

Tide Tables 2011

HIGH AND LOW WATER PREDICTIONS

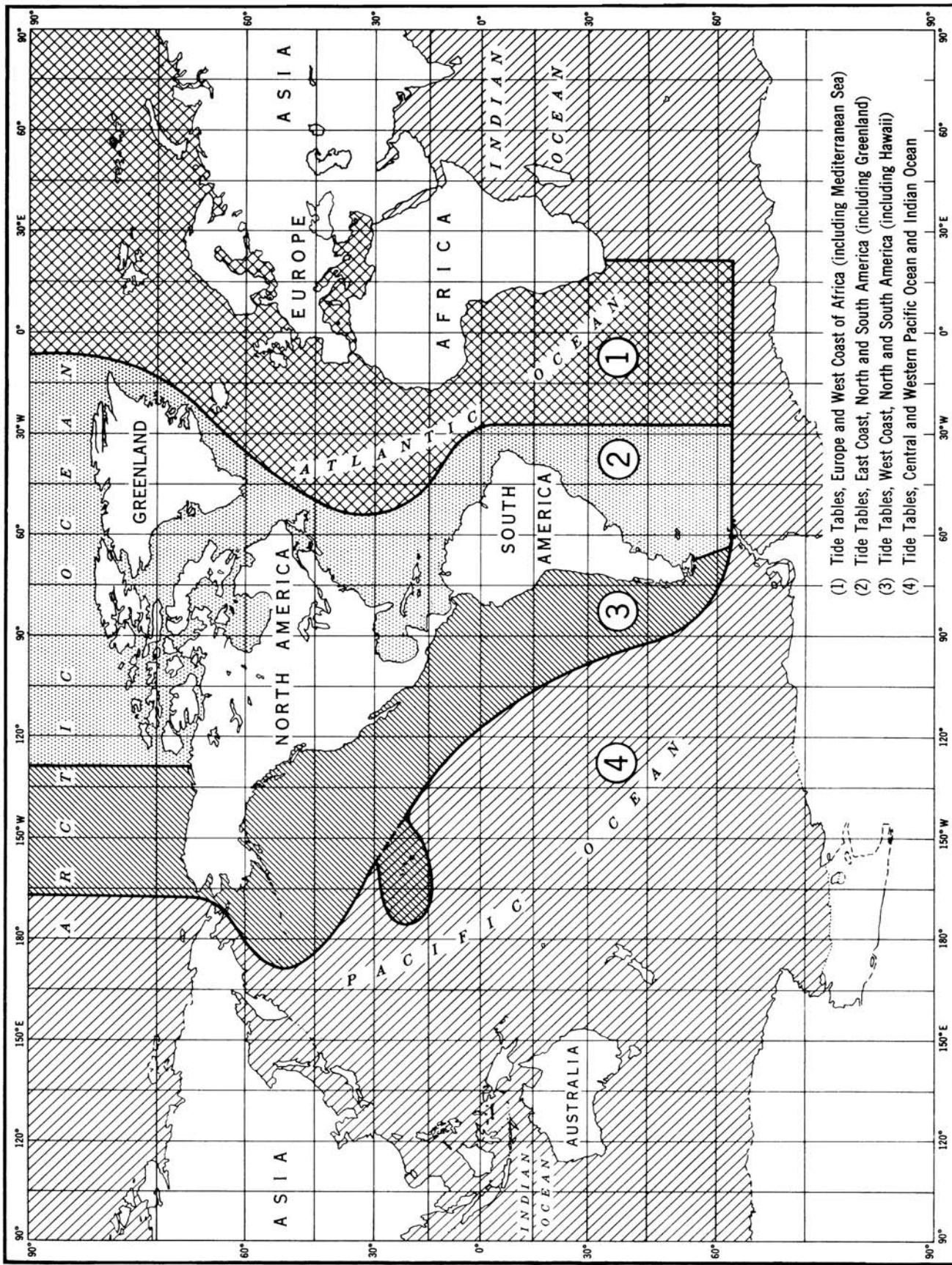
East Coast of North and South America

Including Greenland



Tide Tables 2011 – East Coast of North and South America including Greenland

INDEX OF TIDE TABLE COVERAGE



Tide Tables 2011 HIGH AND LOW WATER PREDICTIONS

East Coast of North and South America

Including Greenland

Issued 2010

SOURCES OF ADDITIONAL INFORMATION

THE NATIONAL OCEAN SERVICE IS NO LONGER PRINTING AND DISTRIBUTING THE TIDE AND TIDAL CURRENT TABLES

Tide and Tidal current data continue to be updated, generated and published by the NOAA/National Ocean Service; however, the printing and distribution in book-form is now done by the Federal Aviation Administration and several private companies working from information provided by NOS.

NOS now offers two vehicles for obtaining predictions. First, the complete set of Tables as camera-ready page-images will be available on CD-ROM. The CD-ROM vehicle is primarily intended for use by federal or private printers who wish to print in book-form the full set of Tables for distribution to resellers and the general public. Second, for domestic tide reference stations, limited predictions are available on the NOS, Center for Operational Oceanographic Products and Services (CO-OPS), web site, (<http://tidesandcurrents.noaa.gov/>).

In addition to predictions, the web site provides updated information on the status of the Tables as they are finalized each year. Notices concerning the most recent Table updates and publication cut-off dates are included.

For the names of companies printing and distributing the Tables, please call or write to:

National Ocean Service
Oceanographic Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
301-713-2815, fax 301-713-4500

PUBLICATIONS:

United States Coast Pilots and Nautical Charts may be ordered from:

FAA, National Aeronautical Charting Office
Distribution Division, AJW-3550
10201 Good Luck Road
Glenn Dale, MD 20769-9700
(301) 436-8301
(800) 638-8972 toll free, U.S. Only
<http://www.naco.faa.gov/>

A list of authorized sales agents is published in the Nautical Chart Catalogs or may be obtained on request from the National Ocean Service. The publications may also be purchased across-the-counter at the NOAA, Distribution Branch office listed above.

TECHNICAL ASSISTANCE:

Technical questions relating to tide and current predictions, as well as requests for special predictions, should be addressed to:

National Ocean Service
Oceanographic Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-2815

SOURCES OF ADDITIONAL INFORMATION

Technical questions relating to ***actual tide observations, tidal datums, and other information necessary*** for ***engineering projects*** should be addressed to:

National Ocean Service
Oceanographic Division, N/OPS3
1305 East-West Highway
Silver Spring, MD 20910
(301) 713-2877

Technical questions relating to *other publications and nautical charts* should be addressed to:

National Ocean Service
Customer Affairs Branch
1315 East-West Highway.
Silver Spring, MD 20910
(301) 713-2729

WEBSITES

Center for Operational Oceanographic Products and Services
(PORTS® * Predictions * Observations * Bench Marks * Tides Online * Great Lakes Online)

<http://tidesandcurrents.noaa.gov>

Coastal Services Center - <http://www.csc.noaa.gov>
Marine Chart Division - <http://www.nauticalcharts.noaa.gov>
Ocean Predictions Center - <http://www.opc.ncep.noaa.gov>
National Centers for Environmental Predictions - <http://www.ncep.noaa.gov>
National Climatic Data Center - <http://www.ncdc.noaa.gov>
National Data Buoy Center - <http://www.ndbc.noaa.gov>
National Geodetic Survey - <http://www.ngs.noaa.gov>
National Geophysical Data Center - <http://www.ngdc.noaa.gov>
National Ocean Service - <http://www.nos.noaa.gov>
National Oceanic and Atmospheric Administration - <http://www.noaa.gov>
National Oceanographic Data Center - <http://www.nodc.noaa.gov>
National Weather Service - <http://www.nws.noaa.gov>
U.S. Coast Guard - <http://www.uscg.mil>
U.S. Geological Survey - <http://www.usgs.gov>
U.S. Naval Observatory - <http://www.usno.navy.mil>
U.S. Naval Oceanographic Office - <https://oceanography.navy.mil>

CORRECTIONS:

Corrections to this publication, after the date of printing, may appear in the Notice to Mariners. They may also appear in the Local Notice to Mariners, published weekly, by the various United States Coast Guard Districts.

CONTENTS

	Page
Index map of tide table coverage	inside front cover
Astronomical data	inside back cover
Important notices	VII
Introduction	XIII
List of reference stations.....	XIV
Table 1. —Daily tide predictions.	
Explanation of table.....	1
Typical tide curves for United States ports	3
Daily predictions for reference stations	4
Table 2. —Tidal differences and other constants.	
Explanation of table.....	309
Tidal differences and other constants	312
Table 3. —Height of tide at any time.	
Explanation of table.....	355
Height of tide at any time	357
Table 4. —Local mean time of sunrise and sunset.	
Explanation of table.....	359
Sunrise and sunset.....	360
Table 5. —Reduction of local mean time to standard time.....	
	369
Table 6. —Moonrise and moonset.	
Explanation of table.....	371
Moonrise and moonset	372
Table 7. —Conversion of feet to centimeters.....	
	379
Table 8. —Tide prediction accuracy.....	
	381
Table 9. — Lowest / highest astronomical tide and other tidal datums	
	383
Publications relating to tides and tidal currents	385
Official U.S. Datums	386
Glossary of terms	387
Index to stations.....	393

IMPORTANT NOTICES

For the most part, tide predictions for U.S. reference stations are based upon analyses of tide observations for periods of at least one year. Since the extremes of meteorological conditions have been excluded from the analyses and predictions, the predicted tidal heights should be considered as those expected under average weather conditions. During times when weather conditions differ from what is considered average for the area, the mariner must take note of the corresponding differences between predicted levels and those actually observed. Generally, prolonged onshore winds or a low barometric pressure can produce higher levels than predicted, while the opposite can result in lower levels than those predicted.

Exclusive of weather conditions, the astronomical tide is subject to range variations which should be noted. Decreased ranges may be expected near the times when the Moon is in apogee (apogean tides) or in quadrature (neap tides), and increased ranges may be expected when the Moon is in perigee (perigean tides) or in a new or full position (spring tides). A larger diurnal range may also result when the Moon is in its maximum declination (tropic tides). The actual range will depend upon the extent to which combinations of these positions reinforce or detract one from the other. The effect of these astronomical lineups is included in the predictions and may be apparent upon inspection.

The mariner may be kept aware of the times of these astronomical events by referring to the astronomical data listed in this book. He should realize, however, that there is generally a time lag from a few hours to several days from the time of the astronomical event to the time of the resultant tide. During times of storm surges or when extreme weather conditions are imminent, the mariner should closely follow local weather forecasts as they relate to the effects upon the tide levels.

Effective January 1, 1989, the chart datum and tidal datum chart, for all nautical charts, bathymetric maps, and tide tables covering the east coast of the United States and areas of the Caribbean Islands were changed from mean low water (MLW) to mean lower low water (MLLW). Notice of changes in tidal datums established through the "National Tidal Datum Convention of 1980" Federal Register, vol. 45, No. 207, Thursday, October 23, 1980, p. 70296-70297.

DAYLIGHT-SAVING TIME IS NOT USED IN THIS PUBLICATION. All daily tide predictions and predictions compiled by the use of Table 2 data are based on the standard time meridian indicated for each location. Predicted times may be converted to daylight saving times, where necessary, by adding 1 hour to these data. In converting times from the Astronomical Data page on the inside back cover, it should be remembered that daylight saving time is based on a meridian 15° east of the normal standard meridian for a particular place.

NOS, in partnership with other agencies and institutions, has established a series of Physical Oceanographic Real Time Systems (PORTS®) in selected areas. These PORTS® sites provide constantly updated information on tide and tidal current conditions, water temperature, and weather conditions. This information is updated every six minutes. PORTS® sites are currently in operation at several major harbors with future sites to be added. The information is accessible through a computer data connection or by a voice response system at the following sites:

PORTS® SITES	VOICE ACCESS	INTERNET ACCESS
CHERRY POINT	888-817-7794	www.tidesandcurrents.noaa.gov
CHESAPEAKE BAY	866-CH-PORTS (866-247-6787)	"
DELAWARE RIVER & BAY	866-30-PORTS (866-307-6787)	"
GULFPORT	888-257-1858	"
HOUSTON/GALVESTON	866-HG-PORTS (866-447-6787)	"
LAKE CHARLES	888-817-7692	"
LOS ANGELES/LONG BEACH		"
LOWER COLUMBIA RIVER	888-53-PORTS (888-537-6787)	"
LOWER MISSISSIPPI RIVER	888-817-7767	"
MOBILE BAY	877-84-PORTS (877-847-6787)	"
NARRAGANSETT BAY	866-75-PORTS (866-757-6787)	"
NEW HAVEN	888-80-PORTS (888-807-6787)	"
NEW YORK/NEW JERSEY	866-21-PORTS (866-217-6787)	"

PORTS® SITES	VOICE ACCESS	INTERNET ACCESS
PASCAGOULA	888-257-1857	"
PORT OF ANCHORAGE	866-AK-PORTS (866-257-6787)	www.tidesandcurrents.noaa.gov
SABINE NECHES	888-257-1859	"
SAN FRANCISCO BAY	866-SB-PORTS (866-727-6787)	"
SOO LOCKS	301-713-9596	"
TACOMA	888-60-PORTS (888-607-6787)	"
TAMPA BAY	866-TB-PORTS (866-827-6787)	"

PUBLISHED CAUTIONARY NOTICES

Published in Local Notice to Mariners and United States Coast Pilot Notices

OBSERVED TIDAL CONDITIONS DIFFER FROM TIDAL PREDICTIONS IN THE HUDSON RIVER

The observed tides along the Hudson River have been reported to differ significantly from the Published tide predictions; particularly in the northern section of the river from Newburgh to Albany, New York. Based on limited reports and comparisons to USGS stream gauges, it appears that high tides are occurring approximately 1 hour earlier than predicted.

NOAA has no information on what may be causing the difference between predictions and observations. This could be the result of natural changes (shoaling, erosion, etc) or artificial changes (dredging, construction, etc) in the Hudson River. Based on preliminary evidence, this does not appear to be a temporary condition and may indicate a long term change in the tidal conditions of the Hudson River.

NOAA does not have any water level stations operating along the length of the Hudson River, with the nearest operating station being located at The Battery, New York. Without observational data in the area, the extent of the difference between predictions and observations cannot be confirmed; neither can the areas affected by this change. Resources are not available for the installation and operation of water level stations along the Hudson River.

Mariners operating in this area are urged to use caution.

Issued: May 24, 2010

CHANGES TO 2004 AND FUTURE EDITIONS OF THE NOS TIDE TABLES

The National Ocean Service's, Center for Operational Oceanographic Products and Services (CO-OPS) is continuing to work on updating tidal data for the 1983-2001 Tidal Epoch. The updated information will begin to appear in the 2004 edition of the published Tide Tables and is expected to be completed for the 2005 Tide Tables. In conjunction with the 1983-2001 Tidal Epoch update, CO-OPS has started a comprehensive review of the secondary stations listed in the published Tide Tables. As a result of this review, there will be numerous changes to the stations listed in the "Table 2 - Tidal Differences and Other Constants" pages of the published Tide Tables and in the CO-OPS web products. These changes will include the addition of new stations, removal of obsolete stations, and updating information for other existing stations. These changes will begin to appear in the 2004 edition of the published Tide Tables and are expected to continue for several years.

Tables in which U.S. stations will be affected by the 1983-2001 Epoch and Table 2 station review include:

- Tide Tables - East Coast of North and South America, Including Greenland
- Tide Tables - West Coast of North and South America, Including the Hawaii Islands
- Tide Tables - Central and Western Pacific Ocean and Indian Ocean

Issued October 1, 2003

TIDAL CURRENT PREDICTIONS INSIDE U.S. ESTUARIES

At present there are several U.S. estuaries with operational Physical Oceanographic Real Time Systems (PORTS) installed. PORTS systems are presently being installed in several additional estuaries. Over the

IMPORTANT NOTICES

next ten years there are projected to be twenty or more additional systems installed. In the past, the tidal current reference station has always been located at the entrance to each estuary. All tidal current secondary stations both inside and outside (along the coast) have been referred to the reference station at the entrance to the estuary. This will no longer be the case in estuaries with an operational PORTS system.

Estuaries with an operational PORTS system will have at least two reference stations. One will be the historic station at the entrance to the estuary. All secondary stations along the coast will continue to be referred to this station. The second tidal current reference station will be the primary PORTS station within the estuary. All secondary locations within the estuary itself will be referred to this location. Depending on the circulation dynamics of the estuary, daily tidal current predictions may be provided for one or more additional stations within the estuary.

(Issued October 1, 1999)

ARANSAS PASS – CORPUS CHRISTI BAY, TX

The Aransas-Corpus Christi Pilots have reported that published tidal current predictions for Aransas Pass deviate from observations by as much as two (2) hours. The published predictions must be used with extreme caution. The Pilots should be consulted for critical transits. Tidal Current predictions of the National Ocean Service (NOS) are derived from analysis of observed data at tidal harmonic frequencies which in turn are based on predictable astronomic positions of the moon and sun. The problem in many areas of the Gulf of Mexico, including the south Texas coast, is that localized meteorological conditions can significantly effect and alter the times of maximum flood and ebb currents. Real-time observation and reporting systems, such as the Physical Oceanographic Real Time System (PORTS) installed in the Galveston-Houston area, are the only means of providing accurate tidal current data for areas such as this.

(Issued July 17, 1997)

BISCAYNE BAY/PORT OF MIAMI, FL

The Biscayne Bay Pilots report that recent dredging and construction by the US Corps of Engineers (COE) supporting Miami port expansion has significantly effected the currents in Miami Harbor. Both flood and ebb currents should be expected to be stronger than indicated in official published predictions. The actual times for maximum and slack currents should be expected to deviate from the published predictions. Funding to support a survey to obtain new data for more accurate tidal current predictions is not available at this time. Installation of a Physical Oceanographic Real Time System (PORTS), like the one in operation in Tampa Bay, would be the best solution for long term marine safety.

(Issued July 17, 1997)

CHARLESTON HARBOR, SC

The US Army Corps of Engineers (CEO) is planning dredging and construction projects for Charleston Harbor in 1996-1997. Such projects in the past in other areas have resulted in dramatic changes in the observed tidal currents of those areas. Once dredging and/or construction operations commence, the Tidal Current predictions for this region should be considered questionable and potentially dangerous to rely upon. Tide predictions will also be affected but to a lesser degree. Funding for a real time system to monitor the Tidal Currents and a resurvey of the area after COE operations are complete is presently not available. Therefore, once COE operations begin and until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

IMPORTANT NOTICES

CHESAPEAKE & DELAWARE CANAL AND BALTIMORE HARBOR CONNECTING CHANNELS

The US Army Corps of Engineers (COE) is planning a project involving the Chesapeake & Delaware Canal (C&D) and the channels in the upper Chesapeake Bay connecting the canal to Baltimore, MD in 1996-1997. Such projects in the past in other areas have resulted in dramatic changes in the observed tidal currents of those areas. Once the project begins, the Tidal Current predictions for the C&D Canal and the channels connecting the canal to Baltimore should be considered questionable and potentially dangerous to rely upon. Tide predictions will be affected but to a lesser degree. Funding for a real-time system to monitor the Tidal Currents and a resurvey of these areas after COE operations are complete is presently not available. Therefore, once COE operations begin and until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration, National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

ST. AUGUSTINE, FL – ATLANTIC INTRACOASTAL WATERWAY

The US Coast Guard (USCG) has reported a problem involving the Tidal Currents in the Atlantic Intracoastal Waterway (AICW) in the St. Augustine, FL area. The specific location is the Bridge of Lions over the waterway. Numerous accidents have occurred at this site which are related to the currents in the waterway. There is no National Ocean Service (NOS) Tidal Current Station at or near the Bridge of Lions. Thus the NOS cannot, at this time, make Tidal Current predictions for this location. The USCG states that the cause of the accidents is loss of maneuverability (control) as a vessel passes under the bridge. The loss of maneuverability results in the vessel striking the bridge supports. The USCG states in part:

"The affect of a 'fair' tide on a navigating vessel is to reduce the vessel's ability to maneuver. When a vessel is proceeding with a current (fair tide), less water flows across the vessel's rudders. This condition has the affect of reducing the vessel's maneuverability for a given speed over ground (all other things being equal).

The Bridge of Lions is a difficult bridge to navigate, even under ideal conditions. This circa 1926 Bascule bridge has a horizontal clearance of only 76' versus the 90' horizontal clearance of most of the other bridges on this section of the AICW."

In addition, according to the US Coast Pilot, Vol 4, Chapter 12, Tidal Currents in excess of 2 knots often run at right angles to the bridge opening. The Coast Pilot advises mariners to transit the bridge at minimal Tidal Current conditions. Funding for real-time monitoring of the Tidal Currents or a survey to obtain Tidal Current observations upon which to base Tidal Current predictions for this location is not presently available. A consortium of local, state, and federal officials in conjunction with the private sector and commercial shipping interests are presently studying various options to provide accurate Tidal Current predictions necessary for marine safety and navigation at this location.

(Issued June 5, 1996)

WILMINGTON AND CAPE FEAR RIVER, NC

The US Army Corps of Engineers (COE) is due to begin dredging operations in the Wilmington and Cape Fear River area in 1997. The plans call for the deepening of the channel approaching Wilmington and extending up the Cape Fear River. Such actions in the past in other areas have resulted in dramatic changes in the observed tidal currents of those areas. Once dredging operations commence, the Tidal Current predictions for this region should be considered questionable at best and potentially dangerous to rely upon. Tide predictions will also be affected but to a lesser degree. Funding for a real-time system to monitor the Tidal Currents during the project and a resurvey of the area after COE operations are complete is presently not available. Therefore, once COE operations begin and until such time as a real-time system is installed or a resurvey of the area conducted, the National Oceanic and Atmospheric Administration,

IMPORTANT NOTICES

National Ocean Service will be unable to provide accurate Tidal Current predictions necessary for marine safety and navigation in this area.

(Issued June 5, 1996)

HAMPTON ROADS, VA

Tidal currents in Hampton Roads and Elizabeth River have been significantly altered by dredging and construction of a new bridge/tunnel. Recent dredging by the U.S. Army Corps of Engineers has deepened the channels by 10 feet to a depth of 50 feet. Pilots and officials at the Norfolk Naval Base report hazardous conditions including significantly higher than predicted maximum current velocities, and significant deviation in the predicted times of maximum current. Mariners should exercise EXTREME CAUTION and DISCRETION in the use of published NOS tidal current predictions for this area. Funding for a Quality Assurance study and a full scale resurvey of the area is presently not available.

(Issued March 24, 1992)

CHINCOTEAGUE CHANNEL, VA

United States Coast Guard (USCG) Personnel at the Chincoteague Coast Guard Station, VA report that the times of high and low water computed from differences in Table 2 of the East Coast Tide Tables are frequently off by as much as an hour. The channel is subject to shoaling and is frequently dredged. Exercise caution in using Table 2 Tide differences for this area.

(Issued May 17, 1991)

INTRODUCTION

Tide tables for the use of mariners have been published by the National Ocean Service (formerly the Coast and Geodetic Survey) since 1853. For a number of years these tables appeared as appendixes to the annual reports of the Superintendent of the Survey, and consisted of detailed instructions enabling the mariner to make his own prediction of tides as the occasion arose.

The first tables to give predictions for each day were those for the year 1867. They gave the times and heights of high waters only and were published in two separate parts, one for the Atlantic coast and the other for the Pacific coast of the United States. Together they contained daily predictions for 19 stations and tidal differences for 124 stations. A few years later predictions for the low waters were also included, and for the year 1896 the tables were extended to include the entire maritime world, with full predictions for 70 ports and tidal differences for about 3,000 stations.

The tidal tables are now issued in four volumes, as follows: *Europe and West Coast of Africa (including the Mediterranean Sea)*; *East Coast of North and South America (including Greenland)*; *West Coast of North and South America (including the Hawaiian Islands)*; *Central and Western Pacific Ocean and Indian Ocean*. Together, they contain daily predictions for 270 reference ports and differences and other constants for more than 6,530 stations.

This edition of the Tide Tables, *East Coast of North and South America*, contains full daily predictions for 76 reference ports and differences and other constants for about 2,600 stations in North America, South America, and Greenland. It also contains a table for obtaining the approximate height of the tide at any time, a table of local mean time of sunrise and sunset for every 5th day of the year for different latitudes, a table for the reduction of local mean time to standard time, a table of moonrise and moonset for 8 places, a table of the Greenwich mean time of the Moons' phases, apogee, perigee, greatest north and south and zero declination, and the time of the solar equinoxes and solstices, and a glossary of terms.

Up to and including the tide tables for the year 1884, all the tide predictions were computed by means of auxiliary tables and curves constructed from the results of tide observations at the different ports. From 1885 to 1911, inclusively, the predictions were generally made by means of the Ferrel Tide-predicting machine. From 1912 to 1965, inclusively, they were made by means of the Coast and Geodetic Survey tide-predicting machine No. 2. Since 1966, predictions have been made by electronic computer.

In the preparation of these tables all available observations were used. In some cases, however, the observations were insufficient for obtaining final results. As further information becomes available it will be included in subsequent editions. All persons using these tables are invited to send information or suggestions for increasing their usefulness to the National Ocean Service, Oceanographic Division, 1305 East-West Highway, N/OPS3, Silver Spring, Maryland 20910, U.S.A.

The information presented in *Table 4 - Local mean time of sunrise and sunset and in Table 6 - Moonrise and moonset* is computed by the National Ocean Service using the Interactive Computer Ephemeris Program provided by the United States Naval Observatory.

In accordance with cooperative arrangements between the National Ocean Service and the authorities listed below, predictions for the following stations appear in this issue:

Canadian Hydrographic Service.—*Harrington Harbour, Quebec, Halifax, St. John, Pictou, and Argentia*.

Diretoria de Hidrografia e Navegacao, Brazil.—*Recife, Rio de Janeiro, and Santos*.

Servicio Hidrografico, Argentina.—*Buenos Aires, Puerto Ingeniero White, Comodoro Rivadiva, and Punta Loyola*.

LIST OF REFERENCE STATIONS

Name of station	Page	Datum below mean sea-level	Updated	Data Series
Albany, New York.....	80	* 2.49	1966	192 days beginning 5/1/1934
Amuay, Venezuela.....	268	0.65		
Apalachicola, Florida.....	196	0.92	1999	3 years (1995-1997)
Argentia, Newfoundland.....	4	4.3		
Atlantic City, New Jersey	88	2.23	2006	5 years (1999-2003)
Baltimore, Maryland	108	0.82	2001	5 years (1994-1998)
Bar Harbor, Maine.....	32	5.71	2003	5 years (1992-1996)
Bayonne Bridge, New York.....	76	2.78	1999	4 years (1990-1991, 1994-1995)
Bermuda Esso Pier, Bahama	240	1.35	2002	4 years (1990-1993)
Boston, Massachusetts.....	40	5.22	2001	5 years (1994-1998)
Breakwater Harbor, Delaware.....	92	2.27	2001	5 years (1994-1998)
Bridgeport, Connecticut.....	64	3.61	2001	5 years (1994-1998)
Buenos Aires, Argentina.....	292	2.6		
Cape Hatteras, North Carolina.....	132	1.65	1998	4 years (1988-1991)
Cedar Key, Florida	188	2.03	2003	5 years (1992-1997)
Charleston, South Carolina	144	2.95	2003	5 years (1996-2000)
Charlotte Amalie, St. Thomas Island.....	256	0.38	2002	8 years (1984-1991)
Chesapeake Bay Bridge Tunnel, Virginia....	116	1.45	2006	5 years (1999-2003)
Comodoro Rivadavia, Argentina	300	10.3		
Cristobal, Panama.....	236	0.38		
Dauphin Island, Alabama	204	0.57	1998	4 years (1993-1996)
Duck Pier, North Carolina	124	1.81	2003	5 years (1996-2000)
Eastport, Maine.....	28	9.71	2001	5 years (1994-1998)
Fernandina Beach, Florida	156	3.35	2003	3 years (1998-2000)
Galveston, Texas	220	0.82	2006	5 years (1999-2003)
Grand Isle, Louisiana.....	216	0.56	2006	5 years (1999-2003)
Halifax, Nova Scotia.....	20	4.3		
Hampton Roads, Virginia	120	1.38	2002	5 years (1995-1999)
Harrington Harbour, Quebec.....	12	3.5		
Isla Zapara, Venezuela	264	2.70		
Key West, Florida	176	0.92	2003	5 years (1996-2000)
Kings Point, Long Island, New York.....	68	3.87	2006	5 years (1999-2003)
Lime Tree, Saint Croix, Virgin Islands	260	0.38	2002	3 years (1995-1997)
Magueyes Island, Puerto Rico	248	0.34	2002	3 years (1995-1997)
Mayport, Florida.....	160	2.46	2005	3 years (2001-2003)
Miami, Government Cut, Florida	168	1.43	2005	2 years (1985-1986)
Mobile, Alabama	208	0.83	1990	2 years (1985-1986)
Montauk, Fort Pond Bay, New York	56	1.09	2003	5 years (1996-2000)
Myrtle Beach, South Carolina	140	2.75	2006	5 years (1999-2003)
Nantucket, Massachusetts.....	44	1.79	2005	5 years (1999-2003)
Naples, Florida.....	180	1.69	2003	4 years (1992-1996)
New London, Connecticut	60	1.55	2001	5 years (1994-1998)
New York (The Battery), New York.....	72	2.58	2006	5 years (1999-2003)
Newport, Rhode Island	52	1.77	2001	5 years (1994-1998)
Ocean City, Maryland.....	104	1.87	1999	5 years (1985-1989)
Oregon Inlet, North Carolina	128	0.66	1999	4 years (1995-1998)

LIST OF REFERENCE STATIONS Cont.

Name of station	Page	Datum below mean sea-level	Updated	Data Series
Padre Island, Texas.....	228	0.86	1998	1 year (1963)
Pensacola, Florida.....	200	0.62	2003	5 years (1996-2000)
Philadelphia, Pennsylvania.....	100	* 3.47	2006	5 years (1999-2003)
Pictou, Nova Scotia	8	3.9		
Port Canaveral (Trident Pier), Florida	164	1.92	2003	5 years (1997-2001)
Port O'Connor, Texas	224	0.42	1999	29 days beginning 2/1/1989
Portland, Maine	36	4.93	2001	5 years (1993-1997)
Puerto Ingeniero White, Argentina	296	8.5		
Punta Gorda, Venezuela	272	3.30		
Punta Loyola, Argentina.....	304	20.3		
Quebec, Quebec	16	* 8.5		
Recife, Brazil	280	3.7		
Reedy Point, Delaware.....	96	2.99	2006	5 years (1999-2003)
Rio de Janeiro, Brazil	284	2.3		
St. John, New Brunswick.....	24	14.5		
St. Marks River Entrance, Florida	192	1.93	1996	358 days beginning 9/1/1970
St. Petersburg, Florida	184	1.19	2006	5 years (1999-2003)
San Juan, Puerto Rico	252	0.78	1999	4 years (1983-1996)
Sandy Hook, New Jersey.....	84	2.56	2006	5 years (1999-2003)
Santos, Brazil	288	2.5		
Savannah, Georgia.....	152	4.38	1990	1 year (1980)
Savannah River Entrance, Georgia	148	3.80	2003	5 years (1996-2000)
Settlement Point, Bahama	244	1.45	2002	4 years (1986-1988, 1990)
South Pass, Louisiana.....	212	.68	1999	3 years (1989-1991)
Suriname River Entrance, Surinam	276	4.28		
Tampico Harbor, Mexico.....	232	0.84		
Vaca Key, Florida	172	0.52	1997	4 years (1985-1987, 1989)
Washington, D.C.	112	* 1.56	2001	5 years (1994-1998)
Wilmington, North Carolina	136	* 2.33	2006	5 years (1999-2003)
Woods Hole, Massachusetts	48	1.04	2005	5 years (1999-2003)

*Datum below mean river level.

**New Reference Station.

Each datum figure above represents the difference in elevation between the local mean sea (or river) level and the reference level from which the predicted heights in table 1 were calculated.

Local mean sea level datum should not be confused with the National Geodetic Vertical Datum which is the datum of the geodetic level net of the United States. Relationships between geodetic and local tidal datums are published in connection with the tidal benchmark data of the National Ocean Service.

TABLE 1.—DAILY TIDE PREDICTIONS

EXPLANATION OF TABLE

This table contains the predicted times and heights of the high and low waters for each day of the year at a number of places which are designated as reference stations. By using tidal differences from table 2, one can calculate the approximate times and heights of the tide at many other places which are called subordinate stations. Instructions on the use of the tidal differences are found in the explanation of table 2.

High water is the maximum height reached by each rising tide, and low water is the minimum height reached by each falling tide. High and low waters can be selected from the predictions by the comparison of consecutive heights. Because of diurnal inequality at certain places, however, there may be a difference of only a few tenths of a foot between one high water and low water of a day, but a marked difference in height between the other high water and low water. Therefore, in using the Tide Tables it is essential to note carefully the heights as well as the times of the tides.

Time.—The kind of time used for the predictions at each reference station is indicated by the time meridian at the bottom of each page. Daylight-saving time is not used in this publication. If daylight-saving time is required, add one (1) hour to the predicted time.

Datum.—The datum from which the predicted heights are recorded is the same as that used for the nautical charts of the locality. The datum for the Atlantic coast of the United States is mean lower low water (MLLW). For foreign coasts a datum approximating to mean low water springs, Indian spring low water, or the lowest possible low water is generally used. The depression of the datum below mean sea level (MSL) for each of the reference stations of this volume is given on the preceding page.

Depth of water.—The nautical charts published by the United States and other maritime nations show the depth of the water as referred to a low water datum corresponding to that from which the predicted tidal heights are recorded. To find the actual depth of water at any time, the height of the tide should be added to the charted depth. If the height of the tide is negative—that is, if there is a minus sign (−) before the tabular height—the height should be subtracted from the charted depth. For any time between high and low water, the height of the tide may be estimated from the heights of the preceding and the following tides, or table 3 may be used. The reference stations in table 1 contain the heights in centimeters as well as in feet.

Variation in sea level.—Changes in winds and barometric conditions cause variations in sea level from day to day. In general, with onshore winds or a low barometer the heights of both the high and low waters will be higher than predicted, while with offshore winds or a high barometer they will be lower. There are also seasonal variations in sea level, but these variations have been included in the predictions for each station. At ocean stations the seasonal variation in sea level is usually less than half a foot.

At stations on tidal rivers the average seasonal variation in river level due to freshets and droughts may be considerably more than a foot. The predictions for these stations include an allowance for this seasonal variation representing average freshet and drought conditions. Unusual freshets or droughts, however, will cause the tides to be higher or lower, respectively, than predicted.

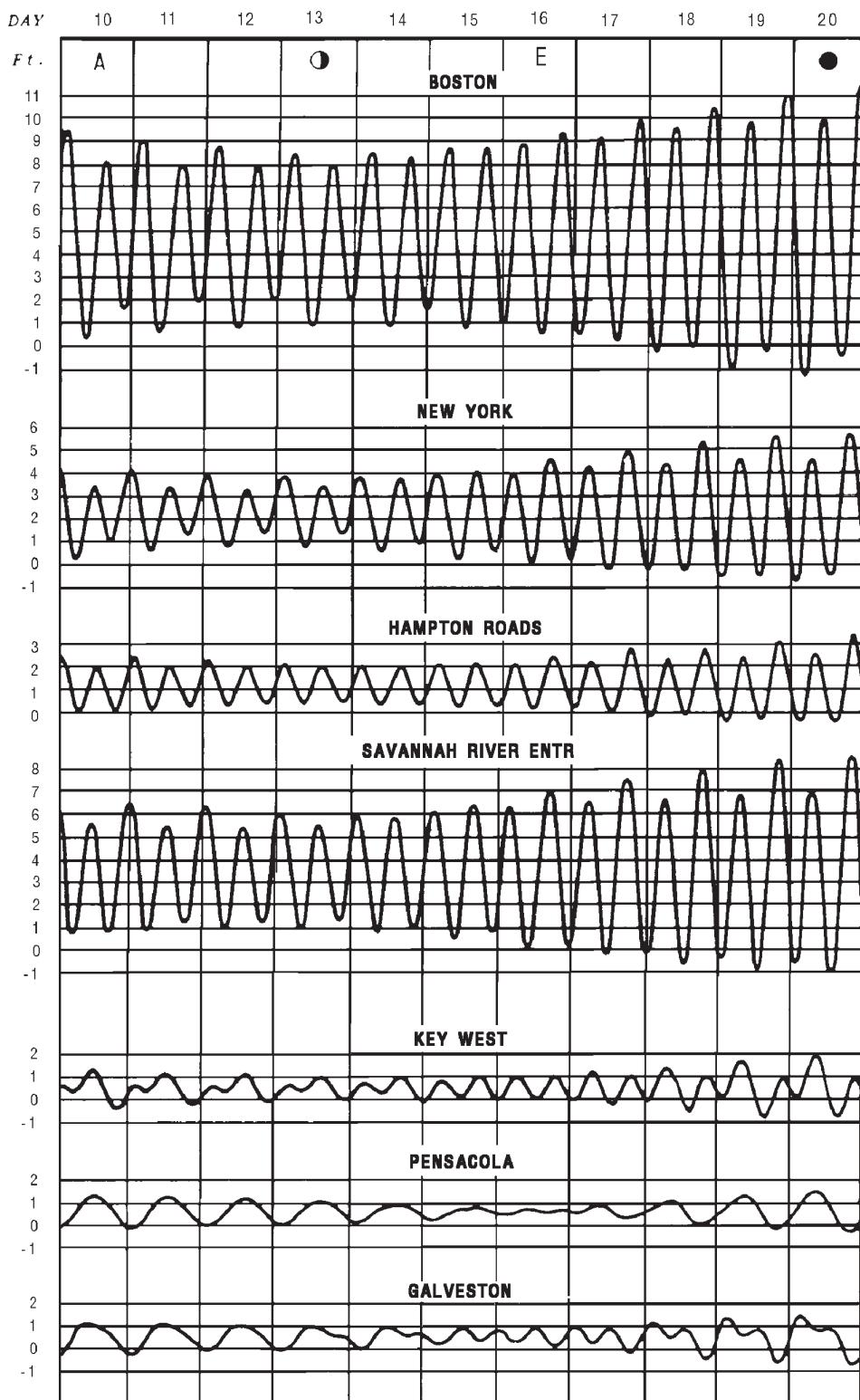
Number of tides.—There are usually two high and two low waters in a day. Tides follow the Moon more closely than they do the Sun, and the lunar or tidal day is about 50 minutes longer than the solar day. This causes the tide to occur later each day, and a tide that has occurred near the end of one calendar day will be followed by a corresponding tide that may skip the next day and occur in the early morning of the third day. Thus, on certain days of each month only a single high or a single low water occurs. At some stations, during portions of each month, the tide becomes diurnal—that is, only one high and one low water will occur during the period of a lunar day.

TABLE 1.—DAILY TIDE PREDICTIONS

Relation of tide to current.— In using these tables of tide predictions bear in mind that they give the times and heights of high and low waters and not the times of turning of the current or slack water. For stations on the outer coast there is usually a small difference between the time of high or low water and the beginning of ebb or flood current, but for places in narrow channels, landlocked harbors, or on tidal rivers, the time of slack water may differ by several hours from the time of high or low water stand. The relation of the times of high and low water to the turning of the current depends upon a number of factors, so no simple or general rule can be given. For the predicted time of slack water, and other current data, reference should be made to the Tidal Current Tables prepared by the National Ocean Service, for the Atlantic and the Pacific coast of North America and Asia.

Typical tide curves.— The variations in the tide from day to day and from place to place are illustrated on the opposite page by the tide curves for representative ports along the Atlantic and Gulf coasts of the United States. Note that the range of tide for stations along the Atlantic coast varies from place to place but that the type is uniformly semidiurnal with the principal variations following the changes in the Moon's distance and phase. In the Gulf of Mexico, however, the type of tide differs considerably and the range of tide is uniformly small. At certain ports such as Pensacola there is usually only one high and one low water a day while at other ports such as Galveston the inequality is such that the tide is semidiurnal around the times the Moon is on the Equator but becomes diurnal around the times of maximum north or south declination of the Moon. In the Gulf of Mexico, consequently, the principal variations in the tide are due to the changing declination of the Moon. Key West, at the entrance to the Gulf of Mexico, has a type of tide which is a mixture of semidiurnal and diurnal types. Here the tide is semidiurnal but there is considerable inequality in the heights of high and low waters. By reference to the curves it will be seen that where the inequality is large there are times when there is only a few tenths of a foot difference between high water and low water.

TYPICAL TIDE CURVES FOR UNITED STATES PORTS



A discussion of these curves is given on the preceding page.

Lunar data:

- A - Moon in apogee
- ☽ - last quarter
- E - Moon on Equator
- - new Moon

Argentia, Newfoundland, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0538 7.2 220	16 Su 0518 6.9 210	1 Tu 0028 2.3 70	16 W 0642 7.5 230	1 Tu 0612 6.9 210	16 W 0517 6.9 210	Sa 1211 2.3 70	Su 1146 3.0 90	Tu 0719 7.5 230	W 1253 2.0 60	Tu 1233 2.6 80	W 1141 2.3 70
1817 6.2 190	1725 5.9 180	1324 2.3 70	1851 6.9 210	1840 6.6 200	1733 6.6 200	2340 2.3 70	2321 2.6 80	1941 6.6 200	1851 6.9 210	2339 2.3 70	2339 2.3 70
1910 6.2 190	1820 6.2 190	● 2017 6.9 210	1938 7.5 230	1921 6.9 210	1921 6.9 210						
2 Su 0636 7.5 230	17 M 0615 7.2 220	2 W 0113 2.0 60	17 Th 0048 1.6 50	2 W 0022 2.3 70	17 Th 0616 7.5 230	1258 2.3 70	1234 2.6 80	0730 8.2 250	0703 7.2 220	1221 2.0 60	1221 2.0 60
1910 6.2 190	1820 6.2 190	● 2017 6.9 210	1938 7.5 230	1921 6.9 210	1921 6.9 210	1910 6.2 190	1910 6.6 200	1407 1.6 50	1257 2.6 80	1829 7.2 220	1829 7.2 220
3 M 0028 2.0 60	18 Tu 0011 2.3 70	3 Th 0153 2.0 60	18 F 0135 1.3 40	3 Th 0101 2.0 60	18 F 0031 1.6 50	0729 7.9 240	0705 7.5 230	0815 8.5 260	0740 7.2 220	0707 7.9 240	0707 7.9 240
1335 2.3 70	1316 2.3 70	1417 2.0 60	1407 1.3 40	1321 2.3 70	1300 1.3 40	1955 6.6 200	1910 6.6 200	1448 2.0 60	1321 2.3 70	1916 7.5 230	1916 7.5 230
4 Tu 0116 2.0 60	19 W 0101 2.0 60	4 F 0230 2.0 60	19 Sa 0218 1.0 30	4 F 0137 2.0 60	19 Sa 0116 1.0 30	0815 7.9 240	0751 8.2 250	0907 7.5 230	0810 7.2 220	0753 8.2 250	0753 8.2 250
1407 2.0 60	1355 2.0 60	1448 2.0 60	1443 1.0 30	1350 2.0 60	1338 1.0 30	● 2035 6.6 200	1957 6.9 210	2121 7.2 220	2107 8.2 250	2002 8.2 250	2002 8.2 250
5 W 0202 2.0 60	20 Th 0148 1.6 50	5 Sa 0305 1.6 50	20 Su 0258 0.7 20	5 Sa 0210 1.6 50	20 Su 0158 0.7 20	0857 7.9 240	0835 8.2 250	0936 7.5 230	0837 7.2 220	0836 8.2 250	0836 8.2 250
1438 2.0 60	1431 1.6 50	1519 2.0 60	1519 1.0 30	1420 1.6 50	1416 1.0 30	2111 6.9 210	2042 7.5 230	2152 6.9 210	2052 7.2 220	2046 8.2 250	2046 8.2 250
6 Th 0243 2.0 60	21 F 0233 1.3 40	6 Su 0338 2.0 60	21 M 0337 0.7 20	6 Su 0243 1.6 50	21 M 0238 0.7 20	0933 7.9 240	0918 8.5 260	1006 7.2 220	0904 7.2 220	0919 8.2 250	0919 8.2 250
1511 2.0 60	1507 1.3 40	1551 2.0 60	1556 1.0 30	1450 1.6 50	1453 1.0 30	2147 6.9 210	2127 7.5 230	2225 6.9 210	2241 7.9 240	2122 7.2 220	2132 8.2 250
7 F 0322 2.0 60	22 Sa 0315 1.0 30	7 M 0411 2.0 60	22 Tu 0416 1.0 30	7 M 0314 1.6 50	22 Tu 0317 0.7 20	1007 7.5 230	1002 8.5 260	1037 7.2 220	0933 7.2 220	1004 7.9 240	1004 7.9 240
1545 2.0 60	1543 1.3 40	1622 2.0 60	1634 1.3 40	1520 1.6 50	1530 1.0 30	2224 6.9 210	2214 7.9 240	2300 6.9 210	2334 7.5 230	2153 7.2 220	2221 8.2 250
8 Sa 0359 2.0 60	23 Su 0356 1.0 30	8 Tu 0444 2.0 60	23 W 0457 1.6 50	8 Tu 0345 1.6 50	23 W 0357 1.0 30	1041 7.5 230	1047 8.2 250	1111 6.9 210	1208 6.9 210	1052 7.2 220	1052 7.2 220
1620 2.3 70	1621 1.3 40	1653 2.3 70	1713 2.0 60	1550 1.6 50	1608 1.3 40	2302 6.6 200	2303 7.5 230	2338 6.6 200	2227 7.2 220	2315 7.9 240	2315 7.9 240
9 Su 0437 2.3 70	24 M 0436 1.3 40	9 W 0519 2.3 70	24 Th 0035 7.2 220	9 W 0416 2.0 60	24 Th 0437 1.6 50	1115 7.2 220	1136 7.9 240	1149 6.6 200	1315 6.6 200	1150 6.6 200	1150 6.6 200
1655 2.3 70	1659 1.6 50	2356 7.5 230	1725 2.3 70	1619 2.0 60	1648 2.0 60	2342 6.6 200	2356 7.5 230	1725 2.3 70	2304 6.9 210	1648 2.0 60	1648 2.0 60
10 M 0515 2.3 70	25 Tu 0519 1.6 50	10 Th 0022 6.6 200	25 F 0140 6.9 210	10 Th 0449 2.3 70	25 F 0016 7.5 230	1153 6.9 210	1229 7.2 220	1742 2.0 60	0636 3.0 90	0521 2.3 70	0521 2.3 70
1730 2.6 80	1742 2.0 60	1232 5.9 180	1425 5.9 180	1650 2.3 70	1301 6.2 190	2108 2.6 80	1801 2.6 80	1801 2.6 80	1854 3.0 90	1650 2.3 70	1732 2.6 80
11 Tu 0024 6.6 200	26 W 0055 7.2 220	11 F 0115 6.6 200	26 Sa 0246 6.9 210	11 F 0524 2.6 80	26 Sa 0120 6.9 210	0555 2.6 80	0607 2.3 70	0642 3.3 100	1005 3.3 100	0614 3.0 90	0614 3.0 90
1234 6.2 190	1331 6.6 200	1324 5.6 170	1533 5.9 180	1533 5.9 180	1407 5.9 180	1808 2.6 80	● 1829 2.3 70	1845 3.0 90	2137 3.3 100	1725 2.3 70	1829 3.0 90
1808 2.6 80	● 1829 2.3 70	1932 2.6 80	1948 3.0 90	1642 5.6 170	1725 3.3 100	1932 2.6 80	1932 2.6 80	1948 3.0 90	2244 3.0 90	1807 2.6 80	2123 3.3 100
12 W 0111 6.2 190	27 Th 0159 6.9 210	12 Sa 0221 6.6 200	27 Su 0354 6.6 200	12 Sa 0040 6.6 200	27 Su 0223 6.9 210	0641 3.0 90	0706 2.6 80	0802 3.6 110	1110 3.0 90	0942 3.3 100	0942 3.3 100
1323 5.9 180	1441 6.2 190	1430 5.6 170	1542 5.6 170	1642 5.9 180	1510 5.9 180	● 1851 3.0 90	1932 2.6 80	1948 3.0 90	2244 3.0 90	1249 5.6 170	2123 3.3 100
● 1851 3.0 90	1932 2.6 80	1948 3.0 90	2042 3.0 90	1807 2.6 80	1807 2.6 80						
13 Th 0206 6.2 190	28 F 0307 6.9 210	13 Su 0333 6.6 200	28 M 0506 6.9 210	13 Su 0144 6.6 200	28 M 0329 6.6 200	0747 3.3 100	1008 3.0 90	1026 3.3 100	1159 3.0 90	0708 3.3 100	1042 3.3 100
1420 5.6 170	1550 5.9 180	1542 5.6 170	1748 5.9 180	1537 5.6 170	1616 5.9 180	1950 3.0 90	2128 3.0 90	2130 3.0 90	2336 2.6 80	1905 3.0 90	2227 3.0 90
2119 3.0 90	2243 2.6 80	2254 2.6 80	2254 2.6 80	2137 3.3 100	2137 3.3 100	2128 3.0 90	2128 3.0 90	2130 3.0 90	2244 3.0 90	1807 2.6 80	2123 3.3 100
15 Sa 0416 6.6 200	30 Su 0523 6.9 210	15 Tu 0547 7.2 220	15 M 0407 6.6 200	15 Tu 0407 6.6 200	30 W 0546 6.6 200	1050 3.3 100	1215 2.6 80	1805 5.9 180	1757 6.2 190	1055 3.0 90	1154 2.6 80
1626 5.6 170	2338 2.6 80	2355 2.3 70	2355 2.3 70	2336 3.0 90	2336 3.0 90	2228 2.6 80	2228 2.6 80	2338 2.6 80	2336 3.0 90	2236 3.0 90	2359 2.3 70
2228 2.6 80	31 M 0627 7.2 220	31 M 1256 2.6 80	31 M 1859 6.2 190	31 M 1859 6.2 190	31 Th 0635 6.9 210	● 1852 6.9 210	● 1852 6.9 210	● 1852 6.9 210	● 1852 6.9 210	● 1852 6.9 210	● 1852 6.9 210

Time meridian 52° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 1.9 feet (62 centimeters) to refer these levels to the datum of N.O.S. charts.

Argentia, Newfoundland, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0038	2.0	60	16 Sa 0009	1.6	50	1 Su 0046	2.0	60	16 M 0037	1.3	40
0711	6.9	210	0642	7.5	230	0706	6.6	200	0740	6.2	190
1248	2.0	60	1228	1.3	40	1245	2.0	60	1326	1.6	50
1925	6.9	210	1855	7.9	240	1924	7.2	220	● 2011	7.5	230
2 Sa 0113	2.0	60	17 Su 0055	1.0	30	2 M 0122	1.6	50	2 Th 0213	2.0	60
0740	6.9	210	0730	7.9	240	0736	6.6	200	0816	6.6	200
1318	2.0	60	1309	1.0	30	1319	1.6	50	1402	1.6	50
1954	7.2	220	○ 1942	8.2	250	1956	7.2	220	2050	7.5	230
3 Su 0147	1.6	50	18 M 0138	0.7	20	3 Tu 0156	1.6	50	3 F 0249	1.6	50
0807	6.9	210	0814	7.9	240	0806	6.6	200	0854	6.6	200
1349	1.6	50	1348	1.0	30	1352	1.6	50	1438	1.6	50
● 2023	7.2	220	2028	8.2	250	● 2030	7.2	220	2131	7.9	240
4 M 0219	1.6	50	19 Tu 0220	0.7	20	4 W 0229	1.6	50	4 Sa 0247	1.3	40
0834	6.9	210	0858	7.5	230	0838	6.6	200	0928	6.9	210
1420	1.6	50	1427	1.0	30	1424	1.6	50	1448	1.3	40
2054	7.2	220	2115	8.2	250	2106	7.5	230	2152	8.2	250
5 Tu 0251	1.6	50	20 W 0259	1.0	30	5 Th 0302	1.6	50	5 Su 0327	1.6	50
0904	6.9	210	0944	7.2	220	0913	6.6	200	1017	6.6	200
1450	1.6	50	1506	1.0	30	1455	1.6	50	1531	1.6	50
2126	7.2	220	2205	8.2	250	2144	7.5	230	2243	7.9	240
6 W 0321	1.6	50	21 Th 0340	1.3	40	6 F 0335	2.0	60	6 Sa 0407	2.0	60
0936	6.6	200	1033	6.9	210	0950	6.6	200	1111	6.6	200
1520	1.6	50	1546	1.6	50	1529	1.6	50	1615	2.0	60
2202	7.2	220	2259	7.9	240	2225	7.5	230	2333	7.5	230
7 Th 0353	1.6	50	22 F 0420	2.0	60	7 Sa 0410	2.0	60	7 Tu 0449	2.3	70
1010	6.6	200	1133	6.6	200	1034	6.2	190	1209	6.2	190
1550	2.0	60	1628	2.0	60	1605	2.0	60	1701	2.3	70
2241	7.2	220	2357	7.5	230	2310	7.2	220	2017	3.0	90
8 F 0425	2.0	60	23 Sa 0504	2.3	70	8 Su 0448	2.3	70	8 M 0024	7.2	220
1049	6.2	190	1240	6.2	190	1124	6.2	190	0535	3.0	90
1623	2.0	60	1714	2.6	80	1645	2.3	70	1304	6.2	190
2325	6.9	210				2359	7.2	220	1754	3.0	90
9 Sa 0502	2.3	70	24 Su 0056	6.9	210	9 M 0531	2.3	70	9 Th 0115	6.9	210
1135	5.9	180	0555	3.0	90	1222	6.2	190	0629	3.0	90
1659	2.3	70	1341	5.9	180	1734	2.6	80	1358	6.2	190
● 1813	3.0	90				● 1803	3.0	90	● 1903	3.0	90
10 Su 0017	6.9	210	25 M 0154	6.6	200	10 Tu 0054	6.9	210	25 W 0209	6.6	200
0545	3.0	90	0719	3.3	100	0625	2.6	80	0746	3.3	100
1233	5.9	180	1439	5.9	180	1324	6.2	190	1453	6.2	190
1744	2.6	80	2020	3.3	100	● 1834	3.0	90	2041	3.3	100
11 M 0116	6.6	200	26 Tu 0255	6.6	200	11 W 0155	6.6	200	26 Th 0308	6.2	190
0643	3.0	90	0951	3.3	100	0738	2.6	80	0921	3.3	100
1340	5.9	180	1540	5.9	180	1428	6.6	200	1549	6.2	190
● 1844	3.0	90	2148	3.0	90	1956	3.0	90	2154	3.0	90
12 Tu 0222	6.6	200	27 W 0401	6.2	190	12 Th 0303	6.6	200	27 F 0409	5.9	180
0852	3.3	100	1033	3.0	90	0916	2.6	80	1013	3.0	90
1450	5.9	180	1640	6.2	190	1534	6.6	200	1643	6.2	190
2018	3.0	90	2241	3.0	90	2144	2.6	80	2248	2.6	80
13 W 0333	6.6	200	28 Th 0505	6.2	190	13 F 0415	6.6	200	28 Sa 0504	5.9	180
1013	2.6	80	1106	3.0	90	1022	2.3	70	1056	2.6	80
1601	6.2	190	1733	6.2	190	1641	6.9	210	1732	6.6	200
2215	2.6	80	2327	2.6	80	2254	2.3	70	2335	2.6	80
14 Th 0445	6.9	210	29 F 0556	6.2	190	14 Sa 0521	6.9	210	29 Su 0550	5.9	180
1103	2.3	70	1138	2.6	80	1112	1.6	50	1135	2.3	70
1707	6.9	210	1816	6.6	200	1741	7.5	230	1815	6.9	210
2318	2.3	70				2348	1.6	50	1913	7.9	240
15 F 0549	7.2	220	30 Sa 0008	2.3	70	15 Su 0618	7.2	220	30 M 0018	2.3	70
1147	1.6	50	0634	6.2	190	1157	1.3	40	0629	5.9	180
1804	7.2	220	1212	2.3	70	1835	7.9	240	1213	2.0	60
			1851	6.9	210				1855	6.9	210
									31 Tu 0058	2.0	60
									0704	6.2	190
									1250	2.0	60
									1933	7.2	220

Time meridian 52° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings. Subtract 1.9 feet (62 centimeters) to refer these levels to the datum of N.O.S. charts.

Argentia, Newfoundland, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0159	2.0	60	16 0225	2.0	60	1 0248	1.3	40	16 0303	1.6	50
F 0757	6.6	200	Sa 0857	6.9	210	M 0904	7.5	230	Tu 0940	7.2	220
1347	1.6	50	Sa 1428	1.6	50	M 1456	1.3	40	Tu 1523	1.6	50
● 2035	7.9	240	Sa 2119	7.9	240	M 2137	8.2	250	Tu 2153	7.2	220
2 0235	1.6	50	17 0256	2.0	60	2 0322	1.3	40	17 0334	1.6	50
Sa 0839	6.9	210	Su 0934	6.9	210	2 Tu 0948	7.9	240	W 1013	7.2	220
1428	1.6	50	Su 1508	1.6	50	1534	1.0	30	1557	2.0	60
2115	8.2	250	Su 2155	7.9	240	2220	8.2	250	2224	7.2	220
3 0309	1.6	50	18 0329	2.0	60	3 W 0357	1.3	40	18 Th 0406	2.0	60
Su 0922	7.2	220	M 1011	6.9	210	1034	7.9	240	Th 1047	6.9	210
1508	1.6	50	M 1545	2.0	60	1613	1.3	40	1630	2.0	60
2157	8.2	250	M 2228	7.5	230	2304	7.9	240	2257	6.9	210
4 0343	1.6	50	19 0403	2.0	60	4 Th 0435	1.3	40	19 F 0438	2.0	60
M 1007	7.2	220	Tu 1048	6.9	210	1124	7.5	230	F 1124	6.9	210
1548	1.6	50	Tu 1622	2.0	60	1654	1.3	40	1704	2.3	70
2240	7.9	240	Tu 2302	7.2	220	2353	7.2	220	2334	6.6	200
5 0419	1.6	50	20 0438	2.3	70	5 F 0515	1.6	50	20 Sa 0510	2.3	70
Tu 1055	7.2	220	W 1128	6.9	210	1219	7.5	230	Sa 1207	6.6	200
1629	1.6	50	W 1659	2.3	70	1738	2.0	60	Sa 1741	2.6	80
2325	7.5	230	W 2339	6.9	210	● 1829	2.3	70	● 1824	3.0	90
6 0458	1.6	50	21 0513	2.3	70	6 Sa 0050	6.9	210	21 Su 0015	5.9	180
W 1146	7.2	220	Th 1209	6.6	200	0559	2.0	60	21 Su 0544	2.6	80
1713	2.0	60	Th 1738	2.6	80	1321	7.2	220	21 Su 1258	6.6	200
7 0014	7.2	220	22 0019	6.6	200	● 1829	2.3	70	● 1824	3.0	90
Th 0540	2.0	60	F 0550	2.6	80	7 Su 0158	6.2	190	6 Tu 0300	5.9	180
1240	7.2	220	F 1256	6.6	200	0652	2.6	80	21 W 0747	3.3	100
1800	2.0	60	F 1822	3.0	90	1429	6.9	210	6 Tu 1521	6.9	210
8 0109	6.9	210	23 0105	5.9	180	1945	3.0	90	6 Tu 2241	3.0	90
F 0628	2.0	60	Sa 0631	3.0	90	8 M 0311	5.9	180	21 W 0135	5.6	170
1341	6.9	210	Sa 1350	6.2	190	0812	3.0	90	W 0640	3.0	90
● 1856	2.3	70	● 1919	3.3	100	1538	6.9	210	W 1428	6.6	200
9 0214	6.6	200	24 0200	5.6	170	2247	3.0	90	21 2128	3.6	110
Sa 0729	2.3	70	Su 0723	3.3	100	9 Tu 0424	5.9	180	22 0246	5.6	170
1447	6.9	210	Su 1452	6.2	190	1017	3.0	90	Th 0804	3.3	100
2018	2.6	80	Su 2115	3.3	100	1649	6.9	210	Th 1539	6.6	200
10 0325	6.2	190	25 0303	5.6	170	2349	2.6	80	22 2232	3.3	100
Su 0853	2.6	80	M 0852	3.3	100	10 25 0430	5.6	170	23 0357	5.9	180
1556	6.9	210	M 1557	6.2	190	W 1119	2.6	80	23 F 1015	3.0	90
2235	2.6	80	M 2233	3.3	100	1758	7.2	220	23 F 1648	6.9	210
11 0437	6.2	190	26 0406	5.6	170	● 1857	7.5	230	23 2318	2.6	80
M 1016	2.3	70	Tu 1016	3.0	90	11 Th 0037	2.6	80	9 W 0016	2.6	80
1704	7.2	220	Tu 1701	6.6	200	0635	6.2	190	24 24 0505	6.2	190
2343	2.6	80	Tu 2331	3.0	90	1212	2.3	70	W 0618	6.6	200
12 0545	6.2	190	27 0507	5.6	170	1857	7.5	230	W 1206	2.3	70
Tu 1115	2.3	70	W 1112	2.6	80	27 25 0430	5.6	170	24 24 1118	2.6	80
1808	7.5	230	W 1759	6.9	210	W 1758	7.2	220	W 1750	7.2	220
13 0037	2.3	70	28 0020	2.6	80	● 2022	7.9	240	23 2359	2.0	60
W 0644	6.2	190	Th 0603	5.9	180	2022	7.9	240	10 0042	2.6	80
1208	2.0	60	Th 1202	2.3	70	27 25 0535	6.2	190	25 0602	6.9	210
1905	7.9	240	Th 1849	7.5	230	W 1232	2.0	60	W 1209	2.0	60
14 0120	2.3	70	29 0102	2.3	70	W 1822	2.6	80	W 1841	7.2	220
Th 0735	6.6	200	F 0653	6.6	200	2022	7.9	240	● 2010	8.2	250
1259	2.0	60	F 1250	2.0	60	27 25 0535	6.2	190	26 0037	1.6	50
1956	7.9	240	F 1934	7.9	240	W 1909	7.9	240	W 0651	7.5	230
15 0154	2.0	60	30 0140	2.0	60	● 1952	8.2	250	W 1254	1.3	40
F 0818	6.9	210	Sa 0738	6.9	210	2022	7.9	240	W 1958	7.2	220
1346	1.6	50	Sa 1335	1.6	50	2022	7.9	240	● 1927	7.9	240
● 2040	8.2	250	● 2015	8.2	250	2022	7.9	240	27 0115	1.3	40
31 0214	1.6	50	Su 0821	7.2	220	2022	7.9	240	Th 0737	7.9	240
Su 1416	1.3	40	Su 1416	1.3	40	2022	7.9	240	Th 1336	1.0	30
2056	8.2	250	2056	8.2	250	2022	7.9	240	● 2010	8.2	250
31 0257	1.0	30	31 0257	1.0	30	2022	7.9	240	28 0152	1.0	30
W 0926	8.2	250	W 0926	8.2	250	2022	7.9	240	W 0821	8.2	250
1515	0.7	20	1515	0.7	20	2022	7.9	240	W 1416	0.7	20
2158	8.2	250	2158	8.2	250	2022	7.9	240	W 2053	8.2	250

Time meridian 52° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the Canadian chart datum of soundings. Subtract 1.9 feet (62 centimeters) to refer these levels to the datum of N.O.S. charts.

Argentia, Newfoundland, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
	h m	ft cm		h m	ft cm			h m	ft cm		
1 Sa	0347	1.0 30		16 Su	0338	2.0 60		1 Tu	0013	6.6 200	
	1048	7.9 240		1027	7.2 220		0457	2.3 70	16 W	0430	2.3 70
	1616	1.3 40		1614	2.0 60		1232	7.2 220	1137	7.2 220	
	2319	6.9 210		2234	6.2 190		1735	2.6 80	1714	2.3 70	
2 Su	0427	1.6 50		17 M	0410	2.0 60		2 W	0117	6.2 190	
	1147	7.5 230		1109	6.9 210		0551	2.6 80	17 Th	0514	2.6 80
	1659	2.0 60		1649	2.3 70		1330	6.9 210	1227	6.9 210	
				2317	5.9 180		● 1838	3.3 100	1759	2.6 80	
3 M	0028	6.6 200		18 Tu	0445	2.3 70		3 Th	0216	6.2 190	
	0511	2.3 70		1156	6.9 210		0714	3.0 90	18 F	0053	6.2 190
	1251	7.2 220		1730	2.6 80		1431	6.6 200	0607	2.6 80	
	● 1749	2.6 80					2128	3.3 100	1322	6.6 200	
4 Tu	0139	6.2 190		19 W	0011	5.9 180		4 F	0315	6.2 190	
	0604	3.0 90		0526	2.6 80		0927	3.0 90	19 Sa	0153	6.6 200
	1355	6.9 210		1251	6.6 200		1535	6.2 190	0713	3.0 90	
	2008	3.3 100		● 1820	3.0 90		2215	3.0 90	1424	6.6 200	
5 W	0243	5.9 180		20 Th	0113	5.9 180		5 Sa	0415	6.2 190	
	0850	3.3 100		0619	3.0 90		1024	3.0 90	20 Su	0256	6.6 200
	1500	6.6 200		1352	6.6 200		1640	6.2 190	0842	2.6 80	
	2216	3.3 100		1940	3.3 100		2249	3.0 90	1533	6.6 200	
6 Th	0348	5.9 180		21 F	0219	5.9 180		6 Su	0512	6.6 200	
	1008	3.0 90		0736	3.3 100		1111	2.6 80	21 M	0402	6.9 210
	1610	6.6 200		1458	6.6 200		1736	6.2 190	1014	2.3 70	
	2305	3.0 90		2138	3.0 90		2320	2.6 80	1642	6.6 200	
7 F	0453	6.2 190		22 Sa	0326	6.2 190		7 M	0559	6.6 200	
	1101	2.6 80		0935	3.0 90		1153	2.3 70	22 Tu	0506	7.2 220
	1719	6.6 200		1609	6.6 200		1820	6.2 190	1116	2.0 60	
	2338	2.6 80		2234	2.6 80		2353	2.3 70	1744	6.9 210	
8 Sa	0550	6.6 200		23 Su	0433	6.6 200		8 Tu	0639	6.9 210	
	1145	2.3 70		1049	2.3 70		1231	2.0 60	23 W	0605	7.5 230
	1815	6.6 200		1716	6.9 210		1854	6.2 190	1210	1.6 50	
				2319	2.0 60			1839	6.9 210	1839	6.9 210
9 Su	0004	2.6 80		24 M	0533	7.2 220		9 W	0028	2.0 60	
	0635	6.9 210		1142	2.0 60		0714	7.2 220	24 Th	0014	1.3 40
	1223	2.3 70		1812	7.2 220		1308	2.0 60	0658	7.9 240	
	1856	6.9 210					1924	6.2 190	1259	1.3 40	
10 M	0030	2.3 70		25 Tu	0001	1.6 50		10 F	0103	1.6 50	
	0711	7.2 220		0627	7.5 230		0747	7.2 220	25 Th	0059	1.0 30
	1258	2.0 60		1230	1.3 40		1343	1.6 50	0749	8.2 250	
	1928	6.9 210		1902	7.5 230		● 1954	6.6 200	1346	1.3 40	
11 Tu	0100	2.0 60		26 W	0043	1.0 30		11 F	0138	1.6 50	
	0743	7.2 220		0715	8.2 250		0820	7.2 220	26 Sa	0145	1.0 30
	1332	1.6 50		1315	1.0 30		1417	1.6 50	0840	8.5 260	
	○ 1955	6.9 210		● 1948	7.5 230		2026	6.6 200	1429	1.3 40	
12 W	0132	1.6 50		27 Th	0124	1.0 30		12 Sa	0212	1.6 50	
	0813	7.2 220		0803	8.2 250		0854	7.2 220	27 Su	0229	1.3 40
	1405	1.6 50		1358	0.7 20		1451	1.6 50	0931	8.5 260	
	2023	6.9 210		2033	7.5 230		2059	6.6 200	1511	1.3 40	
13 Th	0204	1.6 50		28 F	0205	0.7 20		13 Su	0245	1.6 50	
	0843	7.2 220		0851	8.5 260		0931	7.5 230	28 M	0314	1.3 40
	1437	1.6 50		1440	1.0 30		1525	2.0 60	1022	8.2 250	
	2052	6.6 200		2119	7.5 230		2136	6.6 200	1552	1.6 50	
14 F	0236	1.6 50		29 Sa	0246	1.0 30		14 M	0318	2.0 60	
	0915	7.2 220		0941	8.2 250		1010	7.5 230	29 Tu	0359	1.6 50
	1509	1.6 50		1521	1.0 30		1559	2.0 60	1114	7.9 240	
	2123	6.6 200		2209	7.2 220		2217	6.2 190	1633	2.3 70	
15 Sa	0307	1.6 50		30 Su	0327	1.3 40		15 Tu	0352	2.0 60	
	0949	7.2 220		1035	8.2 250		1052	7.2 220	30 W	0445	2.3 70
	1541	1.6 50		1603	1.6 50		1635	2.3 70	1205	7.5 230	
	2156	6.6 200		2306	6.6 200		2303	6.2 190	1716	2.6 80	
31 M	0410	1.6 50		31 M	1133	7.9 240					
				1646	2.0 60						

Time meridian 52° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to the Canadian chart datum of soundings. Subtract 1.9 feet (62 centimeters) to refer these levels to the datum of N.O.S. charts.

Pictou, Nova Scotia, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0106	1.6	50	16 Su 0038	2.3	70	1 Tu 0255	1.6	50	1 Tu 0144	2.0	60
0809	4.9	150	0751	4.6	140	0959	4.9	150	0850	4.6	140
1246	3.9	120	1149	4.3	130	1428	3.9	120	1316	3.6	110
1856	5.9	180	1751	5.9	180	2039	5.9	180	1934	5.6	170
2 Su 0207	1.3	40	17 M 0137	2.0	60	2 0339	1.3	40	2 W 0235	1.6	50
0914	5.2	160	0852	4.6	140	1032	5.2	160	0925	4.9	150
1347	3.9	120	1300	4.3	130	1519	3.6	110	1416	3.3	100
1953	6.2	190	1855	5.9	180	● 2129	5.9	180	2031	5.6	170
3 M 0301	1.3	40	18 Tu 0229	1.6	50	3 Th 0417	1.6	50	3 Th 0316	1.6	50
1007	5.2	160	0940	4.9	150	1101	5.2	160	0954	4.9	150
1442	3.9	120	1405	3.9	120	1603	3.3	100	1505	3.0	90
2047	6.2	190	2000	6.2	190	2214	5.9	180	2120	5.6	170
4 Tu 0349	1.3	40	19 W 0315	1.3	40	4 F 0452	1.6	50	4 F 0351	2.0	60
1050	5.2	160	1020	5.2	160	1128	5.2	160	1020	4.9	150
1532	3.9	120	1503	3.6	110	1644	3.0	90	1547	2.6	80
● 2137	6.2	190	○ 2102	6.2	190	2255	5.9	180	● 2204	5.6	170
5 W 0432	1.3	40	20 Th 0359	1.0	30	5 Sa 0523	2.0	60	5 Sa 0423	2.0	60
1128	5.2	160	1057	5.6	170	1155	5.2	160	1046	5.2	160
1619	3.6	110	1556	3.3	100	1722	3.0	90	1624	2.3	70
2222	6.2	190	2158	6.6	200	2334	5.6	170	2244	5.6	170
6 Th 0512	1.3	40	21 F 0441	1.0	30	6 Su 0551	2.0	60	6 Su 0451	2.3	70
1202	5.6	170	1134	5.6	170	1220	5.2	160	1209	6.2	190
1702	3.6	110	1646	3.0	90	1758	2.6	80	1805	1.3	40
2305	6.2	190	2253	6.6	200				1111	5.2	160
7 F 0549	1.6	50	22 Sa 0523	1.0	30	7 M 0012	5.6	170	1658	2.3	70
1235	5.2	160	1210	5.9	180	0618	2.3	70	2322	5.2	160
1743	3.3	100	1735	2.6	80	1244	5.2	160			
2346	5.9	180	2346	6.2	190	1833	2.6	80			
8 Sa 0623	2.0	60	23 Su 0604	1.3	40	8 Tu 0050	5.2	160			
1305	5.2	160	1247	5.9	180	0644	2.6	80			
1824	3.3	100	1823	2.3	70	1306	5.6	170			
9 Su 0026	5.6	170	24 M 0040	6.2	190	1910	2.3	70			
0655	2.3	70	0646	1.6	50	9 W 0131	4.9	150			
1333	5.2	160	1324	5.9	180	0711	3.0	90			
1904	3.3	100	1913	2.0	60	1330	5.6	170			
10 M 0107	5.2	160	25 Tu 0137	5.6	170	1949	2.3	70			
0724	2.6	80	0730	2.3	70	10 Th 0216	4.6	140			
1359	5.2	160	1403	5.9	180	0739	3.3	100			
1945	3.0	90	2007	2.0	60	1357	5.6	170			
11 Tu 0151	4.9	150	26 W 0242	5.2	160	2035	2.3	70	2159	1.6	50
0753	3.0	90	0815	2.6	80	11 F 0312	4.6	140	1917	2.0	60
1425	5.2	160	1443	5.9	180	0809	3.3	100			
2031	3.0	90	○ 2108	2.0	60	1430	5.6	170			
12 W 0244	4.6	140	27 Th 0358	4.9	150	● 2131	2.3	70	2324	2.0	60
0823	3.3	100	0903	3.3	100				2001	2.0	60
1452	5.6	170	1528	5.9	180						
● 2123	3.0	90	2220	2.0	60						
13 Th 0352	4.6	140	28 F 0522	4.6	140						
0857	3.6	110	0959	3.6	110						
1524	5.6	170	1621	5.9	180						
2224	2.6	80	2340	2.0	60						
14 F 0517	4.3	130	29 M 0647	4.6	140						
0938	3.6	110	1107	3.9	120						
1604	5.6	170	1727	5.9	180						
2332	2.6	80									
15 Sa 0638	4.3	130	30 Su 0057	1.6	50						
1036	3.9	120	0811	4.9	150						
1653	5.6	170	1220	3.9	120						
			1837	5.9	180						
			31 M 0202	1.6	50						
			0916	4.9	150						
			1328	3.9	120						
			1943	5.9	180						

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Pictou, Nova Scotia, 2011

Times and Heights of High and Low Waters

April						May						June							
Time		Height		Time		Height		Time		Height		Time		Height		Time		Height	
1 F 0240 0902 1446 2108	2.3	70	16 Sa 0142 0810 1415 2046	2.0	60	1 Su 0231 0835 1459 2137	3.0	90	16 M 0205 0814 1450 2139	2.6	80	1 W 0301 0854 1546 2248	3.6	110	16 Th 0328 0931 1621 2321	3.3	100		
	4.9	150		5.6	170		5.2	160		5.9	180		5.6	170		6.2	190	6.2	190
	2.6	80		1.6	50		1.6	50		0.7	20		1.3	40		0.3	10	0.3	10
	5.2	160		5.6	170		4.9	150		5.6	170		4.9	150		5.2	160	5.2	160
2 Sa 0315 0930 1525 2151	2.3	70	17 Su 0235 0854 1507 2144	2.0	60	2 M 0306 0906 1534 2219	3.0	90	17 Tu 0257 0902 1540 2235	3.0	90	2 Th 0341 0933 1624 2330	3.6	110	17 F 0418 1021 1709	3.3	100		
	4.9	150		5.9	180		5.2	160		6.2	190		5.6	170		6.2	190	6.2	190
	2.3	70		1.0	30		1.3	40		0.3	10		1.0	30		1.0	30	0.7	20
	5.2	160		5.6	170		4.9	150		5.6	170		5.2	160		5.2	160	5.2	160
3 Su 0346 0958 1600 ● 2232	2.6	80	18 M 0323 0936 1556 2239	2.3	70	3 Tu 0338 0937 1608 2300	3.3	100	18 W 0347 0948 1629 2328	3.0	90	3 F 0421 1013 1702	3.6	110	18 Sa 0007 0506 1109 1755	5.2	160		
	5.2	160		5.9	180		5.2	160		6.2	190		5.9	180		5.9	180	5.9	180
	2.0	60		0.7	20		1.3	40		0.3	10		1.0	30		1.0	30	0.7	20
	5.2	160		5.9	180		4.9	150		5.6	170		5.2	160		5.2	160	5.2	160
4 M 0415 1024 1633 2311	2.6	80	19 Tu 0409 1018 1643 2332	2.3	70	4 W 0411 1007 1643 2341	3.3	100	19 Th 0434 1034 1718	3.0	90	4 Sa 0011 0503 1054 1742	5.2	160	19 Su 0050 0552 1157 1840	5.2	160		
	5.2	160		6.2	190		5.6	170		6.2	190		5.6	170		5.6	170	5.6	170
	1.6	50		0.3	10		1.0	30		0.3	10		1.0	30		1.0	30	1.0	30
	5.2	160		5.9	180		5.2	160		0.7	20		1.0	30		1.0	30	1.0	30
5 Tu 0443 1049 1706 2350	3.0	90	20 W 0454 1059 1730	2.6	80	5 Th 0445 1038 1718	3.3	100	20 F 0020 0521 1119 1806	5.6	170	5 Su 0052 0547 1137 1824	5.2	160	20 M 0132 0639 1245 1923	5.2	160		
	5.2	160		6.2	190		5.6	170		6.2	190		5.9	180		5.6	170	5.6	170
	1.3	40		0.3	10		1.0	30		0.7	20		1.0	30		1.0	30	1.0	30
	5.2	160		5.9	180		5.2	160		0.7	20		1.0	30		1.0	30	1.0	30
6 W 0512 1115 1739	3.0	90	21 Th 0526 0538 1140 1818	5.6	170	6 F 0022 0520 1111 1756	4.9	150	21 Sa 0111 0608 1206 1856	5.2	160	6 M 0134 0634 1225 1908	5.2	160	21 Tu 0211 0727 1335 2006	5.2	160		
	5.6	170		3.0	90		3.3	100		3.3	100		3.3	100		3.3	100	3.0	90
	1.3	40		6.2	190		5.6	170		5.9	180		5.6	170		5.6	170	5.6	170
	5.2	160		0.3	10		1.0	30		1.0	30		1.3	40		1.0	30	1.0	30
7 Th 0029 0542 1141 1815	4.9	150	22 F 0121 0624 1222 1910	5.2	160	7 Sa 0105 0558 1145 1837	4.9	150	22 Su 0201 0657 1254 1949	5.2	160	7 Tu 0215 0724 1318 1954	5.2	160	22 W 0249 0817 1430 2048	4.9	150		
	3.0	90		3.3	100		3.3	100		3.3	100		3.3	100		3.0	90	3.0	90
	5.6	170		5.9	180		5.6	170		5.6	170		5.6	170		5.6	170	5.6	170
	1.3	40		0.7	20		1.0	30		1.3	40		1.3	40		1.3	40	1.3	40
8 F 0110 0614 1210 1854	4.9	150	23 Sa 0220 0711 1306 2008	5.2	160	8 Su 0151 0640 1224 1922	4.9	150	23 M 0251 0749 1348 2042	4.9	150	8 W 0256 0819 1422 2044	5.2	160	23 Th 0325 0913 1533 2130	4.9	150		
	3.3	100		3.3	100		3.6	110		3.6	110		3.3	100		3.0	90	2.6	80
	5.6	170		5.6	170		5.6	170		5.2	160		5.2	160		5.2	160	4.6	140
	1.3	40		1.3	40		1.3	40		1.6	50		1.6	50		1.6	50	2.6	80
9 Sa 0156 0649 1242 1938	4.6	140	24 Su 0321 0804 1357 2114	4.9	150	9 M 0239 0728 1309 2011	4.9	150	24 Tu 0338 0848 1452 2136	4.9	150	9 W 0339 0921 1538 2137	5.2	160	24 F 0359 1014 1645 2213	4.9	150		
	3.3	100		3.6	110		3.6	110		3.6	110		3.3	100		3.0	90	2.6	80
	5.6	170		5.2	160		5.6	170		4.9	150		4.9	150		4.9	150	4.3	130
	1.6	50		1.6	50		1.3	40		2.0	60		2.0	60		2.0	60	3.0	90
10 Su 0249 0728 1319 2029	4.6	140	25 M 0420 0907 1506 2221	4.9	150	10 Tu 0327 0825 1406 2105	4.9	150	25 W 0422 0953 1607 2229	4.9	150	10 F 0423 1028 1701 2235	5.2	160	25 Sa 0435 1118 1755 2301	4.9	150		
	3.6	110		3.6	110		3.3	100		3.0	90		3.0	90		2.3	70	2.3	70
	5.6	170		4.9	150		5.2	160		4.6	140		4.6	140		4.9	150	4.3	130
	1.6	50		2.3	70		2.0	60		2.6	80		2.6	80		3.0	90	3.6	110
11 M 0349 0819 1406 ● 2129	4.6	140	26 Tu 0515 1020 1632 2323	4.6	140	11 W 0416 1092 1525 2204	4.9	150	26 Th 0504 1102 1723 2320	4.9	150	11 Sa 0509 1137 1819 2337	5.6	170	26 Su 0512 1217 1900 2352	5.2	160		
	3.6	110		3.6	110		3.3	100		3.0	90		2.0	60		2.3	70	2.3	70
	5.2	160		4.9	150		4.9	150		4.6	140		4.6	140		4.9	150	4.3	130
	1.6	50		2.3	70		2.0	60		2.6	80		2.6	80		3.0	90	3.6	110
12 Tu 0450 0929 1511 2235	4.6	140	27 W 0605 1134 1752	4.6	140	12 Th 0503 1044 1659 2306	4.9	150	27 F 0543 1206 1833 2030	4.9	150	12 Su 0558 1242 1931	5.6	170	27 M 0554 1311 2001	5.2	160		
	3.6	110		3.3	100		3.0	90		2.6	80		2.4	70		2.0	60	2.0	60
	5.2	160		4.6	140		4.9	150		4.6	140		4.6	140		4.6	140	4.6	140
	2.0	60		2.0	60		2.3	70		2.3	70		2.3	70		2.0	60	1.6	50
13 W 0546 1051 1647 2341	4.6	140	28 Th 0020 0648 1241 1902	2.3	70	13 F 0550 1155 1824	5.2	160	28 Sa 0010 0621 1301 1935	3.0	90	13 M 0039 0651 1342 2036	3.0	90	28 Tu 0044 0641 1359 2056	3.6	110		
	3.3	100		4.9	150		2.3	70		4.9	150		4.9	150		5.2	160	5.2	160
	4.9	150		3.0	90		4.9	150		4.6	140		4.6	140		4.6	140	4.6	140
	2.0	60		4.6	140		4.9	150		4.6	140		4.6	140		4.6	140	4.6	140
14 Th 0638 1209 1824	4.9	150	29 F 0110 0727 1336 2001	2.6	80	14 Sa 0008 0637 1259 1937	2.3	70	29 Su 0056 0659 1348 2030	3.3	100	14 M 0139 0745 1439 2136	3.3</						

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to the Canadian chart datum of soundings.

Pictou, Nova Scotia, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0314	3.6	110	16 Sa 0403	3.0	90	1 M 0430	2.6	80	1 Th 0511	2.3	70
0910	5.9	180	1014	6.2	190	1043	6.2	190	1133	5.6	170
1607	1.0	30	1657	1.0	30	1707	1.0	30	1746	2.0	60
● 2310	4.9	150	2343	5.2	160	2350	5.6	170	1804	2.0	60
2 Sa 0401	3.3	100	17 Su 0449	3.0	90	2 Tu 0516	2.3	70	2 W 0008	5.2	160
0959	5.9	180	1101	5.9	180	1134	6.2	190	0549	2.3	70
1647	1.0	30	1738	1.3	40	1747	1.3	40	1214	5.6	170
2349	5.2	160							1817	2.3	70
3 Su 0447	3.3	100	18 M 0019	5.2	160	3 W 0026	5.6	170	18 Th 0036	5.2	160
1048	5.9	180	0533	2.6	80	0603	2.0	60	0626	2.0	60
1728	1.0	30	1146	5.9	180	1226	5.9	180	1255	5.2	160
			1816	1.3	40	1829	1.3	40	1847	2.6	80
4 M 0026	5.2	160	19 Tu 0052	5.2	160	4 Th 0103	5.6	170	4 F 0102	5.2	160
0534	3.0	90	0616	2.6	80	0651	1.6	50	0704	2.0	60
1138	5.9	180	1231	5.6	170	1321	5.6	170	1338	4.9	150
1809	1.0	30	1852	1.6	50	1912	2.0	60	1916	3.0	90
5 Tu 0104	5.2	160	20 W 0125	5.2	160	5 F 0142	5.9	180	20 Sa 0128	5.2	160
0621	2.6	80	0658	2.6	80	0743	1.6	50	0744	2.3	70
1229	5.9	180	1316	5.2	160	1422	5.2	160	1425	4.6	140
1851	1.3	40	1927	2.3	70	1958	2.3	70	1947	3.0	90
6 W 0141	5.6	170	21 Th 0155	5.2	160	6 Sa 0224	5.9	180	21 W 0157	5.2	160
0710	2.3	70	0741	2.6	80	0840	1.6	50	0829	2.3	70
1325	5.6	170	1403	4.9	150	1531	4.9	150	1521	4.6	140
1935	1.6	50	2000	2.6	80	● O 2048	2.6	80	● O 2021	3.3	100
7 Th 0220	5.6	170	22 F 0225	5.2	160	7 Su 0311	5.6	170	7 M 0231	5.2	160
0803	2.3	70	0827	2.3	70	0948	1.6	50	0925	2.3	70
1427	5.2	160	1457	4.6	140	1648	4.9	150	1630	4.3	130
2021	2.0	60	2034	3.0	90	2145	3.3	100	2103	3.6	110
8 F 0301	5.6	170	23 Sa 0254	5.2	160	8 M 0406	5.6	170	23 Tu 0313	5.2	160
0902	2.0	60	0919	2.3	70	1105	1.6	50	1033	2.3	70
1538	4.9	150	Sa 1601	4.3	130	1804	4.6	140	1742	4.3	130
● 2112	2.3	70	● O 2111	3.3	100	2251	3.6	110	2159	3.6	110
9 Sa 0345	5.6	170	24 Su 0328	5.2	160	9 Tu 0511	5.6	170	24 W 0407	5.2	160
1008	1.6	50	1020	2.3	70	1221	1.3	40	1146	2.3	70
1655	4.9	150	1711	4.3	130	1919	4.6	140	1852	4.3	130
2208	3.0	90	2155	3.3	100				2312	3.6	110
10 Su 0434	5.6	170	25 M 0408	5.2	160	10 W 0001	3.6	110	25 Th 0516	5.2	160
1119	1.6	50	1126	2.3	70	0621	5.6	170	1252	2.0	60
1812	4.9	150	1821	4.3	130	1330	1.3	40	1953	4.6	140
2311	3.3	100	2249	3.6	110	2026	4.9	150			
11 M 0530	5.6	170	26 Tu 0457	5.2	160	11 Th 0108	3.6	110	26 F 0026	3.6	110
1229	1.3	40	1231	2.0	60	0727	5.9	180	0633	5.6	170
1925	4.9	150	1928	4.3	130	1428	1.3	40	1347	1.6	50
			2352	3.6	110	2119	4.9	150	2041	4.6	140
12 Tu 0016	3.3	100	27 W 0554	5.2	160	12 F 0208	3.3	100	12 Sa 0516	5.2	160
0630	5.9	180	1329	2.0	60	0826	5.9	180	0621	5.6	170
1335	1.0	30	2029	4.6	140	1517	1.3	40	1252	2.0	60
2033	4.9	150				2200	4.9	150	1953	4.6	140
13 W 0120	3.6	110	28 Th 0055	3.6	110	13 Sa 0301	3.0	90	26 F 0026	3.6	110
0731	5.9	180	0657	5.6	170	0918	5.9	180	0633	5.6	170
1434	1.0	30	1420	1.6	50	1559	1.3	40	1347	1.6	50
2132	4.9	150	2119	4.6	140	● O 2236	5.2	160	2041	4.6	140
14 Th 0219	3.3	100	29 F 0155	3.6	110	14 Su 0348	2.6	80	12 Sa 0516	5.2	160
0830	5.9	180	0759	5.9	180	1006	5.9	180	0633	5.6	170
1527	1.0	30	1505	1.3	40	1638	1.3	40	1347	1.6	50
2222	5.2	160	2201	4.9	150	2308	5.2	160	2121	4.9	150
15 F 0313	3.3	100	30 Su 0250	3.3	100	15 M 0431	2.6	80	27 W 0132	3.3	100
0924	6.2	190	0857	5.9	180	1051	5.9	180	0744	5.6	170
1614	1.0	30	1546	1.0	30	1713	1.6	50	1435	1.6	50
● 2304	5.2	160	● O 2239	5.2	160	2339	5.2	160	2226	5.2	160
16 Th 0341	3.0	90	31 Su 0951	6.2	190				● O 2149	5.9	180
			1627	1.0	30						
			2315	5.2	160						

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Pictou, Nova Scotia, 2011

Times and Heights of High and Low Waters

October						November						December							
Time		Height		Time		Height		Time		Height		Time		Height		Time		Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0611	0.7	20	16 Su	0602	1.6	50	1 Tu	0050	6.2	190	16 W	0005	5.9	180	1 Th	0126	5.9	180
	1305	5.9	180		1301	5.2	160		0742	1.3	40		0659	1.6	50		0812	2.0	60
	1824	3.0	90		1806	3.6	110		1454	5.6	170		1413	5.2	160		1510	5.6	170
					2358	5.6	170		1946	3.6	110		1908	3.9	120		2021	3.6	110
2 Su	0030	6.2	190	17 M	0639	1.6	50	2 W	0144	5.9	180	17 Th	0047	5.6	170	2 O	0228	5.2	160
	0702	1.0	30		1346	4.9	150		0845	1.6	50		0743	2.0	60		0905	2.3	70
	1405	5.6	170		1841	3.6	110		1554	5.2	160		1458	5.2	160		1556	5.2	160
									2048	3.6	110		1959	3.6	110		2125	3.3	100
3 M O	0115	5.9	180	18 Tu	0029	5.6	170	3 Th	0255	5.6	170	18 O	0138	5.6	170	3 Sa	0344	4.9	150
	0800	1.3	40		0721	2.0	60		0953	2.3	70		0832	2.3	70		0959	3.0	90
	1513	5.2	160		1435	4.9	150		1650	5.2	160		1543	5.2	160		1640	5.2	160
					1921	3.9	120		2201	3.6	110		2101	3.6	110		2237	3.3	100
4 Tu	0208	5.9	180	19 W	0106	5.6	170	4 F	0419	5.2	160	19 Sa	0248	5.2	160	4 Su	0505	4.9	150
	0911	1.6	50		0809	2.0	60		1058	2.6	80		0927	2.3	70		1054	3.3	100
	1623	4.9	150		1531	4.9	150		1741	5.2	160		1628	5.2	160		1721	5.2	160
					2010	3.9	120		2317	3.3	100		2211	3.3	100		2349	3.0	90
5 W	0319	5.6	170	20 Th	0152	5.6	170	5 Sa	0539	4.9	150	20 Su	0421	4.9	150	5 M	0621	4.9	150
	1029	2.0	60		0905	2.3	70		1158	2.6	80		1026	2.6	80		1148	3.6	110
	1730	4.9	150		1628	4.9	150		1826	5.2	160		1714	5.6	170		1802	5.2	160
					2115	3.9	120						2322	3.0	90				
6 Th	0443	5.2	160	21 F	0256	5.2	160	6 Su	0025	3.0	90	21 M	0552	4.9	150	6 Tu	0050	2.6	80
	1142	2.0	60		1008	2.3	70		0651	4.9	150		1129	3.0	90		0728	4.9	150
	1831	4.9	150		1721	4.9	150		1251	3.0	90		1801	5.6	170		1239	3.6	110
					2232	3.6	110		1907	5.2	160						1842	5.6	170
7 F	0601	5.2	160	22 Sa	0430	5.2	160	7 M	0122	2.6	80	22 Tu	0028	2.3	70	7 W	0140	2.3	70
	1244	2.3	70		1113	2.3	70		0752	5.2	160		0708	5.2	160		0825	4.9	150
	1921	4.9	150		1809	4.9	150		1338	3.3	100		1232	3.0	90		1325	3.9	120
					2346	3.3	100		1944	5.2	160		1850	5.9	180		1922	5.6	170
8 Sa	0047	3.3	100	23 Su	0604	5.2	160	8 Tu	0208	2.3	70	23 W	0128	1.6	50	8 Th	0224	2.0	60
	0710	5.2	160		1216	2.6	80		0844	5.2	160		0814	5.6	170		0914	4.9	150
	1337	2.3	70		1855	5.2	160		1418	3.3	100		1332	3.3	100		1408	3.9	120
									2019	5.6	170		1941	6.2	190		2001	5.9	180
9 Su	0143	3.0	90	24 M	0051	2.6	80	9 W	0249	2.0	60	24 Th	0223	1.0	30	9 F	0302	2.0	60
	0808	5.2	160		0720	5.2	160		0930	5.2	160		0913	5.6	170		0957	5.2	160
	1422	2.6	80		1314	2.6	80		1454	3.6	110		1427	3.3	100		1447	3.9	120
					1939	5.6	170		2051	5.6	170		2031	6.6	200		2039	5.9	180
10 M	0230	2.3	70	25 Tu	0149	2.0	60	10 Th	0325	1.6	50	25 F	0315	0.7	20	10 O	0337	1.6	50
	0858	5.6	170		0824	5.6	170		1011	5.2	160		1009	5.9	180		1037	5.2	160
	1500	2.6	80		1407	2.6	80		1528	3.6	110		1519	3.3	100		1526	3.9	120
					2023	5.9	180		2123	5.6	170		2120	6.6	200		2117	5.9	180
11 Tu	0311	2.0	60	26 W	0241	1.3	40	11 F	0358	1.6	50	26 Sa	0405	0.7	20	11 Su	0412	1.6	50
	0943	5.6	170		0921	5.9	180		1051	5.2	160		1102	5.9	180		1115	5.2	160
	1534	2.6	80		1457	2.6	80		1559	3.6	110		1609	3.3	100		1604	3.9	120
									2153	5.9	180		2209	6.6	200		2155	6.2	190
12 W	0348	2.0	60	27 Th	0330	0.7	20	12 Sa	0431	1.6	50	27 Su	0453	0.7	20	12 M	0447	1.3	40
	1024	5.6	170		1015	6.2	190		1129	5.6	170		1153	5.9	180		1140	5.9	180
	1606	3.0	90		1544	2.6	80		1632	3.6	110		1657	3.6	110		1644	3.9	120
					2150	6.6	200		2223	5.9	180		2256	6.6	200		2234	6.2	190
13 Th	0422	1.6	50	28 F	0418	0.3	10	13 Su	0505	1.6	50	28 M	0542	0.7	20	13 Tu	0523	1.3	40
	1104	5.6	170		1108	6.2	190		1208	5.2	160		1243	5.9	180		1230	5.6	170
	1635	3.0	90		1630	3.0	90		1707	3.6	110		1745	3.6	110		1726	3.6	110
					2234	6.6	200		2255	5.9	180		2344	6.6	200		2314	6.2	190
14 F	0455	1.6	50	29 Sa	0506	0.3	10	14 M	0540	1.6	50	29 Tu	0631	1.0	30	14 W	0601	1.3	40
	1142	5.2	160		1201	5.9	180		1248	5.2	160		1333	5.6	170		1306	5.6	170
	1705	3.3	100		1716	3.3	100		1743	3.9	120		1834	3.6	110		1809	3.6	110
					2317	6.6	200		2328	5.9	180						2358	5.9	180
15 Sa	0528	1.6	50	30 Su	0554	0.7	20	15 Tu	0618	1.6	50	30 W	0033	6.2	190	15 Th	0640	1.6	50
	1221	5.2	160		1256	5.9	180		1330	5.2	160		0720	1.6	50		1343	5.6	170
	1735	3.3	100		1803	3.3	100		1823	3.9	120		1422	5.6	170		1855	3.6	110
													1925	3.6	110				
31 M	0002	6.2	190													31 Sa	0201	5.2	160
	0646	1.0	30														0815	2.6	80
	1353	5.6	170														1453	5.6	170
					1852	3.6	110										2042	3.0	90

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to the Canadian chart datum of soundings.

Harrington Harbour, Quebec, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0148	1.3	40	16 Su 0121	1.6	50	1 Tu 0321	1.0	30	16 W 0244	1.0	30
0847	6.2	190	0831	5.6	170	1013	6.2	190	0935	6.2	190
1504	2.3	70	1452	2.6	80	1627	2.0	60	1553	2.0	60
2032	4.6	140	2004	4.6	140	2155	4.9	150	2126	5.2	160
2 Su 0242	1.0	30	17 M 0215	1.3	40	2040	1.0	30	17 Th 0333	0.3	10
0938	6.6	200	0918	6.2	190	1049	6.2	190	1015	6.6	200
1556	2.3	70	1538	2.6	80	1701	2.0	60	1631	1.3	40
2121	4.9	150	2055	4.6	140	● 2233	5.2	160	2213	5.6	170
3 M 0330	1.0	30	18 Tu 0304	1.0	30	0443	0.7	20	18 F 0420	0.3	10
1024	6.6	200	0959	6.6	200	1121	6.2	190	1054	6.6	200
1640	2.3	70	1619	2.3	70	1733	1.6	50	1708	1.0	30
2205	4.9	150	2142	4.9	150	2309	5.2	160	○ 2258	5.9	180
4 Tu 0414	0.7	20	19 W 0349	0.7	20	0519	1.0	30	19 Sa 0506	0.0	0
1105	6.9	210	1040	6.9	210	1150	6.2	190	1132	6.6	200
1721	2.0	60	1658	2.0	60	1803	1.6	50	1746	0.7	20
● 2245	5.2	160	○ 2227	5.2	160	2344	5.2	160	2344	6.2	190
5 W 0455	0.7	20	20 Th 0434	0.3	10	0553	1.0	30	20 Sa 0553	0.3	10
1143	6.6	200	1120	6.9	210	1218	5.9	180	1210	6.6	200
1758	2.0	60	1737	1.6	50	1832	1.6	50	1824	0.7	20
2324	5.2	160	2312	5.6	170	2052	1.0	30	1117	5.6	170
6 Th 0534	1.0	30	21 F 0519	0.3	10	0018	5.6	170	0641	0.7	20
1218	6.6	200	1159	6.9	210	0627	1.3	40	1244	5.9	180
1834	2.0	60	1816	1.3	40	1859	1.6	50	1904	0.7	20
7 F 0002	5.2	160	22 Sa 0605	0.3	10	0053	5.2	160	0031	6.2	190
0613	1.0	30	1238	6.9	210	0701	1.6	50	0641	0.7	20
1251	6.2	190	1856	1.3	40	1311	5.6	170	1249	5.9	180
1908	2.0	60	2358	5.9	180	1928	1.6	50	1904	0.7	20
8 Sa 0040	5.2	160	23 Su 0046	5.9	180	0130	5.2	160	0826	1.6	50
0650	1.3	40	0653	0.7	20	0737	2.0	60	1410	4.9	150
1323	5.9	180	1318	6.6	200	1339	5.2	160	2034	1.0	30
1942	2.0	60	1938	1.0	30	1959	1.6	50	1845	1.0	30
9 Su 0120	5.2	160	24 M 0136	5.9	180	0211	5.2	160	0312	5.6	170
0729	1.6	50	0745	1.3	40	0818	2.3	70	0930	2.3	70
1355	5.6	170	1359	5.9	180	1410	4.9	150	1457	4.6	140
2016	2.0	60	2021	1.3	40	2033	1.6	50	● 2130	1.3	40
10 M 0202	4.9	150	25 Tu 0231	5.6	170	0259	4.9	150	0429	5.2	160
0811	2.0	60	0842	1.6	50	0910	2.6	80	1047	2.6	80
1428	5.2	160	1444	5.6	170	1446	4.6	140	1557	4.3	130
2053	2.0	60	2110	1.3	40	2116	2.0	60	2241	1.6	50
11 Tu 0251	4.9	150	26 W 0335	5.6	170	0404	4.9	150	0603	5.2	160
0859	2.6	80	0948	2.3	70	1018	3.0	90	1217	3.0	90
1504	4.9	150	1534	4.9	150	1533	4.3	130	1727	3.9	120
2134	2.3	70	● 2205	1.6	50	○ 2214	2.0	60	2029	1.6	50
12 W 0350	4.9	150	27 Th 0453	5.2	160	0529	4.9	150	0003	1.6	50
0959	3.0	90	1106	2.6	80	1147	3.3	100	0727	5.2	160
1548	4.6	140	1637	4.6	140	1644	3.9	120	1343	2.6	80
● 2221	2.3	70	2311	1.6	50	2327	2.0	60	1904	3.9	120
13 Th 0504	4.9	150	28 F 0621	5.6	170	0657	4.9	150	0119	1.6	50
1115	3.0	90	1234	3.0	90	1317	3.0	90	0828	5.6	170
1643	4.3	130	1756	4.3	130	1818	3.9	120	1443	2.6	80
2318	2.3	70	1917	4.3	130	1936	4.3	130	2013	4.3	130
14 F 0625	4.9	150	29 M 0024	1.6	50	0043	1.6	50	0324	4.9	150
1239	3.0	90	0741	5.6	170	0802	5.6	170	0948	2.6	80
1752	4.3	130	1356	2.6	80	1423	2.6	80	1453	4.3	130
1903	4.3	130	1917	4.3	130	1936	4.3	130	● 2127	1.6	50
15 Sa 0021	2.0	60	30 M 0134	1.3	40	0149	1.3	40	0444	4.9	150
0735	5.2	160	0843	5.9	180	0853	5.9	180	0828	5.6	170
1354	3.0	90	1459	2.6	80	1512	2.3	70	1605	3.9	120
1903	4.3	130	2022	4.3	130	2035	4.6	140	2246	1.6	50
16 M 0232	1.3	40	31 M 0933	6.2	190				14 0615	4.9	150
1548	2.3	70	1548	2.3	70				1238	2.6	80
2112	4.6	140	2112	4.6	140				1748	3.9	120

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Harrington Harbour, Quebec, 2011

Times and Heights of High and Low Waters

April				May				June					
	Time	Height			Time	Height			Time	Height			
	h m	ft	cm		h m	ft	cm		h m	ft	cm		
1 F 0333 1.3 40 0945 5.2 160 1554 1.3 40 2159 5.2 160	16 Sa 0300 1.0 30 0909 5.6 170 1521 0.7 20 2140 6.2 190			1 Su 0349 1.6 50 0934 4.6 140 1541 1.0 30 2209 5.6 170			16 M 0341 1.3 40 0925 4.9 150 1534 0.3 10 2213 6.6 200		1 W 0445 2.0 60 1007 4.6 140 1611 1.0 30 2259 6.2 190			16 Th 0513 1.6 50 1040 4.9 150 1649 0.3 10 2339 6.6 200	
					2 M 0425 1.6 50 1004 4.6 140 1610 1.0 30 2243 5.9 180			17 Tu 0432 1.3 40 1011 4.9 150 1619 0.3 10 2301 6.9 210		2 O 0522 2.0 60 1045 4.6 140 1647 0.7 20 2337 6.2 190			17 F 0558 1.6 50 1124 4.9 150 1734 0.7 20
					3 M 0442 0.7 20 1034 5.6 170 1643 0.0 0 2313 6.9 210			18 W 0522 1.3 40 1055 4.9 150 1703 0.3 10 2349 6.9 210		3 F 0601 2.0 60 1123 4.6 140 1726 0.7 20			18 Sa 0023 6.6 200 0642 1.6 50 1207 4.9 150 1818 0.7 20
					4 W 0444 1.3 40 1040 5.2 160 1649 1.0 30 2304 5.6 170			19 Th 0531 0.7 20 1116 5.2 160 1724 0.0 0		4 Sa 0017 6.2 190 0641 2.0 60 1204 4.6 140 1807 0.7 20			19 Su 0106 6.2 190 0725 2.0 60 1251 4.9 150 1903 1.0 30
5 Tu 0550 1.3 40 1134 4.9 150 1741 1.0 30	20 W 0000 6.9 210 0620 1.0 30 1157 4.9 150 1807 0.3 10			5 Th 0613 1.6 50 1140 4.6 140 1742 0.7 20			20 F 0037 6.6 200 0659 1.6 50 1222 4.6 140 1834 0.7 20		5 Su 0058 6.2 190 0724 2.0 60 1247 4.6 140 1852 1.0 30			20 M 0147 5.9 180 0806 2.0 60 1337 4.9 150 1951 1.3 40	
					6 W 0008 5.9 180 0624 1.6 50 1202 4.9 150 1809 1.0 30			21 Th 0049 6.6 200 0710 1.3 40 1239 4.9 150 1852 0.7 20		6 M 0028 5.9 180 0652 2.0 60 1215 4.6 140 1819 1.0 30			21 Tu 0126 6.2 190 0748 2.0 60 1308 4.6 140 1922 1.0 30
					7 Th 0043 5.6 170 0701 2.0 60 1233 4.6 140 1840 1.0 30			22 F 0140 6.2 190 0803 2.0 60 1323 4.6 140 1941 1.0 30		7 Sa 0109 5.9 180 0736 2.0 60 1255 4.6 140 1900 1.0 30			22 W 0215 5.9 180 0839 2.0 60 1358 4.3 130 2015 1.3 40
					8 F 0121 5.6 170 0743 2.0 60 1307 4.6 140 1916 1.3 40			23 Sa 0237 5.9 180 0901 2.3 70 1413 4.3 130 2037 1.3 40		8 M 0154 5.6 170 0825 2.3 70 1341 4.3 130 1950 1.3 40			23 Th 0307 5.6 170 0930 2.3 70 1455 4.3 130 2116 1.6 50
9 Sa 0206 5.2 160 0833 2.3 70 1347 4.3 130 2002 1.3 40	24 M 0341 5.2 160 1004 2.3 70 1516 3.9 120 2146 1.6 50			9 M 0246 5.6 170 0920 2.3 70 1438 4.3 130 2050 1.6 50			24 Tu 0402 4.9 150 1023 2.3 70 1606 4.3 130 2224 2.0 60		9 W 0415 5.2 160 1043 1.6 50 1656 4.9 150 2303 2.0 60			24 O 0442 4.6 140 1107 2.0 60 1743 4.6 140 2243 2.6 80	
					10 Su 0302 5.2 160 0934 2.6 80 1439 3.9 120 2102 1.6 50			10 M 0452 4.9 150 1111 2.3 70 1641 3.9 120 2305 2.0 60		25 W 0347 5.2 160 1020 2.3 70 1551 4.3 130 2203 1.6 50			10 F 0458 4.9 150 1117 2.3 70 1725 4.3 130 2338 2.3 70
					11 M 0413 4.9 150 1046 2.6 80 1554 3.9 120 2220 1.6 50			11 W 0452 5.2 160 1120 2.0 60 1716 4.3 130 2322 1.6 50		26 W 0554 4.6 140 1210 2.0 60 1839 4.6 140			11 Sa 0515 4.9 150 1139 1.3 40 1812 5.2 160
					12 Tu 0533 4.9 150 1159 2.3 70 1732 3.9 120 2344 1.6 50			12 Th 0024 2.0 60 0700 4.9 150 1311 2.0 60 1924 4.3 130		27 F 0556 5.2 160 1218 1.6 50 1834 4.9 150 1938 4.9 150			12 Su 0131 2.0 60 0716 4.6 140 1331 1.0 30 2019 5.9 180
13 W 0641 5.2 160 1302 2.0 60 1855 4.3 130	28 Th 0131 2.0 60 0748 4.6 140 1358 2.0 60 2016 4.9 150			13 F 0038 1.6 50 0655 5.2 160 1312 1.3 40 1938 5.2 160			28 M 0150 2.3 70 0732 4.3 130 1345 1.6 50 2026 5.2 160		13 W 0235 2.0 60 0813 4.6 140 1424 0.7 20 2114 6.2 190			28 Tu 0300 2.6 80 0816 4.3 130 1427 1.3 40 2123 5.9 180	
					14 Th 0059 1.3 40 0737 5.2 160 1354 1.6 50 1958 4.9 150			14 F 0225 2.0 60 0827 4.6 140 1437 1.6 50 2058 5.2 160		29 M 0146 1.6 50 0748 5.2 160 1402 1.0 30 2033 5.9 180			14 W 0241 2.3 70 0814 4.3 130 1425 1.3 40 2107 5.6 170
					15 F 0204 1.0 30 0825 5.6 170 1439 1.0 30 2051 5.6 170			15 M 0246 1.3 40 0838 4.9 150 1449 0.7 20 2124 6.6 200		30 W 0326 2.0 60 0853 4.3 130 1502 1.3 40 2146 5.9 180			15 Th 0425 1.6 50 0954 4.9 150 1603 0.3 10 2253 6.6 200
								31 Tu 0406 2.0 60 0931 4.6 140 1536 1.0 30 2223 5.9 180					30 Tu 0425 2.3 70 0944 4.6 140 1550 1.0 30 2243 6.2 190

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Harrington Harbour, Quebec, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0504	2.0	60	16 Sa 0539	2.0	60	1 M 0552	1.3	40	1 Th 0004	5.9	180
1026	4.9	150	1109	5.2	160	1137	5.6	170	0615	1.6	50
1631	0.7	20	1720	0.7	20	1744	0.3	10	1207	5.6	170
● 2322	6.2	190							1819	1.3	40
2 Sa 0542	2.0	60	17 Su 0003	6.2	190	2 Tu 0014	6.6	200	17 W 0032	5.6	170
1108	4.9	150	0617	1.6	50	0631	1.3	40	0644	1.6	50
1713	0.7	20	1150	5.2	160	1223	5.9	180	1243	5.6	170
			1801	1.0	30	1831	0.7	20	1855	1.6	50
3 Su 0000	6.6	200	18 M 0038	6.2	190	3 W 0053	6.2	190	18 Th 0100	5.2	160
0621	1.6	50	0652	1.6	50	0711	1.0	30	0714	1.6	50
1151	5.2	160	1230	5.2	160	1311	5.9	180	1320	5.2	160
1756	0.7	20	1842	1.0	30	1921	1.0	30	1933	2.0	60
4 M 0040	6.2	190	19 Tu 0111	5.9	180	4 Th 0134	5.9	180	19 F 0130	4.9	150
0701	1.6	50	0727	1.6	50	0753	1.0	30	0746	1.6	50
1237	5.2	160	1311	5.2	160	1404	5.9	180	1401	5.2	160
1843	0.7	20	1923	1.6	50	2016	1.6	50	2015	2.3	70
5 Tu 0120	6.2	190	20 W 0144	5.6	170	5 F 0218	5.2	160	20 Sa 0201	4.9	150
0743	1.6	50	0802	1.6	50	0840	1.3	40	0821	2.0	60
1327	5.2	160	1353	4.9	150	1504	5.6	170	1449	4.9	150
1933	1.0	30	2006	2.0	60	2118	2.0	60	2106	2.6	80
6 W 0203	5.9	180	21 Th 0217	5.2	160	6 Sa 0307	4.9	150	21 F 0238	4.6	140
0827	1.3	40	0838	2.0	60	0934	1.3	40	0904	2.0	60
1421	5.2	160	1440	4.9	150	1615	5.6	170	1551	4.9	150
2029	1.3	40	2053	2.3	70	● 2231	2.3	70	● 2212	3.0	90
7 Th 0249	5.6	170	22 F 0253	4.9	150	7 Su 0406	4.6	140	21 Th 0238	4.6	140
0915	1.3	40	0918	2.0	60	1037	1.6	50	0904	2.0	60
1523	5.2	160	1536	4.9	150	1738	5.6	170	1551	4.9	150
2133	2.0	60	2150	2.6	80	2353	2.6	80	2334	3.0	90
8 F 0339	5.2	160	23 Sa 0334	4.6	140	8 M 0521	4.3	130	23 Tu 0437	3.9	120
1007	1.3	40	1004	2.0	60	1150	1.6	50	1113	2.0	60
1635	5.2	160	1644	4.6	140	1901	5.6	170	1837	4.9	150
● 2245	2.3	70	● 2259	3.0	90						
9 Sa 0438	4.9	150	24 Su 0425	4.3	130	9 Tu 0115	2.6	80	24 W 0056	3.0	90
1105	1.3	40	1059	2.0	60	0643	4.3	130	0605	3.9	120
1752	5.2	160	1802	4.9	150	1302	1.3	40	1227	2.0	60
						2010	5.9	180	1942	5.2	160
10 Su 0003	2.3	70	25 M 0017	3.0	90	10 W 0224	2.6	80	10 Th 0200	2.6	80
0544	4.6	140	0530	4.3	130	0753	4.3	130	0720	4.3	130
1208	1.3	40	1201	2.0	60	1405	1.3	40	1331	1.6	50
1907	5.6	170	1914	4.9	150	2104	5.9	180	2031	5.6	170
11 M 0120	2.3	70	26 Tu 0132	3.0	90	11 Th 0317	2.3	70	26 F 0248	2.3	70
0653	4.6	140	0641	4.3	130	0849	4.6	140	0817	4.6	140
1312	1.3	40	1302	2.0	60	1458	1.0	30	1425	1.3	40
2013	5.9	180	2012	5.2	160	2149	6.2	190	2113	5.9	180
12 Tu 0229	2.3	70	27 W 0232	2.6	80	12 F 0400	2.0	60	27 Sa 0328	2.0	60
0758	4.6	140	0745	4.3	130	0935	4.9	150	0905	5.2	160
1411	1.0	30	1357	1.6	50	1545	1.0	30	1513	1.0	30
2110	6.2	190	2059	5.6	170	2227	6.2	190	2152	6.2	190
13 W 0327	2.3	70	28 Th 0320	2.6	80	13 F 0438	2.0	60	28 Su 0405	1.6	50
0854	4.6	140	0837	4.6	140	1016	5.2	160	0951	5.6	170
1505	0.7	20	1446	1.3	40	1626	0.7	20	1559	0.7	20
2159	6.6	200	2142	5.9	180	● 2302	6.2	190	● 2229	6.6	200
14 Th 0416	2.0	60	29 F 0400	2.3	70	14 W 0512	1.6	50	29 M 0442	1.3	40
0943	4.9	150	0924	4.9	150	1054	5.2	160	1035	5.9	180
1553	0.7	20	1532	1.0	30	1705	1.0	30	1644	0.3	10
2244	6.6	200	2221	6.2	190	2334	5.9	180	2306	6.6	200
15 F 0459	2.0	60	30 Su 0438	2.0	60	15 M 0544	1.6	50	30 Tu 0519	1.0	30
1028	4.9	150	1008	5.2	160	1131	5.6	170	1120	6.2	190
1638	0.7	20	1615	0.7	20	1743	1.0	30	1730	0.7	20
● 2325	6.6	200	● 2259	6.6	200				2345	6.2	190
31 Su 0515	1.6	50							31 W 0557	0.7	20
1052	5.6	170							1206	6.6	200
1659	0.3	10							1818	0.7	20
2336	6.6	200									

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
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Harrington Harbour, Quebec, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
	h m	ft cm		h m	ft cm			h m	ft cm		
1 Sa	0039	5.2	160	16 Su	0021	4.9	150	1 Tu	0159	4.6	140
	0651	0.7	20		0625	1.3	40		0819	1.6	50
	1331	6.6	200		1307	5.9	180		1519	5.9	180
	1952	2.0	60		1932	2.3	70		2143	2.6	80
2 Su	0125	4.9	150	17 M	0055	4.6	140	2 W	0304	4.6	140
	0741	1.0	30		0701	1.6	50		0928	2.0	60
	1431	6.2	190		1351	5.6	170		1630	5.6	170
	2055	2.3	70		2021	2.6	80		2248	2.6	80
3 M	0217	4.6	140	18 Tu	0136	4.6	140	3 Th	0428	4.3	130
	0841	1.6	50		0745	2.0	60		1048	2.3	70
	1543	5.6	170		1444	5.2	160		1741	5.2	160
	2207	2.6	80		2120	3.0	90		2352	2.6	80
4 Tu	0323	4.3	130	19 W	0228	4.3	130	4 F	0558	4.6	140
	0954	2.0	60		0844	2.0	60		1207	2.3	70
	1708	5.6	170		1552	5.2	160		1841	5.2	160
	2325	2.6	80		2228	3.0	90				
5 W	0455	4.3	130	20 Th	0341	4.3	130	5 Sa	0050	2.3	70
	1118	2.0	60		1000	2.3	70		0709	4.9	150
	1827	5.2	160		1709	5.2	160		1316	2.3	70
					2336	2.6	80		1931	5.2	160
6 Th	0038	2.6	80	21 F	0513	4.3	130	6 Su	0138	2.0	60
	0630	4.3	130		1123	2.3	70		0802	5.2	160
	1238	2.0	60		1817	5.2	160		1412	2.3	70
	1928	5.6	170						2013	4.9	150
7 F	0137	2.3	70	22 Sa	0036	2.3	70	7 M	0219	2.0	60
	0738	4.6	140		0634	4.6	140		0846	5.6	170
	1343	2.0	60		1238	2.0	60		1458	2.0	60
	2015	5.6	170		1912	5.6	170		2049	4.9	150
8 Sa	0222	2.0	60	23 Su	0127	2.0	60	8 Tu	0255	1.6	50
	0827	5.2	160		0735	5.2	160		0923	5.9	180
	1435	1.6	50		1341	1.6	50		1539	2.0	60
	2054	5.6	170		1959	5.6	170		2122	4.9	150
9 Su	0259	2.0	60	24 M	0211	1.3	40	9 W	0328	1.3	40
	0908	5.6	170		0827	5.9	180		0959	6.2	190
	1518	1.6	50		1437	1.3	40		1616	2.0	60
	2127	5.6	170		2043	5.9	180		2153	4.9	150
10 M	0333	1.6	50	25 Tu	0254	1.0	30	10 Th	0358	1.3	40
	0944	5.6	170		0915	6.6	200		1032	6.2	190
	1557	1.6	50		1528	1.0	30		1651	2.0	60
	2158	5.2	160		2126	5.9	180		2224	4.9	150
11 Tu	0403	1.3	40	26 W	0335	0.7	20	11 F	0428	1.3	40
	1018	5.9	180		1002	6.9	210		1105	6.2	190
	1633	1.6	50		1617	1.0	30		1726	2.0	60
	2226	5.2	160		● 2208	5.6	170		2255	4.9	150
12 W	0431	1.3	40	27 Th	0417	0.3	10	12 Sa	0458	1.3	40
	1050	5.9	180		1048	7.2	220		1139	6.2	190
	1707	1.6	50		1706	1.0	30		1801	2.3	70
	2253	5.2	160		2251	5.6	170		2327	4.9	150
13 Th	0459	1.3	40	28 F	0459	0.3	10	13 Su	0529	1.3	40
	1123	6.2	190		1136	7.2	220		1215	6.2	190
	1740	1.6	50		1756	1.3	40		1839	2.3	70
	2321	5.2	160		2335	5.6	170		1920	2.3	70
14 F	0526	1.3	40	29 Sa	0543	0.3	10	14 M	0002	4.9	150
	1155	5.9	180		1225	6.9	210		0604	1.3	40
	1814	2.0	60		1847	1.6	50		1253	6.2	190
	2350	4.9	150						1920	2.3	70
15 Sa	0554	1.3	40	30 Su	0019	5.2	160	15 Tu	0040	4.9	150
	1230	5.9	180		0630	0.7	20		0643	1.3	40
	1851	2.3	70		1318	6.6	200		1335	5.9	180
					1941	2.0	60		2005	2.6	80
31 M	0106	4.9	150	31 M	0721	1.0	30				
					1415	6.2	190				
					2040	2.3	70				

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Quebec, Quebec, 2011

Times and Heights of High and Low Waters

January					February					March						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		
1 Sa	0333	13.1	400	16 Su	0315	11.2	340	1 Tu	0033	1.0	30	16 W	0436	13.5	410	
	1039	1.3	40		1003	2.3	70		0515	13.8	420		1145	1.0	30	
	1545	17.1	520		1527	15.4	470		1221	1.3	40		1642	17.4	530	
	2351	0.7	20		2327	1.3	40		1721	17.4	530					
2 Su	0430	13.5	410	17 M	0418	12.1	370	2 W	0118	0.7	20	17 Th	0045	0.3	10	
	1139	1.0	30		1106	1.6	50		0557	14.4	440		0518	15.1	460	
	1642	17.7	540		1621	16.4	500		1306	1.0	30		1242	0.7	20	
								●	1803	17.7	540		1727	18.4	560	
3 M	0045	0.7	20	18 Tu	0021	1.0	30	3 Th	0154	0.7	20	18 F	0133	0.3	10	
	0521	14.1	430		0506	13.1	400		0630	15.1	460		0600	16.4	500	
	1230	1.0	30		1206	1.0	30		1345	1.0	30		1333	0.3	10	
	1730	18.0	550		1706	17.7	540		1833	18.0	550		○	1809	19.0	580
4 Tu	0133	0.7	20	19 W	0112	0.7	20	4 F	0230	0.7	20	19 Sa	0215	0.0	0	
	0606	14.8	450		0548	14.4	440		0700	15.7	480		0639	17.4	530	
	1318	1.0	30		1257	0.7	20		1424	1.0	30		1424	0.0	0	
	●	1812	18.4	560	○	1748	18.7	570		1909	18.0	550		1851	19.4	590
5 W	0215	0.7	20	20 Th	0157	0.3	10	5 Sa	0303	0.7	20	20 Su	0257	0.0	0	
	0648	15.1	460		0627	15.4	470		0733	16.1	490		0718	18.4	560	
	1400	1.0	30		1348	0.3	10		1500	0.7	20		1512	0.0	0	
	1851	18.4	560		1830	19.4	590		1942	17.4	530		1936	18.7	570	
6 Th	0254	0.7	20	21 F	0242	0.0	0	6 Su	0333	0.7	20	21 M	0336	0.0	0	
	0727	15.1	460		0706	16.1	490		0803	16.1	490		0800	18.7	570	
	1439	1.0	30		1436	0.3	10		1533	0.7	20		1557	0.0	0	
	1930	18.4	560		1915	19.4	590		2012	17.1	520		2021	17.7	540	
7 F	0330	0.7	20	22 Sa	0324	0.0	0	7 M	0400	0.7	20	22 Tu	0412	0.0	0	
	0803	15.1	460		0748	16.7	510		0836	16.1	490		0845	18.7	570	
	1518	1.0	30		1524	0.3	10		1606	1.0	30		1645	0.0	0	
	2006	17.7	540		1957	19.0	580		2048	16.1	490		2109	16.4	500	
8 Sa	0406	0.7	20	23 Su	0403	0.0	0	8 Tu	0427	0.7	20	23 W	0451	0.0	0	
	0842	15.1	460		0830	17.4	530		0909	15.7	480		0933	18.0	550	
	1554	1.0	30		1612	0.3	10		1642	1.0	30		1733	0.3	10	
	2045	17.1	520		2045	18.4	560		2121	15.1	460		2157	15.1	460	
9 Su	0436	0.7	20	24 M	0445	0.0	0	9 W	0454	1.0	30	24 Th	0530	0.3	10	
	0918	15.1	460		0915	17.4	530		0945	15.4	470		1024	17.1	520	
	1630	1.3	40		1703	0.3	10		1715	1.3	40		1821	1.0	30	
	2124	16.1	490		2136	17.1	520		2157	13.8	420		○	2254	13.5	410
10 M	0506	1.0	30	25 Tu	0524	0.3	10	10 Th	0518	1.3	40	25 F	0612	1.0	30	
	0957	14.8	450		1003	17.1	520		1024	14.8	450		1124	16.1	490	
	1709	1.3	40		1754	0.7	20		1757	2.0	60		2242	12.5	380	
	2206	14.8	450		2227	15.4	470		2242	12.5	380					
11 Tu	0536	1.3	40	26 W	0606	0.7	20	11 F	0551	1.6	50	26 Sa	0003	12.1	370	
	1036	14.4	440		1057	16.7	510		1112	14.1	430		0709	2.0	60	
	1751	1.6	50		1848	1.0	30		1845	2.3	70		1233	15.1	460	
	2251	13.5	410		○	2324	13.8	420		○	2336	11.2	340		2039	1.6	50
12 W	0606	1.6	50	27 Th	0651	1.0	30	12 Su	0636	2.3	70	27 Su	0518	1.6	50	
	1121	13.8	420		1157	16.1	490		1215	13.8	420		0830	2.3	70	
	1839	2.3	70		1954	1.3	40		2000	2.6	80		1357	14.8	450	
	○	2342	12.1	370					2200	1.6	50		2200	11.5	350	
13 Th	0645	2.0	60	28 F	0033	12.5	380	13 Su	0748	2.6	80	28 M	0300	11.8	360	
	1215	13.5	410		0748	1.3	40		1306	15.4	470		0954	2.0	60	
	1942	2.6	80		1306	15.4	470		1330	13.8	420		1515	15.1	460	
					2109	1.3	40		2130	2.3	70		2309	1.3	40	
14 F	0045	11.2	340	29 Sa	0154	11.8	360	14 M	0227	10.8	330	14 M	0018	10.8	330	
	0736	2.6	80		0900	1.6	50		0918	2.3	70		0718	2.6	80	
	1318	13.8	420		1424	15.4	470		1448	14.8	450		1251	14.1	430	
	2100	2.6	80		2227	1.3	40		2251	1.3	40		2054	2.0	60	
15 Sa	0200	10.8	330	30 Su	0315	12.1	370	15 Tu	0342	11.8	360	15 Tu	0151	11.5	350	
	0848	2.6	80		1015	1.6	50		1039	1.6	50		0851	2.3	70	
	1427	14.1	430		1533	16.1	490		1548	16.1	490		1412	14.8	450	
	2218	2.0	60		2336	1.0	30		2351	1.0	30		2215	1.3	40	
31 M	0427	12.8	390	31 M	1124	1.3	40									
					1633	16.7	510									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Quebec, Quebec, 2011

Times and Heights of High and Low Waters

April				May				June			
	Time	Height			Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0018	1.6	50	16 Sa	0415	17.4	530	1 Su	0009	2.0	60
	0503	15.7	480		1209	0.7	20	M	0500	16.4	500
	1233	1.6	50		1642	17.4	530		1245	1.3	40
	1718	16.4	500			1727	15.1	460		1706	16.4	500
2 Sa	0054	1.6	50	17 Su	0030	1.0	30	2 M	0042	2.0	60
	0536	16.4	500		0500	18.7	570		0530	16.7	510
	1312	1.3	40		1306	0.7	20	Tu	1321	1.3	40
	1751	16.4	500	O	1724	17.7	540		1757	15.4	470
3 Su	0124	1.6	50	18 M	0112	0.7	20	3 Tu	0112	1.6	50
	0603	16.7	510		0542	19.7	600		0600	17.4	530
	1345	1.3	40		1354	0.3	10		1354	1.3	40
	● 1821	16.4	500		1812	17.7	540	●	1824	15.1	460
4 M	0154	1.6	50	19 Tu	0157	0.7	20	4 W	0145	1.6	50
	0627	17.4	530		0624	20.0	610		0627	17.7	540
	1418	1.3	40		1442	0.7	20		1427	1.3	40
	1848	16.1	490		1854	17.4	530		1854	15.1	460
5 Tu	0221	1.3	40	20 W	0239	1.0	30	5 Th	0218	1.6	50
	0657	17.4	530		0709	20.0	610		0700	17.7	540
	1451	1.0	30		1527	1.0	30		1503	1.3	40
	1918	15.7	480		1939	16.7	510		1927	15.1	460
6 W	0248	1.3	40	21 Th	0318	1.0	30	6 F	0251	1.6	50
	0727	17.7	540		0754	19.7	600		0736	17.7	540
	1524	1.0	30		1612	1.0	30		1542	1.3	40
	1948	15.4	470		2027	15.7	480		2006	15.1	460
7 Th	0318	1.3	40	22 F	0400	1.3	40	7 Sa	0330	1.6	50
	0800	17.4	530		0842	18.7	570		0818	17.7	540
	1557	1.3	40		1657	1.3	40		1621	1.3	40
	2024	14.8	450		2118	14.8	450		2048	14.8	450
8 F	0348	1.3	40	23 Sa	0442	2.0	60	8 Su	0409	1.6	50
	0839	17.1	520		0936	17.4	530		0903	17.4	530
	1633	1.3	40		1742	1.6	50		1706	1.6	50
	2103	14.1	430		2212	14.1	430		2136	14.4	440
9 Sa	0424	1.6	50	24 Su	0527	2.3	70	9 M	0457	2.0	60
	0921	16.7	510		1033	16.4	500		0954	16.7	510
	1715	1.6	50		1836	2.0	60		1757	1.6	50
	2148	13.5	410	O	2321	13.1	400		2233	14.1	430
10 Su	0503	2.0	60	25 M	0627	3.0	90	10 Tu	0551	2.3	70
	1009	15.7	480		1142	15.1	460		1054	16.1	490
	1806	2.0	60		1939	2.3	70		1854	1.6	50
	2245	12.8	390					O	2339	14.1	430
11 M	0554	2.3	70	26 Tu	0036	12.8	390	11 W	0700	2.3	70
	1109	15.1	460		0742	3.3	100		1200	15.4	470
	1909	2.0	60		1257	14.4	440		1957	1.6	50
	● 2357	12.5	380		2045	2.3	70				
12 Tu	0706	2.6	80	27 W	0151	13.1	400	12 F	0048	14.4	440
	1224	14.8	450		0903	3.0	90		0818	2.0	60
	2024	2.0	60		1412	14.4	440		1315	15.4	470
					2151	2.3	70		2100	1.6	50
13 W	0121	12.8	390	28 Th	0254	14.1	430	13 F	0154	15.4	470
	0833	2.3	70		1015	2.6	80		0936	1.3	40
	1342	15.1	460		1518	14.4	440		1424	15.4	470
	2136	1.6	50		2245	2.3	70		2203	1.3	40
14 Th	0233	14.1	430	29 F	0348	14.8	450	14 Sa	0251	16.4	500
	0957	1.6	50		1115	2.0	60		1045	1.0	30
	1451	16.1	490		1609	15.1	460		1524	15.7	480
	2242	1.3	40		2330	2.3	70		2300	1.0	30
15 F	0330	15.7	480	30 Sa	0427	15.7	540	15 M	0345	17.7	570
	1106	1.3	40		1203	1.6	50		1148	0.7	20
	1551	16.7	510		1651	15.1	460		1618	16.1	490
	2339	1.0	30						2354	1.0	30
16 Th	0457	16.4	500	31 Tu	0457	16.4	500	16 W	0106	0.7	20
	0554	15.7	510		1251	1.3	40		0533	17.1	520
	1136	1.6	50		1733	14.1	430		1403	0.7	20
	1624	12.5	380						1742	15.1	460
17 F	0006	1.6	50	30 Th	0018	0.7	20	17 W	0554	18.7	570
	0509	16.7	510		0506	18.7	570		1451	0.7	20
	1306	1.0	30		1315	0.7	20		1715	14.8	450
	1745	13.8	420		1742	15.1	460				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Quebec, Quebec, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 F 0051	1.3	40		16 Sa 0139	0.7	20		1 Th 0212	0.3	10	
0548	17.4	530	Sa	0630	18.0	550	M	0651	18.4	560	Tu
1348	0.7	20		1433	0.7	20		1454	0.0	0	
● 1824	14.4	440		1903	15.1	460		1921	16.4	500	
2 Sa 0136	1.0	30		17 Su 0224	0.7	20		2 0300	0.0	0	
0627	18.0	550	Su	0712	18.0	550	Tu	0733	18.4	560	W
1433	0.3	10		1512	0.7	20		1536	0.0	0	
1900	15.1	460		1942	15.4	470		2000	17.1	520	
3 Su 0221	0.7	20		18 M 0303	0.7	20		3 W 0348	0.0	0	
0709	18.4	560	M	0751	17.7	540		0818	18.0	550	Th
1515	0.3	10		1548	0.7	20		1618	0.0	0	
1942	15.4	470		2021	15.4	470		2045	17.4	530	
4 M 0309	0.7	20		19 Tu 0345	1.0	30		4 Th 0436	0.0	0	
0751	18.4	560	Tu	0830	17.1	520		0906	17.1	520	F
1557	0.3	10		1621	0.7	20		1657	0.0	0	
2024	15.7	480		2100	15.4	470		2133	17.1	520	
5 Tu 0357	0.7	20		20 W 0424	1.0	30		5 F 0527	0.3	10	
0836	18.0	550	W	0909	16.1	490		0954	15.7	480	Sa
1639	0.3	10		1654	1.0	30		1739	0.3	10	
2112	16.1	490		2139	15.1	460		2224	16.7	510	
6 W 0445	0.7	20		21 Th 0503	1.3	40		6 Sa 0618	0.3	10	
0924	17.1	520	Th	0951	15.1	460		1051	14.1	430	Sa
1721	0.3	10		1724	1.0	30		1821	0.3	10	
2200	16.1	490		2221	14.4	440		● 2321	16.1	490	
7 Th 0539	0.7	20		21 F 0545	1.6	50		21 Su 0545	1.6	50	
1018	16.1	490	F	1036	13.8	420		1036	12.1	370	Su
1806	0.3	10		1754	1.6	50		1739	1.6	50	
2251	16.1	490		2306	14.1	430		● 2300	13.8	420	
8 F 0636	0.7	20		22 Sa 0627	2.0	60		8 M 0027	15.7	480	
1118	15.1	460	Sa	1124	12.1	370		0827	1.0	30	Tu
1854	0.7	20		1830	2.0	60		1309	12.1	370	
● 2348	16.1	490		● 2354	13.8	420		2021	1.3	40	
9 Sa 0739	0.7	20		24 Su 0724	2.3	70		9 Tu 0139	15.4	470	
1221	13.8	420	Su	1221	11.2	340		0945	1.0	30	
1945	1.0	30		1918	2.6	80		1427	12.1	370	
10 Su 0051	16.1	490		25 M 0054	13.5	410		2136	1.3	40	
0848	1.0	30	M	0836	2.3	70		10 W 0251	15.7	480	
1330	13.1	400		1333	10.5	320		1057	1.0	30	Tu
2048	1.0	30		2024	2.6	80		1542	12.5	380	
11 M 0157	16.1	490		25 W 0227	14.1	430		2248	1.0	30	
1000	1.0	30		26 Tu 0203	13.8	420		1024	1.3	40	
1439	12.8	390	Tu	0954	2.0	60		1157	0.7	20	
2157	1.0	30		1448	10.8	330		1642	13.5	410	
12 Tu 0303	16.7	510		2136	2.3	70		2351	1.0	30	
1109	0.7	20		27 W 0306	14.4	440		● 0357	16.4	500	
1548	13.1	400	W	1100	1.6	50		0357	1.0	30	
2300	1.0	30		1554	11.5	350		1248	0.7	20	
13 W 0403	17.1	520		2242	1.6	50		1248	14.4	440	
1209	0.7	20		27 F 0451	16.7	510		27 Th 0421	16.4	500	
1648	13.8	420	F	1157	1.0	30		1218	0.3	10	
● 1803	14.8	450		1409	0.7	20		1657	14.4	440	
14 Th 0000	0.7	20		1842	15.7	480		● 1736	15.7	480	
0457	17.7	540		14 Th 0448	16.4	500		1303	0.0	0	
1303	0.7	20		1724	13.8	420		1806	15.1	460	
1736	14.4	440		1409	0.7	20		● 1806	15.1	460	
15 F 0054	0.7	20		1842	15.7	480		1842	17.1	520	
0545	18.0	550		1842	15.7	480		1842	16.7	510	
1351	0.7	20		1803	14.8	450		● 1803	14.8	450	
● 1821	14.8	450		1839	15.7	480		1839	18.4	560	
16 W 0124	0.3	10						13 Th 0018	0.3	10	
0609	18.0	550						0506	17.4	530	
1412	0.0	0						1303	0.0	0	
1839	15.7	480						● 1736	15.7	480	
17 W 0124	0.3	10						1842	16.7	510	
0609	18.0	550						1842	16.7	510	
1412	0.0	0						● 1842	16.7	510	
1839	15.7	480						1842	16.7	510	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Quebec, Quebec, 2011

Times and Heights of High and Low Waters

October				November				December				
	Time	Height			Time	Height			Time	Height		
	h m	ft cm			h m	ft cm			h m	ft cm		
1 Sa	0403	0.0	0	16 Su	0339	0.7	20	1 Tu	0518	0.7	20	
	0824	16.1	490	16 Su	0815	14.4	440	16 W	0957	14.1	430	
	1600	0.3	10	15 Su	1530	1.0	30	17 Th	1706	1.6	500	
	2039	18.7	570	2021	16.7	510	2209	16.4	500	16 Th	1033	14.4	440
2 Su	0448	0.3	10	17 M	0415	1.0	30	2 W	0609	1.0	30	
	0915	14.8	450	17 W	0851	13.8	420	17 Th	1103	13.5	410	
	1639	0.7	20	16 W	1603	1.3	40	2 F	1803	2.3	70	
	2133	17.4	530	2103	16.1	490	2318	15.1	460	17 Sa	1012	13.8	420
3 M	0539	0.7	20	18 Tu	0454	1.3	40	18 F	0709	1.6	50	
	1012	13.8	420	18 Tu	0933	13.1	400	18 F	1112	13.8	420	
	1727	1.3	40	18 Tu	1642	2.0	60	18 F	1824	2.0	60	
	2233	16.1	490	2151	15.4	470	2327	15.1	460	18 O	2300	15.4
4 Tu	0633	1.3	40	19 W	0542	1.6	50	4 F	0033	14.4	440	
	1118	12.8	390	19 W	1030	12.5	380	4 F	0815	1.6	50	
	1824	2.0	60	19 W	1733	2.3	70	19 Sa	1330	13.5	410	
	2342	15.1	460	2248	14.8	450	2039	2.3	70	4 Su	1221	14.1	430
5 W	0742	1.6	50	20 Th	0639	1.6	50	5 Sa	0151	14.1	430	
	1239	12.5	380	20 Th	1139	12.1	370	5 Sa	0921	1.6	50	
	1945	2.3	70	20 Th	1839	2.6	80	5 Su	1433	14.1	430	
	2109	2.3	70	20 Th	2154	2.0	60	5 M	2057	1.3	40	
6 Th	0103	14.4	440	21 F	0000	14.4	440	6 Su	0300	14.1	430	
	0857	1.6	50	21 F	0751	1.6	50	6 Su	1021	1.6	50	
	1403	12.8	390	21 F	1257	12.8	390	6 M	1527	15.1	460	
	2109	2.3	70	2003	2.3	70	2257	1.6	50	6 Tu	2212	0.7	20
7 F	0224	14.8	450	22 Sa	0118	14.4	440	21 M	0154	14.8	450	
	1009	1.6	50	22 Sa	0903	1.3	40	21 M	0927	1.0	30	
	1512	13.8	420	22 Sa	1406	13.8	420	21 M	1427	15.7	480	
	2224	1.6	50	22 Sa	2127	1.6	50	21 Tu	2238	1.3	40	
8 Sa	0330	15.1	460	23 Su	0227	15.1	460	7 M	0354	14.4	440	
	1106	1.3	40	23 Su	1009	1.0	30	22 Tu	1027	0.7	20	
	1603	14.8	450	23 Su	1503	15.1	460	7 W	1112	1.6	50	
	2324	1.3	40	23 Su	2239	1.0	30	22 W	1512	17.1	520	
9 Su	0421	15.7	480	24 M	0327	16.1	490	9 W	0030	1.0	30	
	1154	1.3	40	24 M	1106	0.7	20	9 F	0518	15.1	460	
	1645	15.7	480	24 M	1551	16.7	510	9 F	1227	1.6	50	
	2342	0.3	10	24 M	2342	0.3	10	9 F	1721	16.7	510	
10 M	0015	1.0	30	25 Tu	0418	16.7	510	24 Sa	0015	0.0	0	
	0503	16.1	490	25 Tu	1157	0.3	10	24 Sa	0551	15.7	480	
	1233	1.3	40	25 Tu	1636	18.0	550	24 Sa	1303	1.3	40	
	1718	16.4	500	25 O	1748	17.1	520	25 O	1742	20.0	610	
11 Tu	0057	0.7	20	26 W	0036	0.0	0	10 Sa	0109	0.7	20	
	0539	16.1	490	26 W	0503	17.1	520	10 Sa	0551	15.1	490	
	1303	1.0	30	26 W	1245	0.3	10	10 Sa	1303	0.3	10	
	1748	16.7	510	26 W	1718	19.4	590	10 O	1800	17.4	530	
12 W	0133	0.7	20	27 Th	0127	-0.3	-10	11 Sa	0142	0.7	20	
	0609	16.1	490	27 Th	0548	17.1	520	11 Sa	0621	14.8	450	
	1333	1.0	30	27 Th	1327	0.0	0	11 Sa	1330	1.3	40	
	1815	17.1	520	27 Th	1800	20.0	610	11 Sa	1818	17.4	530	
13 Th	0206	0.7	20	28 F	0215	-0.3	-10	11 Sa	1830	20.0	610	
	0639	15.7	480	28 F	0633	17.1	520	11 Sa	1830	20.0	610	
	1403	1.0	30	28 F	1412	0.0	0	11 Sa	1830	20.0	610	
	1842	17.1	520	28 F	1842	20.0	610	11 Sa	1830	20.0	610	
14 F	0236	0.7	20	29 Sa	0300	0.0	0	12 M	0245	0.3	10	
	0709	15.4	470	29 Sa	0718	16.4	500	29 M	0706	16.1	490	
	1430	1.0	30	29 Sa	1451	0.3	10	29 M	1430	0.7	20	
	1915	17.1	520	29 Sa	1930	19.7	600	29 M	2000	17.7	540	
15 Sa	0306	0.7	20	30 Su	0345	0.0	0	29 M	0321	0.7	20	
	0739	15.1	460	30 Su	0809	15.7	480	29 M	0757	14.4	440	
	1500	1.0	30	30 Su	1533	0.7	20	29 M	1509	1.3	40	
	1945	17.1	520	30 Su	2021	18.7	570	29 M	2000	17.4	530	
31 M	0430	0.3	10	31 M	0900	14.8	450	30 F	0400	1.0	30	
	0900	14.8	450	31 M	1618	1.0	30	30 F	0836	14.4	440	
	1618	1.0	30	31 M	2112	17.7	540	30 F	1648	1.6	50	
	2112	17.7	540	31 M	2112	17.7	540	31 M	2112	17.1	520	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Halifax, Nova Scotia, 2011

Times and Heights of High and Low Waters

January				February				March											
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height								
h m	ft	cm		h m	ft	cm		h m	ft	cm									
1 Sa	0455 1158 1749	5.6 0.7 5.2	170 20 160	16 Su	0428 1119 1730 2324	5.2 1.3 4.9 2.0	160 40 150 60	1 Tu	0055 0633 1323 1918	1.6 5.6 0.7 5.6	50 170 20 170	16 Tu	0530 1213 1814	5.2 1.0 5.2	160 30 160	16 W	0423 1108 1719 2331	5.6 1.0 5.6 1.6	170 30 170 50
2 Su	0015 0552 1251 1843	1.6 5.9 0.7 5.2	50 180 20 160	17 M	0523 1212 1820	5.6 1.0 4.9	170 30 150	2 W	0141 0719 1406 ● 1959	1.6 5.9 0.7 5.6	50 180 20 170	2 W	0036 0618 1300 1855	1.6 5.6 1.0 5.6	50 170 30 170	17 Th	0527 1201 1810	5.9 0.7 5.9	180 20 180
3 M	0110 0644 1340 1933	1.6 5.9 0.7 5.6	50 180 20 170	18 Tu	0017 0614 1303 1907	1.6 5.9 0.7 5.2	50 180 20 160	3 Th	0222 0802 1444 2037	1.6 5.9 1.0 5.9	50 180 30 180	3 Th	0119 0701 1341 1932	1.6 5.9 1.0 5.6	50 180 30 170	18 F	0029 0623 1253 1857	1.0 6.2 0.3 6.6	30 190 10 200
4 Tu	0159 0733 1426 ● 2019	1.6 5.9 0.7 5.6	50 180 20 170	19 W	0109 0704 1350 ○ 1953	1.6 6.2 0.3 5.6	50 190 160	4 F	0258 0842 1516 2113	1.6 5.9 1.0 5.9	50 180 30 180	4 F	0156 0740 1415 ● 2007	1.6 5.9 1.0 5.6	50 180 30 170	19 Sa	0125 0715 1343 ○ 1944	0.3 6.2 0.0 6.9	10 190 0 210
5 W	0244 0819 1508 2101	1.6 5.9 0.7 5.9	50 180 20 180	20 Th	0200 0753	1.3 6.6	40 200	5 Sa	0331 0921 1545 2148	1.6 5.9 1.3 5.9	50 180 40 180	5 Sa	0229 0819 1444 2040	1.3 5.9 1.0 5.9	40 180 30 180	20 Su	0220 0806 1433 2031	0.0 6.2 0.0 6.9	0 190 0 210
6 Th	0326 0903 1546 2142	2.0 5.9 1.0 5.9	60 180 30 180	21 F	0253 0842 1523 2124	1.0 6.6 0.0 6.2	30 200	6 Su	0404 0959 1610 2222	1.6 5.6 1.3 5.9	50 170 40 180	6 Su	0259 0856 1509 2112	1.3 5.9 1.3 5.9	40 180 40 180	21 M	0313 0857 1524 2118	0.0 6.2 0.3 6.9	0 190 10 210
7 F	0406 0946 1620 2220	2.0 5.9 1.3 5.9	60 180 40 180	22 Sa	0348 0931 1611 2210	1.0 6.2 0.0 6.2	30 190 0 190	7 M	0439 1035 1638 2256	1.6 5.6 1.6 5.9	50 170 50 180	22 Tu	0525 1053 1737 2316	0.3 5.9 0.7 6.2	10 180 10 190	22 M	0407 0946 1619 2205	0.0 5.9 0.7 6.6	0 180 20 200
8 Sa	0446 1027 1653 2258	2.0 5.9 1.3 5.9	60 180 40 180	23 Su	0446 1020 1702 2255	1.0 6.2 0.3 6.2	30 190 10 190	8 Tu	0519 1112 1712 2330	2.0 5.2 2.0 5.6	60 160 60 170	23 Tu	0624 1142 1839 2216	0.7 5.6 1.0 5.6	20 170 30 170	23 W	0503 1035 1719 2251	0.3 5.9 1.0 6.2	10 180 30 190
9 Su	0528 1107 1725 2335	2.0 5.6 1.6 5.9	60 170 50 180	24 M	0545 1109 1758 2341	1.0 5.9 0.7 6.2	30 180 60 190	9 W	0605 1150 1755 ● 1943	2.0 4.9 2.0 1.3	60 150 60 40	9 W	0438 1041 1635 2250	1.6 5.2 2.0 5.6	50 160 60 170	24 Th	0601 1125 1823 2340	0.7 5.6 1.3 5.9	20 170 40 180
10 M	0613 1147 1801	2.3 5.2 2.0	70 160 60	25 Tu	0645 1200 1857	1.0 5.6 1.0	30 170 30	10 Th	0006 0655 1232 1851	5.6 2.0 4.9 2.3	170 60 150 70	10 Th	0522 0825 1335 2047	1.6 5.0 4.9 1.6	50 160 60 170	25 F	0701 1217 1927	1.0 5.2 1.6	30 160 50
11 Tu	0014 0701 1229 1845	5.6 2.3 4.9 2.0	170 70 150 60	26 W	0028 0745 1255 ○ 1958	5.9 1.0 5.2 1.3	180 30 160 40	11 F	0047 0751 1321 ○ 1953	5.2 2.0 4.6 2.3	160 60 140 70	11 F	0164 1157 1818	1.6 4.9 2.3	50 150 70	26 Sa	0032 0801 1315 ○ 2030	5.2 1.0 4.9 2.0	160 30 150 60
12 W	0056 0750 1317 ● 1936	5.6 2.3 4.6 2.3	170 70 140 70	27 Th	0121 0845 1357 2101	5.6 1.0 4.9 1.6	170 30 150 50	12 Sa	0136 0848 1425 2055	5.2 2.0 4.6 2.3	160 60 140 70	12 Sa	0006 1024 1620 2249	5.2 1.3 4.6 2.0	160 60 150 80	27 Su	0132 0859 1429 2131	5.2 1.3 4.6 2.0	160 40 140 60
13 Th	0141 0840 1415 2032	5.2 2.0 4.6 2.3	160 60 140 70	28 F	0221 0945 1511 2203	5.6 1.0 4.6 1.6	170 30 140 70	13 Su	0236 0947 1543 2155	5.2 1.6 4.6 2.3	160 50 150 70	13 Su	0054 1121 1726 2345	5.2 1.3 4.9 1.6	160 50 150 50	28 M	0248 0957 1555 2229	4.9 1.3 4.9 2.0	150 40 150 60
14 F	0232 0932 1523 2130	5.2 1.6 4.6 2.3	160 50 140 70	29 Sa	0330 1044 1632 2304	5.2 1.0 4.9 1.6	160 30 150 50	14 M	0346 1045 1655 2254	5.2 1.3 4.9 2.0	160 40 150 60	14 M	0155 0914 1500 2130	5.2 1.6 4.6 2.3	160 50 140 60	29 Tu	0408 1052 1658 2324	4.9 1.3 5.2 2.0	150 40 160 60
15 Sa	0329 1026 1632 2228	5.2 1.6 4.6 2.3	160 50 140 70	30 Su	0441 1141 1739	5.2 1.0 4.9	160 30 150	15 Tu	0452 1141 1751 2351	5.6 1.0 5.2 1.6	170 30 160 50	15 Tu	0309 1012 1619 2231	5.6 1.3 4.9 2.0	170 40 150 60	30 W	0508 1143 1745 1824	5.2 1.3 5.2 5.6	160 40 160 170
				31 M	0002 0542 1235 1832	1.6 5.6 1.0 5.2	50 170 30 160					31 Th	0012 0555 1229 1824	1.6 5.2 1.3 5.6	50 160 40 170				

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Halifax, Nova Scotia, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0053	1.6	50	16 Sa 0012	0.7	20	1 Su 0058	1.3	40	16 W 0052	0.0	0
0637	5.6	170	0603	5.9	180	0650	5.2	160	0640	5.9	180
1309	1.3	40	1225	0.7	20	1304	1.6	50	1302	1.0	30
1859	5.6	170	1827	6.6	200	1854	5.6	170	1851	6.6	200
2 Sa 0129	1.3	40	17 Su 0108	0.3	10	2 M 0131	1.0	30	17 Tu 0146	0.0	0
0716	5.6	170	0657	5.9	180	0729	5.2	160	0733	5.9	180
1342	1.3	40	1319	0.3	10	1336	1.6	50	1358	1.0	30
1932	5.6	170	○ 1916	6.9	210	1928	5.6	170	1941	6.6	200
3 Su 0200	1.3	40	18 M 0202	0.0	0	3 Tu 0203	0.7	20	18 W 0238	0.0	0
0754	5.6	170	0749	6.2	190	0807	5.2	160	0825	5.9	180
1410	1.3	40	1412	0.3	10	1408	1.6	50	1453	1.0	30
● 2004	5.6	170	2004	6.9	210	● 2002	5.6	170	2031	6.6	200
4 M 0230	1.0	30	19 Tu 0255	0.0	0	4 W 0238	0.7	20	19 Th 0328	0.0	0
0831	5.6	170	0840	5.9	180	0844	5.2	160	0916	5.9	180
1436	1.6	50	1506	0.7	20	1441	1.6	50	1548	1.3	40
2035	5.6	170	2053	6.6	200	2037	5.6	170	2121	6.2	190
5 Tu 0301	1.0	30	20 W 0348	0.0	0	5 Th 0315	0.7	20	20 F 0419	0.3	10
0906	5.6	170	0930	5.9	180	0920	5.2	160	1004	5.9	180
1503	1.6	50	1603	1.0	30	1518	2.0	60	1644	1.6	50
2108	5.6	170	2141	6.2	190	2114	5.6	170	2209	5.9	180
6 W 0334	1.0	30	21 Th 0441	0.3	10	6 F 0356	1.0	30	21 Sa 0510	0.7	20
0941	5.2	160	1020	5.9	180	0958	5.2	160	1052	5.6	170
1535	1.6	50	1702	1.3	40	1600	2.0	60	1742	2.0	60
2141	5.6	170	2229	5.9	180	2153	5.6	170	2257	5.9	180
7 Th 0412	1.3	40	22 F 0537	0.7	20	7 Sa 0441	1.0	30	22 Su 0601	1.0	30
1016	5.2	160	1109	5.6	170	1037	5.2	160	1139	5.6	170
1612	2.0	60	1805	1.6	50	1651	2.3	70	1841	2.0	60
2217	5.6	170	2318	5.6	170	2234	5.6	170	2347	5.6	170
8 F 0456	1.3	40	23 Sa 0634	1.0	30	8 Su 0532	1.3	40	23 W 0652	1.3	40
1053	5.2	160	1159	5.2	160	1119	5.2	160	1228	5.6	170
1659	2.3	70	1908	2.0	60	1751	2.3	70	1938	2.3	70
2255	5.6	170				2319	5.6	170			
9 Sa 0548	1.6	50	24 Su 0010	5.2	160	9 M 0626	1.3	40	24 Tu 0039	5.2	160
1133	5.2	160	0730	1.3	40	1206	5.2	160	0742	1.6	50
1800	2.3	70	1255	5.2	160	1854	2.3	70	1322	5.2	160
2337	5.6	170	○ 2009	2.0	60				○ 2033	2.3	70
10 Su 0647	1.6	50	25 M 0108	5.2	160	10 Tu 0009	5.6	170	25 W 0138	4.9	150
1221	4.9	150	0826	1.6	50	0722	1.3	40	0831	2.0	60
1906	2.6	80	1359	4.9	150	1300	5.2	160	1421	5.2	160
			2107	2.0	60	○ 1957	2.3	70	2126	2.0	60
11 M 0027	5.6	170	26 Tu 0216	4.9	150	11 W 0108	5.6	170	26 Th 0243	4.6	140
0746	1.6	50	0920	1.6	50	0817	1.3	40	0920	2.0	60
1318	4.9	150	1512	5.2	160	1402	5.6	170	1521	5.2	160
● 2010	2.3	70	2203	2.0	60	2058	2.0	60	2215	2.0	60
12 Tu 0126	5.2	160	27 W 0331	4.9	150	12 Th 0217	5.2	160	27 F 0349	4.6	140
0844	1.3	40	1012	1.6	50	0912	1.3	40	1009	2.0	60
1429	4.9	150	1616	5.2	160	1508	5.6	170	1614	5.2	160
2112	2.3	70	2255	2.0	60	2158	1.3	40	2301	1.6	50
13 W 0239	5.6	170	28 Th 0434	4.9	150	13 F 0334	5.2	160	28 M 0448	4.9	150
0940	1.3	40	1102	1.6	50	1008	1.3	40	1057	2.0	60
1543	5.2	160	1704	5.2	160	1610	5.9	180	1659	5.2	160
2213	1.6	50	2341	1.6	50	2258	1.0	30	2343	1.3	40
14 Th 0357	5.6	170	29 F 0525	4.9	150	14 F 0444	5.6	170	29 W 0538	4.9	150
1036	1.0	30	1148	1.6	50	1106	1.0	30	1143	2.0	60
1645	5.9	180	1745	5.6	170	1707	6.2	190	1740	5.6	170
2314	1.3	40				2356	0.3	10			
15 F 0504	5.6	170	30 Sa 0022	1.3	40	15 Su 0545	5.6	170	30 M 0022	1.3	40
1131	0.7	20	0609	5.2	160	1205	1.0	30	0623	4.9	150
1738	6.2	190	1229	1.6	50	1759	6.6	200	1225	2.0	60
			1821	5.6	170				1818	5.6	170
									31 Tu 0059	1.0	30
									0704	5.2	160
									1304	2.0	60
									1855	5.6	170

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Halifax, Nova Scotia, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0156	0.7	20	16 0250	0.7	20	1 0257	0.0	0	16 0335	1.0	30
F 0800	5.2	160	Sa 0842	5.9	180	M 0859	6.2	190	Tu 0931	5.9	180
1401	1.6	50	1510	1.6	50	1519	1.0	30	1556	1.6	50
● 1954	6.2	190	2046	6.2	190	2106	6.2	190	2145	5.9	180
2 0239	0.3	10	17 0331	0.7	20	2 0342	0.0	0	17 0403	1.3	40
Sa 0842	5.6	170	Su 0924	5.9	180	Tu 0943	6.2	190	W 1006	5.9	180
1447	1.6	50	1553	1.6	50	1612	1.0	30	1631	1.6	50
2038	6.2	190	2130	5.9	180	2153	6.2	190	2223	5.6	170
3 0322	0.3	10	18 0409	1.0	30	3 W 0430	0.3	10	18 Th 0429	1.6	50
Su 0924	5.6	170	M 1003	5.9	180	1026	6.2	190	1041	5.9	180
1536	1.3	40	1635	1.6	50	1709	0.7	20	1708	1.6	50
2123	6.2	190	2212	5.9	180	2241	5.9	180	2300	5.2	160
4 0407	0.3	10	19 0443	1.3	40	4 Th 0522	0.3	10	19 0500	2.0	60
M 1006	5.9	180	Tu 1041	5.9	180	1111	6.2	190	F 1116	5.6	170
1629	1.3	40	1717	2.0	60	1808	1.0	30	1750	2.0	60
2208	6.2	190	2253	5.6	170	2330	5.6	170	2338	5.2	160
5 0453	0.3	10	20 0516	1.6	50	5 F 0620	0.7	20	20 Sa 0541	2.0	60
Tu 1049	5.9	180	W 1119	5.9	180	1157	5.9	180	Sa 1153	5.6	170
1726	1.3	40	1802	2.0	60	1908	1.0	30	1839	2.0	60
2255	5.9	180	2333	5.2	160	● 2009	1.0	30	● 1932	2.0	60
6 0544	0.7	20	21 0551	1.6	50	6 Sa 0022	5.2	160	21 Su 0019	4.9	150
W 1133	5.9	180	Th 1158	5.6	170	0722	1.3	40	Su 0634	2.3	70
1826	1.3	40	1848	2.0	60	1247	5.9	180	1233	5.2	160
2345	5.6	170	● 2009	1.0	30	● 1932	2.0	60	● 1932	2.0	60
7 0638	1.0	30	22 0016	4.9	150	7 Su 0120	4.9	150	21 Tu 0212	4.6	140
Th 1219	5.9	180	F 0633	2.0	60	0826	1.3	40	W 0919	1.6	50
1926	1.3	40	1239	5.6	170	1344	5.6	170	1434	5.2	160
2337	2.0	60	1937	2.0	60	2111	1.0	30	2154	1.0	30
8 0039	5.2	160	23 0102	4.6	140	8 M 0228	4.9	150	21 Tu 0212	4.6	140
F 0736	1.0	30	Sa 0722	2.3	70	0929	1.6	50	W 0808	2.6	80
1310	5.9	180	Sa 1324	5.2	160	1451	5.2	160	1332	5.2	160
● 2026	1.0	30	● 2026	2.0	60	2212	1.0	30	● 2048	1.6	50
9 0139	5.2	160	24 0156	4.6	140	9 Tu 0351	4.6	140	22 Th 0235	4.9	150
Sa 0836	1.3	40	Su 0818	2.3	70	1032	1.6	50	W 0908	2.3	70
1407	5.6	170	1415	5.2	160	1606	5.2	160	M 1021	1.6	50
2126	1.0	30	2117	2.0	60	2312	1.0	30	1441	5.2	160
10 0249	4.9	150	25 0303	4.6	140	10 W 0509	4.9	150	22 W 2028	4.6	140
Su 0938	1.6	50	M 0917	2.3	70	1133	1.6	50	Th 1056	5.2	160
1512	5.6	170	M 1513	5.2	160	1715	5.6	170	2348	1.0	30
2227	1.0	30	2209	1.6	50	● 2009	1.3	40	● 2240	1.3	40
11 0405	4.9	150	26 0415	4.6	140	11 Th 0008	1.0	30	9 F 0458	4.9	150
M 1041	1.6	50	Tu 1014	2.3	70	0607	5.2	160	W 1120	1.6	50
1619	5.6	170	Tu 1614	5.2	160	1229	1.6	50	Th 1705	5.2	160
2326	0.7	20	2302	1.3	40	1811	5.9	180	2332	1.0	30
12 0516	4.9	150	27 0517	4.6	140	12 F 0059	0.7	20	10 0323	4.6	140
Tu 1143	1.6	50	W 1109	2.3	70	0655	5.6	170	Su 0634	5.6	170
1723	5.9	180	1709	5.6	170	1320	1.6	50	1301	1.6	50
2354	1.0	30	● 2009	1.3	40	1859	5.9	180	1842	5.6	170
13 0023	0.7	20	28 0607	4.9	150	13 Th 0146	0.7	20	11 Su 0123	1.0	30
W 0617	5.2	160	Th 1200	2.0	60	0738	5.6	170	26 M 0023	0.7	20
1241	1.6	50	Th 1759	5.9	180	1405	1.6	50	0630	6.2	190
1820	5.9	180	● 1944	5.9	180	1911	6.2	190	M 1257	0.7	20
14 0116	0.7	20	29 0043	0.7	20	14 Su 0227	0.7	20	27 0124	0.3	10
Th 0709	5.6	170	F 0652	5.2	160	0818	5.9	180	W 0716	6.6	200
1335	1.3	40	F 1249	1.6	50	1445	1.6	50	Th 1350	0.3	10
1912	6.2	190	1847	5.9	180	2026	5.9	180	● 1940	6.2	190
15 0205	0.3	10	30 0129	0.3	10	15 M 0304	1.0	30	12 M 0201	1.0	30
F 0758	5.9	180	Sa 0734	5.6	170	0855	5.9	180	27 Tu 0748	5.9	180
1424	1.6	50	Sa 1338	1.3	40	1522	1.6	50	1419	1.3	40
● 2000	6.2	190	● 1934	6.2	190	2106	5.9	180	● 2003	5.9	180
16 0214	0.3	10	31 0214	0.3	10	14 W 0144	0.0	0	13 W 0234	1.0	30
Su 0817	5.9	180	Su 1428	1.0	30	0747	6.2	190	28 W 0802	6.9	210
1428	6.2	190	2020	6.2	190	1409	0.7	20	1443	0.0	0
2020	6.2	190				1959	6.2	190	2030	6.2	190
17 0317	0.0	0				● 1911	6.2	190	● 1911	0.0	0
Su 0916	6.6	200				2048	6.2	190	2119	5.6	170
1555	0.3	10				2136	6.2	190	2155	5.6	170
2136	6.2	190									

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Halifax, Nova Scotia, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa	0447 0.7 20	16 Su	0359 2.0 60	1 Tu	0642 1.6 50	16 W	0525 2.3 70	1 Th	0008 5.6 170	16 F	0608 2.0 60
1025 6.2 190	1004 5.6 170	1148 5.6 170	1100 5.6 170	0716 2.0 60	1131 5.6 170	1100 5.6 170	1219 5.2 160	0716 2.0 60	1824 1.0 30	1131 5.6 170	
1730 0.3 10	1639 1.3 40	1906 1.0 30	1757 1.3 40	1924 1.3 40	1924 1.3 40	1757 1.3 40	2346 5.2 160	1924 1.3 40	1824 1.0 30	1924 1.3 40	
2300 5.6 170	2242 5.2 160										
2 Su	0552 1.3 40	17 M	0443 2.3 70	2 W	0032 5.2 160	17 Th	0625 2.3 70	2 F	0059 5.6 170	17 Sa	0012 5.6 170
1114 5.9 180	1041 5.6 170	0744 2.0 60	1146 5.6 170	0813 2.0 60	0707 2.0 60	1315 4.9 150	1222 5.6 170	1917 1.3 40	1222 5.6 170	1824 1.0 30	1917 1.3 40
1831 0.7 20	1726 1.6 50	1244 5.2 160	1850 1.3 40	2015 1.6 50							
2352 5.2 160	2320 5.2 160										
3 M	0658 1.6 50	18 Tu	0539 2.3 70	3 Th	0132 5.2 160	18 F	0034 5.2 160	3 Sa	0154 5.6 170	18 Su	0101 5.9 180
1206 5.6 170	1121 5.6 170	0844 2.0 60	0726 2.3 70	0907 2.0 60	0806 1.6 50	1239 5.6 170	1321 5.2 160	1417 4.9 150	1321 5.2 160	2013 1.3 40	2013 1.3 40
1932 1.0 30	1820 1.6 50	1348 4.9 150	1943 1.3 40	2105 2.0 60							
●		2057 1.6 50									
4 Tu	0049 4.9 150	19 W	0004 5.2 160	4 F	0240 5.2 160	19 Sa	0128 5.6 170	4 Su	0253 5.2 160	19 M	0156 5.9 180
0803 1.6 50	0643 2.6 80	0941 2.0 60	0826 2.0 60	0958 2.0 60	0906 1.3 40	1341 5.2 160	1524 4.6 140	2156 2.0 60	1428 5.2 160	2111 1.3 40	2111 1.3 40
1304 5.2 160	1206 5.2 160	1501 4.9 150	2037 1.3 40								
2032 1.3 40	● 1917 1.6 50	2151 1.6 50									
5 W	0156 4.9 150	20 Th	0056 4.9 150	5 Sa	0347 5.2 160	20 Su	0229 5.6 170	5 M	0351 5.2 160	20 Tu	0258 5.9 180
0905 2.0 60	0745 2.6 80	1034 1.6 50	0925 1.6 50	1047 1.6 50	1006 1.0 30	1453 5.2 160	1627 4.6 140	2247 2.0 60	1542 5.2 160	2212 1.3 40	2212 1.3 40
1414 4.9 150	1300 5.2 160	1610 4.9 150	2132 1.3 40	2235 2.0 60							
2130 1.3 40	2014 1.6 50	2243 1.6 50									
6 Th	0319 4.9 150	21 F	0158 5.2 160	6 Su	0440 5.6 170	21 M	0332 5.9 180	6 Tu	0441 5.2 160	21 W	0402 5.9 180
1005 2.0 60	0845 2.3 70	1124 1.6 50	1024 1.0 30	1131 1.3 40	1106 0.7 20	1606 5.2 160	1722 4.9 150	2335 2.0 60	1652 5.2 160	2315 1.3 40	2315 1.3 40
1535 4.9 150	1406 5.2 160	1706 4.9 150	2230 1.3 40	2330 1.3 40							
2226 1.3 40	2109 1.3 40	2332 1.6 50									
7 F	0431 5.2 160	22 Sa	0309 5.2 160	7 M	0525 5.6 170	22 Tu	0431 6.2 190	7 W	0525 5.2 160	22 Th	0504 6.2 190
1101 1.6 50	0945 2.0 60	1208 1.3 40	1123 0.7 20	1212 1.3 40	1205 0.3 10	1712 5.6 170	1809 4.9 150	1755 5.6 170	1755 5.6 170		
1644 5.2 160	1522 5.2 160	1753 5.2 160	2329 1.0 30	2329 1.0 30							
2320 1.3 40	2203 1.3 40										
8 Sa	0521 5.2 160	23 Su	0412 5.6 170	8 Tu	0017 1.6 50	23 W	0527 6.6 200	8 Th	0019 2.0 60	23 F	0018 1.3 40
1152 1.6 50	1044 1.3 40	1633 5.6 170	1220 0.3 10	0604 5.6 170	0605 5.6 170	1810 5.6 170	1250 1.0 30	1853 5.2 160	1302 0.3 10	1853 5.6 170	190 5.9 180
1736 5.2 160	2257 1.0 30	1836 5.2 160									
9 Su	0009 1.3 40	24 M	0507 6.2 190	9 W	0056 1.6 50	24 Th	0028 1.0 30	9 F	0057 2.0 60	24 Sa	0117 1.3 40
0603 5.6 170	1142 1.0 30	0640 5.6 170	0621 6.6 200	1316 0.0 0	0644 5.6 170	1906 5.9 180	1327 1.0 30	1933 5.2 160	0659 6.6 200	1355 0.0 0	1947 5.9 180
1238 1.3 40	1733 5.6 170	1322 1.0 30	1917 5.2 160	1917 5.2 160							
1820 5.6 170	2352 0.7 20										
10 M	0053 1.3 40	25 Tu	0557 6.6 200	10 Th	0130 1.6 50	25 F	0127 1.0 30	10 Sa	0134 2.0 60	25 Su	0214 1.3 40
0640 5.6 170	1238 0.3 10	1238 5.9 180	0715 5.6 170	0714 6.6 200	0723 5.6 170	1410 0.0 0	1959 5.9 180	1405 0.7 20	1446 0.0 0	2038 5.9 180	2038 5.9 180
1317 1.3 40											
1901 5.6 170											
11 Tu	0131 1.3 40	26 W	0047 0.7 20	11 F	0201 2.0 60	26 Sa	0225 1.0 30	11 Su	0210 2.0 60	26 M	0308 1.3 40
0715 5.6 170	0646 6.9 210	1333 0.0 0	0750 5.6 170	1428 0.7 20	0807 6.6 200	1503 0.0 0	2052 5.9 180	1443 0.7 20	1535 0.3 10	2126 6.2 190	2126 6.2 190
1351 1.0 30											
○ 1940 5.6 170	● 1921 5.9 180			2033 5.2 160				2050 5.2 160			
12 W	0202 1.3 40	27 Th	0141 0.7 20	12 Sa	0232 2.0 60	27 Su	0322 1.0 30	12 M	0248 2.0 60	27 Tu	0400 1.3 40
0749 5.6 170	0736 6.9 210	1426 -0.3 -10	0825 5.6 170	1502 1.0 30	0858 6.6 200	1555 0.0 0	2143 5.9 180	1523 0.7 20	1622 0.7 20	2212 6.2 190	2212 6.2 190
1422 1.0 30				2110 5.2 160				2128 5.6 170			
2018 5.6 170		2013 5.9 180									
13 Th	0230 1.6 50	28 F	0237 0.7 20	13 Su	0306 2.0 60	28 M	0420 1.3 40	13 Tu	0330 2.0 60	28 W	0453 1.6 50
0822 5.6 170	0826 6.9 210	1520 -0.3 -10	0902 5.6 170	1540 1.0 30	0949 6.2 190	1647 0.3 10	1604 0.7 20	1622 1.0 30	1707 1.0 30	2255 5.9 180	2255 5.9 180
1452 1.0 30				2146 5.2 160		2232 5.9 180	2206 5.6 170				
2055 5.6 170	2105 5.9 180										
14 F	0256 1.6 50	29 Sa	0334 0.7 20	14 M	0345 2.0 60	29 Tu	0519 1.6 50	14 W	0417 2.0 60	29 Th	0545 1.6 50
0855 5.6 170	0916 6.6 200	1614 0.0 0	0940 5.6 170	1621 1.0 30	1038 5.9 180	1740 0.7 20	1648 1.0 30	1752 1.3 40	2338 5.9 180	2338 5.9 180	2338 5.9 180
1524 1.0 30				2224 5.2 160		2320 5.9 180	2246 5.6 170				
2131 5.2 160	2157 5.9 180										
15 Sa	0325 2.0 60	30 Su	0434 1.0 30	15 Tu	0431 2.3 70	30 W	0618 2.0 60	15 Th	0510 2.0 60	30 F	0638 2.0 60
0929 5.6 170	1006 6.2 190	1710 0.3 10	1019 5.6 170	1707 1.3 40	1128 5.6 170	1832 1.0 30	1734 1.0 30	1045 5.9 180	1150 5.2 160	1837 1.6 50	1837 1.6 50
1559 1.3 40				2303 5.2 160				2328 5.6 170			
2206 5.2 160	2247 5.6 170										
31 M	0538 1.3 40										
1056 5.9 180											
1808 0.7 20											
2339 5.6 170											

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Saint John, New Brunswick, 2011

Times and Heights of High and Low Waters

January				February				March			
	Time	Height			Time	Height			Time	Height	
	h m	ft cm		h m	ft cm			h m	ft cm		
1 Sa	0242	4.3	130	16 Su	0217	6.6	200	1 Tu	0419	4.9	150
	0854	25.6	780		0829	23.6	720		1029	25.3	770
	1518	3.3	100		1452	5.2	160		1649	3.6	110
	2129	24.0	730		2103	22.3	680		2258	24.0	730
2 Su	0339	4.3	130	17 M	0310	5.9	180	2 W	0507	4.6	140
	0950	25.9	790		0921	24.6	750		1115	25.6	780
	1613	3.0	90		1543	4.3	130		1734	3.3	100
	2223	24.3	740		2153	23.3	710		● 2341	24.3	740
3 M	0432	4.3	130	18 Tu	0400	4.9	150	3 Th	0551	4.3	130
	1042	25.9	790		1010	25.6	780		1158	25.6	780
	1703	3.0	90		1632	3.0	90		1815	3.3	100
	2313	24.3	740		2240	24.3	740		● ○ 2349	27.6	840
4 Tu	0522	4.3	130	19 W	0449	3.9	120	4 F	0021	24.6	750
	1130	25.9	790		1058	26.6	810		0631	4.3	130
	1750	3.0	90		1719	2.0	60		1237	25.6	780
	● 2359	24.6	750		○ 2326	25.6	780		1853	3.6	110
5 W	0608	4.3	130	20 Th	0537	2.6	80	5 Sa	0059	24.6	750
	1215	25.9	790		1145	27.6	840		0709	4.3	130
	1835	3.0	90		1805	1.0	30		1316	25.3	770
									1930	3.9	120
6 Th	0042	24.6	750	21 F	0013	26.2	800	6 Su	0135	24.6	750
	0652	4.3	130		0624	2.0	60		0746	4.6	140
	1258	25.9	790		1232	27.9	850		1353	24.6	750
	1917	3.3	100		1852	0.7	20		2006	4.3	130
7 F	0124	24.6	750	22 Sa	0059	26.9	820	7 M	0211	24.3	740
	0734	4.6	140		0713	1.3	40		0823	4.9	170
	1340	25.3	770		1320	27.9	850		1430	24.0	730
	1958	3.6	110		1940	0.3	10		2042	4.9	150
8 Sa	0205	24.3	740	23 Su	0148	27.2	830	8 Tu	0248	24.0	730
	0816	4.9	150		0803	1.3	40		0901	5.2	160
	1423	24.9	760		1410	27.6	840		1508	23.3	710
	2039	4.3	130		2029	0.7	20		2120	5.2	160
9 Su	0247	24.3	740	24 M	0239	27.2	830	9 W	0328	23.6	720
	0858	5.2	160		0855	1.6	50		0942	5.6	170
	1505	24.0	730		1503	26.9	820		1550	22.6	690
	2120	4.9	150		2121	1.6	50		2201	5.9	180
10 M	0329	24.0	730	25 Tu	0332	26.9	820	10 Th	0410	23.3	710
	0942	5.9	180		0951	2.3	70		1027	6.2	190
	1549	23.3	710		1559	25.6	780		1635	22.0	670
	2203	5.6	170		2216	2.6	80		2247	6.6	200
11 Tu	0413	23.3	710	26 W	0428	26.2	800	11 F	0458	23.0	700
	1027	6.2	190		1050	3.0	90		1118	6.6	200
	1636	22.6	690		1659	24.6	750		1728	21.3	650
	2248	6.2	190		● ○ 2316	3.6	110		● ○ 2339	7.2	220
12 W	0459	23.0	700	27 Th	0529	25.3	770	12 Sa	0552	22.6	690
	1116	6.6	200		1153	3.6	110		1215	6.6	200
	1725	22.0	670		1804	23.6	720		1826	21.3	650
	● 2336	6.9	210						1959	22.6	690
13 Th	0549	22.6	690	28 F	0019	4.6	140	13 Su	0037	7.2	220
	1208	6.9	210		0633	24.9	760		0650	23.0	700
	1819	21.3	650		1258	4.3	130		1315	6.2	190
					1911	23.3	710		1927	21.7	660
14 F	0028	7.2	220	29 Sa	0124	5.2	160	14 M	0138	6.6	200
	0642	22.6	690		0738	24.6	750		0751	23.6	720
	1303	6.6	200		1403	4.3	130		1415	5.2	160
	1915	21.3	650		2016	23.0	700		2026	22.6	690
15 Sa	0123	7.2	220	30 Su	0227	5.2	160	15 Tu	0237	5.6	170
	0736	23.0	700		0841	24.6	750		0849	24.6	750
	1359	6.2	190		1504	4.3	130		1511	3.9	120
	2010	21.7	660		2116	23.3	710		2121	23.6	720
31 M	0326	5.2	160	31 M	0938	24.9	760				
					1559	3.9	120				
					2210	23.6	720				

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Saint John, New Brunswick, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height								
1 F	0425 4.6 140	16 Sa	0337 1.3 40	1 Su	0435 4.3 130	16 M	0411 0.7 20	1 W	0519 3.9 120	16 Th	0541 1.6 50
1034 24.3 740	0946 26.9 820	1045 23.6 720	1021 26.2 800	1129 23.6 720	1150 25.3 770	1129 23.6 720	1800 3.3 100	1732 5.2 160	1150 25.3 770	1239 25.3 770	
1646 4.3 130	1602 1.0 30	1651 4.9 150	1633 1.6 50	1633 1.6 50	1615 2.0 60	2242 28.2 860	2338 25.3 770	2338 25.3 770	1849 3.6 110	1849 3.6 110	
2252 24.3 740	2211 27.9 850	2256 24.6 750	2242 28.2 860	2331 24.6 750	2334 28.2 860	● 2338 25.3 770	● 2338 25.3 770	● 2338 25.3 770	● 2338 25.3 770	1849 3.6 110	
2 Sa	0505 4.3 130	17 Su	0430 0.3 10	2 M	0512 3.9 120	17 Tu	0504 0.3 10	2 Th	0556 3.3 100	17 F	0008 26.9 820
1114 24.6 750	1039 27.2 830	1122 23.6 720	1114 26.6 810	1727 4.9 150	1725 2.0 60	1810 4.9 150	1205 23.6 720	1205 23.6 720	1239 25.3 770	1239 25.3 770	
1723 4.3 130	1653 0.7 20	1801 4.9 150	1816 2.3 70	● 2302 28.5 870	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	1849 3.6 110	
2328 24.6 750	● 2302 28.5 870	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	● 2334 28.2 860	1849 3.6 110	
3 Su	0541 3.9 120	18 M	0522 -0.3 -10	3 Tu	0547 3.6 110	18 W	0556 0.7 20	3 F	0015 25.6 780	18 Sa	0057 26.6 810
1150 24.3 740	1130 27.6 840	1157 23.6 720	1205 26.2 800	1801 4.9 150	1816 2.3 70	1816 2.3 70	1243 24.0 730	1243 24.0 730	1327 24.9 760	1327 24.9 760	
1758 4.3 130	1744 0.7 20	1801 4.9 150	1801 4.9 150	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	1850 4.6 140	1850 4.6 140	1938 3.9 120	1938 3.9 120	
● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	1938 3.9 120	
4 M	0002 24.6 750	19 Tu	0613 -0.3 -10	4 W	0005 24.9 760	19 Th	0024 27.9 850	4 Sa	0055 25.6 780	19 Su	0145 26.2 800
0615 3.6 110	1222 27.2 830	0622 3.6 110	0646 1.0 30	1231 23.6 720	1256 25.9 790	1907 3.0 90	0715 3.0 90	0805 3.0 90	1414 24.6 750	1414 24.6 750	
1224 24.3 740	1834 1.0 30	1836 4.9 150	1907 3.0 90	1907 3.0 90	1907 3.0 90	1907 3.0 90	1931 4.6 140	1931 4.6 140	2026 4.6 140	2026 4.6 140	
1831 4.6 140	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
5 Tu	0034 24.6 750	20 W	0043 28.2 860	5 Th	0040 24.9 760	20 F	0115 27.2 830	5 Su	0136 25.6 780	20 M	0233 25.3 770
0649 3.9 120	0704 0.3 10	0657 3.6 110	0737 1.6 50	1306 23.6 720	1347 25.3 770	1958 3.6 110	0757 3.0 90	0852 3.6 110	1502 24.3 740	1502 24.3 740	
1257 24.0 730	1313 26.6 810	1912 4.9 150	1958 3.6 110	1912 4.9 150	1958 3.6 110	1958 3.6 110	2016 4.3 130	2115 4.9 150	2115 4.9 150	2115 4.9 150	
1903 4.6 140	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
6 W	0107 24.6 750	21 Th	0134 27.6 840	6 F	0116 24.9 760	21 Sa	0206 26.2 800	6 M	0221 25.6 780	21 Tu	0322 24.6 750
0722 3.9 120	0756 1.0 30	0756 1.0 30	0828 2.6 80	1343 23.6 720	1438 24.6 750	2050 4.6 140	0843 3.0 90	0940 4.3 130	1551 24.0 730	1551 24.0 730	
1330 23.6 720	1406 25.6 780	1406 25.6 780	1438 24.6 750	1951 5.2 160	1951 5.2 160	1951 5.2 160	2104 4.3 130	2205 5.6 170	2205 5.6 170	2205 5.6 170	
1937 4.9 150	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
7 Th	0141 24.6 750	22 F	0227 26.6 810	7 Sa	0156 24.9 760	22 Su	0258 25.3 770	7 Tu	0310 25.6 780	22 W	0413 23.6 720
0758 4.3 130	0849 2.3 70	0849 2.3 70	0816 3.9 120	1424 23.6 720	1532 24.0 730	2144 5.2 160	0920 3.6 110	0932 3.3 100	1030 5.2 160	1643 23.6 720	
1405 23.3 710	1500 24.6 750	1500 24.6 750	2034 5.2 160	2122 4.3 130	2122 4.3 130	2122 4.3 130	2144 5.2 160	2157 4.3 130	2258 6.2 190	2258 6.2 190	
2014 5.6 170	2112 4.3 130	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
8 F	0219 24.3 740	23 Sa	0322 25.6 780	8 Su	0240 24.6 750	23 M	0353 24.6 750	8 W	0404 25.3 770	23 Th	0507 23.0 700
0837 4.6 140	0945 3.6 110	0945 3.6 110	0901 4.3 130	1510 23.3 710	1627 23.6 720	2241 5.9 180	1014 4.3 130	1025 3.3 100	1122 5.9 180	1735 23.0 700	
1445 23.0 700	1558 23.6 720	1558 23.6 720	1510 23.3 710	2122 5.6 170	2122 5.6 170	2122 5.6 170	2241 5.9 180	● 2353 6.6 200	● 2353 6.6 200	● 2353 6.6 200	
2055 5.9 180	2211 5.2 160	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
9 Sa	0301 24.0 730	24 Su	0421 24.3 740	9 M	0329 24.6 750	24 Tu	0451 23.6 720	9 Th	0502 24.9 760	24 F	0603 22.3 680
0922 4.9 150	1045 4.6 140	1045 4.6 140	0952 4.3 130	1601 23.6 720	1725 23.3 710	● 2341 6.2 190	1111 5.2 160	1122 3.3 100	1215 6.6 200	1829 23.0 700	
1530 22.6 690	1659 23.0 700	1659 23.0 700	1601 23.6 720	2216 5.6 170	2216 5.6 170	2216 5.6 170	● 2341 6.2 190	1735 25.3 770	1735 25.3 770	2355 3.6 110	
2142 6.2 190	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
10 Su	0349 23.6 720	25 M	0524 23.6 720	10 Tu	0423 24.3 740	25 W	0551 23.0 700	10 F	0603 24.9 760	25 Sa	0048 6.6 200
1012 5.2 160	1147 5.2 160	1147 5.2 160	1047 4.3 130	1658 23.6 720	1658 23.6 720	1823 23.0 700	1208 5.6 170	1222 3.6 110	0659 22.0 670	1309 6.9 210	
1622 22.3 680	1802 22.6 690	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
2236 6.6 200	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
11 M	0445 23.6 720	26 Tu	0017 6.2 190	11 W	0523 24.3 740	26 Th	0040 6.6 200	11 Sa	0057 3.3 100	26 Su	0142 6.6 200
1109 5.2 160	0629 23.3 710	0629 23.3 710	1146 4.3 130	1758 24.3 740	1758 24.3 740	1919 23.0 700	0650 22.6 690	0707 24.6 750	0754 21.7 660	1401 6.9 210	
1721 22.6 690	1249 5.6 170	1249 5.6 170	1758 24.3 740	1758 24.3 740	1758 24.3 740	1758 24.3 740	1305 5.9 180	1322 3.3 100	2013 23.0 700	2013 23.0 700	
● 2336 6.2 190	1904 22.6 690	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
12 Tu	0546 23.6 720	27 W	0120 6.2 190	12 Th	0016 4.6 140	27 F	0137 6.2 190	12 Su	0159 2.6 80	27 M	0234 5.9 180
1211 4.9 150	0731 23.0 700	1348 5.6 170	0747 22.6 690	1246 3.6 110	1359 6.2 190	2011 23.3 710	0809 24.9 760	0845 22.0 670	1450 6.6 200	2101 23.3 710	
1823 23.0 700	2002 23.0 700	2002 23.0 700	1359 6.2 190	1859 24.9 760	1859 24.9 760	1859 24.9 760	2035 26.6 810	2035 26.6 810	2035 26.6 810	2035 26.6 810	
● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
13 W	0039 5.6 170	28 Th	0218 5.9 180	13 F	0119 3.6 110	28 Sa	0230 5.9 180	13 M	0259 2.3 70	28 Tu	0321 5.2 160
0650 24.3 740	0828 23.3 710	0828 23.3 710	0728 24.9 760	1346 3.0 90	1346 3.0 90	1448 5.9 180	0840 22.6 690	0909 24.9 760	0933 22.3 680	1537 6.2 190	
1313 4.3 130	1442 5.2 160	1442 5.2 160	1346 3.0 90	1958 26.2 800	1958 26.2 800	2058 23.6 720	1448 5.9 180	1521 3.3 100	2146 24.0 730	2146 24.0 730	
1925 24.0 730	2053 23.6 720	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	● 2352 28.9 880	
14 Th	0142 4.3 130	29 F	0309 5.2 160	14 Sa	0219 2.6 80	29 Su	0317 5.2 160	14 Tu	0355 1.6 50	29 W	0406 4.6 140
0752 24.9 760	0919 23.3 710	0919 23.3 710	0828 25.6 780	1444 2.3 70	1444 2.3 70	2142 24.0 730	0928 22.6 690	1006 25.3 770	1017 23.0 700	1621 5.6 170	
1413 3.3 100	1530 5.2 160	1530 5.2 160	1444 2.3 70	2055 26.9 820	2055 26.9 820	2142 24.0 730	1534 5.9 180	1616 3.0 90	2227 27.2 830	2229 24.6 750	
2024 25.6 780	2139 24.0 730	●									

Saint John, New Brunswick, 2011

Times and Heights of High and Low Waters

July					August					September				
Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0530	3.3	100	16 Sa 0614	2.6	80	1 M 0010	27.6	840	16 Tu 0100	25.6	780	1 Th 0122	27.9	850
1138	24.3	740	1222	24.9	760	0629	1.0	30	0714	3.3	100	0738	0.3	10
1745	4.3	130	1832	3.9	120	1236	26.9	820	1320	24.9	760	1346	28.2	860
● 2351	26.2	800				1848	1.6	50	1932	3.9	120	2005	0.3	10
2 Sa 0611	2.6	80	17 Su 0039	26.2	800	2 Tu 0055	27.9	850	17 W 0139	24.9	760	2 F 0213	27.2	830
1218	24.9	760	0658	2.6	80	0714	0.7	20	0752	3.9	120	0828	1.3	40
1827	3.6	110	1305	24.9	760	1321	27.2	830	1357	24.6	750	1438	27.6	840
			1916	3.9	120	1936	1.3	40	2010	4.3	130	2058	1.3	40
3 Su 0033	26.6	810	18 M 0123	25.9	790	3 W 0142	27.6	840	18 Th 0218	24.3	740	3 Sa 0307	25.9	790
0653	2.0	60	0740	3.0	90	0800	0.7	20	0829	4.6	140	0923	2.3	70
1300	25.6	780	1348	24.9	760	1408	27.2	830	1436	24.3	740	1533	26.6	810
1911	3.3	100	1959	4.3	130	2025	1.3	40	2049	4.9	150	2155	2.3	70
4 M 0117	26.9	820	19 Tu 0206	25.3	770	4 Th 0232	27.2	830	19 F 0257	23.6	720	4 Su 0406	24.6	750
0737	1.6	50	0822	3.6	110	0850	1.3	40	0908	5.2	160	1021	3.6	110
1344	25.9	790	1430	24.6	750	1459	27.2	830	1515	24.0	730	1633	25.6	780
1956	3.0	90	2043	4.6	140	2117	1.6	50	2130	5.6	170	2257	3.3	100
5 Tu 0202	26.9	820	20 W 0250	24.6	750	5 F 0325	26.2	800	20 Sa 0338	22.6	690	5 M 0510	23.6	720
0823	1.6	50	0905	4.3	130	0942	2.3	70	0949	5.9	180	1125	4.9	150
1430	26.2	800	1513	24.3	740	1553	26.6	810	1558	23.3	710	1739	24.6	750
2045	2.6	80	2127	5.2	160	2214	2.3	70	2214	6.2	190	● 2318	6.2	190
6 W 0251	26.6	810	21 Th 0335	23.6	720	6 Sa 0423	25.3	770	21 F 0424	22.0	670	6 Tu 0004	4.3	130
0911	2.0	60	0948	5.2	160	1039	3.3	100	1034	6.9	210	0618	23.0	700
1520	26.2	800	1558	23.6	720	1651	25.9	790	1645	22.6	690	1232	5.6	170
2137	3.0	90	2213	5.9	180	● 2315	3.3	100	● 2304	6.6	200	1848	24.0	730
7 Th 0344	25.9	790	22 F 0422	22.6	690	7 Su 0525	24.3	740	22 M 0515	21.3	650	7 W 0424	22.0	670
1003	2.6	80	1034	5.9	180	1141	4.3	130	1125	7.2	220	7 Tu 0004	4.3	130
1614	25.9	790	1645	23.3	710	1755	25.3	770	1737	22.3	680	1227	22.6	690
2233	3.0	90	2302	6.6	200				2359	6.9	210	1955	24.0	730
8 F 0442	25.3	770	23 Sa 0512	22.0	670	8 M 0020	3.9	120	23 Th 0612	21.0	640	8 Th 0218	4.6	140
1059	3.0	90	1122	6.6	200	0632	23.3	710	1222	7.5	230	0831	23.0	700
1712	25.9	790	1735	22.6	690	1247	4.9	150	1835	22.3	680	1443	5.2	160
● 2334	3.3	100	● 2354	6.9	210	1901	24.6	750				2056	24.3	740
9 Sa 0543	24.6	750	24 W 0606	21.3	650	9 Tu 0127	4.3	130	24 F 0059	6.6	200	9 F 0316	4.3	130
1159	3.6	110	1215	7.2	220	0740	23.3	710	0712	21.3	650	0928	23.6	720
1813	25.6	780	1829	22.3	680	1353	5.2	160	1321	7.2	220	1539	4.9	150
10 Su 0037	3.3	100	25 M 0050	6.9	210	2008	24.6	750	1935	23.0	700	2150	24.6	750
0648	24.3	740	0702	21.0	640	10 F 0232	4.3	130	25 Th 0158	5.9	180	1017	24.3	740
1303	4.3	130	1310	7.5	230	0845	23.3	710	0810	22.0	670	1628	4.3	130
1916	25.6	780	1924	22.6	690	1456	4.9	150	1419	6.2	190	2238	24.9	760
11 M 0142	3.3	100	26 Tu 0146	6.6	200	2109	24.9	760	2031	24.0	730	● 2323	27.9	850
0753	24.0	730	0759	21.3	650	● 2338	25.3	770	2124	24.9	760	1100	24.6	750
1406	4.3	130	1405	7.2	220	2204	25.3	770	2124	24.9	760	1712	3.9	120
2019	25.6	780	2018	23.0	700				2204	25.3	770	2320	25.3	770
12 Tu 0244	3.3	100	27 W 0240	5.9	180	12 F 0424	3.6	110	27 Sa 0343	3.6	110	1009	26.9	820
0856	24.0	730	0852	22.0	670	1034	24.3	740	0952	24.6	750	1139	24.9	760
1507	4.3	130	1458	6.6	200	1644	4.3	130	1603	3.6	110	1752	3.6	110
2119	25.9	790	2109	24.0	730	2254	25.6	780	2213	26.2	800	● 2359	25.3	770
13 W 0343	3.0	90	28 Th 0330	4.9	150	13 F 0512	3.3	100	28 Su 0431	2.3	70	1058	28.2	860
0954	24.3	740	0940	22.6	690	1120	24.6	750	1039	25.9	790	1829	3.6	110
1604	4.3	130	1547	5.6	170	1730	3.9	120	1651	2.3	70	● 2259	27.2	830
2215	26.2	800	2157	24.9	760	● 2338	25.9	790				● 2323	27.9	850
14 Th 0437	2.6	80	29 F 0417	3.9	120	14 M 0555	3.0	90	29 M 0517	1.0	30	1047	27.9	850
1047	24.6	750	1026	24.0	730	1202	24.9	760	1124	27.2	830	0647	3.9	120
1657	3.9	120	1633	4.3	130	1813	3.9	120	1738	1.0	30	1251	24.9	760
2306	26.2	800	2242	25.9	790				2346	27.9	850	1905	3.9	120
15 F 0527	2.6	80	30 Sa 0501	2.6	80	15 M 0020	25.6	780	30 Tu 0603	0.3	10	1113	24.6	750
1136	24.9	760	1109	24.9	760	0636	3.3	100	1210	27.9	850	0722	4.3	130
1746	3.9	120	1718	3.3	100	1242	24.9	760	1826	0.3	10	1326	24.6	750
● 2354	26.2	800	● 2326	26.9	820	1853	3.9	120				1940	3.9	120
31 Su 0545	1.6	50	31 W 0650	0.0	0	3033	28.2	860	31 W 0650	0.0	0	0650	0.0	0
1152	25.9	790	1803	2.3	70				1257	28.2	860	1257	28.2	860
									1915	0.0	0			

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Saint John, New Brunswick, 2011

Times and Heights of High and Low Waters

October				November				December							
	Time	Height			Time	Height			Time	Height					
1 Sa	h m	ft	cm	16 Su	h m	ft	cm	1 Tu	h m	ft	cm				
	0155	26.6	810	0156	23.3	710		0331	24.3	740	16 Th				
	0809	1.6	50	0803	5.6	170		0945	4.6	140	0404	24.3	740		
	1418	27.6	840	1407	24.3	740		1555	25.3	770	1018	5.2	160		
	2040	1.3	40	2025	4.6	140		2218	3.6	110	1627	24.3	740		
2 Su	0251	25.6	780	17 M	0233	23.0	700	2 W	0432	23.6	720	2 F	0501	23.6	720
	0904	3.0	90	0842	5.9	180		1046	5.2	160	1117	5.6	170		
	1515	26.2	800	1447	24.0	730		1657	24.3	740	1727	23.6	720		
	2138	2.3	70	2107	4.9	150		2320	4.6	140	2344	5.2	160		
3 M	0349	24.3	740	18 Tu	0316	22.6	690	3 Th	0535	23.3	710	18 F	0431	23.6	720
	1004	4.3	130	0926	6.2	190		1150	5.9	180	1046	5.2	160		
	1615	25.3	770	1532	23.6	720		1802	23.6	720	1653	24.3	740		
	2240	3.6	110	2154	5.2	160				2315	4.3	130			
4 Tu	0453	23.6	720	19 W	0404	22.3	680	4 F	0022	4.9	150	19 Sa	0527	24.0	730
	1108	5.2	160	1016	6.6	200		0638	23.3	710	1144	4.9	150		
	1721	24.3	740	1624	23.3	710		1254	5.9	180	1752	24.3	740		
	2345	4.6	140	2246	5.6	170		1906	23.3	710					
5 W	0600	23.0	700	20 Th	0458	22.3	680	5 Sa	0123	5.2	160	20 Tu	0012	3.9	120
	1215	5.9	180	1112	6.6	200		0737	23.3	710	0625	24.9	760		
	1829	23.6	720	1721	23.3	710		1354	5.6	170	1245	3.9	120		
				2344	5.2	160		2005	23.3	710	1853	24.6	750		
6 Th	0052	4.9	150	21 F	0556	23.0	700	6 Su	0219	5.2	160	21 W	0111	3.6	110
	0707	23.0	700	1212	5.9	180		0832	23.6	720	0724	25.6	780		
	1322	5.9	180	1821	23.6	720		1449	5.2	160	1345	3.0	90		
	1935	23.6	720					2059	23.6	720	1954	25.3	770		
7 F	0155	4.9	150	22 Sa	0044	4.9	150	7 M	0310	4.9	150	22 Tu	0210	3.0	90
	0809	23.3	710	0656	23.6	720		0920	24.0	730	0821	26.6	810		
	1424	5.6	170	1313	4.9	150		1538	4.6	140	1444	2.0	60		
	2036	24.0	730	1922	24.3	740		2148	23.6	720	2052	25.6	780		
8 Sa	0252	4.6	140	23 Su	0142	3.9	120	8 Tu	0356	4.9	150	23 W	0306	2.3	70
	0904	23.6	720	0754	24.9	760		1004	24.3	740	0917	27.6	840		
	1518	4.9	150	1412	3.6	110		1621	4.3	130	1621	1.0	30		
	2129	24.3	740	2021	25.3	770		2231	23.6	720	2149	26.2	800		
9 Su	0342	4.3	130	24 M	0238	2.6	80	9 W	0438	4.9	150	24 Th	0402	2.0	60
	0952	24.3	740	0849	26.2	800		1044	24.6	750	0904	28.2	860		
	1606	4.3	130	1508	2.0	60		1701	3.9	120	1635	0.3	10		
	2216	24.3	740	2116	26.2	800		2311	23.6	720	2244	26.6	810		
10 M	0427	4.3	130	25 Tu	0332	1.6	50	10 W	0516	4.9	150	10 O	0456	1.6	50
	1035	24.6	750	0942	27.6	840		1121	24.6	750	1105	28.5	870		
	1649	3.9	120	1601	0.7	20		1738	3.6	110	1728	0.3	10		
	2258	24.6	750	2210	26.9	820		2348	23.6	720	2337	26.6	810		
11 Tu	0508	4.3	130	26 W	0424	1.0	30	11 F	0551	4.9	150	11 Sa	0549	2.0	60
	1113	24.9	760	1033	28.5	870		1156	24.9	760	1158	28.2	860		
	1728	3.6	110	1653	0.0	0		1813	3.6	110	1820	0.3	10		
	2337	24.6	750	2302	27.2	830									
12 W	0545	4.3	130	27 Th	0515	0.7	20	12 Sa	0022	23.6	720	12 M	0030	26.2	800
	1149	24.9	760	1124	28.9	880		0626	5.2	160	0641	2.3	70		
	1804	3.6	110	1745	-0.7	-20		1230	24.9	760	1250	27.9	850		
				2353	27.2	830		1848	3.6	110	1913	1.0	30		
13 Th	0013	24.3	740	28 F	0606	0.7	20	13 Su	0057	23.6	720	13 Tu	0122	25.9	790
	0620	4.6	140	1215	28.9	880		0701	5.2	160	0734	3.0	90		
	1223	24.9	760	1837	-0.3	-10		1306	24.9	760	1342	27.2	830		
	1839	3.6	110					1924	3.9	120	2005	1.6	50		
14 F	0047	24.0	730	29 Sa	0046	26.9	820	14 M	0132	23.6	720	14 Tu	0215	25.3	770
	0653	4.9	150	0658	1.3	40		0739	5.2	160	0827	3.6	110		
	1257	24.6	750	1307	28.2	860		1343	24.6	750	1435	26.2	800		
	1913	3.9	120	1929	0.3	10		2002	3.9	120	2057	2.6	80		
15 Sa	0121	23.6	720	30 Su	0139	26.2	800	15 Tu	0210	23.6	720	15 W	0308	24.6	750
	0727	5.2	160	0751	2.3	70		0819	5.6	170	0921	4.6	140		
	1331	24.6	750	1400	27.2	830		1424	24.6	750	1530	25.3	770		
	1948	4.3	130	2023	1.3	40		2044	4.3	130	2151	3.6	110		
31 Sa	0234	25.3	770	31 M	0846	3.3	100								
				1456	26.2	800									
				2119	2.6	80									

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the Canadian chart datum of soundings.

Eastport, Maine, 2011

Times and Heights of High and Low Waters

January				February				March				
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 Sa	0148	0.9	27	16 Su	0125	2.6	79	1 Tu	0324	1.0	30	
0753	19.7	600	Su 0733	18.1	552	Tu 0927	19.3	588	16 W	0243	0.7	21
1426	-0.3	-9	1401	1.3	40	1555	-0.1	-3	W 0848	19.9	607	
2029	18.1	552	2005	16.8	512	2157	18.1	552	1 Tu	1516	-0.8	-24
2 Su	0245	0.7	21	17 M	0219	1.9	58	16 W	2118	19.1	582	
0849	20.0	610	0825	18.9	576	2 W	0411	0.7	21			
1521	-0.6	-18	1454	0.4	12	17 Th	0336	-0.5	-15			
2123	18.4	561	2056	17.7	539	W 0939	21.0	640				
3 M	0338	0.5	15	● 2239	18.4	561	1606	-1.9	-58			
0940	20.1	613	18 Tu	0311	1.1	34	2207	20.3	619			
1611	-0.8	-24	0915	19.8	604	3 Th	0454	0.5	15			
2212	18.6	567	1544	-0.6	-18	18 F	0427	-1.6	-49			
4 Tu	0427	0.4	12	2145	18.6	567	1029	21.8	664			
1028	20.2	616	19 W	0400	0.1	3	1655	-2.7	-82			
1657	-0.9	-27	1003	20.7	631	O 2255	21.3	649				
● 2257	18.7	570	1632	-1.6	-49	18 Th	0351	0.8	24			
5 W	0512	0.4	12	O 2232	19.5	594	1029	19.0	579			
1112	20.1	613	20 Th	0449	-0.7	-21	1615	0.2	6			
1740	-0.7	-21	1050	21.4	652	2216	18.5	564				
2340	18.6	567	1212	19.2	585	19 F	0431	0.4	12			
6 Th	0555	0.6	18	Sa 1833	0.0	0	1033	19.2	585			
1155	19.8	604	21 F	0537	-1.4	-43	1653	0.0	0			
1821	-0.4	-12	1137	21.8	664	● 2253	18.8	573				
7 F	0022	18.5	564	1805	-2.6	-79	2343	21.9	668			
0637	0.8	24	22 M	0005	20.8	634	5 Sa	0605	-2.9	-88		
1237	19.3	588	Sa 0625	-1.8	-55	1206	22.2	677				
1901	0.0	0	1225	21.8	664	20 Su	1111	19.2	585			
8 Sa	0102	18.3	558	1852	-2.7	-82	1212	19.0	579			
0718	1.2	37	23 Su	0053	21.1	643	2328	19.0	579			
1318	18.8	573	0715	-1.8	-55	5 Th	0509	0.2	6			
1941	0.5	15	1315	21.4	652	1112	20.1	674				
9 Su	0144	18.1	552	1941	-2.3	-70	1719	-2.9	-88			
0800	1.5	46	24 M	0143	21.0	640	2319	22.5	686			
1401	18.2	555	W 0806	-1.6	-49	6 Th	0454	0.1	3			
2022	1.1	34	1407	20.7	631	1147	19.0	579				
10 M	0226	17.8	543	2032	-1.6	-49	21 M	1146	22.0	671		
0843	1.9	58	25 Tu	0235	20.7	631	1807	-2.7	-82			
1445	17.5	533	Sa 0901	-1.0	-30	22 F	0244	20.0	610			
2105	1.7	52	1502	19.7	600	0915	-0.5	-15				
11 Tu	0311	17.5	533	2125	-0.7	-21	1519	18.2	555			
0930	2.3	70	26 W	0330	20.1	613	2138	1.1	34			
1533	16.8	512	0958	-0.4	-12	26 Th	0343	18.8	573			
2150	2.2	67	● 2223	0.3	9	1014	0.6	18				
12 W	0359	17.2	524	2324	1.1	34	1620	17.3	527			
1019	2.6	79	27 Th	0429	19.5	594	● 2240	2.0	61			
1624	16.3	497	Sa 1059	0.3	9	27 F	0446	18.0	549			
● 2240	2.7	82	1703	17.8	543	0954	1.4	43				
13 Th	0450	17.1	521	2348	3.0	91	1117	1.4	43			
1113	2.7	82	28 F	0532	18.9	576	1725	16.7	509			
1718	16.0	488	1204	0.7	21	● 2214	2.8	85				
2333	3.0	91	1809	17.2	524	2344	2.5	76				
14 F	0544	17.1	521	13 Sa	0557	17.3	527	27 M	0446	18.0	549	
1209	2.5	76	1227	2.1	64	0616	18.0	549				
1815	15.9	485	1832	16.1	491	1248	1.4	43				
15 Sa	0029	2.9	88	1351	1.2	37	1557	16.4	500			
0639	17.5	533	1957	17.0	518	● 2214	2.8	85				
1306	2.1	64	31 M	0231	1.4	43	2314	2.8	85			
1911	16.2	494	0836	19.0	579	14 Tu	0521	17.5	533			
16 M	1506	0.2	1506	0.2	6	1152	1.8	55				
2109	17.7	539	2015	17.3	527	1757	16.6	506				
17 W	31 M	0231	1.4	43	15 Tu	0016	2.4	73				
0738	18.8	573	0836	19.0	579	0623	18.1	552				
1411	0.6	18	1506	0.2	6	1254	1.1	34				
2015	17.3	527	2109	17.7	539	1858	17.4	530				
18 F	31 M	0231	1.4	43	11 Tu	0146	2.1	64				
0738	18.8	573	0842	18.0	549	0752	17.7	539				
1411	0.6	18	1502	1.1	34	1415	1.4	43				
2020	17.5	533	2105	18.0	549	2020	17.5	533				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Eastport, Maine, 2011

Times and Heights of High and Low Waters

April				May				June							
	Time	Height			Time	Height			Time	Height					
	h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 F	0323	1.0	30	16 Sa	0248	-1.4	-43	1 Su	0332	0.8	24	16 M	0321	-2.1	-64
	0927	18.4	561		0851	20.7	631		0923	20.3	619		0423	0.3	9
	1544	0.8	24		1513	-1.6	-49		1548	1.3	40		1025	17.8	543
	2146	18.5	564		2115	21.5	655		2150	18.9	576		1637	1.5	46
2 Sa	0404	0.5	15	17 Su	0342	-2.5	-76	2 M	0412	0.4	12	17 Tu	0415	-2.6	-79
	1007	18.6	567		0944	21.2	646		1015	18.1	552		1016	20.5	625
	1622	0.6	18		1605	-2.1	-64		1627	1.2	37		1635	-1.2	-37
	2223	18.9	576		O 2206	22.2	677		2228	19.1	582		O 2235	22.0	671
3 Su	0442	0.2	6	18 M	0434	-3.1	-94	3 Tu	0451	0.1	3	18 W	0506	-2.6	-79
	1044	18.7	570		1036	21.5	655		1054	18.2	555		1108	20.3	619
	1659	0.6	18		1656	-2.2	-67		1706	1.2	37		1726	-1.0	-30
	● 2259	19.1	582		2256	22.5	686		● 2305	19.2	585		2326	21.7	661
4 M	0519	0.0	0	19 Tu	0525	-3.3	-101	4 W	0530	0.0	0	19 Th	0557	-2.4	-73
	1121	18.7	570		1126	21.3	649		1131	18.2	555		1158	20.0	610
	1735	0.7	21		1746	-2.0	-61		1744	1.3	40		1816	-0.5	-15
	2334	19.2	585		2346	22.3	680		2343	19.2	585				
5 Tu	0555	0.0	0	20 W	0615	-3.0	-91	5 Th	0609	0.0	0	20 F	0016	21.1	643
	1157	18.5	564		1217	20.8	634		1209	18.1	552		0647	-1.8	-55
	1811	0.9	27		1836	-1.4	-43		1823	1.4	43		1249	19.4	591
												1907	0.1	3	
6 W	0010	19.1	582	21 Th	0036	21.7	661	6 F	0022	19.2	585	21 Sa	0107	20.3	619
	0632	0.1	3		0706	-2.3	-70		0737	-1.0	-30		0737	19.6	597
	1233	18.2	555		1308	20.0	610		1249	18.0	549		1340	18.8	573
	1848	1.2	37		1927	-0.5	-15		1904	1.5	46		1957	0.8	24
7 Th	0047	18.9	576	22 F	0128	20.8	634	7 Sa	0103	19.1	582	22 Su	0158	19.4	591
	0711	0.4	12		0758	-1.3	-40		0732	0.2	6		0827	-0.1	-3
	1311	17.9	546		1401	19.1	582		1332	17.9	546		1432	18.2	555
	1927	1.6	49		2020	0.5	15		1948	1.7	52		2049	1.5	46
8 F	0126	18.7	570	23 Sa	0222	19.7	600	8 Su	0147	18.9	576	23 M	0251	18.5	564
	0752	0.7	21		0852	-0.3	-9		0817	0.4	12		0918	0.7	21
	1353	17.5	533		1457	18.1	552		1418	17.8	543		1525	17.6	536
	2009	1.9	58		2115	1.4	43		2036	1.7	52		2142	2.1	64
9 Sa	0209	18.4	561	24 Su	0319	18.6	567	9 M	0236	18.8	573	24 Tu	0346	17.7	539
	0837	1.0	30		0948	0.7	21		0907	0.5	15		1010	1.5	46
	1438	17.2	524		1555	17.4	530		1509	17.9	546		1619	17.3	527
	2056	2.2	67		O 2213	2.2	67		2129	1.7	52		O 2237	2.5	76
10 Su	0257	18.1	552	25 M	0418	17.8	543	10 Tu	0330	18.6	567	25 W	0441	17.2	524
	0927	1.3	40		1046	1.5	46		1000	0.6	18		1103	2.0	61
	1530	17.0	518		1655	16.9	515		1605	18.1	552		1713	17.2	524
	2148	2.4	73		2313	2.6	79		O 2226	1.5	46		2332	2.6	79
11 M	0352	18.0	549	26 Tu	0520	17.2	524	11 W	0429	18.6	567	26 Sa	0538	16.8	512
	1023	1.4	43		1144	2.0	61		1057	0.5	15		1156	2.3	70
	1627	17.0	518		1754	16.9	515		1703	18.5	564		1806	17.3	527
	● 2247	2.3	70						2326	1.1	34				
12 Tu	0452	18.0	549	27 W	0013	2.6	79	12 Th	0530	18.7	570	27 M	0027	2.5	76
	1122	1.2	37		0620	17.1	521		1156	0.3	9		0633	16.7	509
	1728	17.4	530		1241	2.1	64		1802	19.1	582		1248	2.4	73
	2349	1.8	55		1851	17.1	521					1857	17.5	533	
13 W	0554	18.4	561	28 Th	0110	2.3	70	13 F	0028	0.4	12	28 Tu	0119	2.1	64
	1223	0.7	21		0716	17.2	524		0631	19.0	579		0725	16.8	512
	1829	18.2	555		1334	2.0	61		1255	0.0	0		1338	2.4	73
					1942	17.5	533		1900	19.9	607		1946	17.9	546
14 Th	0051	0.9	27	29 F	0202	1.8	55	14 Sa	0128	-0.5	-15	29 W	0209	1.7	52
	0656	19.1	582		0807	17.4	530		0731	19.5	594		0814	17.0	518
	1323	0.0	0		1423	1.8	55		1353	-0.5	-15		1426	2.2	67
	1927	19.3	588		2028	18.0	549		1957	20.8	634		2032	18.3	558
15 F	0151	-0.2	-6	30 Sa	0249	1.3	40	15 Su	0226	-1.4	-43	30 M	0256	1.2	37
	0755	19.9	607		0853	17.7	539		0828	20.0	610		0900	17.3	527
	1419	-0.8	-24		1507	1.5	46		1449	-0.9	-27		1511	2.0	61
	2022	20.5	625		2110	18.5	564		2051	21.5	655		2115	18.7	570
31 Tu	0340	0.7	21	31 Tu	0944	17.6	536	16 O	0340	0.7	21	29 W	0906	19.2	585
					1555	1.7	52		1555	1.7	52		1523	-0.2	-6
					2157	19.0	579		2157	19.0	579		2125	21.1	643

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Eastport, Maine, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 0438	-0.3	-9		16 0520	-1.0	-30		1 0542	-1.9	-58	
F 1040	18.1	552	Sa 1121	18.8	573	M 1143	20.2	616	Tu 1218	18.8	573
1653	0.9	27	1738	0.3	9	1802	-1.2	-37	1836	0.5	15
● 2254	19.9	607	2337	19.9	607						
2 0522	-0.8	-24	17 0604	-0.7	-21	2 0002	21.1	643	17 0036	18.8	573
Sa 1123	18.7	570	Su 1205	18.8	573	Tu 0629	-2.1	-64	W 0655	0.4	12
1738	0.5	15	1822	0.5	15	1229	20.7	631	1256	18.6	567
2338	20.2	616				1851	-1.5	-46	1915	0.8	24
3 0607	-1.2	-37	18 0021	19.5	594	3 W 0050	21.0	640	18 0116	18.2	555
Su 1207	19.1	582	M 0647	-0.3	-9	0716	-2.0	-61	Th 0734	0.9	27
1824	0.1	3	1248	18.7	570	1317	20.9	637	1336	18.4	561
			1905	0.8	24	1941	-1.5	-46	1956	1.2	37
4 0023	20.4	622	19 0105	19.0	579	4 Th 0141	20.6	628	19 0157	17.6	536
M 0652	-1.4	-43	Tu 0728	0.2	6	0805	-1.6	-49	F 0814	1.5	46
1252	19.5	594	1330	18.4	561	1407	20.8	634	1417	18.0	549
1911	-0.2	-6	1948	1.1	34	2033	-1.3	-40	2039	1.6	49
5 0110	20.4	622	20 0148	18.4	561	5 F 0234	19.9	607	20 0241	17.0	518
Tu 0738	-1.4	-43	W 0809	0.7	21	0857	-1.0	-30	Sa 0856	2.1	64
1340	19.8	604	1413	18.2	555	1500	20.5	625	1502	17.6	536
2001	-0.3	-9	2031	1.5	46	2128	-0.9	-27	2125	2.0	61
6 0200	20.2	616	21 0233	17.7	539	6 Th 0330	19.1	582	21 0328	16.4	500
W 0827	-1.2	-37	0852	1.4	43	0952	-0.2	-6	Su 0943	2.6	79
1430	20.0	610	1457	17.9	546	1557	20.0	610	1550	17.3	527
2053	-0.4	-12	2117	1.9	58	● 2227	-0.3	-9	● 2215	2.3	70
7 0253	19.7	600	22 0319	17.1	521	7 Su 0430	18.3	558	22 0419	16.0	488
Th 0918	-0.8	-24	F 0936	2.0	61	1050	0.6	18	M 1034	3.0	91
1522	20.0	610	1544	17.6	536	1657	19.5	594	1642	17.1	521
2148	-0.3	-9	2205	2.2	67	2329	0.1	3	2309	2.4	73
8 0349	19.2	585	23 0409	16.5	503	8 M 0533	17.7	539	23 0515	15.8	482
F 1012	-0.3	-9	Sa 1024	2.5	76	1152	1.1	34	Tu 1129	3.1	94
1618	19.9	607	1633	17.3	527	1800	19.2	585	1738	17.2	524
● 2246	-0.1	-3	● 2256	2.4	73						
9 0448	18.7	570	24 0501	16.1	491	9 Tu 0033	0.3	9	24 0006	2.2	67
Sa 1109	0.2	6	Su 1115	2.9	88	0638	17.5	533	W 0612	16.0	488
1717	19.8	604	1725	17.2	524	1256	1.3	40	1227	2.9	88
2347	-0.1	-3	2350	2.5	76	1903	19.1	582	1835	17.6	536
10 0550	18.2	555	25 0556	15.9	485	10 W 0136	0.3	9	25 0104	1.7	52
Su 1210	0.6	18	M 1209	3.0	91	0740	17.5	533	Th 0709	16.5	503
1817	19.8	604	1819	17.3	527	1358	1.2	37	1324	2.3	70
						2003	19.2	585	1931	18.3	558
11 0049	-0.1	-3	26 0045	2.2	67	11 W 0235	0.0	0	26 0159	0.8	24
M 0652	18.1	552	Tu 0652	16.0	488	0838	17.9	546	F 0803	17.4	530
1311	0.8	24	1304	2.9	88	1455	0.9	27	1419	1.3	40
1917	19.9	607	1913	17.7	539	2058	19.4	591	2024	19.2	585
12 0150	-0.3	-9	27 0140	1.7	52	12 F 0328	-0.3	-9	27 0252	-0.2	-6
Tu 0753	18.1	552	0746	16.4	500	0930	18.2	555	Sa 0854	18.5	564
1411	0.7	21	1358	2.5	76	1546	0.6	18	1512	0.2	6
2016	20.0	610	2005	18.3	558	2148	19.6	597	2115	20.1	613
13 0249	-0.6	-18	28 0233	1.0	30	12 F 0328	-0.3	-9	12 0252	0.0	0
W 0851	18.3	558	0837	17.1	521	0930	18.2	555	Sa 0854	18.5	564
1508	0.6	18	1450	1.8	55	1546	0.6	18	1512	0.2	6
2111	20.2	616	2055	19.0	579				● 2252	19.1	582
14 0343	-0.9	-27	29 0323	0.2	6	13 O 0415	-0.5	-15	13 0341	-1.1	-34
Th 0945	18.6	567	0925	17.9	546	Sa 1016	18.6	567	Su 0943	19.6	597
1602	0.4	12	1540	1.0	30	1633	0.4	12	1602	-0.8	-24
2203	20.2	616	2142	19.8	604	● 2204	20.9	637	● 2204	20.9	637
15 0434	-1.0	-30	30 0410	-0.7	-21	14 Su 0459	-0.5	-15	29 0429	-1.9	-58
F 1035	18.8	573	1012	18.7	570	1059	18.8	573	W 1147	19.0	579
1651	0.3	9	1628	0.1	3	1716	0.3	9	1651	-1.8	-55
● 2251	20.2	616	● 2229	20.4	622	2316	19.5	594	2252	21.5	655
31 0457	-1.4	-43	31 0457	-1.4	-43	15 M 0539	-0.3	-9	15 0547	0.4	12
Su 1057	19.5	594	Su 1057	19.5	594	1139	18.8	573	W 1147	19.0	579
1715	-0.6	-18	1715	-0.6	-18	1757	0.3	9	1807	0.3	9
2315	20.9	637	2315	20.9	637	2356	19.2	585			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Eastport, Maine, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
1 Sa	h m 0100	ft 20.6	cm 628	16 Su	0056	17.5	533	1 Tu	0232	18.6	567
	0721	-1.3	-40		0710	1.9	58		0851	0.9	27
	1322	21.5	655		1310	18.4	561		1454	19.3	588
	1953	-2.0	-61		1937	1.0	30		2124	0.1	3
2 Su	0155	19.7	600	17 M	0137	17.1	521	2 W	0331	17.9	546
	0815	-0.4	-12		0752	2.3	70		0949	1.7	52
	1417	20.6	628		1353	18.1	552		1554	18.4	561
	2049	-1.0	-30		2021	1.3	40		2223	0.9	27
3 M	0253	18.7	570	18 Tu	0222	16.8	512	3 Th	0432	17.4	530
	0912	0.6	18		0838	2.6	79		1050	2.1	64
	1516	19.5	594		1439	17.8	543		1656	17.7	539
	2148	-0.1	-3		2109	1.6	49		2322	1.4	43
4 Tu	0354	17.8	543	19 W	0312	16.6	506	4 F	0533	17.3	527
	1013	1.4	43		0929	2.8	85		1151	2.3	70
	1619	18.6	567		1532	17.6	536		1758	17.4	530
	2250	0.7	21		2202	1.7	52		2326	0.7	21
5 W	0459	17.3	527	20 Th	0406	16.7	509	5 Sa	0020	1.7	52
	1117	1.9	58		1025	2.7	82		0630	17.4	530
	1724	18.1	552		1629	17.7	539		1250	2.1	64
	2353	1.1	34		2258	1.5	46		1855	17.4	530
6 Th	0603	17.2	524	21 F	0504	17.1	521	6 Su	0115	1.7	52
	1221	2.0	61		1124	2.2	67		0723	17.8	543
	1828	17.9	546		1729	18.0	549		1344	1.7	52
					2357	1.0	30		1948	17.5	533
7 F	0054	1.2	37	22 Sa	0603	17.9	546	7 M	0204	1.6	49
	0703	17.4	530		1224	1.4	43		0810	18.2	555
	1321	1.7	52		1829	18.6	567		1432	1.2	37
	1927	18.0	549						2035	17.8	543
8 Sa	0150	1.0	30	23 Su	0054	0.4	12	8 Tu	0249	1.4	43
	0757	17.9	546		0700	19.0	579		0853	18.7	570
	1415	1.3	40		1323	0.3	9		1516	0.8	24
	2019	18.3	558		1926	19.4	591		2119	17.9	546
9 Su	0239	0.8	24	24 M	0150	-0.5	-15	9 W	0331	1.3	40
	0844	18.4	561		0754	20.2	616		0934	19.0	579
	1503	0.8	24		1419	-0.9	-27		1557	0.4	12
	2105	18.5	564		2022	20.2	616		2159	18.1	552
10 M	0323	0.6	18	25 Tu	0244	-1.2	-37	10 Th	0411	1.2	37
	0925	18.8	573		0847	21.3	649		1012	19.2	585
	1545	0.4	12		1513	-2.1	-64		1636	0.2	6
	2147	18.6	567		2115	20.9	637		2238	18.1	552
11 Tu	0403	0.6	18	26 W	0335	-1.8	-55	11 F	0449	1.3	40
	1004	19.1	582		0937	22.2	677		1050	19.2	585
	1625	0.2	6		1605	-2.9	-88		1714	0.2	6
	2226	18.6	567		2207	21.3	649		2316	18.0	549
12 W	0441	0.7	21	27 Th	0426	-2.1	-64	12 Sa	0527	1.4	43
	1041	19.2	585		1027	22.7	692		1127	19.2	585
	1702	0.1	3		1657	-3.3	-101		1753	0.2	6
	2303	18.5	564		2258	21.3	649		2353	17.8	543
13 Th	0517	0.9	27	28 F	0517	-2.0	-61	13 Su	0606	1.6	49
	1117	19.2	585		1118	22.7	692		1205	19.0	579
	1740	0.2	6		1748	-3.2	-98		1832	0.4	12
	2340	18.2	555		2349	21.0	640				
14 F	0554	1.2	37	29 Sa	0608	-1.6	-49	14 M	0032	17.6	536
	1154	19.0	579		1209	22.2	677		0646	1.8	55
	1817	0.4	12		1840	-2.7	-82		1245	18.8	573
									1913	0.5	15
15 Sa	0018	17.9	546	30 Su	0041	20.3	619	15 Tu	0113	17.5	533
	0631	1.5	46		0700	-0.9	-27		0728	2.0	61
	1231	18.7	570		1301	21.4	652		1327	18.6	567
	1856	0.7	21		1933	-1.9	-58		1957	0.7	21
31 Sa	0135	19.5	594	31 M	0754	0.0	0		0754	20.4	622
					1356	20.4	622		2028	-0.9	-27

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bar Harbor, Maine, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm				
1 Sa	0138	0.6	18	16 Su	0108	1.9	58	1 Tu	0316	0.7	21	16 W	0223	0.7	21
0753	11.9	363	Su	0722	10.7	326	Tu	0927	11.6	354	W	0836	11.9	363	
1422	-0.4	-12	M	1354	0.8	24	Tu	1551	-0.2	-6	W	1502	-0.5	-15	
2033	10.5	320	Su	2001	9.5	290	Tu	2200	10.6	323	Tu	2110	11.0	335	
2 Su	0235	0.5	15	17 M	0200	1.5	46	2 W	0402	0.6	18	2 Th	0315	-0.1	-3
0848	12.0	366	W	0813	11.2	341	W	1012	11.7	357	Th	0928	12.6	384	
1516	-0.6	-18	M	1443	0.2	6	W	1633	-0.3	-9	W	1550	-1.2	-37	
2127	10.7	326	Su	2051	10.0	305	●	2242	10.7	326	W	2159	11.8	360	
3 M	0328	0.5	15	18 Tu	0250	0.9	27	3 Th	0445	0.5	15	18 F	0406	-0.8	-24
0939	12.1	369	Tu	0902	11.8	360	Th	1053	11.7	357	F	1018	13.0	396	
1606	-0.7	-21	Tu	1530	-0.4	-12	Th	1712	-0.2	-6	O	1637	-1.6	-49	
2216	10.8	329	Tu	2138	10.6	323	Th	2320	10.8	329	○	2246	12.5	381	
4 Tu	0416	0.4	12	19 W	0338	0.4	12	4 F	0524	0.4	12	4 F	0424	0.4	12
1026	12.1	369	W	0950	12.4	378	F	1131	11.5	351	F	1107	13.2	402	
1651	-0.7	-21	W	1616	-1.0	-30	F	1748	-0.1	-3	W	1723	-1.8	-55	
● 2301	10.8	329	○	2224	11.2	341	F	2355	10.8	329	○	2333	12.9	393	
5 W	0501	0.5	15	20 Th	0426	-0.2	-6	5 Sa	0601	0.5	15	5 Sa	0546	-1.6	-49
1110	11.9	363	Th	1037	12.8	390	Sa	1208	11.3	344	Sa	1157	13.1	399	
1733	-0.5	-15	Th	1701	-1.4	-43	Sa	1823	0.2	6	Sa	1811	-1.7	-52	
2342	10.7	326	Th	2310	11.7	357	Th	2357	11.0	335	Sa	2325	11.0	335	
6 Th	0544	0.6	18	21 F	0514	-0.6	-18	6 Su	0030	10.8	329	6 Su	0022	13.0	396
1152	11.7	357	F	1125	13.0	396	Su	0638	0.6	18	Su	0637	-1.6	-49	
1814	-0.3	-9	F	1746	-1.6	-49	Su	1244	10.9	332	Su	1248	12.7	387	
2356	12.1	369	F	2356	12.1	369	Su	1857	0.5	15	Su	1900	-1.3	-40	
7 F	0023	10.6	323	22 Sa	0603	-0.9	-27	7 M	0104	10.7	326	7 M	0112	12.9	393
0625	0.7	21	Sa	1214	13.0	396	M	0716	0.8	24	M	0731	-1.4	-43	
1232	11.3	344	Sa	1833	-1.5	-46	M	1321	10.5	320	M	1342	12.1	369	
1853	0.0	0	M	1932	0.8	24	M	1932	0.8	24	M	1952	-0.7	-21	
8 Sa	0102	10.5	320	23 Su	0044	12.3	375	8 Tu	0140	10.6	323	8 W	0205	12.5	381
0707	1.0	30	Su	0655	-0.9	-27	Tu	0755	1.0	30	W	0828	-0.9	-27	
1313	10.9	332	Su	1305	12.6	384	Tu	1400	10.1	308	W	1439	11.4	347	
1932	0.4	12	Su	1922	-1.3	-40	Tu	2009	1.2	37	W	2048	0.0	0	
9 Su	0141	10.3	314	24 M	0135	12.3	375	9 W	0219	10.4	317	9 Th	0303	12.0	366
0749	1.2	37	M	0749	-0.8	-24	W	0837	1.3	40	W	0930	-0.3	-9	
1355	10.5	320	M	1359	12.1	369	W	1443	9.7	296	W	1541	10.6	323	
2011	0.8	24	M	2014	-0.8	-24	W	2049	1.5	46	○	2149	0.6	18	
10 M	0222	10.2	311	25 Tu	0228	12.2	372	10 Th	0302	10.2	311	10 F	0405	11.5	351
0834	1.4	43	Tu	0847	-0.5	-15	Th	0924	1.5	46	F	1035	0.2	6	
1438	10.0	305	Tu	1457	11.5	351	Th	1530	9.3	283	F	1648	10.1	308	
2053	1.2	37	Tu	2109	-0.3	-9	Th	2135	1.9	58	F	2255	1.2	37	
11 Tu	0305	10.1	308	26 W	0326	11.9	363	11 F	0349	10.1	308	11 Sa	0512	11.0	335
0921	1.6	49	W	0949	-0.2	-6	Sa	1017	1.6	49	Sa	1144	0.5	15	
1526	9.6	293	W	1559	10.8	329	Sa	1624	9.0	274	Sa	1758	9.8	299	
2137	1.6	49	W	2209	0.3	9	Sa	2227	2.1	64	○	2227	2.1	64	
12 W	0351	10.0	305	27 Th	0427	11.6	354	12 Sa	0444	10.1	308	12 Su	0004	1.4	43
1012	1.7	52	Th	1055	0.1	3	Sa	1115	1.6	49	Su	0620	10.8	329	
1617	9.2	280	Th	1706	10.3	314	Sa	1723	8.9	271	Su	1250	0.6	18	
● 2225	1.9	58	Th	2314	0.8	24	Sa	2326	2.1	64	Su	1904	9.8	299	
13 Th	0441	9.9	302	28 F	0532	11.4	347	13 Su	0543	10.2	311	13 M	0109	1.4	43
1107	1.8	55	F	1203	0.3	9	Su	1216	1.3	40	M	0724	10.8	329	
1712	9.0	274	F	1815	10.0	305	Su	1825	9.1	277	M	1350	0.5	15	
2317	2.0	61	F	1921	10.0	305	M	2003	10.0	305	M	2249	2.0	61	
14 F	0534	10.0	305	29 M	0020	1.1	34	14 M	0027	1.9	58	14 F	0505	10.4	317
1204	1.6	49	M	0638	11.3	344	M	0643	10.6	323	M	1137	1.1	34	
1810	8.9	271	M	1309	0.3	9	M	1316	0.8	24	M	1749	9.4	287	
1908	9.1	277	M	1921	10.0	305	M	1925	9.6	293	M	2354	1.7	52	
15 Sa	0013	2.1	64	30 M	0125	1.1	34	15 Tu	0127	1.4	43	15 Tu	0610	10.7	326
0628	10.3	314	M	0740	11.3	344	Tu	0742	11.2	341	Tu	1239	0.7	21	
1301	1.3	40	M	1410	0.1	3	Tu	1411	0.2	6	Tu	1851	10.0	305	
1908	9.1	277	M	2021	10.1	308	Tu	2020	10.3	314	Tu	2024	10.3	314	
16 M	0224	0.9	27	31 M	0837	11.5	351	16 M	0224	0.9	27	16 Th	0234	0.9	27
1503	-0.1	-3	M	1503	-0.1	-3	M	1503	-0.1	-3	Th	0844	10.7	326	
2114	10.4	317	M	2114	10.4	317	M	2114	10.4	317	Th	1458	0.6	18	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bar Harbor, Maine, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0319	0.6	18	16 Sa 0233	-0.9	-27	1 Su 0329	0.4	12	16 M 0310	-1.5	-46
0927	10.8	329	0844	12.1	369	0936	10.3	314	0415	0.2	6
1538	0.6	18	1455	-0.9	-27	1539	1.0	30	1023	10.0	305
2146	10.8	329	2107	12.8	390	2146	11.0	335	1620	1.3	40
2 Sa 0359	0.3	9	17 Su 0327	-1.6	-49	2 M 0407	0.2	6	2227	11.3	344
1006	10.8	329	0938	12.4	378	1015	10.3	314	0454	0.0	0
1614	0.5	15	1546	-1.2	-37	1615	1.0	30	1102	10.1	308
2221	11.0	335	O 2158	13.3	405	2221	11.2	341	1658	1.2	37
3 Su 0436	0.2	6	18 M 0419	-2.0	-61	3 Tu 0444	0.1	3	2305	11.5	351
1043	10.8	329	1031	12.5	381	1051	10.3	314	1141	10.3	314
1648	0.6	18	1637	-1.2	-37	1650	1.1	34	1738	1.1	34
● 2254	11.2	341	2248	13.5	411	● 2256	11.3	344	2345	11.6	354
4 M 0510	0.1	3	19 Tu 0511	-2.2	-67	4 W 0519	0.0	0	4 Sa 0612	-0.3	-9
1117	10.7	326	1122	12.4	378	1127	10.3	314	1222	10.4	317
1721	0.7	21	1727	-1.0	-30	1725	1.2	37	1820	1.0	30
2326	11.2	341	2338	13.4	408	2330	11.3	344	1922	0.8	24
5 Tu 0544	0.1	3	20 W 0603	-2.0	-61	5 Th 0555	0.0	0	5 Su 0011	12.7	387
1152	10.5	320	1214	12.0	366	1204	10.2	311	6 F 0638	-1.2	-37
1753	0.9	27	1818	-0.6	-18	1801	1.2	37	6 M 1251	11.2	341
2358	11.1	338	1911	0.0	0	1853	0.3	9	5 Su 1305	10.5	320
6 W 0619	0.2	6	21 Th 0029	13.0	396	6 F 0007	11.3	344	5 M 1905	0.9	27
1226	10.3	314	0655	-1.5	-46	0633	0.1	3	20 0129	11.3	344
1827	1.1	34	1308	11.5	351	1242	10.1	308	20 M 0752	0.0	0
7 Th 0033	11.0	335	1911	0.0	0	1839	1.3	40	20 M 1405	10.5	320
0655	0.4	12	22 F 0122	12.4	378	21 M 0102	12.1	369	20 2111	1.1	34
1303	10.1	308	0750	-0.9	-27	0729	-0.7	-21	21 Tu 0218	10.8	329
1903	1.3	40	1403	11.0	335	1343	10.8	329	21 W 0838	0.4	12
8 F 0110	10.9	332	2008	0.6	18	1946	0.7	21	21 M 1452	10.3	314
0734	0.5	15	23 Sa 0219	11.7	357	22 F 0047	11.2	341	21 2102	1.3	40
1343	9.9	302	0847	-0.3	-9	0713	0.1	3	22 Th 0307	10.3	314
1943	1.5	46	1501	10.4	317	1324	10.1	308	22 W 0925	0.9	27
9 Sa 0153	10.8	329	2107	1.1	34	1922	1.4	43	22 M 1540	10.2	311
0818	0.7	21	24 Sa 0318	11.0	335	23 M 0155	11.5	351	22 2154	1.5	46
1429	9.7	296	0946	0.3	9	0758	0.2	6	23 Th 0828	-0.3	-9
2029	1.7	52	1602	10.0	305	1410	10.1	308	23 W 1442	10.9	332
10 Su 0241	10.7	326	● 2210	1.5	46	2011	1.4	43	23 2050	0.7	21
0908	0.8	24	25 W 0420	10.5	320	23 F 0250	10.9	332	23 Th 0204	11.5	351
1520	9.6	293	1047	0.8	24	0915	0.4	12	23 W 0828	-0.3	-9
2123	1.7	52	1703	9.8	299	1530	10.2	311	23 M 1442	10.9	332
11 M 0336	10.6	323	2313	1.6	49	2138	1.4	43	23 2050	0.7	21
1004	0.8	24	26 Tu 0523	10.1	308	24 F 0220	11.1	338	23 Th 0204	11.5	351
1618	9.7	296	1146	1.1	34	0847	0.2	6	23 W 0828	-0.3	-9
● 2223	1.6	49	1802	9.8	299	1501	10.2	311	23 M 1442	10.9	332
12 Tu 0437	10.7	326	27 W 0114	1.6	49	2105	1.3	40	23 2050	0.7	21
1105	0.7	21	0623	10.0	305	23 F 0345	10.4	317	23 Th 0204	11.5	351
1719	10.0	305	1242	1.2	37	1008	0.8	24	23 W 0828	-0.3	-9
2329	1.3	40	1856	10.0	305	1624	10.0	305	23 M 1442	10.9	332
13 W 0542	10.9	332	28 Th 0111	1.4	43	● 2236	1.6	49	23 2050	0.7	21
1207	0.4	12	0719	10.0	305	0220	11.1	338	23 Th 0204	11.5	351
1821	10.6	323	1333	1.2	37	0847	0.2	6	23 W 0828	-0.3	-9
1945	10.3	314	1945	10.3	314	1501	10.2	311	23 M 1442	10.9	332
14 Th 0034	0.7	21	29 F 0201	1.1	34	2105	1.3	40	23 2050	0.7	21
0646	11.2	341	0809	10.1	308	0725	11.3	344	23 Th 0204	11.5	351
1306	0.0	0	1419	1.1	34	1335	-0.3	-9	23 W 0828	-0.3	-9
1920	11.3	344	2029	10.5	320	1950	12.3	375	23 M 1442	10.9	332
15 F 0135	-0.1	-3	30 Sa 0247	0.7	21	2045	12.8	390	23 2050	0.7	21
0747	11.7	357	0855	10.2	311	2110	10.9	332	23 Th 0204	11.5	351
1402	-0.5	-15	1500	1.1	34	2109	10.8	329	23 2050	0.7	21
2015	12.1	369	1945	10.3	314	2109	10.8	329	23 Th 0204	11.5	351

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bar Harbor, Maine, 2011

Times and Heights of High and Low Waters

July				August				September				
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	
h m	ft	cm		h m	ft	cm		h m	ft	cm		
1 0426	-0.2	-6		16 0514	-0.7	-21		1 0524	-1.1	-34		
F 1035	10.3	314	Sa 1124	10.9	332	M 1133	11.7	357	Tu 1216	10.9	332	
1632	0.9	27		1726	0.4	12		1826	0.5	15	Th 1243	
● 2241	11.8	360	Sa 2335	11.9	363		2350	12.6	384	1903	-1.4	-43
2 0508	-0.5	-15	17 0557	-0.5	-15	2 0609	-1.2	-37	17 0032	10.9	332	
Sa 1116	10.6	323	Su 1207	10.9	332	Tu 1220	12.1	369	W 0644	0.4	12	
1715	0.6	18	1811	0.5	15	1829	-0.7	-21	1252	10.8	329	
2324	12.0	366							1905	0.7	21	
3 0549	-0.7	-21	18 0018	11.6	354	3 W 0039	12.4	378	18 0110	10.5	320	
Su 1159	10.9	332	M 0639	-0.2	-6	Th 0656	-1.2	-37	18 0721	0.8	24	
1800	0.4	12	1249	10.8	329	1308	12.3	375	1330	10.6	323	
			1855	0.7	21	1922	-0.7	-21	1945	0.9	27	
4 0009	12.1	369	19 0101	11.2	341	4 Th 0131	12.1	369	3 Sa 0210	11.5	351	
M 0633	-0.8	-24	Tu 0719	0.2	6	0745	-0.9	-27	18 0818	-0.3	-9	
1244	11.2	341	1330	10.6	323	1359	12.3	375	Sa 1432	12.3	375	
1848	0.2	6	1938	0.9	27	2017	-0.6	-18	2059	-0.6	-18	
5 0057	12.1	369	20 0144	10.7	326	5 F 0226	11.6	354	19 0210	10.9	332	
Tu 0719	-0.8	-24	W 0800	0.6	18	0838	-0.5	-15	4 Th 0310	10.9	332	
1331	11.5	351	1411	10.5	320	1453	12.2	372	0917	0.3	9	
1939	0.0	0	2023	1.1	34	2116	-0.4	-12	1533	11.9	363	
6 0148	11.9	363	21 0228	10.2	311	6 Sa 0325	11.1	338	5 O 2203	-0.2	-6	
W 0807	-0.7	-21	Th 0841	1.0	30	0935	0.0	0	0416	10.4	317	
1421	11.7	357	1453	10.3	314	1552	12.0	366	1022	0.8	24	
2034	0.0	0	2110	1.4	43	● 2219	-0.2	-6	1639	11.5	351	
7 0242	11.6	354	22 0314	9.7	296	2114	1.4	43	2310	0.2	6	
Th 0859	-0.5	-15	F 0924	1.4	43				0334	9.1	277	
1515	11.8	360	1538	10.2	311				0936	2.1	64	
2133	0.0	0	2159	1.5	46				1550	10.1	308	
8 0341	11.1	338	23 0404	9.3	283				● 2220	1.4	43	
F 0954	-0.1	-3	Sa 1011	1.7	52				0430	9.1	277	
1611	11.8	360	1626	10.1	308				1033	2.1	64	
● 2235	0.0	0	● 2252	1.6	49				1647	10.2	311	
9 0443	10.8	329	24 0457	9.0	274				2318	1.3	40	
Sa 1053	0.2	6	Su 1101	2.0	61							
1711	11.8	360	1717	10.1	308							
2339	0.0	0	2347	1.6	49							
10 0548	10.5	320	25 0553	8.9	271							
Su 1155	0.5	15	M 1155	2.1	64							
1813	11.9	363	1811	10.2	311							
11 0044	-0.2	-6	26 0043	1.4	43							
M 0654	10.4	317	Tu 0650	8.9	271							
1258	0.6	18	1249	2.0	61							
1915	12.0	366	1904	10.4	317							
12 0147	-0.4	-12	27 0136	1.1	34							
Tu 0757	10.4	317	W 0744	9.2	280							
1359	0.6	18	1342	1.8	55							
2015	12.1	369	1955	10.8	329							
13 0245	-0.6	-18	28 0226	0.7	21							
W 0856	10.6	323	Th 0834	9.6	293							
1457	0.5	15	1432	1.4	43							
2110	12.2	372	2044	11.3	344							
14 0339	-0.7	-21	29 0312	0.1	3							
Th 0949	10.8	329	F 0920	10.1	308							
1550	0.4	12	1520	0.9	27							
2202	12.2	372	2131	11.8	360							
15 0428	-0.8	-24	30 0357	-0.4	-12							
F 1038	10.9	332	Sa 1005	10.7	326							
1640	0.3	9	1606	0.4	12							
● 2250	12.1	369	● 2217	12.2	372							
31 0440	-0.8	-24	Su 1049	11.2	341							
			1652	-0.1	-3							
			2303	12.5	381							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bar Harbor, Maine, 2011

Times and Heights of High and Low Waters

October				November				December															
	Time	Height			Time	Height			Time	Height													
1 Sa	h m 0056 0701 1314 1941	ft 12.0 -0.6 12.8 -1.2	cm 366 -18 390 -37	16 Su	h m 0050 0649 1256 1921	ft 9.9 1.5 10.7 0.7	cm 302 46 326 21	1 Tu	h m 0235 0840 1452 2121	ft 10.7 0.7 11.5 0.0	cm 326 21 351 0	16 Th	h m 0149 0749 1358 2024	ft 9.8 1.6 10.8 0.5	cm 299 49 329 15	1 Sa	h m 0306 0915 1523 2146	ft 10.5 1.1 10.7 0.6	cm 320 34 326 18	16 F	h m 0213 0819 1428 2048	ft 10.7 0.9 11.1 0.0	cm 326 27 338 0
	0153 Su	11.4 0.0 12.3 -0.7	347 0 375 -21	17 M	0130 0729 1338 2004	9.6 1.8 10.5 0.9	293 55 320 27	2 W	0336 0944 1556 2222	10.4 1.1 10.9 0.4	317 34 326 12	17 Th	0237 0840 1450 2115	9.9 1.6 10.7 0.5	302 49 326 15	2 F	0402 1014 1622 2242	10.2 1.4 10.2 1.0	311 43 311 30	17 Sa	0303 0915 1523 2141	10.9 0.8 10.9 0.2	332 24 332 6
	0254 M	10.8 0.6 11.7 -0.1	329 58 357 -3	18 Tu	0214 0813 1424 2052	9.5 1.9 10.4 1.0	290 58 317 30	3 Th	0439 1049 1700 2323	10.1 1.3 10.5 0.7	308 40 320 21	18 F	0330 0937 1547 2210	10.1 1.4 10.7 0.5	308 46 326 15	3 Sa	0458 1114 1722 2336	10.1 1.5 9.8 1.3	308 46 299 40	18 Su	0358 1015 1624 2238	11.1 0.6 10.7 0.3	338 18 326 9
	0359 Tu	10.3 1.0 11.2 -0.3	314 30 341 9	19 W	0303 0905 1516 2145	9.4 2.0 10.3 1.0	287 61 314 30	4 F	0539 1152 1802	10.1 1.3 10.3	308 40 314	19 Sa	0425 1038 1647 2307	10.4 1.1 10.7 0.4	317 34 326 12	4 Su	0552 1212 1819	10.1 1.4 9.6	308 43 293	19 M	0456 1119 1728 2338	11.4 0.3 10.6 0.3	347 9 323 9
5 W	0506 1114 1728 2355	10.1 1.2 10.8 0.5	308 37 329 15	20 Th	0358 1002 1614 2242	9.5 1.9 10.4 0.9	290 58 317 27	5 Sa	0020 0635 1250 1859	0.9 10.3 1.2 10.2	27 314 37 311	20 Su	0523 1141 1750	10.9 0.6 10.8	332 18 329	5 M	0029 0644 1306 1914	1.5 10.3 1.2 9.6	46 314 37 293	20 Tu	0556 1223 1833	11.7 -0.1 10.7	357 -3 326
6 Th	0610 1219 1832	10.1 1.2 10.7	308 37 326	21 F	0456 1104 1716	9.8 1.5 10.6	299 46 323	6 Su	0113 0726 1343 1951	1.0 10.5 0.9 10.2	30 320 27 311	21 M	0005 0622 1243 1853	0.2 11.5 0.0 11.1	6 351 0 338	6 Tu	0119 0732 1356 2004	1.5 10.5 1.0 9.6	46 320 30 293	21 W	0040 0657 1326 1936	0.3 12.1 -0.5 10.8	349 369 -15 329
7 F	0054 0709 1318 1930	0.6 10.3 1.0 10.7	18 314 30 326	22 Sa	0554 1206 1817	10.3 1.0 10.9	314 30 332	7 M	0200 0812 1430 2038	1.0 10.7 0.6 10.3	30 326 314 314	22 Tu	0103 0718 1342 1952	-0.1 12.2 -0.7 11.4	-3 372 -21 347	7 W	0206 0817 1442 2050	1.5 10.7 0.7 9.7	46 326 21 296	22 Th	0140 0756 1426 2036	0.1 12.5 -1.0 11.1	338 381 -30 338
8 Sa	0148 0800 1411 2021	0.5 10.5 0.7 10.8	15 320 21 329	23 Su	0037 0651 1306 1916	0.2 11.0 0.2 11.4	6 335 6 347	8 Tu	0243 0853 1513 2120	1.0 10.9 0.4 10.3	30 332 12 314	23 W	0159 0814 1439 2050	-0.4 12.8 -1.3 11.7	-12 390 -40 357	8 Th	0250 0859 1525 2132	1.4 10.9 0.4 9.9	43 332 12 302	23 F	0239 0853 1522 2133	-0.1 12.9 -1.4 11.3	338 393 -43 344
9 Su	0235 0846 1458 2107	0.5 10.8 0.5 10.9	15 329 15 332	24 M	0132 0745 1403 2013	-0.3 11.8 -0.6 11.9	-9 360 -18 363	9 W	0323 0931 1552 2200	1.0 11.1 0.2 10.3	30 338 6 314	24 Th	0254 0907 1534 2144	-0.6 13.2 -1.8 11.9	-18 402 -55 363	9 F	0330 0938 1604 2212	1.4 11.1 0.2 10.0	43 338 6 305	24 Sa	0334 0947 1615 2225	-0.3 13.1 -1.6 11.5	349 399 -49 351
10 M	0317 0926 1540 2148	0.5 11.0 0.2 10.9	15 335 6 332	25 Tu	0224 0837 1457 2107	-0.7 12.6 -1.3 12.2	-21 384 -40 372	10 W	0400 1007 1630 2237	1.0 11.2 0.1 10.3	30 341 3 314	25 F	0347 1000 1627 2237	-0.7 13.5 -2.0 11.9	-21 411 -61 363	10 O	0409 1016 1642 2249	1.3 11.3 0.1 10.1	40 344 3 308	25 Su	0427 1039 1705 2316	-0.4 13.1 -1.6 11.5	349 399 -49 351
11 Tu	0355 1003 1619 O	0.5 11.1 0.1 10.8	15 338 3 329	26 W	0315 0927 1549 ● 2200	-1.0 13.2 -1.9 12.4	-30 402 -58 378	11 F	0436 1042 1706 2313	1.1 11.2 0.1 10.2	34 341 3 311	26 Sa	0439 1052 1719 2330	-0.7 13.4 -1.9 11.8	-21 408 -58 360	11 Su	0446 1053 1718 2326	1.2 11.4 0.0 10.2	37 347 0 311	26 M	0518 1129 1754	-0.3 12.8 -1.3	349 390 -40
12 W	0431 1037 1655 2302	0.6 11.2 0.1 10.6	18 341 3 323	27 Th	0406 1017 1641 2252	-1.2 13.5 -2.2 12.4	-37 411 -67 378	12 Sa	0511 1117 1741 2349	1.2 11.2 0.2 10.1	37 341 6 308	27 M	0532 1144 1811 2349	-0.5 13.1 -1.6 -18	-15 399 -49 -18	12 O	0523 1130 1756 2326	1.2 12.6 -0.1 10.2	37 347 -3 311	27 Tu	0005 0608 1218 1842	11.4 -0.1 12.4 -10	347 -3 378 -30
13 Th	0505 1111 1730 2337	0.8 11.1 0.2 10.4	24 338 6 317	28 F	0456 1108 1733 2345	-1.1 13.6 -2.1 12.1	-34 415 -64 369	13 Su	0546 1152 1818	1.3 11.1 0.3	40 338 9	28 M	0022 0625 1236 1903	11.5 -0.1 12.6 -1.1	351 -3 384 -34	13 Tu	0004 0602 1209 1834	10.3 1.1 11.4 -0.1	314 34 347 -3	28 W	0053 0658 1307 1929	11.2 0.2 11.9 -0.4	341 6 363 -12
14 F	0538 1144 1805	1.0 11.0 0.3	30 335 9	29 Sa	0548 1200 1827	-0.8 13.3 -1.8	-24 405 -55	14 M	0026 0623 1230 1856	9.9 1.5 11.0 0.4	302 46 335 12	29 Tu	0116 0720 1330 1957	11.2 0.3 12.0 -0.6	341 9 366 -18	14 W	0044 0643 1251 1915	10.4 1.0 11.4 -0.1	317 30 347 -3	29 Th	0141 0748 1356 2016	10.9 0.6 11.2 0.1	332 18 341 3
15 Sa	0013 0613 1219 1842	10.1 1.3 10.9 0.5	308 40 332 15	30 Su	0039 0642 1254 1922	11.7 -0.3 12.8 -1.2	357 -9 390 -37	15 Tu	0106 0704 1312 1938	9.9 1.6 10.9 0.5	302 49 332 15	30 W	0210 0816 1426 2051	10.8 0.7 11.3 0.0	329 21 344 0	15 Th	0126 0729 1337 2000	10.5 1.0 11.3 -0.1	320 30 344 -3	30 F	0229 0839 1446 2104	10.6 1.0 10.6 0.7	323 30 323 21
			31 M	0135 0740 1352 2020	11.2 0.2 12.1 -0.6	341 6 369 -18									31 Sa	0318 0933 1539 2154	10.3 1.3 10.0 1.2	314 40 305 37					

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Portland, Maine, 2011

Times and Heights of High and Low Waters

January				February				March									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height						
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm						
1 Sa	0152	0.5	15	16 Su	0120	1.5	46	1 Tu	0331	0.6	18	16 W	0237	0.4	12		
0813	10.3	314	Su	0740	9.2	280	Tu	0948	9.9	302	W	0854	10.2	311			
1442	-0.5	-15	M	1412	0.6	18	1611	-0.3	-9	Th	1519	-0.7	-21				
2057	8.9	271		2024	8.0	244	2224	8.9	271		2132	9.3	283				
2 Su	0249	0.5	15	17 M	0213	1.1	34	2 W	0418	0.4	12	17 Th	0330	-0.3	-9		
0908	10.4	317		0831	9.7	296	W	1032	10.0	305	W	0946	10.8	329			
1536	-0.6	-18		1501	0.0	0	Th	1653	-0.4	-12	Th	1607	-1.2	-37			
2150	9.0	274		2113	8.4	256	●	2305	9.0	274		2220	10.0	305			
3 M	0342	0.4	12	18 Tu	0303	0.7	21	3 Th	0500	0.3	9	18 F	0421	-0.9	-27		
0959	10.4	317		0920	10.2	311	Th	1112	9.9	302	F	1036	11.2	341			
1625	-0.7	-21		1548	-0.5	-15		1730	-0.3	-9	1654	-1.6	-49	O	2307	10.5	320
2239	9.1	277		2200	8.9	271		2341	9.1	277		2239	9.1	277			
4 Tu	0430	0.3	9	19 W	0352	0.2	6	4 F	0539	0.3	9	19 Sa	0511	-1.4	-43		
1045	10.4	317		1008	10.7	326	F	1150	9.8	299	Sa	1126	11.3	344			
1710	-0.7	-21		1633	-1.0	-30		1805	-0.2	-6	F	1740	-1.8	-55			
● 2323	9.1	277		○ 2246	9.4	287					●	2354	10.9	332			
5 W	0515	0.4	12	20 Th	0440	-0.3	-9	5 Sa	0016	9.1	277	5 Sa	0517	0.2	6		
1129	10.2	311		1055	11.0	335	Sa	0616	0.4	12	Sa	1128	9.5	290			
1752	-0.6	-18		1718	-1.4	-43		1226	9.5	290	Sa	1736	0.2	6			
				2331	9.9	302		1839	0.0	0		2345	9.3	283			
6 Th	0005	9.1	277	21 F	0529	-0.7	-21	6 Su	0050	9.1	277	6 Su	0551	0.2	6		
0558	0.5	15		1143	11.2	341	Su	0652	0.5	15	Su	1202	9.3	283			
1210	10.0	305		1803	-1.6	-49		1302	9.2	280		1806	0.3	9			
1832	-0.3	-9						1912	0.3	9		1916	-1.3	-40			
7 F	0045	9.0	274	22 Sa	0017	10.2	311	7 M	0123	9.0	274	7 Tu	0132	11.0	335		
0639	0.6	18		0619	-0.9	-27	M	0730	0.6	18	M	0748	-1.4	-43			
1250	9.7	296		1232	11.1	338		1339	8.9	271		1402	10.2	311			
1910	0.0	0		1850	-1.6	-49		1946	0.6	18		2008	-0.8	-24			
8 Sa	0123	8.9	271	23 Su	0105	10.4	317	8 Tu	0159	8.9	271	8 Tu	0225	10.7	326		
0721	0.8	24		0711	-1.0	-30	Tu	0809	0.8	24	W	0846	-1.0	-30			
1330	9.3	283		1324	10.8	329		1419	8.5	259		1500	9.6	293			
1948	0.3	9		1939	-1.3	-40		2022	0.9	27		2103	-0.2	-6			
9 Su	0202	8.8	268	24 M	0155	10.5	320	9 W	0237	8.8	268	9 W	0322	10.3	314		
0803	1.0	30		0805	-0.8	-24	M	0852	1.0	30	M	0948	-0.4	-12			
1412	8.9	271		1418	10.3	314		1502	8.1	247		1603	8.9	271			
2026	0.6	18		2030	-0.9	-27		2103	1.2	37		2203	0.4	12			
10 M	0242	8.7	265	25 Tu	0248	10.4	317	10 Th	0320	8.7	265	10 F	0424	9.8	299		
0848	1.2	37		0904	-0.6	-18	Th	0939	1.2	37	F	1055	0.0	0			
1456	8.5	259		1516	9.7	296		1550	7.8	238		1712	8.4	256			
2107	1.0	30		2125	-0.4	-12		2148	1.5	46		2309	0.9	27			
11 Tu	0324	8.6	262	26 W	0345	10.2	311	11 F	0408	8.6	262	11 Sa	0532	9.5	290		
0935	1.4	43		1006	-0.3	-9	F	1032	1.3	40	Sa	1205	0.3	9			
1544	8.1	247		1620	9.1	277		1644	7.5	229		1823	8.2	250			
2150	1.3	40		○ 2224	0.1	3		○ 2241	1.6	49							
12 W	0410	8.5	259	27 Th	0446	10.0	305	12 Sa	0501	8.6	262	12 Su	0019	1.2	37		
1027	1.5	46		1114	0.0	0	Sa	1132	1.2	37	Su	0641	9.3	283			
1636	7.7	235		1728	8.6	262		1744	7.4	226		1312	0.4	12			
● 2238	1.5	46		2328	0.6	18		2339	1.7	52		1929	8.2	250			
13 Th	0459	8.5	259	28 F	0552	9.8	299	13 Su	0600	8.8	268	13 M	0126	1.2	37		
1123	1.5	46		1223	0.1	3	M	1233	1.0	30	M	0746	9.3	283			
1732	7.5	229		1839	8.4	256		1847	7.6	232		1412	0.3	9			
2329	1.7	52									2028	8.4	256				
14 F	0552	8.6	262	29 Sa	0035	0.8	24	14 M	0040	1.5	46	14 Tu	0523	9.0	274		
1221	1.3	40		0658	9.7	296	Sa	0701	9.1	277	M	1154	0.8	24			
1832	7.5	229		1330	0.1	3		1333	0.5	15		1810	8.0	244			
				1946	8.3	253		1947	8.0	244							
15 Sa	0024	1.7	52	30 Su	0140	0.9	27	15 Tu	0140	1.0	30	15 Tu	0008	1.3	40		
0646	8.8	268		0801	9.7	296		0759	9.7	296		0627	9.3	283			
1318	1.0	30		1431	-0.1	-3		1428	0.0	0		1256	0.4	12			
1930	7.6	232		2046	8.5	259		2042	8.6	262		1913	8.4	256			
16 M	0239	0.8	24	31 M	0858	9.8	299										
				1524	-0.2	-6											
				2138	8.7	265											

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Portland, Maine, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0337	0.6	18	16 Sa 0249	-0.8	-24	1 Su 0347	0.5	15	16 M 0328	-1.2	-37
0949	9.2	280	0903	10.5	320	0958	8.8	268	0941	10.1	308
1557	0.6	18	1511	-0.8	-24	1554	1.1	34	1540	-0.4	-12
2207	9.3	283	2127	11.1	338	2205	9.6	293	2156	11.6	354
2 Sa 0416	0.4	12	17 Su 0344	-1.4	-43	2 M 0425	0.3	9	17 Tu 0422	-1.5	-46
1027	9.2	280	0958	10.7	326	1036	8.8	268	1036	10.2	311
1631	0.6	18	1602	-1.0	-30	1628	1.1	34	1632	-0.4	-12
2241	9.5	290	O 2217	11.6	354	2239	9.7	296	O 2247	11.6	354
3 Su 0452	0.2	6	18 M 0437	-1.8	-55	3 Tu 0501	0.2	6	18 W 0514	-1.6	-49
1103	9.2	280	1051	10.8	329	1112	8.8	268	1129	10.1	308
1703	0.6	18	1652	-1.0	-30	1702	1.1	34	1723	-0.2	-6
● 2312	9.6	293	2306	11.8	360	● 2313	9.8	299	2338	11.5	351
4 M 0527	0.1	3	19 Tu 0529	-1.9	-58	4 W 0535	0.1	3	19 Th 0606	-1.4	-43
1137	9.1	277	1144	10.6	323	1148	8.8	268	1222	9.9	302
1734	0.7	21	1742	-0.8	-24	1736	1.1	34	1815	0.1	3
2343	9.6	293	2357	11.7	357	2347	9.9	302			
5 Tu 0600	0.1	3	20 W 0621	-1.8	-55	5 Th 0611	0.1	3	20 F 0029	11.2	341
1211	8.9	271	1237	10.3	314	1225	8.7	265	0657	-1.1	-34
1806	0.9	27	1833	-0.5	-15	1813	1.2	37	1314	9.7	296
6 W 0015	9.6	293	21 Th 0048	11.4	347	6 F 0024	9.9	302	1907	0.4	12
0634	0.2	6	0714	-1.4	-43	0649	0.1	3	21 Sa 0121	10.7	326
1246	8.7	265	1331	9.9	302	1303	8.7	265	0749	-0.6	-18
1839	1.0	30	1926	0.0	0	1853	1.2	37	1407	9.4	287
7 Th 0050	9.6	293	22 F 0141	10.9	332	21 M 0214	10.1	308	2001	0.8	24
0711	0.3	9	0809	-0.8	-24	7 Sa 0104	9.9	302	0744	-0.1	-3
1324	8.5	259	1427	9.4	287	0730	0.1	3	1500	9.1	277
1916	1.2	37	2022	0.6	18	1345	8.6	262	2056	1.2	37
8 F 0127	9.5	290	23 Sa 0237	10.2	311	8 Su 0148	9.8	299	1554	8.9	271
0750	0.4	12	0906	-0.2	-6	0815	0.2	6	2154	1.5	46
1404	8.4	256	1525	9.0	274	1432	8.7	265	2024	0.6	18
1958	1.3	40	2121	1.0	30	2025	1.3	40			
9 Sa 0210	9.4	287	24 Sa 0337	9.6	293	9 M 0238	9.7	296	● 2204	0.6	18
0835	0.5	15	1006	0.3	9	0904	0.2	6	2210	1.5	46
1450	8.2	250	1626	8.7	265	1522	8.8	268	2307	0.4	12
2045	1.4	43	O 2225	1.4	43	2120	1.2	37			
10 Su 0258	9.3	283	25 W 0439	9.2	280	10 Tu 0332	9.6	293	23 M 0308	9.6	293
0925	0.6	18	1107	0.7	21	0958	0.2	6	0934	0.4	12
1542	8.2	250	1728	8.5	259	1618	9.0	274	1554	8.9	296
2138	1.5	46	2330	1.6	49	● 2220	1.1	34	2154	1.5	46
11 M 0353	9.2	280	26 Tu 0543	8.8	268	11 W 0432	9.6	293	2040	9.1	277
1021	0.6	18	1207	1.0	30	1055	0.2	6	1027	1.4	43
1640	8.3	253	1827	8.5	259	1716	9.3	283	1212	1.4	43
● 2238	1.4	43	2324	0.8	24	2324	0.8	24	1832	8.8	271
12 Tu 0454	9.3	283	27 W 0033	1.6	49	12 Th 0535	9.6	293	26 Th 0559	8.4	256
1122	0.5	15	0645	8.7	265	1154	0.1	3	1212	1.4	43
1741	8.6	262	1303	1.1	34	1815	9.8	299	1832	8.8	268
2343	1.1	34	1920	8.7	265				1921	9.0	274
13 W 0558	9.4	287	28 Th 0130	1.4	43	13 F 0028	0.4	12	27 F 0049	1.5	46
1223	0.3	9	0741	8.6	262	0640	9.6	293	0656	8.3	253
1842	9.1	277	1353	1.1	34	1253	0.0	0	1302	1.5	46
			2008	8.9	271	1913	10.3	314	1921	9.0	274
14 Th 0049	0.6	18	29 F 0221	1.1	34	14 F 0132	-0.2	-6	28 Sa 0141	1.3	40
0703	9.7	296	0831	8.7	265	0744	9.8	299	0749	8.2	250
1322	-0.1	-3	1437	1.1	34	1351	-0.2	-6	1349	1.6	49
1940	9.8	299	2051	9.2	280	2009	10.8	329	2006	9.2	280
15 F 0151	-0.1	-3	30 Sa 0307	0.8	24	15 Su 0231	-0.7	-21	2045	11.1	338
0805	10.1	308	0917	8.8	268	0844	10.0	305	30 M 0314	0.8	24
1418	-0.5	-15	1517	1.1	34	1446	-0.3	-9	15 F 0409	-1.0	-30
2035	10.5	320	2130	9.4	287	2103	11.3	344	30 Th 0403	0.3	9
									31 O 0354	0.5	15
									1005	8.5	259
									1552	1.4	43
									2206	9.8	299

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Portland, Maine, 2011

Times and Heights of High and Low Waters

July			August			September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0444 0.0 0	16 Sa 0533 -0.5 -15	1 M 0541 -1.0 -30	16 Tu 0013 9.8 299	1 Th 0041 10.9 332	16 F 0100 8.9 271				
1057 8.8 268	Sa 1147 9.4 287	M 1155 10.0 305	0626 0.2 6	0649 -1.1 -34	0659 1.0 30				
1644 0.9 27	Sa 1740 0.5 15	M 1755 -0.4 -12	1237 9.3 283	1304 11.2 341	1309 9.3 283				
● 2258 10.4 317	Sa 2354 10.4 317		1841 0.6 18	1920 -1.2 -37	1926 0.7 21				
2 Sa 0525 -0.3 -9	17 Su 0616 -0.4 -12	2 Tu 0009 11.0 335	17 W 0051 9.5 290	2 F 0134 10.5 320	17 Sa 0138 8.6 262				
1138 9.1 277	Su 1230 9.3 283	Tu 0626 -1.1 -34	0701 0.5 15	0739 -0.7 -21	0735 1.3 40				
1728 0.7 21	Su 1825 0.6 18	Tu 1241 10.4 317	1312 9.3 283	1356 11.1 338	1347 9.2 280				
2342 10.6 323		Tu 1845 -0.6 -18	1920 0.7 21	2016 -0.9 -27	2006 0.9 27				
3 Su 0607 -0.6 -18	18 M 0037 10.1 308	3 W 0058 10.8 329	18 Th 0130 9.1 277	3 Sa 0231 10.0 305	18 Su 0219 8.3 253				
1221 9.4 287	M 0657 -0.1 -3	W 0713 -1.0 -30	0736 0.8 24	0833 -0.2 -6	0814 1.5 46				
1814 0.4 12	M 1311 9.3 283	W 1329 10.6 323	1349 9.2 280	1452 10.8 329	1428 9.0 274				
	Su 1909 0.7 21	W 1938 -0.6 -18	2000 0.9 27	2116 -0.5 -15	2050 1.1 34				
4 M 0027 10.7 326	19 Tu 0120 9.7 296	4 Th 0150 10.5 320	19 F 0210 8.7 265	4 Su 0332 9.4 287	19 M 0304 8.0 244				
0650 -0.7 -21	Tu 0737 0.2 6	Th 0802 -0.8 -24	0813 1.1 34	0932 0.3 9	0859 1.7 52				
1306 9.7 296	Tu 1352 9.2 280	Th 1420 10.7 326	1428 9.1 277	1552 10.4 317	1515 8.9 271				
1903 0.2 6	Tu 1953 0.9 27	Th 2033 -0.5 -15	2043 1.1 34	2221 -0.1 -3	2140 1.3 40				
5 Tu 0115 10.6 323	20 W 0202 9.3 283	5 F 0246 10.1 308	20 Sa 0253 8.4 256	5 M 0438 8.9 271	20 Tu 0354 7.8 238				
0736 -0.7 -21	W 0817 0.6 18	F 0854 -0.4 -12	0853 1.4 43	1036 0.7 21	0949 1.9 58				
1353 9.9 302	W 1432 9.1 277	F 1513 10.6 323	Sa 1510 8.9 271	1658 10.0 305	1607 8.9 271				
1955 0.1 3	W 2038 1.1 34	F 2133 -0.3 -9	2129 1.3 40	2329 0.2 6	2235 1.3 40				
6 W 0206 10.4 317	21 Th 0246 8.9 271	6 Sa 0345 9.5 290	21 Su 0340 8.0 244	6 Tu 0546 8.7 265	21 W 0450 7.8 238				
0824 -0.6 -18	Th 0857 0.9 27	Sa 0950 0.0 0	0938 1.6 49	1144 1.0 30	1046 1.8 55				
1443 10.1 308	Th 1514 9.0 274	Sa 1611 10.4 317	1556 8.8 268	1806 9.8 299	1704 8.9 271				
2050 0.1 3	Th 2125 1.3 40	O 2236 -0.1 -3	O 2220 1.5 46		2333 1.2 37				
7 Th 0301 10.1 308	22 F 0333 8.5 259	7 Su 0449 9.1 277	22 M 0431 7.7 235	7 W 0037 0.3 9	22 Th 0549 8.0 244				
0915 -0.4 -12	F 0939 1.3 40	Su 1050 0.4 12	M 1027 1.8 55	0654 8.6 262	1146 1.6 49				
1535 10.2 311	F 1558 8.9 271	Su 1714 10.3 314	1648 8.8 268	1251 1.1 34	1805 9.2 280				
2149 0.1 3	F 2215 1.5 46	Su 2343 0.1 3	2316 1.5 46	1912 9.7 296					
8 F 0359 9.7 296	23 Sa 0422 8.1 247	8 M 0557 8.7 265	23 Tu 0528 7.6 232	8 Th 0140 0.3 9	23 F 0032 0.9 27				
1009 -0.1 -3	Sa 1024 1.6 49	M 1155 0.7 21	1122 1.9 58	0755 8.7 265	0648 8.4 256				
1631 10.3 314	Sa 1645 8.8 268	M 1819 10.1 308	1743 8.9 271	1353 0.9 27	1247 1.2 37				
● 2251 0.1 3	O 2308 1.6 49			2012 9.8 299	1904 9.5 290				
9 Sa 0502 9.3 283	24 Su 0516 7.8 238	9 Tu 0051 0.1 3	24 W 0015 1.4 43	9 F 0235 0.3 9	24 Sa 0128 0.4 12				
1108 0.2 6	Su 1113 1.8 55	Tu 0706 8.6 262	0627 7.7 235	0849 9.0 274	0743 9.0 274				
1731 10.4 317	Su 1735 8.8 268	Tu 1301 0.9 27	1220 1.8 55	1448 0.7 21	1346 0.6 18				
2357 0.1 3		Tu 1924 10.1 308	1841 9.1 277	2105 9.8 299	2002 10.0 305				
10 Su 0608 9.0 274	25 M 0004 1.6 49	10 W 0155 0.1 3	25 Th 0112 1.1 34	10 Sa 0324 0.2 6	25 Su 0221 -0.1 -3				
1209 0.4 12	M 0613 7.6 232	W 0810 8.7 265	0725 8.0 244	0936 9.2 280	0835 9.7 296				
1832 10.4 317	M 1206 1.9 58	W 1404 0.8 24	1318 1.4 43	1537 0.5 15	1441 -0.1 -3				
	M 1828 8.9 271	W 2025 10.2 311	1937 9.5 290	2152 9.8 299	2056 10.5 320				
11 M 0102 0.0 0	26 Tu 0101 1.4 43	11 Th 0253 -0.1 -3	26 F 0206 0.6 18	11 Su 0406 0.2 6	26 M 0310 -0.6 -18				
0715 8.9 271	Tu 0710 7.7 235	Th 0907 8.9 271	0818 8.5 259	1018 9.3 283	0924 10.4 317				
1311 0.6 18	Tu 1300 1.8 55	Th 1501 0.7 21	1413 0.9 27	1620 0.4 12	1533 -0.8 -24				
1934 10.5 320	Tu 1921 9.2 280	Th 2120 10.2 311	2031 10.0 305	2233 9.8 299	2148 10.9 332				
12 Tu 0206 -0.2 -6	27 W 0154 1.1 34	12 F 0344 -0.2 -6	27 Sa 0255 0.0 0	12 M 0444 0.2 6	27 Tu 0359 -1.0 -30				
0819 8.9 271	W 0804 7.9 241	F 0957 9.1 277	0908 9.1 277	1055 9.4 287	1012 11.0 335				
1412 0.6 18	W 1353 1.6 49	F 1552 0.5 15	1505 0.3 9	1700 0.3 9	1625 -1.4 -43				
2033 10.6 323	W 2012 9.5 290	W 2209 10.3 314	2121 10.5 320	2312 9.7 296	● 2239 11.0 335				
13 W 0304 -0.4 -12	28 Th 0244 0.7 21	13 Sa 0430 -0.2 -6	28 O 0342 -0.5 -15	13 Tu 0519 0.4 12	28 W 0447 -1.2 -37				
0918 9.1 277	Th 0855 8.2 250	Sa 1042 9.2 280	0955 9.7 296	1129 9.5 290	1100 11.5 351				
1510 0.5 15	Th 1443 1.3 40	Sa 1638 0.4 12	1555 -0.3 -9	1737 0.3 9	1716 -1.7 -52				
2129 10.7 326	Th 2101 9.9 302	O 2253 10.2 311	● 2211 10.9 332	2348 9.5 290	2331 11.0 335				
14 Th 0358 -0.6 -18	29 F 0330 0.2 6	14 Su 0512 -0.2 -6	29 M 0428 -0.9 -27	14 W 0552 0.6 18	29 Th 0535 -1.1 -34				
1012 9.2 280	F 0942 8.6 262	Su 1123 9.3 283	1041 10.3 314	1202 9.5 290	1149 11.7 357				
1604 0.5 15	F 1532 0.8 24	Su 1721 0.4 12	1645 0.8 -24	1813 0.4 12	1808 -1.7 -52				
2221 10.7 326	F 2148 10.3 314	Su 2334 10.0 305	2300 11.1 338						
15 F 0448 -0.6 -18	30 Sa 0414 -0.3 -9	15 M 0550 0.0 0	30 Tu 0514 -1.2 -37	15 Th 0023 9.2 280	30 F 0023 10.8 329				
1101 9.3 283	Sa 1026 9.1 277	M 1201 9.4 287	1127 10.8 329	0625 0.8 24	0625 -0.9 -27				
1653 0.4 12	Sa 1619 0.4 12	M 1802 0.5 15	1735 -1.1 -34	1235 9.4 287	1240 11.6 354				
● 2309 10.6 323	● 2235 10.7 326		2349 11.1 338	1849 0.5 15	1902 -1.5 -46				
		31 Su 0457 -0.7 -21	31 W 0600 -1.2 -37						
		Su 1110 9.6 293	1214 11.1 338						
		1706 0.0 0	1827 -1.3 -40						
		2321 10.9 332							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Portland, Maine, 2011

Times and Heights of High and Low Waters

October				November				December					
	Time	Height			Time	Height			Time	Height			
1 Sa	0118 10.3 314 0718 -0.5 -15 1333 11.2 341 1959 -1.1 -34	0110 8.5 259 0702 1.4 43 1313 9.4 287 1936 0.7 21	16 Su	0258 9.3 283 0855 0.7 21 1511 10.0 305 2139 0.0 0	1 Tu	0210 8.4 256 0804 1.4 43 1415 9.4 287 2040 0.4 12	16 W	0329 9.0 274 0930 1.0 30 1543 9.3 283 2205 0.5 15	1 Th	0233 9.1 277 0834 0.7 21 1445 9.6 293 2104 -0.1 -3	16 F	0233 9.1 277 0834 0.7 21 1445 9.6 293 2104 -0.1 -3	
2 Su	0215 9.8 299 0814 0.0 0 1431 10.8 329 2059 -0.6 -18	0151 8.3 253 0743 1.6 49 1355 9.2 280 2019 0.8 24	17 M	0400 9.0 274 0959 1.1 34 1615 9.5 290 2242 0.4 12	2 W	0258 8.5 259 0855 1.4 43 1507 9.3 283 2131 0.5 15	17 Th	0425 8.8 268 1031 1.3 40 1642 8.8 268 2300 0.9 27	17 Sa	0323 9.3 283 0930 0.6 18 1541 9.4 287 2157 0.0 0	17 O	0323 9.3 283 0930 0.6 18 1541 9.4 287 2157 0.0 0	
3 M	0317 9.3 283 0914 0.6 18 1533 10.2 311 2203 -0.1 -3	0235 8.2 250 0828 1.7 52 1441 9.1 277 2107 0.9 27	18 Tu	0503 8.8 268 1105 1.3 40 1720 9.1 277 2343 0.7 21	18 F	0350 8.7 265 0952 1.2 37 1604 9.3 283 2225 0.4 12	18 O	0521 8.7 265 1133 1.4 43 1743 8.4 256 2355 1.2 37	18 Sa	0417 9.5 290 1031 0.5 15 1641 9.1 277 2254 0.1 3	18 M	0417 9.5 290 1031 0.5 15 1641 9.1 277 2254 0.1 3	
4 Tu	0422 8.9 271 1020 1.0 30 1640 9.8 299 2310 0.3 9	0324 8.1 247 0919 1.7 52 1534 9.1 277 2200 1.0 30	19 W	0603 8.8 268 1210 1.3 40 1823 8.9 271	19 F	0446 9.0 274 1053 1.0 30 1705 9.3 283 2323 0.3 9	19 O	0615 8.8 268 1232 1.3 40 1842 8.2 250	19 Sa	0515 9.8 299 1135 0.2 6 1746 9.0 274 2353 0.2 6	19 M	0515 9.8 299 1135 0.2 6 1746 9.0 274 2353 0.2 6	
5 W	0529 8.7 265 1129 1.2 37 1748 9.5 290	0418 8.2 250 1016 1.6 49 1631 9.1 277 2257 0.8 24	20 Th	0041 0.9 27 0659 8.9 271 1309 1.1 34 1922 8.8 268	20 Sa	0543 9.5 290 1157 0.5 15 1808 9.3 283 1937 8.2 250	20 M	0048 1.4 43 0706 8.9 271 1328 1.1 34 1957 8.2 250	20 Tu	0615 10.1 308 1241 -0.1 -3 1853 9.0 274	20 F	0615 10.1 308 1241 -0.1 -3 1853 9.0 274	
6 Th	0015 0.5 15 0634 8.7 265 1236 1.2 37 1853 9.3 283	0516 8.5 259 1118 1.4 43 1733 9.2 280 2356 0.6 18	21 F	0133 1.0 30 0749 9.1 277 1403 0.9 27 2014 8.8 268	21 M	0021 0.2 6 0641 10.0 305 1300 0.0 0 1911 9.5 290	21 O	0137 1.5 46 0753 9.0 274 1418 0.9 27 2027 8.2 250	21 Tu	0055 0.2 6 0715 10.5 320 1345 -0.6 -18 1957 9.2 280	21 W	0055 0.2 6 0715 10.5 320 1345 -0.6 -18 1957 9.2 280	
7 F	0115 0.6 18 0732 8.9 271 1336 1.0 30 1952 9.3 283	0614 8.9 271 1220 0.9 27 1835 9.5 290	22 Sa	0220 1.0 30 0834 9.3 283 1450 0.7 21 2101 8.8 268	22 M	0119 -0.1 -3 0737 10.6 323 1400 -0.6 -18 2012 9.8 299	22 W	0223 1.4 43 0837 9.2 280 1503 0.6 18 2113 8.3 253	22 Th	0155 0.0 0 0814 10.9 332 1444 -1.0 -30 2058 9.4 287	22 O	0155 0.0 0 0814 10.9 332 1444 -1.0 -30 2058 9.4 287	
8 Sa	0209 0.6 18 0823 9.1 277 1429 0.8 24 2044 9.4 287	0053 0.2 6 0710 9.6 293 1321 0.2 6 1935 9.9 302	23 Su	0302 1.1 34 0914 9.5 290 1532 0.4 12 2143 8.8 268	23 Tu	0215 -0.3 -9 0832 11.1 338 1457 -1.2 -37 2110 10.0 305	23 F	0304 1.4 43 0918 9.4 287 1544 0.4 12 2155 8.4 256	23 O	0253 -0.1 -3 0911 11.2 341 1541 -1.3 -40 2155 9.6 293	23 M	0253 -0.1 -3 0911 11.2 341 1541 -1.3 -40 2155 9.6 293	
9 Su	0255 0.6 18 0908 9.3 283 1516 0.5 15 2129 9.4 287	0148 -0.2 -6 0804 10.3 314 1419 -0.5 -15 2032 10.3 314	24 M	0340 1.1 34 0951 9.6 293 1611 0.3 9 2222 8.8 268	24 W	0309 -0.5 -15 0925 11.5 351 1552 -1.6 -49 2206 10.2 311	24 O	0343 1.3 40 0956 9.6 293 1623 0.2 6 2234 8.5 259	24 Sa	0348 -0.3 -9 1005 11.3 344 1633 -1.5 -46 2248 9.7 296	24 F	0348 -0.3 -9 1005 11.3 344 1633 -1.5 -46 2248 9.7 296	
10 M	0336 0.6 18 0948 9.5 290 1558 0.4 12 2210 9.3 283	0241 -0.5 -15 0856 11.0 335 1514 -1.2 -37 2127 10.6 323	25 Tu	0415 1.1 34 1025 9.7 296 1647 0.2 6 2259 8.8 268	25 O	0402 -0.6 -18 1018 11.7 357 1645 -1.8 -55 2259 10.2 311	25 F	0421 1.2 37 1033 9.8 299 1659 0.1 3 2311 8.5 259	25 Tu	0441 -0.4 -12 1057 11.3 344 1724 -1.5 -46 2339 9.8 299	25 W	0441 -0.4 -12 1057 11.3 344 1724 -1.5 -46 2339 9.8 299	
11 Tu	0413 0.7 21 1023 9.6 293 1636 0.3 9 2247 9.3 283	0332 -0.8 -24 0946 11.5 351 1607 -1.7 -52 2221 10.7 326	26 W	0449 1.1 34 1059 9.7 296 1722 0.2 6 2335 8.7 265	26 F	0455 -0.6 -18 1110 11.7 357 1737 -1.8 -55 2352 10.1 308	26 O	0457 1.1 34 1109 9.9 302 1735 0.0 0 2348 8.6 262	26 M	0532 -0.3 -9 1147 11.1 338 1812 -1.3 -40	26 W	0532 -0.3 -9 1147 11.1 338 1812 -1.3 -40	
12 W	0447 0.8 24 1056 9.6 293 1712 0.2 6 2323 9.1 277	0422 -0.9 -27 1036 11.8 360 1659 -1.9 -58 2314 10.7 326	27 Th	0523 1.2 37 1133 9.7 296 1757 0.2 6	27 Sa	0547 -0.4 -12 1202 11.5 351 1829 -1.5 -46	27 O	0535 1.0 30 1147 9.9 302 1811 -0.1 -3 2311 8.5 259	27 Tu	0027 9.7 296 0623 -0.1 -3 1237 10.7 326 1900 -0.9 -27	27 F	0535 1.0 30 1147 9.9 302 1811 -0.1 -3 2311 8.5 259	
13 Th	0519 0.9 27 1128 9.6 293 1746 0.3 9 2358 8.9 271	0513 -0.9 -27 1127 11.9 363 1752 -1.9 -58	28 F	0010 8.6 262 0558 1.3 40 1209 9.7 296 1833 0.3 9	28 M	0045 9.9 302 0640 -0.1 -3 1255 11.0 335 1922 -1.1 -34	28 O	0025 8.7 265 0614 0.9 27 1226 9.9 302 1850 -0.2 -6	28 Tu	0115 9.5 290 0713 0.2 6 1325 10.2 311 1947 -0.5 -15	28 W	0115 9.5 290 0713 0.2 6 1325 10.2 311 1947 -0.5 -15	
14 F	0552 1.1 34 1201 9.6 293 1821 0.4 12	0007 10.5 320 0604 -0.6 -18 1219 11.6 354 1845 -1.6 -49	29 Sa	0047 8.5 259 0636 1.3 40 1247 9.6 293 1912 0.3 9	29 Tu	0139 9.6 293 0734 0.3 9 1349 10.5 320 2015 -0.5 -15	29 W	0105 8.8 268 0657 0.9 27 1308 9.9 302 1931 -0.2 -6	29 Th	0203 9.3 283 0803 0.5 15 1415 9.6 293 2034 0.0 0	29 O	0203 9.3 283 0803 0.5 15 1415 9.6 293 2034 0.0 0	
15 Sa	0033 8.7 265 0626 1.2 37 1236 9.5 290 1857 0.5 15	0102 10.1 308 0658 -0.2 -6 1313 11.2 341 1941 -1.1 -34	30 Su	0127 8.4 256 0718 1.4 43 1329 9.5 290 1954 0.4 12	30 Tu	0233 9.3 283 0831 0.7 21 1445 9.8 299 2109 0.0 0	30 O	0147 8.9 271 0743 0.8 24 1354 9.8 299 2016 -0.1 -3	30 Th	0251 9.1 277 0855 0.8 24 1505 9.0 274 2121 0.5 15	30 W	0251 9.1 277 0855 0.8 24 1505 9.0 274 2121 0.5 15	
31 Sa	0158 9.7 296 0754 0.2 6 1410 10.6 323 2039 -0.6 -18		31 M							31 O	0339 8.8 268 0949 1.1 34 1558 8.5 259 2210 1.0 30	31 W	0339 8.8 268 0949 1.1 34 1558 8.5 259 2210 1.0 30

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Boston, Massachusetts, 2011

Times and Heights of High and Low Waters

January						February						March											
Time		Height		Time		Height		Time		Height		Time		Height		Time							
1 Sa	h m 0156 0817 1444 2100	ft 0.5 10.6 -0.4 9.1	cm 15 323 -12 277	16 Su	h m 0135 0751 1420 2032	ft 1.5 9.6 0.5 8.4	cm 46 293 15 256	1 Tu	h m 0331 0952 1614 2229	ft 0.7 10.2 -0.2 9.1	cm 21 311 -6 277	16 W	h m 0252 0906 1531 2143	ft 0.3 10.7 -0.7 9.7	cm 9 326 -21 296	1 Tu	h m 0222 0846 1507 2123	ft 1.1 9.7 0.5 8.9	cm 34 296 15 271	16 W	h m 0129 0743 1408 2021	ft 0.8 10.2 -0.1 9.5	cm 24 311 -3 290
2 Su	0252 0912 1539 2154	0.5 10.7 -0.5 9.2	15 326 -15 280	17 M	0227 0843 1510 2123	1.1 10.1 0.0 8.8	34 308 0 268	2 W	0418 1037 1655 2310	0.5 10.3 -0.2 9.3	15 314 -6 283	17 Th	0345 0958 1620 2232	-0.3 11.3 -1.3 10.4	-9 344 -40 317	2 W	0315 0935 1552 2206	0.9 9.8 0.3 9.1	27 299 9 277	17 Th	0227 0840 1501 2114	0.1 10.7 -0.7 10.3	3 314
3 M	0345 1003 1628 2244	0.4 10.8 -0.6 9.3	12 329 -18 283	18 Tu	0318 0932 1559 2211	0.6 10.6 -0.6 9.3	18 323 -18 283	3 Th	0502 1118 1734 2347	0.4 10.3 -0.2 9.4	12 314 -6 287	18 F	0436 1049 1707 2319	-1.0 11.6 -1.7 11.0	-30 354 -52 335	3 O	0400 1019 1630 2244	0.6 9.9 0.2 9.4	18 302 6 287	18 F	0322 0935 1552 2204	-0.7 11.2 -1.2 11.0	-21 341 -37 335
4 Tu	0434 1051 1714 ● 2329	0.4 10.8 -0.6 9.4	12 329 -18 287	19 W	0408 1021 1646 2258	0.1 11.1 -1.1 9.8	3 338 -18 299	4 F	0543 1157 1810	0.3 10.2 -0.1	9 311 -3	19 Sa	0526 1139 1755	-1.5 11.8 -1.9	-46 360 -58	4 ●	0441 1058 1706 2319	0.4 10.0 0.2	12 305 6 293	19 O	0415 1028 1641 2253	-1.4 11.5 -1.5 11.6	-43 351 -46 354
5 W	0520 1135 1756	0.4 10.6 -0.5	12 323 -15	20 Th	0457 1109 1732 2345	-0.4 11.5 -1.5 10.3	-12 351 -46 314	5 Sa	0023 0623 1235 1847	9.5 0.3 10.0 0.0	290 9 305 0	20 Su	0007 0617 1230 1842	11.4 -1.8 11.7 -1.8	347 -55 357 -55	5 Sa	0520 1134 1741 2353	0.2 9.9 0.2 9.7	6 302 6 296	20 Su	0507 1120 1730 2342	-1.9 11.7 -1.6 12.0	-58 357 -49 366
6 Th	0011 0604 1217 1837	9.4 0.4 10.4 -0.3	287 12 317 -9	21 F	0546 1158 1819	-0.8 11.6 -1.7	-24 354 -52	6 Su	0059 0702 1313 1923	9.5 0.4 9.7 0.2	290 12 296 6	21 M	0055 0708 1321 1931	11.6 -1.8 11.3 -1.5	354 -55 344 -46	6 Su	0558 1211 1816	0.2 9.8 0.3	6 299 9 9	21 M	0558 1211 1818	-2.1 11.5 -1.5	-64 351 -46
7 F	0051 0647 1259 1917	9.3 0.6 10.1 -0.1	283 18 308 -3	22 Sa	0032 0636 1247 1906	10.7 -1.1 11.6 -1.7	326 -34 354 -52	7 M	0135 0743 1352 2001	9.5 0.5 9.4 0.5	290 15 287 15	22 Tu	0145 0801 1414 2021	11.5 -1.5 10.7 -0.9	351 -46 326 -27	7 M	0027 0636 1247 1852	9.8 0.2 9.6 0.5	299 6 293 15	22 Tu	0031 0649 1303 1908	12.1 -2.0 11.1 -1.1	369 -61 338 -34
8 Sa	0131 0730 1341 1957	9.3 0.7 9.8 0.2	283 21 299 6	23 Su	0119 0727 1338 1954	10.9 -1.1 11.3 -1.5	332 -34 344 -46	8 Tu	0214 0825 1434 2042	9.4 0.7 9.0 0.9	287 21 274 27	23 W	0236 0856 1510 2115	11.2 -1.0 10.0 -0.3	341 -30 305 -9	8 Tu	0102 0714 1325 1929	9.8 0.3 9.3 0.7	299 9 283 21	23 W	0121 0742 1356 1959	11.8 -1.7 10.6 -0.6	360 -52 323 -18
9 Su	0211 0814 1424 2038	9.2 0.9 9.4 0.6	280 27 287 18	24 M	0209 0820 1432 2045	11.0 -1.0 10.8 -1.0	335 -30 329 -30	9 W	0254 0910 1519 2125	9.3 1.0 8.6 1.2	283 30 262 37	24 Th	0332 0955 1610 2212	10.8 -0.5 9.4 0.4	329 -15 287 12	9 W	0138 0755 1405 2008	9.7 0.4 9.0 1.0	296 12 274 30	24 Th	0213 0836 1452 2052	11.4 -1.1 10.0 0.1	347 -34 305 3
10 M	0253 0900 1509 2121	9.1 1.1 8.9 0.9	277 34 271 27	25 Tu	0301 0916 1528 2138	10.9 -0.7 10.1 -0.5	332 -21 308 -15	10 Th	0338 0958 1608 2212	9.1 1.2 8.2 1.5	277 37 250 46	25 F	0432 1057 1715 2313	10.3 0.1 8.8 0.9	314 3 268 27	10 Th	0217 0837 1448 2050	9.6 0.7 8.7 1.3	293 21 265 40	25 F	0309 0933 1551 2149	10.8 -0.4 9.3 0.7	329 -12 283 21
11 Tu	0337 0948 1557 2206	9.0 1.3 8.5 1.3	274 40 259 40	26 W	0356 1016 1628 2234	10.7 -0.4 9.5 0.1	326 -12 290 3	11 F	0427 1052 1702 2305	9.0 1.3 7.9 1.7	274 241 241 52	26 Sa	0536 1204 1823	9.9 0.5 8.5	302 15 259	11 F	0301 0924 1535 2137	9.4 0.9 8.4 1.5	287 27 256 46	26 O	0408 1034 1654 2251	10.2 0.3 8.8 1.2	311 9 268 37
12 W	0424 1040 1649 ● 2255	8.9 1.5 8.2 1.5	271 46 250 46	27 Th	0455 1118 1733 2335	10.4 0.0 9.0 0.6	317 0 0 18	12 Sa	0520 1149 1800	9.1 1.3 7.9	277 40 241	27 Su	0018 0643 1311 1931	1.2 9.7 0.6 8.5	37 296 18 259	12 O	0349 1016 1628 2230	9.3 1.0 8.2 1.6	283 30 250 49	27 O	0512 1138 1800 2355	9.7 0.7 8.6 1.5	296 21 262 46
13 Th	0513 1134 1744 2347	8.9 1.5 8.0 1.7	271 46 244 52	28 F	0557 1224 1840	10.2 0.2 8.7	311 6 265	13 Su	0001 0617 1248 1859	1.7 1.3 1.0 8.0	52 40 30 244	28 M	0122 0748 1414 2031	1.3 9.6 0.6 8.6	40 293 18 262	13 Su	0443 1113 1725 2328	9.3 1.1 8.1 1.6	283 34 247 49	28 M	0619 1244 1904 2002	9.4 1.0 8.6 8.8	287 30 305 268
14 F	0605 1230 1841	9.0 1.3 7.9	274 40 241	29 Tu	0037 0701 1330 1947	0.9 10.1 0.2 8.6	27 308 6 262	14 M	0059 0715 1345 1957	1.4 9.6 0.5 8.4	43 293 15 256	14 M	0542 1213 1825	9.4 0.9 8.4	287 27 256	29 Tu	0100 0723 1344 2002	1.5 9.3 1.0 8.8	46 283 30 268				
15 Sa	0041 0658 1326 1938	1.7 9.3 1.0 8.1	52 283 30 247	30 Su	0139 0804 1432 2049	0.9 10.1 0.1 8.7	27 308 3 265	15 Tu	0157 0812 1439 2052	1.0 10.1 -0.1 9.0	30 308 -3 274	15 Tu	0029 0643 1312 1924	1.3 9.7 0.4 8.9	40 296 12 271	30 W	0159 0820 1436 2051	1.4 9.3 0.9 9.0	43 283 27 274				
31 M	0238 0901 1526	0.9 10.2 0.0	27 311 0 0	31 M	0238 0901 1526	0.9 10.2 0.0	27 311 0 0	31 M	0251 0909 1519	1.1 9.4 0.8	34 287 24 24	31 Th	0251 0909 1519 2134	1.1 9.4 0.8 9.3	34 287 24 283								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Boston, Massachusetts, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 F 0336	0.8	24		16 Sa 0301	-0.9	-27		1 M 0347	0.6	18	
0953	9.5	290		0913	10.9	332		0949	10.6	323	
1557	0.7	21		1524	-0.9	-27		1551	-0.5	-15	
2211	9.6	293		2137	11.6	354		2205	12.0	366	
2 Sa 0416	0.5	15		17 Su 0427	0.4	12		17 Th 0430	-1.6	-49	
1032	9.6	293		1008	11.2	341		1044	10.6	323	
1634	0.7	21		1615	-1.1	-34		1643	-0.5	-15	
2246	9.8	299	O	2227	12.0	366		2256	12.1	369	
3 Su 0455	0.3	9		18 M 0448	-1.9	-58		18 W 0522	-1.6	-49	
1109	9.6	293		1101	11.2	341		1137	10.5	320	
1709	0.7	21		1705	-1.1	-34		1734	-0.3	-9	
● 2321	10.0	305		2317	12.2	372		2347	11.9	363	
4 M 0532	0.1	3		19 Tu 0539	-2.1	-64		19 Sa 0602	-0.1	-3	
1146	9.6	293		1153	11.1	338		1216	9.3	283	
1745	0.7	21		1755	-0.9	-27		1809	1.0	30	
2355	10.0	305									
5 Tu 0610	0.1	3		20 W 0008	12.2	372		20 M 0103	10.7	326	
1223	9.4	287		0631	-1.9	-58		0728	-0.3	-9	
1822	0.8	24		1246	10.8	329		1343	9.5	290	
				1845	-0.6	-18		1941	0.8	24	
6 W 0030	10.1	308		21 Th 0058	11.8	360		2031	0.7	21	
0648	0.1	3		0722	-1.5	-46					
1301	9.3	283		1339	10.4	317					
1859	1.0	30		1937	-0.1	-3					
7 Th 0107	10.0	305		22 F 0151	11.3	344		21 M 0150	10.6	323	
0728	0.3	9		0815	-0.9	-27		0815	-0.3	-9	
1340	9.0	274		1433	9.9	302		1430	9.7	296	
1939	1.1	34		2030	0.5	15		2031	0.7	21	
8 F 0147	9.9	302		23 Sa 0246	10.7	326		21 Tu 0244	9.9	302	
0811	0.4	12		0910	-0.2	-6		0901	0.5	15	
1423	8.8	268		1530	9.4	287		1520	9.4	287	
2022	1.3	40		2126	1.0	30		2122	1.3	40	
9 Sa 0231	9.8	299		24 Su 0343	10.1	308		22 W 0333	9.4	287	
0857	0.6	18		1007	0.4	12		0947	0.9	27	
1510	8.7	265		1629	9.0	274		1607	9.3	283	
2110	1.5	46	O	2225	1.4	43		2213	1.5	46	
10 Su 0320	9.7	296		25 M 0443	9.6	293		23 F 0424	9.0	274	
0948	0.7	21		1106	0.9	27		1035	1.3	40	
1601	8.6	262		1729	8.8	268		1655	9.2	280	
2204	1.5	46		2327	1.7	52		2307	1.6	49	
11 M 0414	9.7	296		26 Tu 0545	9.2	280		24 F 0517	8.6	262	
1044	0.7	21		1205	1.2	37		1124	1.6	49	
1657	8.7	265		1827	8.8	268		1744	9.2	280	
● 2302	1.4	43									
12 Tu 0513	9.7	296		27 W 0028	1.7	52		25 Sa 0001	1.6	49	
1142	0.6	18		0646	9.0	274		0612	8.4	256	
1756	9.0	274		1301	1.4	43		1214	1.8	55	
				1921	9.0	274		1833	9.3	283	
13 W 0004	1.1	34		28 Th 0126	1.5	46		26 Su 0055	1.5	46	
0615	9.9	302		0742	9.0	274		0706	8.3	253	
1240	0.3	9		1352	1.4	43		1304	1.9	58	
1854	9.5	290		2009	9.2	280		1923	9.5	290	
14 Th 0105	0.5	15		29 F 0218	1.2	37		27 M 0147	1.3	40	
0717	10.2	311		0833	9.0	274		0759	8.3	253	
1337	-0.1	-3		1437	1.3	40		1354	1.8	49	
1951	10.2	311		2053	9.5	290		2011	9.7	296	
15 F 0204	-0.2	-6		30 Sa 0305	0.9	27		28 Tu 0147	1.3	40	
0816	10.6	323		0919	9.1	277		0850	8.5	259	
1432	-0.5	-15		1518	1.2	37		1442	1.6	49	
2045	10.9	332		2133	9.7	296		2058	10.0	305	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Boston, Massachusetts, 2011

Times and Heights of High and Low Waters

July			August			September		
Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 1108 1701 ● 2312	-0.1 9.2 0.8 10.8	-3 280 24 329	16 Sa 1152 1746	0536 0.4	-0.5 9.7 0.4 12	1 M 1209 1813	0556 -0.5	-1.1 10.5 -0.5 -15
2 Sa 1151 1747 2357	0537 0.5 11.0	-0.4 15 335	17 Su 0620 1235 1831	0000 0.5	10.8 9.7 0.5	2 Tu 0642 1255 1903	0024 10.9	11.4 332 -0.7
3 Su 1235 1834	0621 0.3	-0.7 299 9	18 M 0701 1317 1916	0045 0.1	10.5 9.7 0.7	3 W 0729 1342 1954	0113 11.1	11.3 344 -0.8
4 M 0706 1320 1922	0044 -0.8 10.1	11.1 -24 308	19 Tu 0743 1358 2001	0128 0.2	10.1 9.6 0.9	4 Th 0818 1433 2048	0205 11.2	10.9 332 -0.7
5 Tu 0753 1407 2013	0132 -0.8 10.4	11.0 -24 317	20 W 0824 1440 2047	0212 0.5	9.7 9.5 1.1	5 F 0909 1526 2145	0300 11.1	10.5 320 -0.4
6 W 0841 1457 2107	0223 -0.7 10.6	10.8 -21 323	21 Th 0907 1523 2134	0257 0.1	9.3 9.4 1.3	6 Sa 0958 1613 2246	0357 1.7	9.9 302 -0.2
7 Th 0932 1549 2204	0317 -0.4 10.7	10.5 -12 326	22 F 0951 1608 2224	0344 0.3	8.9 9.3 1.5	7 Su 1092 1722 2349	0459 10.7	9.5 320 0.1
8 F 1026 1643 ● 2304	0414 -0.1 10.8	10.1 -3 329	23 Sa 1039 1656 ● 2317	0435 0.2	8.5 9.2 1.6	8 M 1203 1824	0604 10.6	9.1 323
9 Sa 1122 1741	0514 0.2	9.7 6	24 Su 1129 1747	0528 0.2	8.2 9.2	9 W 0709 1305 1927	0053 0.9	0.2 274 10.5
10 Su 0617 1221 1840	0006 9.4 0.4	0.0 287 12 332	25 M 0623 1221 1839	0012 1.9	1.5 58 9.4	10 W 0813 1405 2027	0156 0.9	0.1 274 10.5
11 M 0721 1320 1940	0108 9.3 0.6	-0.1 283 18 335	26 Tu 0718 1315 1932	0106 1.9	1.4 58 9.6	11 Th 0910 1502 2123	0254 0.8	0.0 280 10.6
12 Tu 0823 1419 2038	0209 0.6 11.0	-0.3 18 335	27 W 0812 1407 2023	0200 1.6	1.0 49 9.9	12 F 1001 1553 2213	0345 0.6	-0.1 287 10.6
13 W 0922 1515 2134	0307 0.5 11.1	-0.4 15 338	28 Th 0903 1458 2112	0250 1.2	0.6 37 10.4	13 Sa 1047 1641 ● 2258	0431 0.5	-0.1 293 10.5
14 Th 1608 2226	0400 0.4	-0.5 12	29 F 0952 1547 2201	0338 0.8	0.1 24 10.8	14 Su 1128 1725 2340	0513 0.4	-0.1 296 10.4
15 F 1658 ● 2315	0450 0.4	-0.6 12	30 Sa 1038 1636 ● 2248	0425 0.3	-0.4 293 11.1	15 M 1206 1807	0553 0.4	0.0 299 11.1
31 Su 1724 2335	0510 -0.2	-0.8 -6	31 W 1123 1724 2335	0510 10.1 11.3	-24 308 344	16 Th 1140 1751	0003 11.3	11.5 351 -46

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Boston, Massachusetts, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
	h m	ft cm		h m	ft cm			h m	ft cm		
1 Sa	0129	10.8	329	16 Su	0125	8.9	271	1 Tu	0304	9.7	296
	0731	-0.6	-18		0723	1.4	43		0901	0.7	21
	1345	11.8	360		1331	9.8	299		1518	10.5	320
	2009	-1.2	-37		1955	0.7	21		2142	0.0	0
2 Su	0225	10.2	311	17 M	0208	8.7	265	2 W	0404	9.3	283
	0825	0.0	0		0806	1.6	49		1001	1.1	34
	1441	11.3	344		1414	9.7	296		1619	9.9	302
	2106	-0.6	-18		2040	0.8	24		2242	0.5	15
3 M	0324	9.7	296	18 Tu	0254	8.5	259	3 Th	0506	9.1	277
	0923	0.5	15		0852	1.7	52		1103	1.4	43
	1541	10.7	326		1502	9.5	290		1722	9.5	290
	2207	-0.1	-3		2129	0.9	27		2342	0.9	27
4 Tu	0427	9.3	283	19 W	0344	8.5	259	4 F	0605	9.1	277
	1024	1.0	30		0944	1.8	55		1207	1.5	46
	1645	10.2	311		1554	9.5	290		1825	9.2	280
	2310	0.4	12		2222	1.0	30		2342	0.3	9
5 W	0533	9.0	274	20 Th	0437	8.6	262	5 Sa	0039	1.1	34
	1128	1.3	40		1040	1.7	52		0701	9.2	280
	1751	9.8	299		1651	9.5	290		1307	1.3	40
					2317	0.8	24		1923	9.1	277
6 Th	0015	0.7	21	21 F	0533	8.9	271	6 Su	0132	1.2	37
	0637	9.0	274		1139	1.4	43		0751	9.4	287
	1233	1.4	43		1750	9.7	296		1401	1.1	34
	1855	9.7	296						2016	9.1	277
7 F	0116	0.8	24	22 Sa	0014	0.6	18	7 M	0218	1.2	37
	0736	9.2	280		0629	9.4	287		0836	9.6	293
	1335	1.2	37		1239	0.9	27		1449	0.8	24
	1954	9.6	293		1849	10.0	305		2103	9.1	277
8 Sa	0210	0.8	24	23 Su	0109	0.2	6	8 Tu	0301	1.2	37
	0827	9.4	287		0723	10.1	308		0917	9.8	299
	1429	1.0	30		1337	0.2	6		1532	0.6	18
	2046	9.6	293		1947	10.3	314		2146	9.1	277
9 Su	0256	0.8	24	24 M	0203	-0.2	-6	9 W	0341	1.1	34
	0912	9.6	293		0816	10.8	329		0955	10.0	305
	1516	0.7	21		1433	-0.6	-18		1612	0.4	12
	2132	9.7	296		2043	10.7	326		2226	9.2	280
10 M	0337	0.8	24	25 Tu	0255	-0.6	-18	10 Th	0419	1.1	34
	0951	9.8	299		0907	11.5	351		1032	10.1	308
	1559	0.5	15		1527	-1.3	-40		1651	0.2	6
	2213	9.7	296		2138	11.0	335		2305	9.1	277
11 Tu	0414	0.8	24	26 W	0346	-0.9	-27	11 F	0458	1.1	34
	1028	10.0	305		0958	12.0	366		1109	10.2	311
	1638	0.3	9		1619	-1.8	-55		1730	0.1	3
	2252	9.6	293		2231	11.1	338		2344	9.1	277
12 W	0451	0.8	24	27 Th	0436	-1.0	-30	12 Sa	0537	1.1	34
	1103	10.1	308		1048	12.3	375		1147	10.2	311
	1716	0.2	6		1712	-2.1	-64		1809	0.1	3
	2330	9.5	290		2324	11.1	338				
13 Th	0527	0.9	27	28 F	0527	-1.0	-30	13 Su	0022	9.0	274
	1138	10.1	308		1139	12.4	378		0616	1.2	37
	1754	0.2	6		1803	-2.0	-61		1225	10.1	308
									1849	0.2	6
14 F	0007	9.4	287	29 Sa	0017	10.9	332	14 M	0102	8.9	271
	0604	1.0	30		0618	-0.7	-21		0657	1.3	40
	1214	10.1	308		1230	12.2	372		1305	10.1	308
	1833	0.3	9		1856	-1.7	-52		1931	0.3	9
15 Sa	0045	9.2	280	30 Su	0111	10.5	320	15 Tu	0144	8.8	268
	0643	1.2	37		0710	-0.3	-9		0741	1.3	40
	1251	10.0	305		1324	11.7	357		1348	10.0	305
	1913	0.5	15		1949	-1.2	-37		2015	0.3	9
31 M	0207	10.1	308	31 M	0207	10.1	308	29 Th	0121	9.2	296
	0804	0.2	6		0804	0.2	6		0743	0.2	6
	1420	11.1	338		1420	11.1	338		1357	10.9	332
	2045	-0.6	-18		2045	-0.6	-18		2020	-0.6	-18

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nantucket, Massachusetts, 2011

Times and Heights of High and Low Waters

January			February			March		
Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0229 0.2 6 0921 3.9 119 1534 -0.2 -6 2212 2.7 82	16 Su 0206 0.6 18 0847 3.5 107 1510 0.2 6 2130 2.4 73	1 Tu 0402 0.3 9 1055 3.5 107 1658 0.0 0 2339 2.7 82	16 W 0319 0.1 3 1001 3.7 113 1611 -0.2 -6 2238 2.8 85	1 Tu 0256 0.4 12 0950 3.3 101 1549 0.2 6 2231 2.7 82	16 W 0200 0.2 6 0840 3.5 107 1449 -0.1 -3 2116 2.9 88			
	2 Su 0324 0.2 6 1016 3.9 119 1627 -0.2 -6 2308 2.7 82	17 M 0255 0.5 15 0937 3.6 110 1557 0.0 0 2221 2.5 76	2 W 0451 0.3 9 1140 3.5 107 1740 0.0 0	17 Th 0413 -0.1 -3 1055 3.8 116 1659 -0.3 -9 2328 3.1 94	2 W 0349 0.3 9 1039 3.3 101 1633 0.2 6 2312 2.8 85	17 Th 0259 -0.1 -3 0937 3.6 110 1539 -0.2 -6 2208 3.2 98		
	3 M 0416 0.3 9 1107 3.8 116 1716 -0.2 -6 2358 2.7 82	18 Tu 0344 0.3 9 1027 3.8 116 1643 -0.1 -3 2309 2.6 79	3 Th 0019 2.7 82 0538 0.3 9 1221 3.4 104 1819 0.1 3	18 F 0507 -0.3 -9 1148 3.8 116 1746 -0.4 -12 O	3 Th 0436 0.3 9 1122 3.2 98 1712 0.2 6 2347 2.8 85	18 F 0356 -0.3 -9 1034 3.6 110 1628 -0.3 -9 2300 3.5 107		
	4 Tu 0506 0.3 9 1154 3.7 113 1802 -0.1 -3	19 W 0434 0.2 6 1116 3.9 119 1728 -0.3 -9 O 2358 2.8 85	4 F 0055 2.8 85 0622 0.3 9 1300 3.3 101 1857 0.1 3	19 Sa 0018 3.4 104 0602 -0.5 -15 1241 3.8 116 1833 -0.5 -15	4 F 0521 0.2 6 1201 3.1 94 1748 0.2 6	19 Sa 0452 -0.5 -15 1130 3.6 110 1717 -0.4 -12 O 2351 3.7 113		
5 W 0043 2.7 82 0554 0.3 9 1239 3.6 110 1845 -0.1 -3	20 Th 0524 0.0 0 1207 3.9 119 1814 -0.4 -12	5 Sa 0129 2.9 88 0706 0.3 9 1339 3.1 94 1934 0.2 6	20 Su 0109 3.6 110 0657 -0.6 -18 1336 3.6 110 1921 -0.5 -15	5 Sa 0020 2.9 88 0603 0.2 6 1238 3.0 91 1824 0.3 9	20 Su 0547 -0.7 -21 1225 3.5 107 1806 -0.4 -12			
6 Th 0124 2.8 85 0642 0.4 12 1322 3.5 107	21 F 0046 3.0 91 0617 -0.2 -6 1258 3.9 119	6 Su 0204 2.9 88 0750 0.3 9 1418 3.0 91 2012 0.2 6	21 M 0200 3.8 116 0753 -0.6 -18 1431 3.5 107 2011 -0.4 -12	6 Su 0053 3.0 91 0644 0.2 6 1315 2.9 88 1859 0.3 9	21 M 0042 3.9 119 0642 -0.8 -24 1320 3.4 104 1855 -0.4 -12			
7 F 0203 2.8 85 0728 0.4 12 1404 3.3 101 2008 0.1 3	22 Sa 0135 3.2 98 0711 -0.2 -6 1351 3.8 116 1948 -0.5 -15	7 M 0241 3.0 91 0835 0.3 9 1500 2.9 88 2050 0.3 9	22 Tu 0253 3.9 119 0850 -0.5 -15 1528 3.3 101 2103 -0.2 -6	7 M 0127 3.1 94 0725 0.1 3 1354 2.8 85 1935 0.4 12	22 Tu 0135 4.0 122 0737 -0.8 -24 1416 3.3 101 1947 -0.3 -9			
8 Sa 0242 2.8 85 0816 0.4 12 1446 3.2 98 2049 0.2 6	23 Su 0226 3.4 104 0807 -0.3 -9 1446 3.6 110 2036 -0.4 -12	8 Tu 0321 3.0 91 0921 0.3 9 1544 2.7 82 2130 0.4 12	23 W 0348 3.9 119 0950 -0.4 -12 1627 3.0 91 2158 -0.1 -3	8 Tu 0204 3.1 94 0806 0.1 3 1435 2.7 82 2012 0.4 12	23 W 0229 4.0 122 0834 -0.6 -18 1513 3.1 94 2040 -0.1 -3			
9 Su 0322 2.9 88 0905 0.5 15 1531 3.0 91 2130 0.3 9	24 M 0318 3.6 110 0905 -0.3 -9 1542 3.4 104 2127 -0.3 -9	9 W 0403 3.1 94 1009 0.4 12 1631 2.6 79 2212 0.5 15	24 Th 0446 3.8 116 1052 -0.3 -9 1729 2.8 85 O 2255 0.1 3	9 W 0243 3.2 98 0849 0.2 6 1517 2.6 79 2051 0.5 15	24 Th 0325 3.9 119 0931 -0.5 -15 1611 3.0 91 2135 0.0 0			
10 M 0403 3.0 91 0955 0.5 15 1617 2.8 85 2213 0.4 12	25 Tu 0412 3.7 113 1006 -0.2 -6 1641 3.2 98 2221 -0.2 -6	10 Th 0449 3.1 94 1100 0.4 12 1721 2.5 76 2257 0.6 18	25 F 0546 3.7 113 1156 -0.1 -3 1833 2.7 82 2356 0.2 6	10 Th 0325 3.2 98 0934 0.2 6 1602 2.5 76 2132 0.5 15	25 F 0423 3.8 116 1031 -0.3 -9 1711 2.8 85 2234 0.2 6			
11 Tu 0447 3.0 91 1048 0.5 15 1706 2.7 82 2257 0.5 15	26 W 0509 3.8 116 1110 -0.2 -6 1744 2.9 88 O 2317 0.0 0	11 F 0537 3.2 98 1153 0.4 12 1813 2.4 73 O 2345 0.6 18	26 Sa 0649 3.6 110 1301 0.0 0 1939 2.6 79	11 F 0410 3.2 98 1022 0.2 6 1650 2.5 76 2218 0.6 18	26 Sa 0523 3.6 110 1133 -0.1 -3 1813 2.7 82 O 2336 0.3 9			
12 W 0532 3.1 94 1142 0.5 15 1757 2.5 76 O 2342 0.6 18	27 Th 0608 3.8 116 1215 -0.1 -3 1849 2.7 82	12 Sa 0627 3.2 98 1247 0.3 9 1906 2.3 70	27 Su 0058 0.3 9 0753 3.5 107 1403 0.1 3 2043 2.6 79	12 Sa 0459 3.2 98 1114 0.2 6 1741 2.4 73 O 2308 0.5 15	27 Su 0625 3.4 104 1235 0.1 3 1916 2.7 82			
13 Th 0619 3.1 94 1237 0.5 15 1851 2.4 73	28 F 0015 0.1 3 0708 3.7 113 1320 0.0 0 1955 2.6 79	13 Su 0036 0.6 18 0720 3.3 101 1341 0.3 9 2001 2.4 73	28 M 0159 0.4 12 0854 3.4 104 1500 0.1 3 2141 2.6 79	13 Su 0551 3.3 101 1208 0.2 6 1834 2.4 73	28 M 0039 0.4 12 0728 3.3 101 1334 0.2 6 2016 2.7 82			
14 F 0029 0.6 18 0708 3.2 98 1330 0.4 12 1945 2.4 73	29 Sa 0115 0.2 6 0810 3.7 113 1423 0.0 0 2101 2.6 79	14 M 0130 0.5 15 0813 3.4 104 1433 0.1 3 2055 2.5 76		14 M 0003 0.5 15 0646 3.3 101 1303 0.2 6 1928 2.5 76	29 Tu 0142 0.4 12 0829 3.2 98 1428 0.3 9 2110 2.8 85			
15 Sa 0117 0.6 18 0757 3.3 101 1421 0.3 9 2038 2.4 73	30 Su 0214 0.3 9 0909 3.7 113 1521 0.0 0 2201 2.6 79	15 Tu 0224 0.3 9 0907 3.6 110 1523 0.0 0 2147 2.6 79		15 Tu 0101 0.4 12 0743 3.4 104 1357 0.1 3 2022 2.7 82	30 W 0239 0.4 12 0925 3.1 94 1516 0.3 9 2156 2.8 85			
	31 M 0310 0.3 9 1005 3.6 110 1612 0.0 0 2254 2.6 79				31 Th 0331 0.4 12 1014 3.0 91 1558 0.4 12 2234 2.9 88			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nantucket, Massachusetts, 2011

Times and Heights of High and Low Waters

April					May					June				
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time
1 F 0418 0.3 9 1058 2.9 88 1636 0.4 12 2309 3.0 91	16 Sa 0340 -0.4 -12 1015 3.3 101 1558 -0.2 -6 2233 3.8 116	1 Su 0437 0.2 6 1107 2.6 79 1634 0.6 18 2304 3.3 101	16 M 0423 -0.5 -15 1058 3.1 94 1624 -0.1 -3 2306 4.2 128	1 W 0529 0.1 3 1158 2.5 76 1714 0.7 21 2351 3.6 110	16 Th 0555 -0.4 -12 1236 2.9 88 1749 0.2 6									
2 Sa 0501 0.2 6 1137 2.8 85 1713 0.4 12 2342 3.1 94	17 Su 0437 -0.6 -18 1113 3.3 101 1649 -0.3 -9 O 2326 4.0 122	2 M 0518 0.1 3 1147 2.6 79 1711 0.6 18 2342 3.3 101	17 Tu 0518 -0.6 -18 1156 3.0 91 1716 0.0 0 O 2359 4.2 128	2 Th 0609 0.1 3 1241 2.6 79 1755 0.6 18	17 F 0036 4.0 122 0645 -0.3 -9 1327 2.9 88 1841 0.3 9									
3 Su 0542 0.1 3 1215 2.8 85 1748 0.5 15	18 M 0532 -0.7 -21 1210 3.3 101 1740 -0.2 -6	3 Tu 0557 0.1 3 1227 2.6 79 1748 0.6 18	18 W 0611 -0.6 -18 1251 3.0 91 1809 0.0 0	3 F 0034 3.6 110 0650 0.0 0 1324 2.6 79 1838 0.6 18	18 Sa 0126 3.9 119 0733 -0.2 -6 1416 3.0 91 1933 0.3 9									
4 M 0017 3.1 94 0621 0.1 3 1252 2.7 82 1824 0.5 15	19 Tu 0019 4.1 125 0627 -0.8 -24 1306 3.2 98 1831 -0.2 -6	4 W 0021 3.4 104 0636 0.0 0 1308 2.6 79 1826 0.6 18	19 Th 0053 4.2 128 0704 -0.6 -18 1345 3.0 91 1901 0.1 3	4 Sa 0119 3.7 113 0732 -0.1 -3 1408 2.7 82 1924 0.5 15	19 Su 0215 3.7 113 0821 -0.1 -3 1502 3.0 91 2026 0.4 12									
5 Tu 0053 3.2 98 0700 0.1 3 1331 2.7 82 1900 0.5 15	20 W 0112 4.2 128 0721 -0.7 -21 1401 3.1 94 1923 -0.1 -3	5 Th 0101 3.4 104 0715 0.0 0 1349 2.6 79 1906 0.6 18	20 F 0146 4.0 122 0756 -0.4 -12 1438 3.0 91 1955 0.2 6	5 Su 0205 3.7 113 0815 -0.1 -3 1453 2.8 85 2013 0.4 12	20 M 0304 3.5 107 0907 0.1 3 1548 3.0 91 2119 0.5 15									
6 W 0130 3.3 101 0740 0.0 0 1412 2.6 79 1937 0.5 15	21 Th 0207 4.1 125 0815 -0.6 -18 1457 3.0 91 2017 0.0 0	6 F 0143 3.5 107 0756 0.0 0 1432 2.6 79 1948 0.6 18	21 Sa 0239 3.8 116 0847 -0.3 -9 1530 2.9 88 2050 0.3 9	6 M 0253 3.6 110 0901 -0.1 -3 1541 3.0 91 2107 0.4 12	21 Tu 0352 3.3 101 0954 0.2 6 1633 3.1 94 2214 0.6 18									
7 Th 0211 3.3 101 0821 0.0 0 1454 2.6 79 2017 0.5 15	22 F 0302 3.9 119 0911 -0.4 -12 1553 2.9 88 2113 0.2 6	7 Sa 0227 3.5 107 0840 0.0 0 1517 2.6 79 2034 0.5 15	22 Su 0332 3.6 110 0939 -0.1 -3 1622 2.9 88 2147 0.5 15	7 Tu 0345 3.6 110 0949 -0.1 -3 1630 3.1 94 2204 0.3 9	22 W 0441 3.1 94 1040 0.4 12 1717 3.1 94 2311 0.6 18									
8 F 0253 3.3 101 0905 0.1 3 1538 2.5 76 2100 0.6 18	23 Sa 0358 3.7 113 1007 -0.2 -6 1650 2.9 88 2212 0.3 9	8 Su 0314 3.5 107 0926 0.0 0 1603 2.7 82 2124 0.5 15	23 M 0425 3.4 104 1031 0.1 3 1713 2.9 88 2246 0.5 15	8 W 0439 3.4 104 1039 -0.1 -3 1721 3.3 101 2305 0.2 6	23 Th 0531 2.9 88 1127 0.5 15 1802 3.2 98									
9 Sa 0339 3.3 101 0952 0.1 3 1625 2.5 76 2147 0.5 15	24 Su 0456 3.5 107 1104 0.0 0 1747 2.8 85 O 2313 0.5 15	9 M 0404 3.5 107 1014 0.0 0 1652 2.8 85 2220 0.4 12	24 Tu 0519 3.2 98 1122 0.2 6 1803 3.0 91 O 2346 0.6 18	9 Th 0537 3.3 101 1131 0.0 0 1813 3.5 107	24 F 0008 0.6 18 0623 2.7 82 1213 0.6 18 1848 3.2 98									
10 Su 0428 3.3 101 1042 0.1 3 1715 2.5 76 2240 0.5 15	25 M 0555 3.3 101 1201 0.1 3 1843 2.8 85	10 Tu 0458 3.4 104 1105 0.0 0 1743 2.9 88 O 2320 0.3 9	25 W 0613 3.0 91 1212 0.4 12 1851 3.0 91	10 F 0008 0.1 3 0637 3.1 94 1224 0.0 0 1908 3.7 113	25 Sa 0104 0.6 18 0716 2.6 79 1300 0.7 21 1934 3.3 101									
11 M 0521 3.3 101 1134 0.1 3 1807 2.6 79 O 2338 0.4 12	26 Tu 0016 0.5 15 0654 3.1 94 1256 0.3 9 1937 2.9 88	11 W 0555 3.3 101 1158 0.0 0 1836 3.1 94	26 Th 0046 0.6 18 0708 2.8 85 1301 0.5 15 1937 3.1 94	11 Sa 0112 0.0 0 0740 3.0 91 1319 0.1 3 2003 3.9 119	26 Su 0157 0.5 15 0809 2.5 76 1346 0.8 24 2021 3.4 104									
12 Tu 0617 3.3 101 1228 0.1 3 1900 2.8 85	27 W 0117 0.5 15 0752 2.9 88 1347 0.4 12 2026 2.9 88	12 Th 0023 0.2 6 0654 3.3 101 1251 0.0 0 1929 3.4 104	27 F 0143 0.5 15 0802 2.7 82 1347 0.6 18 2021 3.2 98	12 Su 0213 -0.2 -6 0843 2.9 88 1414 0.1 3 2059 4.0 122	27 M 0247 0.5 15 0901 2.5 76 1431 0.8 24 2107 3.5 107									
13 W 0039 0.3 9 0716 3.3 101 1322 0.0 0 1954 3.0 91	28 Th 0215 0.5 15 0848 2.8 85 1433 0.5 15 2110 3.0 91	13 F 0125 0.0 0 0756 3.2 98 1345 0.0 0 2023 3.6 110	28 Sa 0236 0.5 15 0855 2.6 79 1431 0.7 21 2104 3.2 98	13 M 0313 -0.3 -9 0945 2.9 88 1509 0.1 3 2155 4.1 125	28 Tu 0333 0.4 12 0951 2.5 76 1515 0.8 24 2153 3.5 107									
14 Th 0141 0.1 3 0816 3.4 104 1415 -0.1 -3 2047 3.3 101	29 F 0307 0.4 12 0939 2.7 82 1516 0.5 15 2150 3.1 94	14 Sa 0227 -0.2 -6 1025 2.7 82 1556 0.6 18 2227 3.2 98	29 M 0324 0.4 12 0945 2.5 76 1513 0.7 21 2146 3.3 101	14 Tu 0410 -0.3 -9 1045 2.9 88 1603 0.1 3 2250 4.2 128	29 W 0417 0.3 9 1039 2.5 76 1558 0.7 21 2238 3.6 110									
15 F 0242 -0.2 -6 0916 3.4 104 1507 -0.2 -6 2141 3.6 110	30 Sa 0354 0.3 9 1025 2.7 82 1556 0.6 18 2227 3.2 98	15 Su 0326 -0.4 -12 0959 3.1 94 1531 -0.1 -3 2212 4.1 125	30 M 0408 0.3 9 1031 2.5 76 1554 0.7 21 2228 3.4 104											

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Nantucket, Massachusetts, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F ●	0540 0.1 3 1210 2.7 82 1727 0.5 15	16 Sa	0020 3.9 119 0624 0.0 0 1305 3.0 91 1822 0.4 12	1 M	0035 3.9 119 0636 -0.1 -3 1310 3.3 101 1846 0.0 0	16 Tu	0127 3.4 104 0716 0.4 12 1349 3.2 98 1935 0.4 12	1 Th	0203 3.6 110 0742 -0.1 -3 1422 4.1 125 2021 -0.3 -9	16 F	0221 2.9 88 0757 0.7 21 1426 3.4 104 2036 0.4 12
2 Sa	0009 3.8 116 0622 0.0 0 1255 2.8 85 1814 0.4 12	17 Su	0107 3.7 113 0707 0.1 3 1347 3.0 91 1911 0.4 12	2 Tu	0126 3.9 119 0721 -0.2 -6 1359 3.5 107 1940 0.0 0	17 W	0207 3.2 98 0755 0.5 15 1426 3.3 101 2021 0.5 15	2 F	0259 3.5 107 0833 0.0 0 1517 4.1 125 2119 -0.2 -6	17 Sa	0304 2.8 85 0837 0.8 24 1509 3.4 104 2121 0.4 12
3 Su	0056 3.8 116 0705 -0.1 -3 1341 3.0 91 1904 0.3 9	18 M	0151 3.6 110 0750 0.1 3 1428 3.1 94 2000 0.5 15	3 W	0219 3.7 113 0808 -0.1 -3 1449 3.7 113 2037 -0.1 -3	18 Th	0249 3.1 94 0835 0.6 18 1506 3.3 101 2107 0.5 15	3 Sa	0357 3.3 101 0927 0.1 3 1614 4.1 125 2220 -0.1 -3	18 Su	0349 2.8 85 0919 0.8 24 1555 3.4 104 2208 0.5 15
4 M	0145 3.8 116 0749 -0.1 -3 1427 3.1 94 1956 0.2 6	19 Tu	0235 3.4 104 0832 0.3 9 1508 3.1 94 2050 0.5 15	4 Th	0314 3.6 110 0858 -0.1 -3 1541 3.9 119 2135 -0.1 -3	19 F	0333 2.9 88 0916 0.7 21 1548 3.3 101 2156 0.5 15	4 Su	0458 3.1 94 1024 0.3 9 1714 4.0 122 2323 0.0 0	19 M	0437 2.7 82 1004 0.9 27 1643 3.4 104 2259 0.5 15
5 Tu	0235 3.7 113 0835 -0.2 -6 1516 3.3 101 2051 0.2 6	20 W	0319 3.2 98 0915 0.4 12 1549 3.2 98 2141 0.6 18	5 F	0411 3.4 104 0950 0.0 0 1636 4.0 122 2237 0.0 0	20 Sa	0419 2.8 85 0959 0.8 24 1633 3.3 101 2246 0.6 18	5 M	0601 3.0 91 1125 0.4 12 1817 3.9 119 2351 0.5 15	20 Tu	0526 2.7 82 1054 0.9 27 1734 3.4 104 2351 0.5 15
6 W	0329 3.6 110 0923 -0.1 -3 1606 3.5 107 2150 0.1 3	21 Th	0405 3.0 91 0958 0.5 15 1631 3.2 98 2233 0.6 18	6 Sa	0510 3.2 98 1044 0.1 3 1733 4.0 122 2340 0.0 0	21 Su	0507 2.7 82 1044 0.8 24 1721 3.4 104 2338 0.6 18	6 Tu	0027 0.1 3 0705 3.0 91 1228 0.5 15 1920 3.8 116	21 W	0617 2.7 82 1147 0.8 24 1827 3.4 104
7 Th	0424 3.4 104 1013 -0.1 -3 1658 3.7 113 2251 0.1 3	22 F	0453 2.9 88 1042 0.6 18 1716 3.3 101 2327 0.6 18	7 Su	0613 3.0 91 1142 0.3 9 1833 4.0 122	22 M	0558 2.6 79 1132 0.9 27 1811 3.4 104	7 W	0130 0.2 6 0809 2.9 88 1330 0.5 15 2023 3.7 113	22 Th	0043 0.5 15 0709 2.7 82 1243 0.7 21 1922 3.5 107
8 F	0523 3.2 98 1106 0.0 0 1753 3.8 116 2355 0.1 3	23 O	0543 2.7 82 1128 0.7 21 1803 3.3 101 ● 0.1 3	8 M	0044 0.1 3 0717 2.9 88 1242 0.4 12 1934 4.0 122	23 Tu	0031 0.6 18 0650 2.6 79 1222 0.9 27 1902 3.5 107	8 Th	0228 0.3 9 0909 3.0 91 1430 0.5 15 2122 3.6 110	23 F	0134 0.4 12 0800 2.9 88 1339 0.5 15 2016 3.6 110
9 Sa	0624 3.1 94 1201 0.1 3 1849 3.9 119	24 Su	0021 0.6 18 0634 2.6 79 1215 0.8 24 1851 3.4 104	9 Tu	0147 0.1 3 0822 2.9 88 1342 0.4 12 2035 3.9 119	24 W	0124 0.6 18 0743 2.6 79 1314 0.8 24 1955 3.5 107	9 F	0320 0.3 9 1002 3.0 91 1525 0.5 15 2215 3.6 110	24 Sa	0224 0.3 9 0851 3.1 94 1435 0.3 9 2111 3.6 110
10 Su	0058 0.0 0 0727 2.9 88 1258 0.2 6 1947 4.0 122	25 M	0115 0.6 18 0727 2.5 76 1302 0.8 24 1940 3.4 104	10 W	0247 0.1 3 0924 2.9 88 1440 0.4 12 2134 3.9 119	25 Th	0214 0.5 15 0834 2.7 82 1406 0.7 21 2047 3.6 110	10 Sa	0406 0.4 12 1047 3.1 94 1615 0.4 12 2303 3.4 104	25 Su	0312 0.2 6 0941 3.4 104 1531 0.0 0 2206 3.7 113
11 M	0201 0.0 0 0832 2.8 85 1355 0.3 9 2046 4.1 125	26 Tu	0206 0.5 15 0820 2.5 76 1351 0.8 24 2030 3.5 107	11 Th	0341 0.1 3 1021 2.9 88 1536 0.4 12 2229 3.8 116	26 F	0302 0.3 9 0925 2.8 85 1459 0.5 15 2139 3.7 113	11 Su	0448 0.4 12 1127 3.2 98 1702 0.4 12 2345 3.3 101	26 M	0400 0.0 0 1030 3.6 110 1625 -0.2 -6 2301 3.7 113
12 Tu	0300 -0.1 -3 0935 2.8 85 1452 0.3 9 2143 4.1 125	27 W	0255 0.5 15 0912 2.5 76 1438 0.7 21 2119 3.6 110	12 F	0431 0.2 6 1112 3.0 91 1628 0.4 12 2319 3.7 113	27 Sa	0349 0.2 6 1014 3.0 91 1551 0.3 9 2231 3.8 116	12 M	0527 0.5 15 1202 3.2 98 1746 0.4 12 ● 0.3 9	27 Tu	0448 -0.1 -3 1120 3.9 119 1719 0.4 12 ● 3.7 113
13 W	0356 -0.1 -3 1034 2.8 85 1547 0.3 9 2239 4.0 122	28 Th	0340 0.3 9 1001 2.6 79 1526 0.6 18 2208 3.7 113	13 O	0516 0.2 6 1156 3.0 91 1717 0.4 12 ● 0.3 9	28 Su	0434 0.1 3 1102 3.3 101 1643 0.1 3 ● 2322 3.9 119	13 Tu	0024 3.2 98 0604 0.5 15 1235 3.3 101 1828 0.3 9	28 W	0536 -0.1 -3 1211 4.1 125 1814 -0.5 -15
14 Th	0449 -0.1 -3 1129 2.9 88 1641 0.3 9 2331 4.0 122	29 F	0425 0.2 6 1049 2.7 82 1614 0.5 15 2257 3.8 116	14 Su	0004 3.6 110 0557 0.2 6 1236 3.1 94 1804 0.4 12	29 M	0519 0.0 0 1150 3.5 107 1736 -0.1 -3	14 W	0102 3.1 94 0641 0.6 18 1310 3.3 101 1910 0.3 9	29 Th	0051 3.6 110 0625 -0.1 -3 1303 4.3 131 1908 -0.6 -18
15 F	0537 -0.1 -3 1219 2.9 88 1732 0.3 9	30 O	0508 0.1 3 1136 2.9 88 1703 0.3 9 ● 2345 3.9 119	15 M	0046 3.5 107 0637 0.3 9 1313 3.1 94 1850 0.4 12	30 Tu	0015 3.8 116 0605 -0.1 -3 1239 3.8 116 1830 -0.3 -9	15 Th	0141 3.0 91 0719 0.7 21 1347 3.4 104 1952 0.4 12	30 F	0146 3.5 107 0716 0.0 0 1358 4.3 131 2004 -0.5 -15
		31 Su	0552 0.0 0 1223 3.1 94 1754 0.2 6			31 W	0108 3.8 116 0653 -0.1 -3 1330 3.9 119 1924 -0.3 -9				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Nantucket, Massachusetts, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0244 3.3 101	16 Su 0239 2.7 82	1 Tu 0423 3.1 94	16 W 0343 2.7 82	1 Th 0451 3.1 94	16 F 0403 3.0 91						
0809 0.1 3	0801 0.8 24	0944 0.4 12	0902 0.7 21	1022 0.5 15	0936 0.4 12						
1454 4.2 128	1435 3.4 104	1630 3.8 116	1541 3.4 104	1659 3.3 101	1611 3.3 101						
2102 -0.4 -12	2050 0.3 9	2237 0.0 0	2152 0.2 6	2259 0.2 6	2210 0.0 0						
2 Su 0342 3.2 98	17 M 0323 2.7 82	2 0522 3.1 94	17 Th 0430 2.8 85	2 0544 3.1 94	17 Sa 0452 3.2 98						
0906 0.2 6	0844 0.8 24	1047 0.5 15	0956 0.6 18	1124 0.5 15	1035 0.3 9						
1553 4.1 125	1521 3.4 104	1731 3.5 107	1633 3.4 104	1756 3.1 94	1706 3.2 98						
2201 -0.2 -6	2135 0.3 9	2335 0.2 6	2240 0.2 6	2351 0.3 9	2300 0.0 0						
3 M 0443 3.1 94	18 Tu 0409 2.7 82	3 Th 0621 3.1 94	18 F 0519 3.0 91	3 Sa 0635 3.1 94	18 Su 0543 3.4 104						
1005 0.4 12	0930 0.8 24	1152 0.6 18	1054 0.5 15	1227 0.6 18	1136 0.2 6						
1654 4.0 122	1609 3.4 104	1833 3.3 101	1728 3.3 101	1854 2.9 88	1805 3.0 91						
● 2303 0.0 0	2223 0.4 12	2330 0.2 6	2352 0.0 0								
4 Tu 0545 3.0 91	19 W 0458 2.7 82	4 F 0032 0.3 9	19 Sa 0610 3.2 98	4 Su 0041 0.5 15	19 M 0636 3.6 110						
1108 0.5 15	1021 0.8 24	0717 3.1 94	1155 0.4 12	0723 3.2 98	1240 0.0 0						
1757 3.8 116	1701 3.4 104	1256 0.6 18	1826 3.2 98	1327 0.5 15	1906 2.9 88						
● 2314 0.4 12		1934 3.1 94		1951 2.7 82							
5 W 0005 0.2 6	20 Th 0548 2.8 85	5 Sa 0125 0.4 12	20 Su 0022 0.1 3	5 M 0130 0.6 18	20 Tu 0047 0.1 3						
0648 3.0 91	1117 0.7 21	0809 3.2 98	0701 3.4 104	0809 3.2 98	0731 3.8 116						
1212 0.5 15	1755 3.4 104	1357 0.5 15	1257 0.2 6	1422 0.5 15	1342 -0.1 -3						
1901 3.6 110		2032 3.0 91	1925 3.2 98	2045 2.6 79	2009 2.9 88						
6 Th 0105 0.3 9	21 F 0005 0.3 9	6 Su 0213 0.5 15	21 M 0115 0.1 3	6 Tu 0216 0.7 21	21 W 0143 0.1 3						
0748 3.1 94	0638 2.9 88	0855 3.3 101	0753 3.7 113	0853 3.3 101	0827 4.0 122						
1317 0.6 18	1217 0.6 18	1451 0.5 15	1358 0.0 0	1512 0.4 12	1442 -0.3 -9						
2003 3.5 107	1851 3.4 104	2125 2.9 88	2026 3.1 94	2135 2.5 76	2111 2.8 85						
7 F 0201 0.4 12	22 Sa 0057 0.3 9	7 M 0257 0.6 18	22 Tu 0208 0.1 3	7 W 0300 0.7 21	22 Th 0238 0.0 0						
0844 3.1 94	0729 3.1 94	0936 3.3 101	0847 3.9 119	0935 3.4 104	0924 4.1 125						
1417 0.5 15	1317 0.4 12	1540 0.4 12	1457 -0.3 -9	1557 0.3 9	1540 -0.4 -12						
2102 3.3 101	1949 3.4 104	2212 2.8 85	2126 3.1 94	2221 2.5 76	2212 2.8 85						
8 Sa 0251 0.4 12	23 Su 0148 0.2 6	8 Tu 0338 0.7 21	23 W 0301 0.0 0	8 Th 0341 0.7 21	23 F 0334 0.0 0						
0933 3.2 98	0820 3.4 104	1013 3.4 104	0940 4.1 125	1015 3.4 104	1020 4.2 128						
1512 0.5 15	1416 0.1 3	1624 0.3 9	1554 -0.5 -15	1639 0.2 6	1635 -0.5 -15						
2155 3.2 98	2047 3.4 104	2255 2.8 85	2225 3.1 94	2304 2.5 76	2310 2.9 88						
9 Su 0335 0.5 15	24 M 0238 0.1 3	9 W 0417 0.7 21	24 Th 0354 0.0 0	9 F 0422 0.7 21	24 Sa 1115 4.2 128						
1015 3.2 98	0911 3.7 113	1050 3.4 104	1034 4.3 131	1056 3.5 107	1115 4.2 128						
1600 0.4 12	1513 -0.1 -3	1704 0.2 6	1649 -0.6 -18	1718 0.2 6	1728 -0.5 -15						
2241 3.1 94	2144 3.4 104	2335 2.7 82	2323 3.1 94	2345 2.5 76	● 2310 2.9 88						
10 M 0415 0.6 18	25 Tu 0328 0.0 0	10 Th 0455 0.7 21	25 F 0446 0.0 0	10 Sa 0501 0.7 21	25 Su 0005 2.9 88						
1052 3.3 101	1002 4.0 122	1126 3.5 107	1129 4.4 134	1137 3.5 107	0522 0.0 0						
1645 0.4 12	1609 -0.4 -12	1743 0.2 6	1743 -0.6 -18	1756 0.1 3	1209 4.1 125						
2323 3.0 91	2241 3.4 104	● 2338 3.4 104			1819 -0.5 -15						
11 Tu 0453 0.6 18	26 W 0418 0.0 0	11 F 0013 2.7 82	26 Sa 0019 3.1 94	11 M 0025 2.6 79	26 M 0058 3.0 91						
1125 3.3 101	1054 4.2 128	0533 0.8 24	0539 0.0 0	0541 0.7 21	0616 0.0 0						
1726 0.3 9	1704 -0.6 -18	1204 3.5 107	1223 4.4 134	1218 3.6 110	1302 4.0 122						
● 2338 3.4 104		1822 0.2 6	1836 -0.6 -18	1835 0.1 3	1908 -0.4 -12						
12 W 0001 3.0 91	27 Th 0509 -0.1 -3	12 Sa 0052 2.7 82	27 Su 0115 3.1 94	12 M 0106 2.6 79	27 F 0149 3.0 91						
0530 0.7 21	1147 4.4 134	0611 0.8 24	0633 0.0 0	0622 0.6 18	0709 0.1 3						
1159 3.4 104	1758 -0.7 -21	1243 3.5 107	1318 4.2 128	1300 3.6 110	1353 3.8 116						
1806 0.3 9		1901 0.2 6	1928 -0.5 -15	1914 0.0 0	1956 -0.3 -9						
13 Th 0038 2.9 88	28 F 0034 3.3 101	13 Su 0132 2.7 82	28 M 0209 3.1 94	13 Tu 0148 2.7 82	28 W 0238 3.0 91						
0606 0.7 21	0600 -0.1 -3	0649 0.8 24	0728 0.1 3	0705 0.6 18	0802 0.2 6						
1235 3.4 104	1241 4.4 134	1324 3.5 107	1413 4.1 125	1344 3.6 110	1443 3.6 110						
1846 0.2 6	1852 -0.6 -18	1940 0.2 6	2021 -0.4 -12	1955 0.0 0	2044 -0.1 -3						
14 F 0117 2.8 85	29 Sa 0130 3.3 101	14 M 0214 2.7 82	29 Tu 0304 3.1 94	14 W 0231 2.7 82	29 Th 0325 3.1 94						
0643 0.8 24	0653 0.0 0	0730 0.7 21	0824 0.2 6	0751 0.5 15	0857 0.3 9						
1312 3.5 107	1336 4.4 134	1407 3.5 107	1508 3.8 116	1430 3.5 107	1533 3.3 101						
1926 0.3 9	1947 -0.6 -18	2022 0.2 6	2114 -0.2 -6	2037 0.0 0	2131 0.0 0						
15 Sa 0157 2.8 85	30 Su 0227 3.2 98	15 Tu 0258 2.7 82	30 W 0358 3.1 94	15 Th 0316 2.9 88	30 F 0412 3.1 94						
0721 0.8 24	0748 0.1 3	0814 0.7 21	0922 0.4 12	0841 0.4 12	0953 0.4 12						
1353 3.5 107	1433 4.2 128	1453 3.5 107	1603 3.6 110	1518 3.4 104	1624 3.1 94						
2007 0.3 9	2043 -0.4 -12	2106 0.2 6	2206 0.0 0	2122 0.0 0	2219 0.2 6						
● 2319 3.1 94											
13 M 0325 3.1 94											
0845 0.2 6											
1531 4.0 122											
2139 -0.2 -6											

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Woods Hole, Massachusetts, 2011

Times and Heights of High and Low Waters

January					February					March					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0522	2.4	73	16 Su	0512	1.9	58	1 Tu	0152	0.0	0	16 Tu	0012	-0.3	-9
	1324	-0.3	-9		1226	0.1	3		0640	2.2	67		0534	1.8	55
	1732	1.5	46		1718	1.3	40		1439	-0.2	-6		1331	-0.3	-9
					2327	0.0	0		1847	1.6	49		1831	1.9	58
2 Su	0100	-0.1	-3	17 M	0558	2.2	67	2 W	0230	0.0	0	17 Th	0114	-0.4	-12
	0612	2.5	76		1315	-0.1	-3		0722	2.2	67		0704	2.5	76
	1414	-0.3	-9		1806	1.5	46		1515	-0.1	-3		1416	-0.5	-15
	1821	1.6	49										1920	2.2	67
3 M	0151	-0.1	-3	18 Tu	0024	-0.2	-6	3 Th	0255	0.0	0	18 F	0214	-0.6	-18
	0659	2.5	76		0642	2.4	73		0804	2.1	64		0751	2.5	76
	1500	-0.3	-9		1401	-0.3	-9		1543	0.0	0		1501	-0.5	-15
	1908	1.6	49		1853	1.7	52		2017	1.8	55		0210	2.4	73
4 Tu	0233	0.0	0	19 W	0122	-0.3	-9	4 F	0305	0.0	0	19 Sa	0313	-0.7	-21
	0744	2.5	76		0727	2.5	76		0846	2.0	61		0839	2.5	76
	1542	-0.2	-6		1447	-0.4	-12		1554	0.0	0		1547	-0.6	-18
	● 1955	1.7	52		○ 1941	1.9	58		2102	1.8	55		2100	2.5	76
5 W	0303	0.0	0	20 Th	0220	-0.4	-12	5 Sa	0334	0.0	0	20 Su	0412	-0.6	-18
	0828	2.4	73		0813	2.6	79		0928	1.9	58		0928	2.3	70
	1620	-0.1	-3		1531	-0.5	-15		1603	0.1	3		1634	-0.5	-15
	2042	1.7	52		2030	2.1	64		2147	1.8	55		2153	2.6	79
6 Th	0325	0.1	3	21 F	0318	-0.5	-15	6 Su	0414	0.1	3	21 M	0514	-0.5	-15
	0913	2.2	67		0900	2.6	79		1010	1.8	55		1018	2.1	64
	1654	0.0	0		1617	-0.5	-15		1630	0.2	6		1725	-0.4	-12
	2129	1.7	52		2121	2.2	67		2232	1.7	52		2247	2.5	76
7 F	0356	0.2	6	22 Sa	0417	-0.4	-12	7 M	0500	0.2	6	22 Tu	0623	-0.4	-12
	0958	2.1	64		0949	2.4	73		1052	1.6	49		1110	1.8	55
	1718	0.1	3		1705	-0.5	-15		1705	0.2	6		1823	-0.2	-6
	2217	1.6	49		2214	2.3	70		2316	1.6	49		2342	2.4	73
8 Sa	0437	0.3	9	23 Su	0521	-0.4	-12	8 Tu	0554	0.3	9	23 W	0736	-0.3	-9
	1043	1.9	58		1040	2.2	67		1134	1.4	43		1203	1.6	49
	1732	0.2	6		1756	-0.4	-12		1745	0.3	9		1932	-0.1	-3
	2306	1.6	49		2308	2.3	70								
9 Su	0527	0.4	12	24 M	0632	-0.2	-6	9 W	0001	1.5	46	24 Th	0039	2.2	67
	1127	1.6	49		1132	2.0	61		0657	0.4	12		0848	-0.2	-6
	1759	0.3	9		1852	-0.3	-9		1217	1.2	37		1257	1.4	43
	2354	1.5	46						1833	0.4	12		2047	0.0	0
10 M	0627	0.5	15	25 Tu	0004	2.2	67	10 Th	0048	1.5	46	25 F	0139	2.0	61
	1211	1.4	43		0749	-0.2	-6		0805	0.4	12		0956	-0.1	-3
	1837	0.4	12		1225	1.7	52		1302	1.1	34		1354	1.2	37
					1954	-0.2	-6		1614	0.4	12		1633	0.7	21
11 Tu	0043	1.5	46						1745*	0.5	15		1746*	0.8	24
	0737	0.5	15	26 W	0102	2.2	67	11 F	0428	1.0	30	26 Sa	0243	1.9	58
	1256	1.3	40		0903	-0.1	-3		0539	1.1	34		1058	-0.1	-3
	1920	0.4	12		1320	1.5	46		0911	0.4	12		1454	1.2	37
12 W	0133	1.4	43	27 Th	0202	2.1	64	12 Sa	0239	1.5	46	27 Su	0347	1.8	55
	0848	0.5	15		1012	-0.1	-3		1009	0.3	9		1157	-0.1	-3
	1344	1.1	34		1418	1.3	40		1452	1.1	34		1554	1.2	37
	● 2007	0.4	12		2202	0.0	0		2119	0.3	9		2305	0.1	3
13 Th	0228	1.5	46	28 F	0306	2.0	61	13 Su	0342	1.6	49	28 M	0006	0.0	0
	0949	0.5	15		1116	-0.1	-3		1103	0.2	6		0445	1.8	55
	1437	1.1	34		1517	1.2	37		1552	1.2	37		1249	-0.1	-3
	2055	0.4	12		2307	0.0	0		2214	0.1	3		1649	1.4	43
14 F	0326	1.5	46	29 Sa	0408	2.0	61	14 M	0439	1.9	58	29 Tu	0302	1.7	52
	1043	0.4	12		1216	-0.2	-6		1155	0.0	0		1031	0.1	3
	1532	1.1	34		1616	1.3	40		1649	1.4	43		1522	1.3	40
	2143	0.3	9						2312	-0.1	-3		2201	0.1	3
15 Sa	0422	1.7	52	30 Su	0009	0.0	0	15 Tu	0530	2.1	64	15 Tu	0404	1.8	55
	1135	0.3	9		0505	2.1	64		1244	-0.1	-3		1120	0.0	0
	1627	1.2	37		1310	-0.2	-6		1741	1.7	52		1622	1.6	49
	2234	0.1	3		1711	1.3	40					2302	-0.1	-3	
31 Th				31 M	0105	0.0	0					31 Th	0129	0.1	3
					0555	2.1	64						0548	1.6	49
					1358	-0.2	-6						1331	0.2	6
					1800	1.5	46						1802	1.8	55

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Woods Hole, Massachusetts, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0204 0.1 3 0629 1.7 52 1324 0.3 9 1845 2.0 61	16 Sa 0106 -0.5 -15 0615 2.1 64 1309 -0.3 -9 1839 2.8 85		1 Su 0204 0.2 6 0638 1.5 46 1227 0.3 9 1900 2.2 67		16 M 0203 -0.5 -15 0641 2.0 61 1333 -0.2 -6 1910 3.1 94		1 W 0234 0.1 3 0729 1.6 49 1330 0.3 9 1955 2.4 73		16 Th 0338 -0.3 -9 0758 1.9 58 1509 0.1 3 2030 2.9 88		
			2 Sa 0226 0.1 3 0708 1.7 52 1321 0.2 6 1926 2.1 64	17 Su 0206 -0.6 -18 0705 2.1 64 1359 -0.4 -12 O 1929 3.0 91		2 M 0219 0.1 3 0718 1.6 49 1311 0.2 6 1940 2.2 67		17 Tu 0258 -0.5 -15 0731 2.0 61 1427 -0.1 -3 O 2000 3.0 91		2 Th 0315 0.0 0 0812 1.7 52 1422 0.2 6 2037 2.4 73	
3 Su 0236 0.0 0 0748 1.7 52 1353 0.2 6 ● 2006 2.1 64	18 M 0304 -0.7 -21 0754 2.1 64 1449 -0.3 -9 2020 3.0 91		3 Tu 0250 0.0 0 0758 1.6 49 1357 0.2 6 ● 2020 2.2 67		18 W 0351 -0.5 -15 0821 1.9 58 1521 -0.1 -3 2051 2.9 88		3 F 0359 0.0 0 0856 1.7 52 1514 0.2 6 2120 2.4 73		18 Sa 0513 -0.1 -3 0938 1.9 58 1650 0.3 9 2207 2.5 76		
			4 M 0303 0.0 0 0828 1.7 52 1431 0.2 6 2047 2.1 64	19 Tu 0400 -0.7 -21 0843 2.0 61 1540 -0.2 -6 2111 2.9 88		4 W 0330 0.0 0 0840 1.6 49 1444 0.2 6 2100 2.2 67		19 Th 0444 -0.4 -12 0911 1.8 55 1615 0.1 3 2142 2.7 82		4 Sa 0446 0.0 0 0943 1.7 52 1608 0.3 9 2206 2.4 73	
5 Tu 0342 0.0 0 0909 1.6 49 1512 0.2 6 2127 2.0 61	20 W 0457 -0.6 -18 0934 1.9 58 1634 -0.1 -3 2204 2.7 82		5 Th 0415 0.0 0 0922 1.6 49 1531 0.3 9 2143 2.2 67		20 F 0538 -0.3 -9 1003 1.8 55 1715 0.2 6 2234 2.5 76		5 Su 0534 0.0 0 1033 1.8 55 1707 0.3 9 2254 2.3 70		20 M 0649 0.2 6 1120 1.8 55 1902 0.6 18 2343 2.0 61		
			6 W 0427 0.0 0 0950 1.5 46 1554 0.3 9 2208 1.9 58	21 Th 0557 -0.4 -12 1026 1.7 52 1736 0.1 3 2258 2.5 76		6 F 0504 0.0 0 1007 1.5 46 1621 0.3 9 2227 2.1 64		21 Sa 0635 -0.1 -3 1055 1.7 52 1829 0.4 12 2325 2.2 67		6 M 0625 0.0 0 1125 1.9 58 1812 0.4 12 2345 2.2 67	
7 Th 0518 0.1 3 1033 1.4 43 1639 0.3 9 2251 1.9 58	22 F 0700 -0.3 -9 1119 1.6 49 1855 0.2 6 2352 2.2 67		7 Sa 0557 0.1 3 1055 1.5 46 1716 0.4 12 2315 2.1 64		22 Su 0732 0.0 0 1148 1.6 49 1948 0.5 15		7 Tu 0716 0.0 0 1218 2.0 61 1924 0.4 12		22 W 0031 1.8 55 0809 0.5 15 1303 1.8 55 2122 0.7 21		
			8 F 0615 0.2 6 1118 1.3 40 1442 0.4 12 1605 0.5 15 1731* 0.4 12	23 Sa 0804 -0.1 -3 1213 1.5 46 2017 0.3 9		8 Su 0652 0.1 3 1145 1.5 46 1821 0.4 12		23 M 0016 2.0 61 0828 0.2 6 1241 1.6 49 2059 0.5 15		8 W 0037 2.1 64 0807 0.0 0 1314 2.1 64 ● 2036 0.3 9	
9 Sa 0716 0.2 6 1205 1.3 40 1523 0.4 12	24 Su 0047 1.9 58 0905 0.0 0 1308 1.4 43 ● 1541 0.9 27		9 M 0005 2.0 61 0747 0.1 3 1238 1.6 49 1931 0.4 12		24 Tu 0107 1.7 52 0919 0.3 9 1335 1.6 49 ● 2203 0.5 15		9 Th 0133 1.9 58 0856 0.0 0 1412 2.3 70 2146 0.2 6		24 F 0209 1.4 43 0828 0.6 18 1451 1.8 55 2310 0.7 21		
			10 Su 0028 1.8 55 0815 0.2 6 1258 1.3 40 1611 0.5 15 1739* 0.6 18	25 M 0143 1.7 52 1001 0.1 3 1404 1.4 43 2233 0.4 12		10 Tu 0100 1.9 58 0838 0.0 0 1334 1.7 52 ● 2040 0.3 9		25 W 0159 1.5 46 1001 0.4 12 1431 1.6 49 2301 0.5 15		10 F 0232 1.8 55 0944 0.0 0 1512 2.4 73 2253 0.1 3	
11 M 0125 1.8 55 0909 0.1 3 1355 1.4 43 ● 2048 0.3 9	26 Tu 0239 1.5 46 1051 0.2 6 1502 1.5 46 2331 0.3 9		11 W 0158 1.9 58 0925 0.0 0 1434 1.9 58 2147 0.2 6		26 Th 0252 1.4 43 1013 0.5 15 1527 1.7 52 2353 0.5 15		11 Sa 0332 1.7 52 1032 0.0 0 1612 2.6 79 2358 -0.1 -3		26 Su 0301 1.3 40 0904 0.6 18 1546 1.9 58 2353 0.6 18		
			12 Tu 0227 1.8 55 0958 0.0 0 1457 1.6 49 2152 0.1 3	27 W 0335 1.4 43 1136 0.3 9 1559 1.6 49		12 Th 0259 1.8 55 1012 -0.1 -3 1534 2.2 67 2253 0.0 0		27 Su 0345 1.3 40 0953 0.5 15 1620 1.9 58		12 M 0431 1.7 52 1124 0.0 0 1709 2.8 85	
13 W 0330 1.9 58 1045 -0.1 -3 1557 1.9 58 2256 -0.1 -3	28 Th 0024 0.3 9 0427 1.4 43 1208 0.4 12 1650 1.8 55		13 F 0400 1.8 55 1058 -0.1 -3 1632 2.5 76		28 Sa 0038 0.5 15 0435 1.3 40 1023 0.5 15 1709 2.0 61		13 M 0100 -0.2 -6 0527 1.8 55 1219 0.0 0 1802 2.9 88		28 Tu 0054 0.5 15 0532 1.5 46 1120 0.4 12 1809 2.3 70		
			14 Th 0429 2.0 61 1131 -0.2 -6 1654 2.2 67	29 F 0108 0.3 9 0514 1.4 43 1123 0.4 12 1736 1.9 58		29 Sa 0000 -0.2 -6 0457 1.9 58 1147 -0.1 -3 1727 2.8 85		14 Tu 0111 0.4 12 0522 1.4 43 1103 0.4 12 1753 2.1 64		29 W 0157 -0.3 -9 0619 1.8 55 1319 0.0 0 1853 3.0 91	
15 F 0001 -0.3 -9 0524 2.1 64 1220 -0.3 -9 1748 2.6 79	30 Sa 0142 0.2 6 0557 1.5 46 1148 0.4 12 1819 2.1 64		15 Su 0104 -0.3 -9 0550 1.9 58 1239 -0.2 -6 1820 3.0 91		30 M 0134 0.3 9 0605 1.5 46 1148 0.4 12 1835 2.3 70		15 W 0249 -0.3 -9 0709 1.9 58 1416 0.0 0 ● 1942 3.0 91		30 Th 0210 0.2 6 0701 1.7 52 1309 0.2 6 1931 2.6 79		
			31 Tu 0158 0.2 6 0647 1.5 46 1238 0.3 9 1915 2.3 70								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Woods Hole, Massachusetts, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0253 0.1 3 0745 1.8 55 1406 0.2 6 ● 2013 2.6 79	16 Sa 0402 0.0 0 0823 2.0 61 1543 0.3 9 2053 2.6 79		1 M 0348 -0.1 -3 0857 2.4 73 1550 0.0 0 2122 2.6 79	16 Tu 0356 0.4 12 0929 2.2 67 1616 0.5 15 2151 2.1 64		1 Th 0450 -0.1 -3 1019 2.9 88 1751 -0.1 -3 2242 2.2 67		16 F 0359 0.5 15 1027 2.1 64 1721 0.5 15 2246 1.6 49			
2 Sa 0336 0.0 0 0832 1.9 58 1502 0.1 3 2058 2.6 79	17 Su 0440 0.1 3 0911 2.1 64 1619 0.4 12 2138 2.4 73		2 Tu 0434 -0.1 -3 0948 2.6 79 1651 0.0 0 2212 2.5 76	17 W 0413 0.5 15 1016 2.1 64 1657 0.6 18 2235 1.9 58		2 F 0546 0.1 3 1115 2.8 85 1903 0.0 0 2336 2.0 61		17 Sa 0441 0.6 18 1112 2.0 61 1821 0.6 18 2331 1.5 46			
3 Su 0420 -0.1 -3 0920 2.0 61 1559 0.1 3 2145 2.6 79	18 M 0514 0.3 9 1000 2.0 61 1655 0.5 15 2224 2.2 67		3 W 0522 -0.1 -3 1041 2.6 79 1758 0.1 3 2303 2.3 70	18 Th 0444 0.6 18 1102 2.0 61 1749 0.7 21 2320 1.7 52		3 Sa 0650 0.2 6 1212 2.7 82 2015 0.1 3		18 Su 0249 0.7 21 1158 1.9 58 1928 0.7 21			
4 M 0506 -0.1 -3 1011 2.2 67 1659 0.2 6 2234 2.5 76	19 Tu 0534 0.4 12 1049 2.0 61 1740 0.6 18 2309 2.0 61		4 Th 0614 0.0 0 1136 2.6 79 1912 0.1 3 2356 2.1 64	19 F 0522 0.6 18 1149 1.9 58 1852 0.7 21		4 Su 0031 1.8 55 0804 0.3 9 1312 2.5 76 ● 2122 0.1 3		19 M 0017 1.4 43 0325 0.7 21 1247 1.8 55 2032 0.6 18			
5 Tu 0554 -0.1 -3 1103 2.3 70 1805 0.2 6 2324 2.3 70	20 W 0547 0.5 15 1138 1.9 58 1842 0.7 21 2355 1.8 55		5 F 0712 0.1 3 1233 2.6 79 2026 0.1 3	20 Sa 0004 1.6 49 0608 0.7 21 1238 1.9 58 2005 0.8 24		5 M 0128 1.6 49 0918 0.3 9 1413 2.4 73 2224 0.1 3		20 Tu 0107 1.4 43 0408 0.7 21 0550 0.9 27 ● 0734 0.8 24			
6 W 0645 0.0 0 1157 2.3 70 1918 0.3 9	21 Th 0616 0.6 18 1227 1.9 58 2011 0.8 24		6 Sa 0050 1.9 58 0814 0.2 6 1332 2.5 76 ● 2135 0.1 3	21 Su 0356 0.8 24 0523 0.9 27 0701 0.8 24 1329* 1.8 55		6 Tu 0228 1.6 49 1026 0.3 9 1516 2.3 70 2322 0.1 3		21 W 0202 1.4 43 0500 0.8 24 0625 0.9 27 0836 0.7 21			
7 Th 0016 2.1 64 0738 0.1 3 1253 2.4 73 2033 0.2 6	22 F 0040 1.6 49 0655 0.7 21 1317 1.8 55 2117 0.8 24		7 Su 0148 1.7 52 0918 0.3 9 1433 2.5 76 2239 0.1 3	22 M 0140 1.4 43 0438 0.8 24 0609 0.9 27 0759 0.8 24 1425* 1.8 55		7 W 0328 1.6 49 1129 0.3 9 1616 2.2 67		22 Th 0301 1.5 46 0935 0.5 15 1540 2.0 61 2253 0.3 9			
8 F 0111 1.9 58 0831 0.1 3 1351 2.5 76 ● 2143 0.2 6	23 Sa 0128 1.4 43 0740 0.7 21 1411 1.8 55 ● 2207 0.8 24		8 M 0247 1.6 49 1022 0.3 9 1536 2.5 76 2340 0.1 3	23 Tu 0235 1.3 40 0531 0.8 24 0646 0.9 27 0855 0.7 21 1524* 1.9 58		8 Th 0016 0.1 3 0426 1.7 52 1227 0.3 9 1707 2.2 67		23 F 0359 1.8 55 1033 0.3 9 1634 2.2 67 2336 0.2 6			
9 Sa 0208 1.8 55 0925 0.1 3 1452 2.5 76 2249 0.1 3	24 Su 0218 1.3 40 0828 0.7 21 1508 1.8 55 2247 0.7 21		9 Tu 0348 1.6 49 1127 0.3 9 1636 2.5 76 2330 0.4 12	24 W 0333 1.4 43 0949 0.5 15 1619 2.1 64 2330 0.4 12		9 F 0104 0.2 6 0518 1.9 58 1319 0.3 9 1752 2.2 67		24 Sa 0453 2.1 64 1132 0.1 3 1725 2.3 70			
10 Su 0308 1.7 52 1019 0.2 6 1554 2.6 79 2352 0.0 0	25 M 0313 1.3 40 0917 0.6 18 1604 1.9 58 2327 0.6 18		10 W 0037 0.1 3 0445 1.7 52 1229 0.3 9 1729 2.5 76	25 Th 0428 1.6 49 1044 0.4 12 1709 2.3 70		10 Sa 0146 0.2 6 0605 2.1 64 1403 0.3 9 1834 2.2 67		25 Su 0021 0.0 0 0544 2.4 73 1234 0.1 3 1813 2.5 76			
11 M 0408 1.7 52 1117 0.2 6 1652 2.7 82	26 Tu 0408 1.4 43 1007 0.5 15 1655 2.1 64		11 Th 0128 0.1 3 0538 1.8 55 1324 0.3 9 1816 2.6 79	26 F 0015 0.3 9 0520 1.9 58 1142 0.2 6 1755 2.5 76		11 Su 0220 0.3 9 0649 2.2 67 1439 0.3 9 1915 2.2 67		26 M 0107 -0.1 -3 0634 2.7 82 1336 -0.2 -6 1900 2.5 76			
12 Tu 0052 0.0 0 0505 1.7 52 1219 0.2 6 1746 2.8 85	27 W 0010 0.5 15 0459 1.5 46 1059 0.4 12 1740 2.3 70		12 F 0214 0.1 3 0626 2.0 61 1412 0.3 9 1900 2.5 76	27 Sa 0100 0.1 3 0609 2.2 67 1242 0.1 3 1839 2.6 79		12 M 0238 0.4 12 0733 2.3 70 1504 0.3 9 ● 1956 2.1 64		27 Tu 0154 -0.2 -6 0723 3.0 91 1436 -0.4 -12 ● 1948 2.5 76			
13 W 0146 -0.1 -3 0557 1.8 55 1321 0.2 6 1835 2.8 85	28 Th 0054 0.3 9 0547 1.7 52 1155 0.3 9 1823 2.5 76		13 Sa 0254 0.1 3 0712 2.1 64 1453 0.3 9 ● 1942 2.5 76	28 Tu 0145 0.0 0 0656 2.4 73 1343 -0.1 -3 ● 1925 2.7 82		13 W 0229 0.4 12 0816 2.3 70 1519 0.3 9 2037 2.1 64		28 F 0241 -0.2 -6 0813 3.1 94 1535 -0.4 -12 2037 2.4 73			
14 Th 0235 -0.1 -3 0647 1.9 58 1415 0.2 6 1922 2.8 85	29 F 0138 0.2 6 0634 1.9 58 1254 0.2 6 1906 2.6 79		14 Su 0328 0.2 6 0758 2.2 67 1524 0.3 9 2025 2.4 73	29 M 0229 -0.1 -3 0745 2.7 82 1443 -0.2 -6 2011 2.7 82		14 W 0250 0.4 12 0859 2.3 70 1549 0.4 12 2119 1.9 58		29 Th 0330 -0.2 -6 0904 3.1 94 1636 -0.4 -12 2128 2.2 67			
15 F 0320 -0.1 -3 0735 2.0 61 1502 0.2 6 ● 2008 2.7 82	30 Sa 0221 0.0 0 0720 2.1 64 1353 0.1 3 ● 1949 2.7 82		15 M 0351 0.3 9 0843 2.2 67 1547 0.4 12 2108 2.2 67	30 Tu 0314 -0.2 -6 0834 2.8 85 1543 -0.2 -6 2100 2.6 79		15 Th 0322 0.5 15 0943 2.2 67 1631 0.4 12 2202 1.8 55		30 F 0422 -0.1 -3 0958 3.0 91 1740 -0.3 -9 2221 2.0 61			
			31 Su 0305 -0.1 -3 0808 2.3 70 1452 0.0 0 2035 2.7 82	31 W 0401 -0.1 -3 0926 2.9 88 1644 -0.2 -6 2150 2.4 73							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Woods Hole, Massachusetts, 2011

Times and Heights of High and Low Waters

October			November			December					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 1054 1849 2315	0.1	3	16 Su 1038 1758 2300	0.5	15	1 Tu 1224 2037	0.3	9	16 W 1142 1922	0.5	15
	2.8	85		2.0	61		2.2	67		2.0	61
	-0.1	-3		0.4	12		0.0	0		0.2	6
	1.9	58		1.5	46					1.8	55
2 Su 1151 1958	0.2	6	17 M 1124 1859 2348	0.6	18	2 W 0856 1319 2135	1.6	49	2 Th 0657 1234 2013	1.5	46
	2.6	79		1.9	58		0.4	12		1.9	58
	0.0	0		0.5	15		2.0	61		1.6	49
				1.4	43		0.1	3		0.3	9
3 M 1250 ● 2103	0.011	52	18 Tu 0439 0605 1212 1958	0.6	18	3 Th 0402 0518 1003 1415*	1.6	49	18 F 0808 1329 2059	1.6	49
	0.3	9		0.8	24		1.3	40		1.9	58
	2.4	73		0.7	21		0.4	12		0.1	3
	0.0	0		1.9	58		1.2	37		0.4	12
4 Tu 0346 0457 0912 ● 1349*	0.108	49	19 W 0344 0522 0714 1304*	1.4	43	4 F 1103 1511 2315	1.6	49	19 Sa 0206 1428 2144	1.8	55
	1.0	30		0.7	21		0.4	12		1.6	49
	34			0.8	24		1.6	49		1.3	40
	1.1	34		0.7	21		0.3	9		0.0	0
5 W 1019 1450 2258	0.207	67	20 Th 0437 0556 0821 1402*	1.5	46	5 Sa 1159 1603 2355	1.7	52	5 M 1019 1528 2228	2.1	64
	0.3	9		0.8	24		0.3	9		1.3	40
	2.0	61		0.9	27		1.5	46		0.4	12
	0.1	3		0.6	18		0.4	12		0.4	12
6 Th 1120 1547	0.307	49	21 F 0924 1502 2348	1.7	52	6 Su 1248 1651	1.9	58	6 M 1123 1627 2314	2.4	73
	0.3	9		0.4	12		0.3	9		1.8	55
	1.9	58		1.9	58		1.5	46		1.3	40
	0.2	6		0.2	6		0.2	6		0.3	9
7 F 1216 1639	0.404	52	22 Sa 1024 1600 2300	1.9	58	7 M 0013 0519 1330	0.4	12	22 Tu 0501 1227 1721	2.7	82
	0.3	9		0.2	6		2.0	61		0.3	9
	1.9	58		2.0	61		0.6	12		1.4	43
				0.0	0		1.6	49		0.3	9
8 Sa 1306 1724	0.033	9	23 Su 0428 1126 1655 2345	2.3	70	8 Tu 0603 1402 1817	0.2	6	23 W 0004 0554 1328	-0.2	-6
	0.456	58		0.0	0		0.3	9		0.2	6
	1.9	58		2.1	64		0.4	12		0.4	12
	1.9	58		-0.1	-3		1.6	49		0.6	12
9 Su 0543 1348	0.110	12	24 M 0522 1229 1746	2.6	79	9 W 0004 0645 1424	0.3	9	9 Th 0057 0645 1426	-0.3	-9
	2.1	64		-0.2	-6		2.3	70		3.1	94
	0.3	9		2.2	67		0.2	6		0.5	-15
	1.9	58		2.2	67		1.6	49		1.0	46
10 M 1422 1846	0.127	12	25 Tu 0032 0613 1331 1836	-0.2	-6	10 Th 0045 0725 1442 1939	0.3	9	10 F 0152 0736 1521 ● 1954	-0.3	-9
	2.2	67		2.9	88		2.3	70		3.1	94
	0.3	9		-0.4	-12		0.2	6		-0.5	-15
	1.9	58		-12			1.7	52		2.0	61
11 Tu 1444	0.059	12	26 W 0121 0703 1431 ● 1927	-0.2	-6	11 F 0130 0806 1515 2020	0.3	9	11 Sa 0248 0827 1614 2044	-0.2	-6
	2.3	70		3.1	94		2.3	70		3.0	91
	0.3	9		-0.5	-15		0.2	6		-0.5	-15
	1.9	58		2.2	67		1.6	49		0.0	0
12 W 1459	0.126	12	27 Th 0212 0753 1529 2015	-0.2	-6	12 Sa 0216 0846 1556 2102	0.3	9	12 M 0344 0918 1709 2136	-0.1	-3
	2.4	73		3.2	98		2.3	70		2.9	88
	0.3	9		-0.5	-15		0.2	6		-0.4	-12
	1.8	55		2.2	67		1.6	49		1.8	55
13 Th 1530	0.0203	12	28 F 0305 0845 1627 2106	-0.2	-6	13 Su 0303 0927 1643 2147	0.3	9	13 M 0443 1010 1806 2230	0.0	0
	2.3	70		3.2	98		2.2	67		2.6	79
	0.3	9		-0.5	-15		0.2	6		-0.3	-9
	1.8	55		2.0	61		1.5	46		1.7	52
14 F 1612	0.0244	12	29 Sa 0359 0938 1727 2159	-0.1	-3	14 M 0352 1010 1734 2233	0.4	12	14 Tu 0553 1102 1905 2324	0.2	6
	2.3	70		3.0	91		2.1	64		2.4	73
	0.3	9		-0.4	-12		0.2	6		-0.1	-3
	1.7	52		1.9	58		1.5	46		1.0	46
15 Sa 1701	0.0326	12	30 Su 0501 1033 1831 2253	0.1	3	15 Tu 0446 1055 1828 2322	0.4	12	15 W 0714 1154 2004 2349	0.3	9
	2.1	64		2.8	85		2.0	61		2.1	64
	0.4	12		-0.2	-6		0.2	6		0.0	0
	1.6	49		1.8	55		1.5	46		1.7	52
31 Sa	0.0640	12	31 M 0616 1128 1935 2349	0.2	6				27 Tu 0427 0945 1735 2204	-0.1	-3
	0.4	12		2.5	76					2.4	73
	0.1	-3		-0.1	-3					-0.2	-6
	1.6	49		1.6	49					1.8	55

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Newport, Rhode Island, 2011

Times and Heights of High and Low Waters

January				February				March						
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height			
h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 Sa	0502	4.0	122	16 Su	0421	3.3	101	1 Tu	0631	3.7	113			
1128	-0.1	-3		1053	0.2	6	Tu	1234	-0.1	-3				
1724	3.2	98		1653	2.8	85	1846	3.4	104	W	1157	-0.4	-12	
2251	-0.2	-6		2222	-0.2	-6	1812	3.7	113	16	0545	3.9	119	
							2349	-0.7	-21	Tu	1137	0.2	6	
									1741	3.2	98			
									2333	0.1	3			
										16	0422	3.6	110	
										W	1037	-0.1	-3	
										16	1654	3.6	110	
										2239	-0.4	-12		
2 Su	0556	4.0	122	17 M	0517	3.6	110	2 W	0015	-0.2	-6			
1212	-0.1	-3		1140	-0.1	-3	17 Th	0636	4.2	128				
1816	3.3	101		1746	3.1	94	1240	-0.6	-18	2 Tu	0611	3.4	104	
2337	-0.3	-9		2312	-0.4	-12	1901	4.1	125	W	1200	0.1	3	
										1825	3.4	104		
										17	0521	3.9	119	
										Th	1121	-0.4	-12	
										1748	4.1	125		
										2335	-0.7	-21		
3 M	0645	4.1	125	18 Tu	0608	3.9	119	3 Th	0056	-0.3	-9			
1251	-0.2	-6		1225	-0.3	-9	18 F	0043	-0.9	-27	3 Th	0008	0.0	0
1903	3.4	104		1835	3.4	104	0724	4.3	131	18 F	0614	4.1	125	
							1322	-0.8	-24	W	1205	-0.6	-18	
							O	1949	4.4	134	1839	4.5	137	
4 Tu	0022	-0.3	-9	19 W	0003	-0.6	-18	4 F	0136	-0.3	-9			
0731	4.0	122		0656	4.1	125	0830	3.5	107	19 Sa	0135	-1.0	-30	
1326	-0.2	-6		1309	-0.5	-15	1400	-0.3	-9	4 F	0043	-0.2	-6	
● 1948	3.5	107		O	1922	3.7	113	2038	4.6	140	19 Sa	0704	4.3	131
										1254	-0.2	-6		
										● 1939	3.7	113		
5 W	0107	-0.3	-9	20 Th	0054	-0.8	-24	5 Sa	0215	-0.3	-9			
0814	3.9	119		0743	4.3	131	0907	3.4	104	20 Su	0225	-1.0	-30	
1359	-0.2	-6		1351	-0.6	-18	1433	-0.3	-9	5 Sa	0120	-0.2	-6	
2032	3.5	107		2010	3.9	119	2121	3.4	104	20 Su	0803	3.4	104	
										1327	-0.2	-6		
										2013	3.7	113		
6 Th	0150	-0.3	-9	21 F	0145	-0.8	-24	6 Su	0253	-0.2	-6			
0856	3.7	113		0832	4.3	131	0942	3.2	98	21 M	0315	-0.9	-27	
1432	-0.2	-6		1431	-0.7	-21	1506	-0.3	-9	6 Su	0156	-0.2	-6	
2114	3.4	104		2100	4.1	125	2157	3.3	101	21 M	0836	3.3	101	
										1400	-0.3	-9		
										2046	3.6	110		
7 F	0233	-0.2	-6	22 Sa	0235	-0.8	-24	7 M	0330	-0.1	-3			
0937	3.5	107		0921	4.2	128	1018	3.0	91	22 Tu	0404	-0.6	-18	
1505	-0.2	-6		1510	-0.7	-21	1540	-0.2	-6	7 M	0231	-0.2	-6	
2156	3.3	101		2151	4.1	125	2233	3.2	98	22 Tu	0910	3.2	98	
										1406	3.7	113		
										2119	3.5	107		
8 Sa	0314	0.0	0	23 Su	0325	-0.7	-21	8 Tu	0407	0.1	3			
1018	3.2	98		1013	4.0	122	1056	2.8	85	23 W	0457	-0.2	-6	
1540	-0.1	-3		1551	-0.6	-18	1615	0.0	0	8 Tu	0306	-0.1	-3	
2237	3.2	98		2243	4.1	125	2310	3.0	91	23 W	0945	3.1	94	
										1507	-0.1	-3		
										2154	3.4	104		
9 Su	0356	0.1	3	24 M	0417	-0.5	-15	9 W	0447	0.3	9			
1057	3.0	91		1106	3.7	113	1136	2.6	79	24 Th	0013	3.9	119	
1616	0.0	0		1634	-0.5	-15	1654	0.1	3	9 W	0605	0.1	3	
2318	3.1	94		2338	4.0	122	2351	2.9	88	24 Th	1238	3.1	94	
										● 1750	0.1	3		
										2231	3.3	101		
10 M	0440	0.3	9	25 Tu	0514	-0.2	-6	10 Th	0534	0.5	15			
1137	2.8	85		1201	3.4	104	1221	2.5	76	25 F	0114	3.6	110	
1656	0.1	3		1723	-0.3	-9	1740	0.2	6	25 F	0805	0.3	9	
2358	3.0	91								1339	2.9	88		
										1905	0.3	9		
11 Tu	0528	0.5	15	26 W	0035	3.8	116	11 Sa	0038	2.9	88			
1218	2.6	79		0627	0.1	3	6 F	0637	0.6	18				
1741	0.2	6		1258	3.2	98	1313	2.4	73	26 Sa	0219	3.3	101	
				● 1821	-0.1	-3	● 1837	0.3	9	11 F	0927	0.4	12	
										1444	2.8	85		
										2101	0.4	12		
12 W	0040	2.9	88	27 Th	0135	3.7	113	12 Su	0133	2.9	88			
0629	0.6	18		0819	0.2	6	8 Sa	0809	0.6	18				
1303	2.5	76		1359	2.9	88	1412	2.4	73	27 M	0327	3.2	98	
● 1833	0.3	9		1946	0.1	3	1946	0.3	9	12 Su	0550	0.6	18	
										1551	2.9	88		
										1245	2.6	79		
										● 1755	0.4	12		
13 Th	0126	2.8	85	28 F	0239	3.5	107	13 M	0237	3.0	91			
0748	0.7	21		0938	0.2	6	9 Su	0929	0.5	15				
1354	2.4	73		1504	2.8	85	1518	2.6	79	28 Th	0431	3.3	101	
1934	0.3	9		2056	0.1	3	2055	0.1	3	13 M	1106	0.3	9	
										2257	0.2	6		
14 F	0220	2.9	88	29 Sa	0346	3.5	107	14 M	0346	3.2	98			
0904	0.6	18		1037	0.2	6	1025	0.2	6	14 M	0849	0.5	15	
1452	2.4	73		1610	2.9	88	1623	2.9	88	14 M	1449	2.8	85	
2034	0.2	6		2159	0.1	3	2157	-0.1	-3	2026	0.2	6		
15 Sa	0320	3.0	91	30 Su	0449	3.5	107	15 Tu	0450	3.5	107			
1002	0.4	12		1125	0.1	3	1112	-0.1	-3	15 Tu	0315	3.3	101	
1555	2.6	79		1709	3.0	91	1720	3.3	101	15 W	0950	0.2	6	
2130	0.0	0		2249	0.0	0	2254	-0.4	-12	15 W	1554	3.2	98	
										2137	0.0	0		
31 M	0543	3.6	110											

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Newport, Rhode Island, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0623	3.3	101	16 Sa 0551	4.0	122	1 Su 0626	3.2	98	1 W 0055	0.2	6
1143	0.1	3	1130	-0.5	-15	1139	0.1	3	0710	3.3	101
1835	3.7	113	1817	4.8	146	1837	3.9	119	1226	0.1	3
									● 1920	4.0	122
2 Sa 0024	0.0	0	17 Su 0015	-0.7	-21	2 M 0036	0.1	3	2 Th 0137	0.1	3
0659	3.3	101	0642	4.2	128	0701	3.3	101	0751	3.4	104
1217	0.0	0	1216	-0.7	-21	1217	0.0	0	1308	0.1	3
1909	3.8	116	○ 1907	5.1	155	1911	3.9	119	2000	4.1	125
3 Su 0059	-0.1	-3	18 M 0107	-0.8	-24	3 Tu 0115	0.1	3	3 F 0216	0.1	3
0733	3.4	104	0732	4.2	128	0737	3.3	101	0804	3.4	104
1252	-0.1	-3	1302	-0.7	-21	1255	0.0	0	1324	-0.4	-12
● 1942	3.8	116	1957	5.1	155	● 1945	3.9	119	2030	4.8	146
4 M 0135	-0.1	-3	19 Tu 0158	-0.7	-21	4 W 0152	0.0	0	4 Sa 0254	0.1	3
0806	3.3	101	0823	4.2	128	0815	3.3	101	0919	3.5	107
1327	-0.1	-3	1349	-0.6	-18	1333	0.0	0	1413	0.1	3
2014	3.8	116	2048	4.9	149	2021	3.9	119	2121	4.6	140
5 Tu 0210	-0.1	-3	20 W 0247	-0.6	-18	5 Th 0229	0.1	3	5 Su 0330	0.1	3
0841	3.3	101	0914	4.0	122	0855	3.3	101	0947	3.8	116
1402	-0.1	-3	1435	-0.5	-15	1411	0.1	3	1500	0.0	0
2047	3.7	113	2140	4.7	143	2100	3.9	119	2213	4.2	128
6 W 0245	0.0	0	21 Th 0334	-0.3	-9	6 F 0304	0.2	6	6 M 0409	0.1	3
0917	3.2	98	1007	3.8	116	0938	3.2	98	0940	3.6	110
1436	0.0	0	1520	-0.2	-6	1449	0.2	6	1058	3.6	110
2123	3.6	110	2234	4.3	131	2144	3.8	116	1608	0.2	6
7 Th 0318	0.1	3	22 F 0422	0.0	0	7 Sa 0341	0.2	6	7 Tu 0452	0.2	6
0958	3.1	94	1102	3.6	110	1025	3.2	98	1151	3.7	113
1511	0.1	3	1608	0.1	3	1530	0.2	6	1704	0.3	9
2203	3.5	107	2330	3.9	119	2233	3.7	113	2357	3.5	107
8 F 0354	0.3	9	23 Sa 0515	0.3	9	8 Su 0421	0.3	9	8 W 0005	3.7	113
1042	2.9	88	1158	3.4	104	1115	3.2	98	0542	0.2	6
1549	0.2	6	1701	0.5	15	1617	0.3	9	1245	3.8	116
2249	3.4	104				2325	3.6	110	● 1813	0.4	12
9 Sa 0434	0.4	12	24 Su 0026	3.5	107	9 M 0508	0.4	12	9 Th 0101	3.6	110
1132	2.9	88	0626	0.5	15	1208	3.3	101	0642	0.2	6
1633	0.3	9	1255	3.2	98	1714	0.4	12	1341	4.0	122
2341	3.3	101	○ 1810	0.7	21				1936	0.4	12
10 Su 0524	0.5	15	25 M 0124	3.2	98	10 Tu 0021	3.5	107	10 F 0200	3.5	107
1225	2.9	88	0754	0.6	18	0608	0.4	12	0746	0.1	3
1728	0.4	12	1353	3.2	98	1304	3.4	104	1441	4.2	128
			2027	0.8	24	○ 1824	0.5	15	2034	0.9	27
11 M 0038	3.3	101	26 Tu 0224	3.0	91	11 W 0120	3.5	107	11 Sa 0303	3.4	104
0634	0.6	18	0847	0.7	21	0718	0.3	9	0846	0.0	0
1323	3.0	91	1452	3.2	98	1402	3.7	113	1542	4.4	134
● 1840	0.5	15	2133	0.8	24	1949	0.4	12	2202	0.2	6
12 Tu 0141	3.3	101	27 W 0324	2.9	88	12 Th 0223	3.5	107	12 Su 0407	3.5	107
0801	0.5	15	0922	0.6	18	0824	0.2	6	0941	-0.1	-3
1424	3.2	98	1549	3.3	101	1503	4.0	122	1643	4.6	140
2005	0.3	9	2214	0.6	18	2107	0.2	6	2259	0.0	0
13 W 0247	3.4	104	28 Th 0420	2.9	88	13 F 0327	3.6	110	13 M 0508	3.6	110
0907	0.2	6	0953	0.5	15	0920	0.0	0	1033	-0.2	-6
1528	3.6	110	1640	3.5	107	1604	4.3	131	1740	4.7	143
2121	0.1	3	2248	0.5	15	2211	-0.1	-3	2250	0.5	15
14 Th 0354	3.6	110	29 F 0507	3.0	91	14 Sa 0430	3.7	113	14 F 0506	2.9	88
0958	0.0	0	1026	0.4	12	1009	-0.2	-6	1021	0.3	9
1628	4.0	122	1724	3.6	110	1702	4.6	140	1725	3.7	113
2224	-0.2	-6	2322	0.3	9	2307	-0.3	-9	2331	0.4	12
15 F 0455	3.8	116	30 Sa 0548	3.1	94	15 Su 0528	3.8	116	15 W 0044	-0.1	-3
1044	-0.3	-9	1101	0.2	6	1058	-0.4	-12	0656	3.9	119
1724	4.5	137	1802	3.8	116	1757	4.9	149	1804	3.8	116
2321	-0.5	-15	2359	0.2	6				● 1924	4.8	146
16 Sa 0013	0.3	9				31 Tu 0630	0.3	9	16 W 0558	3.1	94
0435	3.8	116				1144	0.1	3	1115	0.2	6
1044	-0.3	-9				1842	3.9	119	1814	4.0	122
1724	4.5	137									
2321	-0.5	-15									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Newport, Rhode Island, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0118 0.1 3 0727 3.5 107 1248 0.0 0 ● 1940 4.3 131	0150 0.0 0 0815 3.9 119 Sa 1337 0.1 3 2038 4.2 128	16 Sa 0208 -0.3 -9 M 0836 4.3 131 1411 -0.3 -9 2054 4.5 137	1 M 0216 0.1 3 Tu 0909 3.9 119 1439 0.2 6 2129 3.6 110	16 Th 0257 -0.5 -15 0954 4.8 146 1538 -0.2 -6 2216 4.2 128	16 F 0250 0.2 6 0943 3.7 113 1526 0.5 15 2209 3.2 98						
2 Sa 0158 0.0 0 0812 3.7 113 1335 0.0 0 2025 4.3 131	17 Su 0222 0.0 0 0900 3.9 119 1421 0.2 6 2122 4.0 122	2 Tu 0246 -0.3 -9 0925 4.5 137 1500 -0.2 -6 2144 4.3 131	17 W 0250 0.1 3 0947 3.8 116 1517 0.4 12 2207 3.4 104	2 F 0340 -0.3 -9 1048 4.7 143 1631 0.1 3 2311 3.9 119	17 Sa 0325 0.3 9 1020 3.6 110 1604 0.7 21 2250 3.1 94						
3 Su 0236 -0.1 -3 0859 3.8 116 1422 -0.1 -3 2113 4.3 131	18 M 0254 0.1 3 0944 3.8 116 1504 0.3 9 2204 3.7 113	3 W 0325 -0.3 -9 1016 4.5 137 1551 -0.1 -3 2235 4.1 125	18 Th 0325 0.2 6 1025 3.7 113 1556 0.5 15 2245 3.2 98	3 Sa 0427 -0.1 -3 1145 4.5 137 1735 0.4 12	18 Su 0403 0.5 15 1102 3.4 104 1646 0.9 27 2337 2.9 88						
4 M 0312 -0.1 -3 0947 3.9 119 1510 0.0 0 2202 4.2 128	19 Tu 0328 0.1 3 1027 3.7 113 1546 0.4 12 2245 3.4 104	4 Th 0406 -0.2 -6 1109 4.5 137 1644 0.1 3 2329 3.9 119	19 F 0401 0.3 9 1103 3.5 107 1637 0.7 21 2325 3.0 91	4 Su 0008 3.6 110 0520 0.2 6 1245 4.2 128 ● 1928 0.7 21	19 M 0444 0.6 18 1149 3.3 101 1739 1.0 30						
5 Tu 0350 -0.1 -3 1038 4.0 122 1600 0.1 3 2254 4.0 122	20 W 0403 0.2 6 1109 3.6 110 1629 0.6 18 2326 3.2 98	5 F 0451 -0.1 -3 1205 4.4 134 1748 0.4 12	20 Sa 0440 0.4 12 1143 3.4 104 1724 0.9 27	5 M 0109 3.4 104 0628 0.5 15 1348 4.0 122 2058 0.7 21	20 Tu 0028 2.9 88 0536 0.8 24 1243 3.3 101 ● 1903 1.1 34						
6 W 0431 -0.1 -3 1131 4.1 125 1656 0.2 6 2347 3.8 116	21 Th 0440 0.3 9 1150 3.5 107 1717 0.8 24	6 Sa 0025 3.6 110 0544 0.1 3 1303 4.3 131 ● 1924 0.6 18	21 Su 0008 2.9 88 0524 0.6 18 1227 3.3 101 ● 1826 1.1 34	6 Tu 0213 3.3 101 0813 0.7 21 1454 3.8 116 2158 0.6 18	21 W 0124 2.9 88 0643 0.8 24 1342 3.4 104 2039 0.9 27						
7 Th 0517 0.0 0 1225 4.2 128 1801 0.4 12	22 F 0007 3.0 91 0522 0.5 15 1231 3.4 104 1814 1.0 30	7 Su 0124 3.4 104 0648 0.3 9 1404 4.1 125 2102 0.6 18	22 M 0057 2.8 85 0618 0.7 21 1317 3.3 101 2000 1.1 34	7 W 0319 3.3 101 0941 0.6 18 1559 3.8 116 2244 0.5 15	22 Th 0225 3.0 91 0802 0.7 21 1447 3.5 107 2133 0.7 21						
8 F 0043 3.6 110 0611 0.1 3 1321 4.2 128 ● 1926 0.5 15	23 Sa 0049 2.8 85 0611 0.6 18 1314 3.3 101 ● 1929 1.0 30	8 M 0227 3.3 101 0805 0.4 12 1510 4.1 125 2207 0.5 15	23 Tu 0153 2.8 85 0724 0.7 21 1416 3.3 101 2117 0.9 27	8 Th 0422 3.5 107 1033 0.5 15 1657 3.9 119 2319 0.5 15	23 F 0328 3.3 101 0913 0.5 15 1551 3.8 116 2215 0.3 9						
9 Sa 0141 3.4 104 0714 0.1 3 1421 4.2 128 2056 0.5 15	24 Su 0137 2.7 82 0708 0.6 18 1403 3.3 101 2047 1.0 30	9 Tu 0334 3.3 101 0919 0.4 12 1615 4.1 125 2259 0.4 12	24 W 0256 2.9 88 0833 0.6 18 1520 3.5 107 2209 0.7 21	9 F 0516 3.7 113 1113 0.4 12 1746 3.9 119 2344 0.4 12	24 Sa 0427 3.7 113 1012 0.1 3 1650 4.0 122 2255 0.0 0						
10 Su 0243 3.3 101 0820 0.2 6 1525 4.2 128 2203 0.4 12	25 M 0232 2.7 82 0809 0.6 18 1459 3.3 101 2147 0.8 24	10 W 0438 3.4 104 1018 0.4 12 1714 4.1 125 2342 0.3 9	25 Th 0359 3.1 94 0935 0.4 12 1623 3.7 113 2253 0.4 12	10 Sa 0603 3.9 119 1148 0.3 9 1829 3.9 119	25 Su 0521 4.2 128 1106 -0.2 -6 1744 4.3 131 2336 -0.2 -6						
11 M 0349 3.3 101 0922 0.1 3 1628 4.3 131 2259 0.3 9	26 Tu 0333 2.8 85 0907 0.5 15 1600 3.5 107 2238 0.7 21	11 Th 0534 3.6 110 1109 0.3 9 1805 4.2 128	26 F 0457 3.4 104 1030 0.2 6 1718 4.1 125 2334 0.1 3	11 Su 0007 0.3 9 0645 4.0 122 1223 0.3 9 1908 3.9 119	26 M 0611 4.7 143 1158 -0.4 -12 1834 4.5 137						
12 Tu 0452 3.4 104 1017 0.1 3 1727 4.4 134 2350 0.2 6	27 W 0433 3.0 91 1000 0.4 12 1656 3.7 113 2324 0.4 12	12 F 0017 0.3 9 0624 3.8 116 1154 0.2 6 1851 4.2 128	27 Sa 0548 3.9 119 1123 -0.1 -3 1809 4.3 131	12 M 0034 0.2 6 0723 4.1 125 1259 0.2 6 ● 1945 3.8 116	27 Tu 0018 -0.5 -15 0700 5.0 152 1250 -0.5 -15 ● 1923 4.6 140						
13 W 0549 3.6 110 1110 0.0 0 1820 4.5 137	28 Th 0527 3.2 98 1051 0.2 6 1746 4.0 122	13 Sa 0046 0.2 6 0709 3.9 119 1238 0.2 6 ● 1933 4.2 128	28 Tu 0014 -0.1 -3 0637 4.3 131 1215 -0.3 -9 ● 1857 4.5 137	13 W 0105 0.1 3 0759 4.1 125 1336 0.2 6 2020 3.7 113	28 W 0102 -0.6 -18 0749 5.2 158 1342 -0.6 -18 2012 4.5 137						
14 Th 0035 0.1 3 0641 3.8 116 1200 0.0 0 1908 4.5 137	29 F 0008 0.2 6 0616 3.5 107 1141 0.0 0 1833 4.3 131	14 Su 0114 0.1 3 0750 4.0 122 1319 0.2 6 2013 4.0 122	29 M 0054 -0.3 -9 0724 4.6 140 1306 -0.4 -12 1944 4.6 140	14 W 0139 0.1 3 0834 4.0 122 1413 0.2 6 2055 3.6 110	29 Th 0146 -0.6 -18 0840 5.2 158 1432 -0.4 -12 2103 4.4 134						
15 F 0115 0.0 0 0729 3.9 119 1250 0.0 0 ● 1954 4.4 134	30 Sa 0050 0.0 0 0702 3.8 116 1231 -0.1 -3 ● 1919 4.4 134	15 M 0144 0.1 3 0830 4.0 122 1400 0.2 6 2051 3.9 119	30 Tu 0134 -0.5 -15 0812 4.8 146 1357 -0.5 -15 2033 4.6 140	15 Th 0214 0.1 3 0908 3.9 119 1450 0.3 9 2131 3.4 104	30 F 0231 -0.5 -15 0933 5.0 152 1523 -0.2 -6 2156 4.1 125						
	31 Su 0129 -0.2 -6 0748 4.1 125 1321 -0.2 -6 2006 4.5 137		31 W 0215 -0.5 -15 0902 4.9 149 1447 -0.4 -12 2123 4.4 134								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Newport, Rhode Island, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0317 0.3 -9	16 Su 0255 0.3 9	1 Tu 0440 0.4 12	16 W 0355 0.3 9	1 Th 0003 3.4 104	16 F 0432 0.1 3	16 Sa 0432 0.1 3	16 F 1135 3.4 104	16 Th 1707 0.1 3	16 F 1707 0.1 3	16 Th 1707 0.1 3	16 F 1707 0.1 3
1028 4.7 143	0948 3.6 110	1204 3.9 119	1101 3.5 107	0518 0.5 15	0518 0.5 15	0003 3.4 104	0432 0.1 3	0518 0.5 15	1135 3.4 104	1707 0.1 3	1707 0.1 3
1617 0.1 3	1539 0.6 18	1819 0.5 15	1644 0.5 15	1230 3.3 101	1230 3.3 101	0003 3.4 104	0432 0.1 3	0518 0.5 15	1135 3.4 104	1707 0.1 3	1707 0.1 3
2253 3.9 119	2224 3.1 94	2342 3.1 94	1806 0.4 12	1806 0.4 12	1806 0.4 12	0003 3.4 104	0432 0.1 3	0518 0.5 15	1135 3.4 104	1707 0.1 3	1707 0.1 3
2 Su 0405 0.0 0	17 M 0333 0.4 12	2 W 0031 3.4 104	17 Th 0446 0.4 12	2 F 0057 3.3 101	17 F 0640 0.7 21	17 Sa 0012 3.4 104	17 M 0432 0.1 3	17 F 1323 3.0 91	17 Sa 0532 0.2 6	17 O 1802 0.0 0	17 M 0432 0.1 3
1126 4.4 134	1032 3.5 107	550 0.7 21	1155 3.4 104	6 F 0640 0.7 21	1323 3.0 91	0012 3.4 104	0432 0.1 3	0518 0.5 15	1135 3.4 104	1707 0.1 3	17 M 0432 0.1 3
1721 0.4 12	1619 0.7 21	1303 3.6 110	1251 3.4 104	1905 0.5 15	1905 0.5 15	0012 3.4 104	0432 0.1 3	0518 0.5 15	1135 3.4 104	1707 0.1 3	17 M 0432 0.1 3
2351 3.6 110	2312 3.0 91	1950 0.6 18	1844 0.4 12	1806 0.4 12	1806 0.4 12	0012 3.4 104	0432 0.1 3	0518 0.5 15	1135 3.4 104	1707 0.1 3	17 M 0432 0.1 3
3 M 0459 0.4 12	18 Tu 0415 0.6 18	1300 3.3 101	18 Sa 0036 3.2 98	3 Sa 0151 3.2 98	18 Su 0828 0.7 21	18 M 0108 3.6 110	18 F 0532 0.2 6	18 Sa 1418 2.8 85	18 Su 0646 0.2 6	18 O 1906 0.0 0	18 M 0108 3.6 110
1226 4.1 125	1122 3.4 104	0814 0.8 24	0550 0.5 15	1402 3.3 101	1251 3.4 104	0036 3.2 98	0108 3.6 110	1402 3.3 101	0646 0.2 6	1327 3.2 98	1906 0.0 0
1912 0.6 18	1707 0.8 24	2046 0.6 18	1844 0.4 12	2000 0.5 15	2000 0.5 15	0036 3.2 98	0108 3.6 110	1402 3.3 101	0646 0.2 6	1327 3.2 98	1906 0.0 0
●						0036 3.2 98	0108 3.6 110	1402 3.3 101	0646 0.2 6	1327 3.2 98	1906 0.0 0
4 Tu 0052 3.4 104	19 W 0004 2.9 88	0230 3.3 101	19 Sa 0132 3.4 104	4 Su 0246 3.2 98	19 M 0206 3.7 113	19 F 0812 0.2 6	19 M 0206 3.7 113	0246 3.2 98	0812 0.2 6	1428 3.2 98	2012 -0.1 -3
0612 0.7 21	0506 0.7 21	0922 0.7 21	0709 0.5 15	1351 3.4 104	1953 0.3 9	0132 3.4 104	0206 3.7 113	1351 3.4 104	0812 0.2 6	1428 3.2 98	2012 -0.1 -3
1329 3.8 116	1216 3.4 104	1502 3.2 98	1953 0.3 9	2122 0.6 18	2122 0.6 18	0132 3.4 104	0206 3.7 113	1351 3.4 104	0812 0.2 6	1428 3.2 98	2012 -0.1 -3
2038 0.7 21	1814 0.9 27	2122 0.6 18	2122 0.6 18	2122 0.6 18	2122 0.6 18	0132 3.4 104	0206 3.7 113	1351 3.4 104	0812 0.2 6	1428 3.2 98	2012 -0.1 -3
5 W 0155 3.3 101	20 Th 0100 3.0 91	0328 3.4 104	20 Su 0231 3.7 113	5 M 0340 3.2 98	20 Tu 0308 3.9 119	20 F 0926 0.0 0	20 M 0308 3.9 119	0340 3.2 98	0926 0.0 0	1533 3.2 98	2113 -0.3 -9
0836 0.8 24	0612 0.7 21	1006 0.6 18	0832 0.3 9	1003 0.6 18	1003 0.6 18	0340 3.2 98	0308 3.9 119	1003 0.6 18	0926 0.0 0	1533 3.2 98	2113 -0.3 -9
1433 3.6 110	1315 3.4 104	1558 3.1 94	1453 3.5 107	1605 2.7 82	2128 0.3 9	0340 3.2 98	0308 3.9 119	1605 2.7 82	0926 0.0 0	1533 3.2 98	2113 -0.3 -9
2133 0.6 18	1941 0.8 24	2148 0.5 15	2051 0.0 0	2128 0.3 9	2128 0.3 9	0340 3.2 98	0308 3.9 119	2128 0.3 9	0926 0.0 0	1533 3.2 98	2113 -0.3 -9
6 Th 0259 3.4 104	21 F 0158 3.2 98	0421 3.5 107	21 M 0332 4.0 122	6 Tu 0431 3.3 101	21 W 0411 4.2 128	6 F 1027 -0.2 -6	21 M 0411 4.2 128	0431 3.3 101	0411 4.2 128	1636 3.4 104	2208 -0.5 -15
0945 0.7 21	0735 0.6 18	1039 0.5 15	0938 0.0 0	1039 0.4 12	1039 0.4 12	0431 3.3 101	0411 4.2 128	1039 0.4 12	0411 4.2 128	1636 3.4 104	2208 -0.5 -15
1535 3.5 107	1417 3.5 107	1647 3.2 98	1556 3.6 110	1653 2.8 85	2209 0.2 6	0431 3.3 101	0411 4.2 128	1653 2.8 85	0411 4.2 128	1636 3.4 104	2208 -0.5 -15
2213 0.6 18	2046 0.5 15	2214 0.4 12	2142 -0.3 -9	2231 0.1 3	2231 0.1 3	0431 3.3 101	0411 4.2 128	2231 0.1 3	0411 4.2 128	1636 3.4 104	2208 -0.5 -15
7 F 0359 3.5 107	22 Sa 0259 3.6 110	0507 3.7 113	22 Tu 0431 4.4 134	7 W 0516 3.4 104	22 Th 0512 4.4 134	7 F 1123 -0.3 -9	22 Th 0512 4.4 134	0516 3.4 104	0512 4.4 134	1734 3.5 107	2301 -0.6 -18
1030 0.6 18	0852 0.4 12	1108 0.4 12	1035 -0.2 -6	1117 0.3 9	1117 0.3 9	0516 3.4 104	0512 4.4 134	1117 0.3 9	0512 4.4 134	1734 3.5 107	2301 -0.6 -18
1632 3.5 107	1521 3.7 113	1730 3.2 98	1655 3.8 116	1736 2.9 88	2250 0.1 3	0516 3.4 104	0512 4.4 134	1736 2.9 88	0512 4.4 134	1734 3.5 107	2301 -0.6 -18
2240 0.5 15	2134 0.2 6	2246 0.2 6	2231 -0.5 -15	2250 0.1 3	2250 0.1 3	0516 3.4 104	0512 4.4 134	2250 0.1 3	0512 4.4 134	1734 3.5 107	2301 -0.6 -18
8 Sa 0452 3.7 113	23 Su 0358 4.0 122	0548 3.8 116	23 Th 0528 4.7 143	8 Th 0556 3.6 110	23 M 0607 4.5 137	8 F 1216 -0.4 -12	23 M 0607 4.5 137	0556 3.6 110	0607 4.5 137	1828 3.7 113	2353 -0.7 -21
1104 0.5 15	0955 0.1 3	1141 0.3 9	1129 -0.4 -12	1156 0.2 6	1156 0.2 6	0556 3.6 110	0607 4.5 137	1156 0.2 6	0607 4.5 137	1828 3.7 113	2353 -0.7 -21
1720 3.6 110	1622 3.9 119	1809 3.3 101	1751 3.9 119	1816 3.0 91	1816 3.0 91	0556 3.6 110	0607 4.5 137	1816 3.0 91	0607 4.5 137	1828 3.7 113	2353 -0.7 -21
2301 0.4 12	2217 -0.1 -3	2321 0.1 3	2320 -0.7 -21	2331 0.0 0	2331 0.0 0	0556 3.6 110	0607 4.5 137	2331 0.0 0	0607 4.5 137	1828 3.7 113	2353 -0.7 -21
9 Su 0538 3.9 119	24 M 0455 4.4 134	0625 3.9 119	24 Th 0621 4.9 149	9 F 0633 3.7 113	24 M 0659 4.6 140	9 F 1920 3.8 116	24 M 0659 4.6 140	0633 3.7 113	0659 4.6 140	1920 3.8 116	●
1133 0.4 12	1050 -0.2 -6	1216 0.2 6	1222 -0.5 -15	1237 0.1 3	1237 0.1 3	0633 3.7 113	0659 4.6 140	1237 0.1 3	0659 4.6 140	1920 3.8 116	●
1802 3.6 110	1719 4.1 125	1845 3.3 101	1844 4.0 122	1855 3.1 94	1855 3.1 94	0633 3.7 113	0659 4.6 140	1855 3.1 94	0659 4.6 140	1920 3.8 116	●
2325 0.3 9	2301 -0.4 -12	2358 0.0 0	2358 0.0 0	2035 3.3 101	2035 3.3 101	0633 3.7 113	0659 4.6 140	2035 3.3 101	0659 4.6 140	1920 3.8 116	●
10 M 0618 4.0 122	25 Tu 0548 4.8 146	0659 3.9 119	25 F 0009 -0.7 -21	10 F 0012 -0.1 -3	25 M 0045 -0.6 -18	10 F 0749 4.5 137	25 M 0045 -0.6 -18	0009 -0.7 -21	0012 -0.1 -3	0749 4.5 137	2010 3.8 116
1204 0.3 9	1142 -0.5 -15	1254 0.2 6	0713 5.0 152	1318 0.0 0	1318 0.0 0	0009 -0.7 -21	0012 -0.1 -3	0713 5.0 152	0012 -0.1 -3	0749 4.5 137	2010 3.8 116
1840 3.6 110	1811 4.3 131	1811 3.4 104	1921 4.1 125	1934 3.2 98	1934 3.2 98	0009 -0.7 -21	0012 -0.1 -3	1921 4.1 125	0012 -0.1 -3	0749 4.5 137	2010 3.8 116
2356 0.2 6	2346 -0.6 -18	2346 -0.6 -18	2035 4.1 125	2027 4.0 122	2027 4.0 122	0009 -0.7 -21	0012 -0.1 -3	2027 4.0 122	0012 -0.1 -3	0749 4.5 137	2010 3.8 116
11 Tu 0654 4.1 125	26 W 0639 5.1 155	0037 0.0 0	26 F 0059 -0.7 -21	11 F 0054 -0.1 -3	26 M 0136 -0.6 -18	11 F 0746 3.8 134	26 M 0136 -0.6 -18	0059 -0.7 -21	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
1238 0.2 6	1235 -0.6 -18	0733 3.9 119	0804 4.9 149	1406 0.5 152	1406 0.5 152	0059 -0.7 -21	0054 -0.1 -3	0733 3.9 119	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
1915 3.6 110	1902 4.4 134	1332 0.2 6	0804 4.9 149	1406 0.5 152	1406 0.5 152	0059 -0.7 -21	0054 -0.1 -3	1332 0.2 6	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
●		1957 3.3 101	0844 3.8 116	1446 0.3 9	1446 0.3 9	0059 -0.7 -21	0054 -0.1 -3	1957 3.3 101	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
12 W 0030 0.1 3	27 Th 0032 -0.7 -21	0115 0.0 0	27 F 0149 -0.6 -18	1324 0.3 98	1324 0.3 98	0059 -0.7 -21	0054 -0.1 -3	0115 0.0 0	0115 0.0 0	0746 3.8 134	2100 3.8 116
0728 4.1 125	0729 5.2 158	0807 3.8 116	0856 4.7 143	1454 0.3 9	1454 0.3 9	0059 -0.7 -21	0054 -0.1 -3	0807 3.8 116	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
1313 0.2 6	1327 -0.6 -18	1410 0.2 6	0856 4.7 143	1541 0.1 3	1541 0.1 3	0059 -0.7 -21	0054 -0.1 -3	1410 0.2 6	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
1949 3.6 110	1952 4.3 131	2035 3.3 101	1454 0.3 9	2119 3.9 119	2119 3.9 119	0059 -0.7 -21	0054 -0.1 -3	1952 4.3 131	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
13 Th 0106 0.1 3	28 F 0120 -0.7 -21	0154 0.1 3	28 M 0239 -0.3 -9	1523 0.3 9	1523 0.3 9	0059 -0.7 -21	0054 -0.1 -3	0120 -0.7 -21	0120 -0.7 -21	0746 3.8 134	2100 3.8 116
0801 4.0 122	0820 5.1 155	0844 3.8 116	0949 4.4 134	1446 0.3 9	1446 0.3 9	0059 -0.7 -21	0054 -0.1 -3	0820 5.1 155	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
1350 0.2 6	1418 -0.4 -12	1446 0.3 9	1541 0.1 3	2213 3.2 98	2213 3.2 98	0059 -0.7 -21	0054 -0.1 -3	1418 -0.4 -12	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
2024 3.5 107	2044 4.2 128	1446 0.3 9	1541 0.1 3	2213 3.2 98	2213 3.2 98	0059 -0.7 -21	0054 -0.1 -3	2044 4.2 128	0054 -0.1 -3	0746 3.8 134	2100 3.8 116
14 F 0142 0.1 3	29 M 0208 -0.5 -15	0232 0.2 6	29 F 0329 -0.1 -3	1509 0.3 9	1509 0.3 9	0059 -0.7 -21	0054 -0.1 -3				

Montauk, Fort Pond Bay, New York, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0001 -0.2 -6	16 Su 0601 2.1 64	1 Tu 0137 -0.2 -6	16 W 0054 -0.3 -9	1 Tu 0037 0.1 3	16 W 0545 2.3 70						
0606 2.5 76	1239 -0.1 -3	0729 2.2 67	0700 2.4 73	0629 2.1 64	1223 -0.2 -6						
1300 -0.4 -12	1814 1.4 43	1416 -0.3 -9	1341 -0.5 -15	1309 0.0 0	1805 2.2 67						
1824 1.6 49		1945 1.8 55	1918 2.1 64	1845 1.8 55							
2 Su 0056 -0.2 -6	17 M 0021 -0.1 -3	2 W 0221 -0.2 -6	17 Th 0146 -0.5 -15	2 W 0124 0.0 0	17 Th 0036 -0.2 -6						
0655 2.5 76	0643 2.3 70	0811 2.2 67	0745 2.5 76	0710 2.1 64	0633 2.5 76						
1350 -0.4 -12	1325 -0.3 -9	1454 -0.3 -9	1426 -0.6 -18	1348 0.0 0	1310 -0.3 -9						
1913 1.7 52	1858 1.6 49	● 2029 1.9 58	2005 2.3 70	1926 2.0 61	1853 2.5 76						
3 M 0146 -0.2 -6	18 Tu 0112 -0.2 -6	3 Th 0303 -0.2 -6	18 F 0238 -0.7 -21	3 Th 0206 0.0 0	18 F 0131 -0.5 -15						
0742 2.5 76	0725 2.4 73	0853 2.2 67	0831 2.6 79	0749 2.1 64	0720 2.5 76						
1435 -0.4 -12	1410 -0.5 -15	1530 -0.3 -9	1510 -0.7 -21	1423 -0.1 -3	1355 -0.5 -15						
2001 1.8 55	1943 1.8 55	2113 1.9 58	○ 2053 2.6 79	2007 2.1 64	1940 2.8 85						
4 Tu 0234 -0.2 -6	19 W 0202 -0.4 -12	4 F 0343 -0.2 -6	19 Sa 0330 -0.8 -24	4 F 0244 -0.1 -3	19 Sa 0223 -0.6 -18						
0828 2.5 76	0808 2.5 76	0934 2.1 64	0918 2.5 76	0829 2.1 64	0807 2.6 79						
1518 -0.4 -12	1454 -0.6 -18	1605 -0.2 -6	1554 -0.7 -21	1456 -0.1 -3	1440 -0.6 -18						
● 2049 1.8 55	○ 2029 1.9 58	2157 2.0 61	2143 2.7 82	● 2047 2.2 67	○ 2029 3.0 91						
5 W 0319 -0.2 -6	20 Th 0253 -0.5 -15	5 Sa 0424 -0.1 -3	20 Su 0423 -0.8 -24	5 Sa 0321 -0.1 -3	20 Su 0315 -0.7 -21						
0914 2.4 73	0853 2.6 79	1016 2.0 61	1007 2.4 73	0909 2.1 64	0856 2.5 76						
1559 -0.4 -12	1539 -0.7 -21	1639 -0.2 -6	1641 -0.7 -21	1528 0.0 0	1526 -0.6 -18						
2136 1.8 55	2117 2.1 64	2241 2.0 61	2234 2.8 85	2128 2.3 70	2119 3.2 98						
6 Th 0404 -0.1 -3	21 F 0344 -0.6 -18	6 Su 0507 -0.1 -3	21 M 0519 -0.7 -21	6 Su 0400 -0.1 -3	21 M 0407 -0.7 -21						
0959 2.3 70	0940 2.5 76	1058 1.9 58	1057 2.2 67	0949 2.0 61	0945 2.4 73						
1639 -0.3 -9	1624 -0.7 -21	1715 -0.1 -3	1731 -0.5 -15	1600 0.0 0	1613 -0.5 -15						
2224 1.9 58	2207 2.3 70	2324 2.0 61	2326 2.8 85	2209 2.3 70	2210 3.2 98						
7 F 0449 0.0 0	22 Sa 0438 -0.6 -18	7 M 0553 0.0 0	22 Tu 0618 -0.5 -15	7 M 0440 -0.1 -3	22 Tu 0501 -0.6 -18						
1044 2.1 64	1028 2.4 73	1140 1.7 52	1148 2.0 61	1030 1.9 58	1036 2.3 70						
1719 -0.2 -6	1711 -0.7 -21	1752 0.1 3	1826 -0.3 -9	1634 0.1 3	1705 -0.3 -9						
2311 1.9 58	2258 2.4 73			2250 2.2 67	2304 3.0 91						
8 Sa 0537 0.1 3	23 Su 0535 -0.5 -15	8 Tu 0008 1.9 58	23 W 0021 2.6 79	8 Tu 0523 0.0 0	23 W 0558 -0.4 -12						
1128 1.9 58	1117 2.2 67	0645 0.1 3	0720 -0.3 -9	1111 1.8 55	1129 2.1 64						
1800 -0.1 -3	1801 -0.6 -18	1223 1.6 49	1242 1.8 55	1710 0.2 6	1801 -0.1 -3						
2359 1.9 58	2350 2.4 73	1834 0.2 6	1926 -0.2 -6	2330 2.2 67	2358 2.8 85						
9 Su 0629 0.2 6	24 M 0637 -0.4 -12	9 W 0052 1.9 58	24 Th 0119 2.4 73	9 W 0611 0.1 3	24 Th 0658 -0.2 -6						
1213 1.7 52	1208 2.0 61	0739 0.2 6	0825 -0.2 -6	1152 1.7 52	1223 2.0 61						
1842 0.0 0	1854 -0.5 -15	1307 1.4 43	1341 1.6 49	1750 0.4 12	1904 0.1 3						
10 M 0047 1.8 55	25 Tu 0045 2.4 73	10 Th 0141 1.8 55	25 F 0224 2.3 70	10 Th 0011 2.1 64	25 F 0056 2.6 79						
0725 0.2 6	0741 -0.3 -9	0835 0.3 9	0929 0.0 0	0704 0.2 6	0801 0.0 0						
1259 1.5 46	1302 1.8 55	1356 1.3 40	1447 1.5 46	1234 1.6 49	1322 1.8 55						
1926 0.2 6	1951 -0.3 -9	2015 0.3 9	2136 0.1 3	1839 0.5 15	2011 0.3 9						
11 Tu 0137 1.8 55	26 W 0144 2.3 70	11 F 0237 1.8 55	26 Sa 0335 2.1 64	11 F 0053 2.0 61	26 Sa 0159 2.3 70						
0821 0.3 9	0846 -0.2 -6	0931 0.2 6	1031 0.0 0	0800 0.3 9	0904 0.1 3						
1348 1.4 43	1402 1.5 46	1454 1.2 37	1559 1.5 46	1320 1.5 46	1427 1.7 52						
2012 0.2 6	○ 2051 -0.2 -6	● 2111 0.3 9	2240 0.1 3	1939 0.5 15	○ 2119 0.4 12						
12 W 0231 1.8 55	27 Th 0248 2.3 70	12 Sa 0340 1.8 55	27 Su 0444 2.0 61	12 Sa 0144 1.9 58	27 Su 0308 2.1 64						
0916 0.3 9	0950 -0.2 -6	1025 0.2 6	1131 0.0 0	0857 0.3 9	1004 0.2 6						
1443 1.3 40	1507 1.4 43	1557 1.2 37	1705 1.5 46	1416 1.4 43	1539 1.7 52						
● 2059 0.3 9	2151 -0.1 -3	2207 0.3 9	2342 0.1 3	● 2041 0.5 15	2225 0.4 12						
13 Th 0329 1.8 55	28 F 0355 2.2 67	13 Su 0438 1.9 58	28 M 0542 2.0 61	13 F 0249 1.9 58	28 M 0417 2.0 61						
1009 0.2 6	1052 -0.2 -6	1117 0.1 3	1224 0.0 0	0952 0.2 6	1100 0.3 9						
1541 1.2 37	1615 1.4 43	1654 1.4 43	1800 1.7 52	1520 1.5 46	1646 1.8 55						
2148 0.3 9	2252 -0.1 -3	2304 0.1 3	2143 0.4 12	2143 0.4 12	2327 0.4 12						
14 F 0426 1.8 55	29 Sa 0500 2.2 67	14 M 0529 2.1 64	14 F 0355 2.0 61	14 M 0056 2.6 79	14 F 0801 0.0 0						
1100 0.2 6	1151 -0.2 -6	1208 -0.1 -3	1044 0.1 3	0704 0.2 6	1044 0.1 3						
1637 1.2 37	1718 1.4 43	1745 1.6 49	1622 1.6 49	1622 1.6 49	1622 1.6 49						
2238 0.2 6	2351 -0.1 -3	2359 0.0 0	2242 0.3 9	2242 0.3 9	2242 0.3 9						
15 Sa 0516 2.0 61	30 Su 0556 2.2 67	15 Tu 0615 2.3 70	15 F 0454 2.2 67	15 F 0051 2.0 61	30 F 0603 2.0 61						
1150 0.0 0	1245 -0.2 -6	1256 -0.3 -9	1135 0.0 0	1135 0.0 0	1233 0.3 9						
1728 1.3 40	1812 1.5 46	1832 1.8 55	1716 1.9 58	1716 1.9 58	1823 2.1 64						
2330 0.1 3	1900 1.6 49		2340 0.0 0	2340 0.0 0	1902 2.3 70						
31 M 0047 -0.1 -3											
0645 2.2 67											
1333 -0.3 -9											
1900 1.6 49											

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Montauk, Fort Pond Bay, New York, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0145	0.2	6	16	0115	-0.4	-12	1	0156	0.2	6	16	0153	-0.4	-12
	0723	2.0	61	Sa	0654	2.4	73	Su	0732	1.9	58	M	0721	2.3	70
	1345	0.2	6		1325	-0.3	-9		1338	0.4	12		1348	-0.1	-3
	1941	2.4	73		1917	3.2	98		1951	2.6	79		1946	3.4	104
2 Sa	0222	0.1	3	17	0208	-0.5	-15	2	0233	0.1	3	17	0244	-0.5	-15
	0802	2.0	61	Su	0743	2.5	76	M	0813	2.0	61	Tu	0812	2.3	70
	1418	0.2	6		1412	-0.3	-9		1415	0.4	12		1439	-0.1	-3
	2019	2.5	76	O	2006	3.4	104		2030	2.7	82	O	2038	3.4	104
3 Su	0258	0.0	0	18	0259	-0.6	-18	3	0311	0.1	3	18	0334	-0.4	-12
	0841	2.0	61	M	0833	2.4	73	Tu	0854	2.0	61	W	0904	2.3	70
	1451	0.2	6		1500	-0.3	-9		1453	0.4	12		1531	-0.1	-3
	2059	2.5	76		2057	3.4	104	●	2110	2.7	82		2130	3.3	101
4 M	0335	0.0	0	19	0351	-0.6	-18	4	0352	0.1	3	19	0425	-0.3	-9
	0922	2.0	61	Tu	0924	2.4	73	W	0937	2.0	61	Th	0958	2.3	70
	1525	0.3	9		1550	-0.2	-6		1533	0.4	12		1624	0.1	3
	2138	2.5	76		2149	3.3	101		2150	2.6	79		2223	3.1	94
5 Tu	0415	0.0	0	20	0443	-0.5	-15	5	0435	0.1	3	20	0516	-0.2	-6
	1003	2.0	61	W	1017	2.3	70	Th	1021	2.0	61	F	1052	2.2	67
	1600	0.3	9		1642	-0.1	-3		1614	0.5	15		1720	0.2	6
	2218	2.5	76		2243	3.1	94		2230	2.6	79		2315	2.8	85
6 W	0458	0.1	3	21	0538	-0.3	-9	6	0521	0.1	3	21	0609	0.0	0
	1045	1.9	58	Th	1110	2.2	67	F	1105	1.9	58	Sa	1146	2.2	67
	1638	0.4	12		1740	0.1	3		1701	0.6	18		1820	0.4	12
	2257	2.4	73		2337	2.9	88		2310	2.5	76				
7 Th	0544	0.2	6	22	0635	-0.1	-3	7	0612	0.2	6	22	0007	2.6	79
	1127	1.8	55	F	1205	2.1	64	Sa	1150	1.9	58	Su	0703	0.1	3
	1720	0.5	15		1843	0.3	9		1755	0.6	18		1241	2.2	67
	2336	2.3	70						2353	2.4	73		1924	0.6	18
8 F	0636	0.2	6	23	0033	2.6	79	8	0704	0.2	6	23	0100	2.3	70
	1210	1.7	52	Sa	0734	0.1	3	Su	1237	1.9	58	M	0756	0.3	9
	1812	0.6	18		1303	2.0	61		1858	0.7	21		1338	2.1	64
					1950	0.5	15					2028	0.6	18	
9 Sa	0017	2.2	67	24	0131	2.3	70	9	0040	2.4	73	24	0155	2.1	64
	0731	0.3	9	Su	0833	0.2	6	M	0757	0.2	6	Tu	0847	0.4	12
	1256	1.7	52		1405	2.0	61		1329	2.0	61		1437	2.1	64
	1915	0.7	21	●	2057	0.6	18		2003	0.6	18	●	2128	0.7	21
10 Su	0105	2.2	67	25	0233	2.1	64	10	0135	2.3	70	25	0252	1.9	58
	0827	0.3	9	M	0929	0.4	12	Tu	0848	0.2	6	W	0933	0.5	15
	1350	1.7	52		1511	2.0	61		1426	2.1	64		1536	2.2	67
	2020	0.6	18		2202	0.6	18	●	2106	0.5	15		2225	0.7	21
11 M	0205	2.1	64	26	0337	2.0	61	11	0238	2.2	67	26	0350	1.8	55
	0920	0.3	9	Tu	1020	0.4	12	W	0938	0.2	6	Th	1016	0.6	18
	1451	1.8	55		1615	2.1	64		1525	2.3	70		1631	2.3	70
	2123	0.5	15		2301	0.6	18		2207	0.3	9		2316	0.6	18
12 Tu	0313	2.2	67	27	0437	1.9	58	12	0342	2.2	67	27	0445	1.7	52
	1011	0.2	6	W	1106	0.5	15	F	1027	0.1	3		1057	0.6	18
	1553	2.0	61		1709	2.2	67		1622	2.6	79		1719	2.4	73
	2224	0.4	12		2354	0.5	15		2306	0.1	3				
13 W	0417	2.2	67	28	0527	1.9	58	13	0443	2.2	67	28	0003	0.5	15
	1101	0.1	3	Th	1147	0.5	15	F	1117	0.0	0	Sa	0534	1.7	52
	1648	2.3	70		1753	2.3	70		1715	2.9	88		1137	0.6	18
	2323	0.1	3									1802	2.5	76	
14 Th	0513	2.3	70	29	0039	0.4	12	14	0004	-0.1	-3	29	0046	0.4	12
	1149	0.0	0	F	0611	1.9	58	Sa	0538	2.2	67	Su	0618	1.8	55
	1739	2.6	79		1225	0.5	15		1207	0.0	0		1218	0.6	18
					1833	2.5	76		1806	3.2	98		1843	2.6	79
15 F	0020	-0.1	-3	30	0118	0.3	9	15	0100	-0.3	-9	30	0126	0.3	9
	0605	2.4	73	Sa	0652	1.9	58	Su	0630	2.2	67	M	0701	1.8	55
	1237	-0.2	-6		1302	0.5	15		1258	-0.1	-3		1301	0.5	15
	1828	2.9	88		1912	2.6	79		1856	3.3	101		1923	2.6	79
												31	0206	0.2	6
												Tu	0743	1.9	58
													1343	0.5	15
													2003	2.7	82

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Montauk, Fort Pond Bay, New York, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0303 0.0 0 0842 2.0 61 1450 0.3 9 ● 2058 2.8 85	16 Sa 0341 -0.1 -3 0917 2.3 70 1548 0.2 6 2138 2.7 82	1 M 0400 -0.2 -6 0946 2.6 79 1613 0.0 0 2202 2.8 85	16 Tu 0424 0.3 9 1023 2.6 79 1654 0.4 12 2239 2.4 73	1 Th 0501 -0.1 -3 1059 3.2 98 1749 -0.1 -3 2319 2.5 76	16 F 0453 0.6 18 1116 2.6 79 1756 0.6 18 2337 2.0 61						
2 Sa 0346 -0.1 -3 0928 2.1 64 1538 0.2 6 2141 2.8 85	17 Su 0422 0.0 0 1007 2.4 73 1635 0.3 9 2224 2.6 79	2 Tu 0445 -0.2 -6 1035 2.8 85 1709 0.0 0 2250 2.7 82	17 W 0459 0.4 12 1108 2.5 76 1741 0.5 15 2323 2.2 67	2 F 0555 0.1 3 1154 3.2 98 1851 0.1 3	17 Sa 0533 0.7 21 1201 2.5 76 1849 0.6 18						
3 Su 0431 -0.2 -6 1015 2.3 70 1630 0.2 6 2226 2.7 82	18 M 0503 0.1 3 1055 2.4 73 1724 0.4 12 2310 2.4 73	3 W 0532 -0.1 -3 1125 2.9 88 1808 0.1 3 2340 2.5 76	18 Th 0537 0.5 15 1153 2.5 76 1831 0.6 18	3 Sa 0013 2.3 70 0654 0.2 6 1251 3.0 91 1955 0.2 6	18 Su 0022 1.9 58 0622 0.9 27 1248 2.4 73 1945 0.7 21						
4 M 0517 -0.2 -6 1103 2.4 73 1725 0.2 6 2312 2.6 79	19 Tu 0544 0.2 6 1142 2.4 73 1816 0.5 15 2355 2.2 67	4 Th 0623 0.0 0 1217 2.9 88 1911 0.1 3	19 F 0007 2.0 61 0618 0.6 18 1239 2.4 73 1925 0.7 21	4 Su 0111 2.1 64 0758 0.3 9 1354 2.8 85 ● 2059 0.3 9	19 M 0111 1.8 55 0722 0.9 27 1341 2.3 70 2041 0.7 21						
5 Tu 0604 -0.1 -3 1152 2.5 76 1826 0.3 9	20 W 0626 0.4 12 1230 2.4 73 1911 0.6 18	5 F 0032 2.3 70 0718 0.1 3 1313 2.9 88 2014 0.2 6	20 Sa 0053 1.9 58 0705 0.8 24 1329 2.3 70 2021 0.7 21	5 M 0215 2.0 61 0903 0.4 12 1502 2.7 82 2201 0.4 12	20 Tu 0207 1.8 55 0825 0.9 27 1441 2.3 70 ● 2135 0.7 21						
6 W 0000 2.5 76 0654 0.0 0 1242 2.6 79 1929 0.3 9	21 Th 0041 2.0 61 0708 0.5 15 1319 2.3 70 2006 0.7 21	6 Sa 0128 2.1 64 0817 0.2 6 1414 2.8 85 ● 2117 0.2 6	21 Su 0143 1.8 55 0757 0.8 24 1425 2.3 70 ● 2115 0.7 21	6 Tu 0326 2.0 61 1008 0.5 15 1611 2.6 79 2300 0.4 12	21 W 0309 1.8 55 0924 0.9 27 1542 2.3 70 2225 0.6 18						
7 Th 0051 2.3 70 0746 0.0 0 1336 2.7 82 2032 0.2 6	22 F 0129 1.8 55 0753 0.6 18 1411 2.3 70 2100 0.7 21	7 Su 0231 1.9 58 0917 0.3 9 1519 2.8 85 2219 0.2 6	22 M 0240 1.7 52 0853 0.8 24 1526 2.3 70 2208 0.7 21	7 W 0435 2.0 61 1110 0.5 15 1712 2.6 79 2354 0.4 12	22 Th 0408 1.9 58 1021 0.7 21 1636 2.4 73 2312 0.4 12						
8 F 0147 2.1 64 0839 0.1 3 1435 2.8 85 ● 2134 0.2 6	23 Sa 0221 1.7 52 0839 0.7 21 1508 2.3 70 ● 2153 0.7 21	8 M 0338 1.9 58 1017 0.3 9 1625 2.8 85 2319 0.2 6	23 Tu 0342 1.7 52 0948 0.8 24 1624 2.3 70 2259 0.6 18	8 Th 0533 2.1 64 1208 0.5 15 1802 2.6 79	23 F 0500 2.2 67 1116 0.5 15 1724 2.6 79 2358 0.3 9						
9 Sa 0249 1.9 58 0934 0.1 3 1537 2.8 85 2235 0.1 3	24 Su 0319 1.6 49 0927 0.7 21 1606 2.3 70 2244 0.6 18	9 Tu 0444 1.9 58 1118 0.3 9 1725 2.8 85 2347 0.4 12	24 W 0439 1.8 55 1043 0.7 21 1714 2.5 76 2347 0.4 12	9 F 0043 0.3 9 0622 2.3 70 1300 0.4 12 1845 2.6 79	24 Sa 0546 2.4 73 1211 0.3 9 1808 2.7 82						
10 Su 0354 1.9 58 1030 0.2 6 1638 2.9 88 2334 0.1 3	25 M 0417 1.6 49 1017 0.7 21 1659 2.4 73 2333 0.5 15	10 W 0015 0.2 6 0543 2.0 61 1216 0.3 9 1817 2.8 85	25 Th 0530 1.9 58 1137 0.5 15 1758 2.6 79 1839 2.8 85	10 Sa 0125 0.3 9 0705 2.4 73 1345 0.4 12 1925 2.5 76	25 Su 0043 0.1 3 0630 2.8 85 1304 0.0 0 1853 2.8 85						
11 M 0457 1.9 58 1127 0.2 6 1735 2.9 88	26 Tu 0511 1.7 52 1108 0.6 18 1746 2.5 76	11 Th 0106 0.2 6 0635 2.1 64 1310 0.3 9 1903 2.8 85	26 F 0034 0.3 9 0615 2.2 67 1230 0.4 12 1839 2.8 85	11 Su 0203 0.3 9 0746 2.6 79 1427 0.3 9 2005 2.5 76	26 M 0128 -0.1 -3 0715 3.1 94 1356 -0.2 -6 1938 2.8 85						
12 Tu 0031 0.0 0 0554 1.9 58 1224 0.2 6 1828 3.0 91	27 W 0021 0.4 12 0559 1.8 55 1200 0.5 15 1828 2.6 79	12 F 0152 0.1 3 0723 2.3 70 1400 0.3 9 1947 2.7 82	27 Sa 0118 0.1 3 0659 2.4 73 1322 0.2 6 1921 2.9 88	12 M 0237 0.3 9 0827 2.7 82 1506 0.3 9 ● 2045 2.5 76	27 Tu 0212 -0.2 -6 0802 3.3 101 1447 -0.3 -9 ● 2025 2.8 85						
13 W 0124 0.0 0 0647 2.0 61 1319 0.1 3 1917 3.0 91	28 Th 0107 0.3 9 0644 1.9 58 1252 0.4 12 1909 2.7 82	13 Sa 0233 0.1 3 0808 2.4 73 1445 0.2 6 ● 2030 2.7 82	28 Tu 0201 -0.1 -3 0743 2.7 82 1413 0.0 0 ● 2004 2.9 88	13 W 0310 0.4 12 0908 2.7 82 1545 0.3 9 2127 2.4 73	28 Th 0257 -0.2 -6 0850 3.4 104 1539 -0.3 -9 2114 2.7 82						
14 Th 0212 -0.1 -3 0738 2.1 64 1411 0.1 3 2005 2.9 88	29 F 0151 0.1 3 0728 2.1 64 1342 0.3 9 1949 2.8 85	14 Su 0312 0.1 3 0853 2.5 76 1528 0.3 9 2113 2.6 79	29 M 0244 -0.2 -6 0829 2.9 88 1504 -0.2 -6 2050 2.9 88	14 W 0343 0.4 12 0950 2.7 82 1625 0.4 12 2210 2.3 70	29 Th 0344 -0.2 -6 0942 3.5 107 1633 -0.3 -9 2206 2.6 79						
15 F 0258 -0.1 -3 0828 2.2 67 1500 0.1 3 ● 2052 2.9 88	30 Sa 0234 -0.1 -3 0812 2.3 70 1431 0.1 3 ● 2032 2.9 88	15 M 0348 0.2 6 0938 2.5 76 1610 0.3 9 2156 2.5 76	30 Tu 0328 -0.2 -6 0917 3.1 94 1556 -0.2 -6 2138 2.8 85	15 Th 0417 0.5 15 1033 2.7 82 1708 0.4 12 2253 2.2 67	30 F 0435 -0.1 -3 1036 3.4 104 1730 -0.1 -3 2259 2.4 73						
	31 Su 0317 -0.2 -6 0858 2.5 76 1521 0.0 0 2116 2.9 88		31 W 0413 -0.2 -6 1007 3.2 98 1651 -0.2 -6 2228 2.7 82								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Montauk, Fort Pond Bay, New York, 2011

Times and Heights of High and Low Waters

October			November			December										
Time	Height		Time	Height		Time	Height		Time	Height						
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm					
1 Sa 1132 1830 2355	0.1 3.2 0.0 2.3	98 98 0 70	16 Su 1127 1818 2356	0.5 0.5 1.9 58	21 Tu 0037 1307 2009	2.1 2.5 0.2 6	64 12 6 6	18 W 0632 1223 1935	0.6 2.2 0.2 6	55 18 6 6	16 Th 0112 1332 2027	2.0 2.0 0.1 3	61 61 61 3	16 F 0039 0715 1243 1949	1.9 0.2 2.0 -0.1	58 6 61 -3
	0.3 3.0 0.2	9 91 6	17 M 1211 1913	2.4 0.5 15	2 W 0140 0831 ● 2107	2.1 0.5 0.3 9	64 15 6 9	17 Th 0109 0737 1313 2026	1.8 0.6 2.1 0.2	55 18 64 6	2 F 0213 0907 ● 2117	2.0 0.4 0.2	61 55 6	17 Sa 0131 1338 ● 2039	2.0 1.8 -0.1	61 55 -3
	0.4 2.7 0.3	12 82 9	18 Tu 0045 0654 2009	1.8 0.9 0.5	3 Th 0247 0937 2200	2.1 0.5 0.3 9	64 15 6 9	18 F 0204 0840 ● 2114	1.9 0.5 0.1 3	58 15 64 9	3 Sa 0314 1007 2204	2.0 0.4 0.3	61 12 9	18 Su 0227 0920 2130	2.1 0.0 -0.1	64 0 -3
	0.5 2.5 0.4	15 76 12	19 W 0138 0800 ● 2101	1.8 0.9 0.5	4 F 0353 1038 2248	2.1 0.5 0.4 12	64 15 6 12	19 Sa 0300 0940 2202	2.1 0.3 0.1 3	64 9 6 3	4 Su 0412 1101 2247	2.1 0.4 0.4	64 12 12	19 M 0326 1020 2222	2.3 -0.1 -0.2	70 -3 -6
5 W 0956 1548 2234	2.1 0.6 0.4	64 18 12	20 Th 0237 0902 2150	1.9 0.8 0.4	5 Sa 0450 1133 2332	2.2 0.5 0.4 12	67 15 12	20 Su 0356 1038 2250	2.4 0.1 0.0	73 3 0	5 M 0503 1150 2328	2.1 0.3 0.4	64 9 12	20 Tu 0425 1119 2315	2.5 -0.3 -0.2	76 -9 -6
	0.6 2.4 0.4	18 73 12	21 F 1000 1554 2237	2.0 2.3 0.3	6 Su 0536 1221 1751	2.4 0.4 1.9	73 12 58	21 M 0450 1135 2339	2.7 -0.1 -0.1	82 3 -3	6 Tu 0548 1233 1802	2.2 0.2 1.5	67 6 46	21 W 0521 1215 1741	2.7 -0.4 1.7	82 -12 52
	0.6 2.3 0.4	18 70 12	22 F 1059 1649 2326	2.3 2.3 0.4	7 M 0011 0616 1831	0.4 2.5 1.9	12 76 58	22 Tu 0540 1230 1802	2.9 -0.3 2.1	88 -9 64	7 W 0009 0630 1844	0.3 2.3 1.6	9 70 49	22 Th 0010 0615 1834	-0.3 2.9 1.8	-9 88 55
	0.5 2.3 0.2	15 70 70	23 Sa 0517 1152 1738	2.6 0.1 2.5	8 Tu 0048 0655 1341	0.4 2.6 0.3	12 79 9	23 W 0029 0630 1852	-0.2 3.2 2.2	-6 98 67	8 Th 0049 0711 1352	0.3 2.4 0.0	9 73 0	23 F 0104 0706 1401	-0.4 2.9 -0.6	-12 88 58
9 Su 1327 1900	0.4 0.5 2.3	12 15 70	24 M 0009 0604 1826	0.0 3.0 2.5	9 W 0123 0734 1951	0.4 2.6 2.0	12 79 61	24 Th 0120 0720 1942	-0.3 3.3 2.2	-9 101 67	9 F 0130 0751 1926	0.2 2.4 1.7	6 73 52	24 Sa 0158 0757 1926	-0.5 2.9 1.9	-15 88 58
	0.4 0.4 2.3	12 12 70	25 Tu 0056 0650 1913	-0.1 3.2 2.5	10 Th 0159 0813 ● 2033	0.4 2.6 2.0	12 79 61	25 F 0211 0811 ● 2034	-0.4 3.3 2.2	-12 101 67	10 Sa 0212 0831 ● 2051	0.2 2.4 1.7	6 73 52	25 Su 0250 0848 ● 2110	-0.5 2.8 2.0	-15 85 61
	0.4 0.3 2.3	12 9 70	26 Tu 0143 0738 ● 2002	-0.2 3.4 2.5	11 F 0236 0853 2115	0.4 2.6 1.9	12 79 58	26 Sa 0303 0903 2127	-0.4 3.2 2.2	-12 98 67	11 Su 0254 0911 2136	0.1 2.4 1.7	3 73 52	26 M 0342 0938 2203	-0.4 2.7 2.1	-12 82 64
	0.4 0.3 2.2	12 9 67	27 W 0231 0828 2053	-0.3 3.5 2.5	12 Sa 0314 0935 2200	0.4 2.6 1.9	12 79 58	27 Su 0356 0957 2222	-0.3 3.0 2.2	-9 91 67	12 M 0337 0951 2221	0.1 2.4 1.8	3 73 55	27 Tu 0434 1028 2255	-0.3 2.5 2.0	-9 76 61
13 Th 1558 2141	0.5 0.3 2.2	15 9 67	28 F 0321 0921 2145	-0.2 3.5 2.4	13 Su 0355 1016 2245	0.4 2.5 1.8	12 76 55	28 M 0452 1050 2318	-0.1 2.8 2.1	-3 85 64	13 Tu 0423 1031 2306	0.2 2.3 1.8	6 70 55	28 W 0529 1117 2347	-0.1 2.3 2.0	-3 70 61
	0.5 0.3 2.2	15 9 67	29 F 0413 1015 2240	-0.1 3.3 2.3	14 M 0439 1057 2331	0.5 2.4 1.8	15 73 55	29 Tu 0552 1144 1838	0.1 2.5 -0.1	3 76 -3	14 W 0514 1112 1809	0.2 2.2 -0.2	6 67 -6	29 Th 0627 1206 2352	0.0 2.0 1.8	0 61 55
	0.6 2.6 2.3	18 79 61	30 Sa 0510 1111 1808	0.0 3.1 -0.1	15 Tu 0531 1139 1842	0.6 2.3 0.2	18 70 6	30 W 0014 0657 1237	2.1 0.2 2.3	64 6 70	15 Th 0612 1156 1933	0.2 2.1 0.0	6 64 0	30 F 0039 0727 1940	2.0 0.2 0.0	61 6 0
	0.6 2.6 2.0	18 79 61	31 M 0613 1208 1908	0.2 2.8 0.1	31 M 0613 1208 1908	0.2 2.8 0.1	6 85 3				31 Sa 0133 0827 1347	1.9 0.2 1.5	58 6 46			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

New London, Connecticut, 2011

Times and Heights of High and Low Waters

January			February			March						
Time	Height		Time	Height		Time	Height		Time	Height		
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 Sa 0027 0.0 0 0634 3.1 94 1319 -0.3 -9 1858 2.2 67	16 Su 0624 2.7 82 1259 0.0 0 1846 2.0 61		1 Tu 0200 0.0 0 0755 2.8 85 1435 -0.2 -6 2015 2.3 70		16 W 0118 -0.1 -3 0725 3.0 91 1402 -0.4 -12 1945 2.6 79	1 Tu 0057 0.1 3 0656 2.6 79 1327 0.0 0 1914 2.4 73		16 W 0002 0.1 3 0611 2.8 85 1243 -0.1 -3 1832 2.7 82				
	2 Su 0121 0.0 0 0722 3.1 94 1409 -0.3 -9 1945 2.3 70	17 M 0049 0.2 6 0707 2.9 88 1346 -0.2 -6 1929 2.2 67	2 W 0246 -0.1 -3 0837 2.8 85 1514 -0.2 -6 2057 2.4 73	17 Th 0211 -0.4 -12 0810 3.1 94 1448 -0.6 -18 2031 2.8 85	2 W 0146 0.1 3 0738 2.6 79 1409 0.0 0 1954 2.5 76	17 Th 0059 -0.2 -6 0659 3.0 91 1332 -0.3 -9 1919 3.0 91						
	3 M 0212 -0.1 -3 0808 3.1 94 1455 -0.3 -9 2031 2.3 70	18 Tu 0139 0.0 0 0749 3.0 91 1431 -0.4 -12 2012 2.3 70	3 Th 0327 -0.1 -3 0918 2.7 82 1551 -0.2 -6 2139 2.5 76	18 F 0302 -0.5 -15 0856 3.1 94 1532 -0.7 -21 2119 3.0 91	3 Th 0229 0.0 0 0817 2.6 79 1446 0.0 0 2034 2.6 79	18 F 0153 -0.4 -12 0746 3.0 91 1418 -0.5 -15 2006 3.2 98						
	4 Tu 0300 -0.1 -3 0853 3.0 91 1537 -0.3 -9 2116 2.4 73	19 W 0229 -0.2 -6 0832 3.1 94 1515 -0.5 -15 2057 2.5 76	4 F 0408 -0.1 -3 0959 2.6 79 1626 -0.1 -3 2221 2.6 79	19 Sa 0353 -0.7 -21 0944 3.1 94 1618 -0.7 -21 2208 3.2 98	4 F 0308 0.0 0 0855 2.6 79 1520 0.0 0 2113 2.7 82	19 Sa 0245 -0.6 -18 0833 3.1 94 1505 -0.5 -15 2054 3.5 107						
5 W 0345 0.0 0 0938 2.9 88 1618 -0.2 -6 2202 2.4 73	20 Th 0318 -0.3 -9 0917 3.2 98 1600 -0.6 -18 2143 2.7 82	5 Sa 0448 0.0 0 1040 2.5 76 1702 0.0 0 2304 2.6 79	20 Su 0445 -0.7 -21 1033 2.9 88 1705 -0.6 -18 2259 3.3 101	5 Sa 0346 -0.1 -3 0934 2.5 76 1553 0.0 0 2153 2.8 85	20 Su 0337 -0.7 -21 0922 3.0 91 1551 -0.5 -15 2144 3.6 110							
	6 Th 0429 0.0 0 1022 2.8 85 1658 -0.2 -6 2248 2.5 76	21 F 0408 -0.4 -12 1005 3.1 94 1645 -0.6 -18 2233 2.8 85	6 Su 0530 0.1 3 1121 2.4 73 1738 0.1 3 2346 2.6 79	21 M 0540 -0.6 -18 1124 2.8 85 1755 -0.5 -15 2352 3.2 98	6 Su 0424 0.0 0 1014 2.5 76 1627 0.1 3 2232 2.8 85	21 M 0428 -0.7 -21 1012 2.9 88 1639 -0.4 -12 2236 3.5 107						
	7 F 0514 0.1 3 1107 2.7 82 1738 0.0 0 2335 2.5 76	22 Sa 0501 -0.4 -12 1053 3.0 91 1732 -0.6 -18 2324 2.9 88	7 M 0615 0.2 6 1203 2.3 70 1816 0.2 6	22 Tu 0637 -0.4 -12 1217 2.5 76 1850 -0.3 -9	7 M 0502 0.0 0 1054 2.4 73 1701 0.2 6 2312 2.8 85	22 Tu 0522 -0.6 -18 1104 2.7 82 1730 -0.3 -9 2329 3.4 104						
	8 Sa 0600 0.2 6 1151 2.5 76 1819 0.1 3	23 Su 0557 -0.4 -12 1144 2.8 85 1822 -0.5 -15	8 Tu 0029 2.5 76 0703 0.2 6 1247 2.1 64 1858 0.3 9	23 W 0048 3.1 94 0738 -0.3 -9 1313 2.3 70 1949 -0.1 -3	8 Tu 0544 0.1 3 1135 2.3 70 1738 0.3 9 2352 2.7 82	23 W 0617 -0.4 -12 1158 2.6 79 1826 -0.1 -3						
9 Su 0021 2.5 76 0650 0.3 9 1236 2.3 70 1902 0.2 6	24 M 0016 3.0 91 0657 -0.3 -9 1236 2.6 79 1916 -0.3 -9	9 W 0115 2.5 76 0755 0.3 9 1334 2.0 61 1946 0.4 12	24 Th 0148 2.9 88 0841 -0.1 -3 1416 2.1 64 2052 0.1 3	9 W 0629 0.2 6 1216 2.2 67 1819 0.4 12	24 Th 0024 3.2 98 0716 -0.2 -6 1254 2.4 73 1927 0.1 3							
	10 M 0110 2.5 76 0743 0.4 12 1324 2.1 64 1947 0.3 9	25 Tu 0112 3.0 91 0800 -0.2 -6 1333 2.3 70 2013 -0.2 -6	10 Th 0204 2.4 73 0849 0.3 9 1428 1.8 55 2038 0.5 15	25 F 0255 2.8 85 0944 0.0 0 1526 2.0 61 2156 0.2 6	10 Th 0032 2.6 79 0719 0.2 6 1300 2.1 64 1907 0.5 15	25 F 0124 3.0 91 0817 0.0 0 1356 2.3 70 2032 0.3 9						
	11 Tu 0201 2.4 73 0838 0.4 12 1417 2.0 61 2034 0.4 12	26 W 0213 2.9 88 0903 -0.1 -3 1437 2.1 64 2112 -0.1 -3	11 F 0301 2.4 73 0944 0.3 9 1530 1.8 55 2134 0.5 15	26 Sa 0406 2.7 82 1046 0.1 3 1638 2.0 61 2300 0.2 6	11 F 0116 2.5 76 0813 0.3 9 1350 2.0 61 2003 0.6 18	26 Sa 0229 2.8 85 0918 0.1 3 1504 2.2 67 2137 0.4 12						
	12 W 0256 2.4 73 0932 0.4 12 1515 1.8 55 2123 0.4 12	27 Th 0319 2.8 85 1006 -0.1 -3 1546 2.0 61 2213 0.0 0	12 Sa 0403 2.4 73 1040 0.3 9 1632 1.8 55 2231 0.4 12	27 Su 0513 2.6 79 1146 0.1 3 1741 2.1 64 1831 2.2 67	12 Sa 0209 2.5 76 0909 0.3 9 1449 1.9 58 2102 0.6 18	27 Su 0339 2.6 79 1018 0.2 6 1614 2.2 67 2242 0.4 12						
13 Th 0353 2.4 73 1025 0.4 12 1615 1.8 55 2213 0.5 15	28 F 0426 2.8 85 1108 -0.1 -3 1655 2.0 61 2315 0.1 3	13 Su 0501 2.5 76 1134 0.1 3 1727 1.9 58 2328 0.3 9	28 M 0001 0.2 6 0610 2.6 79 1240 0.1 3 1831 2.2 67	13 M 0315 2.5 76 1005 0.3 9 1553 2.0 61 2203 0.5 15	28 M 0447 2.5 76 1115 0.3 9 1717 2.3 70 2342 0.4 12							
	14 F 0448 2.5 76 1118 0.3 9 1711 1.8 55 2305 0.4 12	29 Sa 0529 2.8 85 1208 -0.1 -3 1755 2.0 61	14 M 0552 2.7 82 1226 0.0 0 1815 2.1 64	14 M 0421 2.6 79 1100 0.2 6 1652 2.1 64 2303 0.3 9	29 Tu 0544 2.5 76 1207 0.3 9 1807 2.5 76							
	15 Sa 0538 2.6 79 1209 0.1 3 1801 1.9 58 2358 0.3 9	30 Su 0015 0.1 3 0624 2.8 85 1303 -0.1 -3 1847 2.1 64	15 Tu 0024 0.1 3 0639 2.9 88 1316 -0.2 -6 1901 2.3 70	15 Tu 0519 2.7 82 1153 0.0 0 1745 2.4 73	30 W 0037 0.3 9 0632 2.5 76 1254 0.3 9 1850 2.6 79							
		31 M 0110 0.0 0 0712 2.8 85 1351 -0.2 -6 1932 2.2 67			31 Th 0125 0.2 6 0713 2.5 76 1334 0.3 9 1929 2.7 82							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

New London, Connecticut, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0207 0.1 3 0752 2.5 76 1411 0.3 9 2007 2.9 88	16 Sa 0137 -0.4 -12 0721 2.9 88 1350 -0.3 -9 1942 3.6 110		1 Su 0219 0.2 6 0802 2.4 73 1410 0.5 15 2016 3.1 94		16 M 0214 -0.4 -12 0750 2.7 82 1416 -0.1 -3 2011 3.8 116		1 W 0309 0.1 3 0858 2.4 73 1457 0.6 18 2106 3.2 98		16 Th 0337 -0.2 -6 0915 2.7 82 1541 0.1 3 2136 3.5 107		
	2 Sa 0246 0.1 3 0830 2.5 76 1446 0.3 9 2045 2.9 88	17 Su 0229 -0.5 -15 0810 2.9 88 1438 -0.3 -9 2031 3.7 113	2 M 0257 0.1 3 0843 2.4 73 1447 0.5 15 2055 3.1 94	17 Tu 0305 -0.4 -12 0841 2.8 85 1507 -0.1 -3 2102 3.8 116		2 O 0349 0.0 0 0941 2.5 76 1539 0.5 15 2146 3.2 98		17 F 0424 -0.2 -6 1007 2.7 82 1632 0.2 6 2226 3.3 101			
	3 Su 0322 0.0 0 0909 2.5 76 1520 0.3 9 2123 3.0 91	18 M 0321 -0.6 -18 0901 2.9 88 1527 -0.3 -9 2122 3.8 116	3 Tu 0334 0.1 3 0924 2.4 73 1524 0.5 15 2133 3.1 94	18 W 0355 -0.4 -12 0933 2.8 85 1558 0.0 0 2154 3.6 110		3 F 0431 0.0 0 1024 2.5 76 1623 0.5 15 2228 3.2 98		18 Sa 0510 -0.1 -3 1058 2.8 85 1723 0.3 9 2315 3.2 98			
	4 M 0359 0.0 0 0949 2.5 76 1554 0.3 9 2202 3.0 91	19 Tu 0412 -0.6 -18 0952 2.8 85 1617 -0.2 -6 2214 3.7 113	4 W 0413 0.0 0 1006 2.4 73 1603 0.5 15 2212 3.1 94	19 Th 0444 -0.3 -9 1026 2.7 82 1650 0.1 3 2247 3.5 107		4 Sa 0516 0.0 0 1108 2.5 76 1711 0.5 15 2311 3.2 98		19 Su 0556 0.1 3 1149 2.8 85 1816 0.5 15			
5 Tu 0437 0.0 0 1030 2.4 73 1629 0.4 12 2240 2.9 88	20 W 0503 -0.5 -15 1045 2.7 82 1709 -0.1 -3 2307 3.5 107	5 Th 0454 0.0 0 1048 2.4 73 1644 0.6 18 2251 3.0 91	20 F 0534 -0.2 -6 1120 2.7 82 1744 0.3 9 2340 3.2 98	5 Su 0602 0.0 0 1153 2.6 79 1804 0.5 15 2357 3.1 94		20 M 0004 3.0 91 0643 0.2 6 1239 2.8 85 1911 0.6 18					
6 W 0518 0.0 0 1111 2.4 73 1707 0.5 15 2318 2.9 88	21 Th 0556 -0.3 -9 1139 2.7 82 1805 0.1 3	6 F 0539 0.1 3 1131 2.4 73 1729 0.6 18 2332 3.0 91	21 Sa 0626 0.0 0 1214 2.7 82 1842 0.4 12	6 M 0651 0.0 0 1241 2.7 82 1903 0.5 15		21 Tu 0053 2.7 82 0730 0.4 12 1330 2.8 85 2008 0.7 21					
7 Th 0602 0.1 3 1152 2.3 70 1750 0.6 18 2357 2.8 85	22 F 0002 3.3 101 0652 -0.1 -3 1235 2.6 79 1906 0.3 9	7 Sa 0627 0.1 3 1215 2.4 73 1821 0.6 18	22 Su 0033 3.0 91 0719 0.2 6 1309 2.7 82 1943 0.6 18	7 Tu 0047 3.0 91 0742 0.1 3 1332 2.8 85 2004 0.5 15		22 W 0144 2.5 76 0817 0.5 15 1424 2.8 85 2104 0.7 21					
8 F 0651 0.2 6 1235 2.2 67 1840 0.6 18	23 Sa 0059 3.0 91 0750 0.1 3 1334 2.5 76 2010 0.5 15	8 Su 0016 2.9 88 0718 0.2 6 1302 2.4 73 1919 0.6 18	23 M 0127 2.8 85 0811 0.3 9 1405 2.6 79 2043 0.7 21	8 W 0141 2.8 85 0833 0.1 3 1428 2.9 88 2107 0.4 12		23 Th 0239 2.3 70 0903 0.6 18 1519 2.8 85 2158 0.7 21					
9 Sa 0040 2.7 82 0744 0.2 6 1323 2.2 67 1938 0.7 21	24 Su 0200 2.8 85 0847 0.2 6 1437 2.4 73 2114 0.6 18	9 M 0106 2.9 88 0810 0.2 6 1354 2.5 76 2021 0.6 18	24 Tu 0224 2.5 76 0902 0.4 12 1504 2.7 82 2142 0.7 21	9 Th 0241 2.7 82 0925 0.1 3 1527 3.1 94 2208 0.3 9		24 F 0336 2.2 67 0949 0.7 21 1614 2.9 88 2251 0.7 21					
10 Su 0131 2.7 82 0838 0.3 9 1418 2.2 67 2039 0.6 18	25 M 0304 2.6 79 0943 0.4 12 1542 2.5 76 2216 0.6 18	10 Tu 0204 2.8 85 0903 0.2 6 1452 2.6 79 2123 0.5 15	25 W 0323 2.4 73 0951 0.6 18 1602 2.7 82 2239 0.7 21	10 F 0346 2.6 79 1018 0.1 3 1626 3.3 101 2309 0.1 3		25 Sa 0434 2.1 64 1036 0.8 24 1706 2.9 88 2342 0.6 18					
11 M 0234 2.6 79 0933 0.2 6 1520 2.3 70 2141 0.5 15	26 Tu 0408 2.4 73 1036 0.5 15 1642 2.6 79 2315 0.6 18	11 W 0309 2.7 82 0955 0.2 6 1552 2.8 85 2225 0.3 9	26 Th 0422 2.3 70 1038 0.6 18 1655 2.8 85 2332 0.6 18	11 Sa 0449 2.5 76 1113 0.1 3 1722 3.5 107		26 Su 0528 2.2 67 1124 0.8 24 1754 3.0 91					
12 Tu 0342 2.7 82 1026 0.2 6 1620 2.5 76 2243 0.3 9	27 W 0507 2.4 73 1125 0.5 15 1734 2.7 82	12 Th 0413 2.7 82 1047 0.1 3 1649 3.1 94 2325 0.1 3	27 F 0516 2.2 67 1123 0.7 21 1743 2.9 88	12 Su 0008 0.0 0 0547 2.5 76 1208 0.1 3 1815 3.6 110		27 M 0030 0.5 15 0617 2.2 67 1212 0.8 24 1838 3.0 91					
13 W 0445 2.7 82 1119 0.1 3 1715 2.7 82 2343 0.1 3	28 Th 0009 0.5 15 0557 2.4 73 1211 0.5 15 1818 2.8 85	13 F 0513 2.7 82 1139 0.1 3 1742 3.4 104	28 Sa 0022 0.5 15 0605 2.2 67 1208 0.7 21 1827 3.0 91	13 M 0105 -0.1 -3 0641 2.5 76 1304 0.1 3 1906 3.7 113		28 Tu 0116 0.4 12 0703 2.3 70 1300 0.7 21 1919 3.1 94					
14 Th 0541 2.8 85 1210 0.0 0 1806 3.1 94	29 F 0057 0.4 12 0641 2.4 73 1253 0.5 15 1859 2.9 88	14 Sa 0024 -0.1 -3 0608 2.7 82 1231 0.0 0 1832 3.6 110	29 Su 0107 0.4 12 0650 2.3 70 1252 0.7 21 1908 3.1 94	14 Tu 0158 -0.2 -6 0733 2.6 79 1358 0.1 3 1956 3.7 113		29 W 0159 0.2 6 0746 2.4 73 1347 0.6 18 2000 3.2 98					
15 F 0041 -0.1 -3 0632 2.9 88 1300 -0.2 -6 1854 3.4 104	30 Sa 0140 0.3 9 0722 2.4 73 1333 0.5 15 1938 3.0 91	15 Su 0120 -0.2 -6 0659 2.7 82 1324 -0.1 -3 1922 3.7 113	30 M 0149 0.3 9 0733 2.3 70 1334 0.6 18 1948 3.1 94	15 W 0249 -0.3 -9 0824 2.7 82 1451 0.1 3 2046 3.6 110		30 Th 0242 0.1 3 0829 2.4 73 1432 0.5 15 2040 3.3 101					
			31 Tu 0229 0.2 6 0815 2.4 73 1416 0.6 18 2027 3.2 98								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

New London, Connecticut, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0324 0.0 0 0912 2.5 76 1518 0.4 12 ● 2122 3.3 101	0400 0.0 0 0944 2.8 85 Sa 1612 0.3 9 2203 3.2 98	16 Sa 0421 -0.2 -6 M 1012 3.1 94 1637 0.0 0 2228 3.3 101	0447 0.3 9 Tu 1046 3.0 91 1717 0.4 12 2303 2.8 85	16 Th 0526 -0.1 -3 1125 3.6 110 1809 -0.1 -3 2347 2.9 88	0522 0.6 18 F 1138 3.0 91 1815 0.5 15						
2 Sa 0406 -0.1 -3 0956 2.6 79 1604 0.3 9 2205 3.3 101	17 Su 0442 0.0 0 1032 2.9 88 1659 0.3 9 2249 3.0 91	2 Tu 0506 -0.2 -6 1100 3.2 98 1731 0.0 0 2316 3.1 94	17 W 0524 0.4 12 1130 3.0 91 1802 0.5 15 2347 2.6 79	2 F 0619 0.0 0 1220 3.6 110 1910 0.0 0	0002 2.5 76 Sa 0604 0.8 24 1222 2.9 88 1905 0.6 18						
3 Su 0450 -0.1 -3 1041 2.8 85 1654 0.3 9 2250 3.3 101	18 M 0523 0.2 6 1119 2.9 88 1747 0.4 12 2334 2.9 88	3 W 0554 -0.1 -3 1151 3.3 101 1828 0.1 3	18 Th 0602 0.5 15 1215 3.0 91 1851 0.6 18	3 Sa 0044 2.7 82 0718 0.2 6 1320 3.4 104 2012 0.2 6	0049 2.3 70 Su 0652 0.9 27 1310 2.8 85 1958 0.6 18						
4 M 0535 -0.1 -3 1128 2.9 88 1748 0.3 9 2338 3.2 98	19 Tu 0604 0.3 9 1206 2.9 88 1837 0.5 15	4 Th 0007 2.9 88 0645 0.0 0 1244 3.4 104 1929 0.1 3	19 F 0032 2.5 76 0644 0.7 21 1302 2.9 88 1942 0.7 21	4 Su 0145 2.5 76 0820 0.3 9 1424 3.3 101 ● 2115 0.2 6	0141 2.3 70 M 0748 0.9 27 1404 2.7 82 2053 0.6 18						
5 Tu 0623 -0.1 -3 1217 3.0 91 1846 0.3 9	20 W 0019 2.7 82 0646 0.4 12 1253 2.9 88 1929 0.6 18	5 F 0102 2.7 82 0740 0.1 3 1341 3.4 104 2032 0.2 6	20 Sa 0121 2.3 70 0731 0.8 24 1352 2.8 85 2035 0.7 21	5 M 0253 2.4 73 0925 0.4 12 1534 3.1 94 2216 0.3 9	0239 2.2 67 Tu 0846 0.9 27 1504 2.7 82 ● 2147 0.6 18						
6 W 0027 3.0 91 0713 0.0 0 1309 3.1 94 1948 0.3 9	21 Th 0107 2.5 76 0730 0.6 18 1343 2.9 88 2023 0.7 21	6 Sa 0201 2.5 76 0839 0.2 6 1444 3.3 101 ● 2134 0.2 6	21 Su 0215 2.2 67 0823 0.9 27 1448 2.8 85 ● 2129 0.7 21	6 Tu 0405 2.4 73 1028 0.5 15 1641 3.1 94 2316 0.3 9	0341 2.2 67 W 0944 0.9 27 1605 2.8 85 2239 0.5 15						
7 Th 0120 2.8 85 0806 0.1 3 1404 3.2 98 2050 0.3 9	22 F 0157 2.3 70 0816 0.7 21 1435 2.8 85 2116 0.7 21	7 Su 0308 2.4 73 0939 0.3 9 1550 3.3 101 2236 0.2 6	22 M 0315 2.2 67 0917 0.9 27 1548 2.8 85 2222 0.7 21	7 W 0511 2.5 76 1130 0.5 15 1741 3.0 91	0438 2.4 73 Th 1041 0.7 21 1700 2.9 88 2329 0.4 12						
8 F 0219 2.6 79 0900 0.1 3 1504 3.3 101 ● 2151 0.2 6	23 Sa 0253 2.2 67 0904 0.8 24 1532 2.8 85 ● 2209 0.7 21	8 M 0417 2.3 70 1040 0.4 12 1655 3.3 101 2336 0.2 6	23 Tu 0416 2.2 67 1012 0.9 27 1645 2.8 85 2314 0.6 18	8 Th 0011 0.3 9 0605 2.6 79 1228 0.4 12 1830 3.0 91	0528 2.6 79 F 1138 0.5 15 1749 3.0 91						
9 Sa 0324 2.4 73 0956 0.2 6 1606 3.3 101 2252 0.2 6	24 Su 0353 2.1 64 0953 0.8 24 1628 2.8 85 2301 0.7 21	9 Tu 0521 2.4 73 1141 0.4 12 1753 3.3 101	24 W 0511 2.3 70 1107 0.8 24 1735 2.9 88	9 F 0101 0.3 9 0651 2.7 82 1320 0.4 12 1913 3.0 91	0018 0.2 6 Sa 0613 2.9 88 1233 0.3 9 1834 3.1 94						
10 Su 0430 2.4 73 1053 0.2 6 1706 3.4 104 2352 0.1 3	25 M 0452 2.1 64 1045 0.8 24 1720 2.9 88 2351 0.6 18	10 W 0032 0.2 6 0617 2.5 76 1239 0.3 9 1844 3.2 98	25 Th 0005 0.4 12 0600 2.4 73 1202 0.6 18 1821 3.1 94	10 Sa 0145 0.3 9 0732 2.9 88 1407 0.3 9 1953 3.0 91	0105 0.0 0 Su 0656 3.2 98 1326 0.0 0 1918 3.2 98						
11 M 0532 2.4 73 1152 0.3 9 1802 3.5 107	26 Tu 0544 2.2 67 1137 0.8 24 1807 3.0 91	11 Th 0124 0.2 6 0706 2.6 79 1334 0.3 9 1930 3.2 98	26 F 0053 0.2 6 0644 2.6 79 1255 0.4 12 1903 3.2 98	11 Su 0225 0.3 9 0812 3.0 91 1449 0.3 9 2032 2.9 88	0151 -0.1 -3 M 0740 3.4 104 1418 -0.2 -6 2004 3.2 98						
12 Tu 0049 0.0 0 0627 2.5 76 1250 0.3 9 1854 3.5 107	27 W 0040 0.4 12 0631 2.3 70 1229 0.7 21 1851 3.1 94	12 F 0211 0.1 3 0752 2.7 82 1423 0.3 9 2014 3.2 98	27 Sa 0139 0.1 3 0726 2.8 85 1346 0.2 6 1946 3.3 101	12 M 0301 0.3 9 0852 3.1 94 1529 0.3 9 ● 2112 2.8 85	0236 -0.2 -6 Tu 0826 3.7 113 1509 -0.3 -9 ● 2051 3.2 98						
13 W 0142 0.0 0 0719 2.5 76 1345 0.2 6 1943 3.4 104	28 Th 0127 0.3 9 0715 2.4 73 1319 0.5 15 1932 3.2 98	13 Sa 0253 0.1 3 0836 2.8 85 1508 0.3 9 ● 2056 3.1 94	28 Su 0223 -0.1 -3 0809 3.1 94 1437 0.0 0 ● 2029 3.4 104	13 Tu 0336 0.4 12 0932 3.1 94 1608 0.3 9 2152 2.8 85	0322 -0.2 -6 W 0915 3.8 116 1601 -0.4 -12 2141 3.1 94						
14 Th 0232 -0.1 -3 0808 2.6 79 1437 0.2 6 2031 3.4 104	29 F 0212 0.1 3 0757 2.6 79 1408 0.4 12 2013 3.3 101	14 Su 0333 0.1 3 0919 2.9 88 1552 0.3 9 2138 3.0 91	29 M 0307 -0.2 -6 0854 3.3 101 1527 -0.2 -6 2115 3.3 101	14 W 0410 0.4 12 1013 3.1 94 1648 0.3 9 2234 2.7 82	0410 -0.2 -6 Th 1007 3.8 116 1654 -0.3 -9 2233 3.0 91						
15 F 0317 -0.1 -3 0856 2.7 82 1525 0.2 6 ● 2117 3.3 101	30 Sa 0255 -0.1 -3 0840 2.7 82 1457 0.2 6 ● 2056 3.4 104	15 M 0410 0.2 6 1002 3.0 91 1634 0.3 9 2220 2.9 88	30 Tu 0351 -0.2 -6 0942 3.5 107 1619 -0.2 -6 2204 3.2 98	15 Th 0445 0.5 15 1055 3.1 94 1730 0.4 12 2318 2.6 79	0501 -0.1 -3 F 1101 3.7 113 1750 -0.2 -6 2328 2.8 85						
		31 Su 0338 -0.2 -6 0925 2.9 88 1546 0.1 3 2141 3.4 104	31 W 0437 -0.2 -6 1032 3.6 110 1712 -0.2 -6 2254 3.1 94								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

New London, Connecticut, 2011

Times and Heights of High and Low Waters

October						November						December											
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height						
1 Sa	0556 1158 1849	0.1 3.6 0.0	3 110 0	16 Su	0532 1147 1833	0.7 2.9 0.4	21 W	0043 0654 1247 1947	2.3 0.7 2.7 0.2	70 21 82 6	1 Tu	0108 0742 1336 2024	2.6 0.4 3.0 0.2	79 12 91 6	16 Th	0140 0819 1402 2043	2.5 0.4 2.5 0.2	76 12 76 6	16 F	0103 0733 1310 2005	2.5 0.3 2.6 0.0	76 9 79 0	
2 Su	0026 0657 1258 1950	2.7 0.3 3.4 0.1	82 9 104 3	17 M	0022 0621 1232 1926	2.3 0.8 2.8 0.5	70 24 85 15	2 W	0212 0848 1441 2121	2.5 0.5 2.7 0.3	76 15 82 9	17 Th	0134 0755 1341 2039	2.3 0.6 2.7 0.2	70 18 82 6	2 F	0241 0921 1502 2135	2.5 0.5 2.3 0.4	76 15 70 12	17 Sa	0156 0835 1408 2057	2.6 0.2 2.4 0.0	79 6 73 0
3 M	0128 0803 1403 2052	2.6 0.4 3.1 0.3	79 12 94 9	18 Tu	0111 0718 1322 2019	2.3 0.9 2.7 0.5	70 27 82 15	3 Th	0319 0952 1546 2216	2.5 0.5 2.6 0.4	76 15 79 12	18 F	0229 0857 1441 2130	2.5 0.5 2.6 0.2	76 15 79 6	3 Sa	0341 1020 1603 2224	2.6 0.4 2.2 0.4	79 12 67 12	18 Su	0254 0937 1512 2150	2.7 0.1 2.3 0.0	82 3 70 0
4 Tu	0236 0909 1512 2152	2.5 0.5 3.0 0.3	76 15 91 9	19 W	0206 0819 1420 2113	2.3 0.9 2.7 0.4	70 27 82 12	4 F	0422 1052 1646 2307	2.6 0.5 2.5 0.4	79 15 76 12	19 Sa	0327 0957 1545 2220	2.6 0.4 2.6 0.1	79 12 79 3	4 Su	0438 1115 1659 2311	2.6 0.4 2.1 0.5	79 12 64 15	19 M	0355 1038 1617 2244	2.9 0.0 2.2 0.0	88 0 67 0
5 W	0347 1013 1620 2250	2.5 0.5 2.9 0.4	76 15 88 12	20 Th	0305 0919 1523 2204	2.3 0.8 2.7 0.4	70 24 82 12	5 Sa	0516 1148 1737 2354	2.7 0.4 2.4 0.5	82 12 73 15	20 Su	0424 1056 1645 2311	2.9 0.2 2.6 0.0	88 6 79 0	5 M	0528 1207 1749 2357	2.7 0.3 2.1 0.5	82 9 64 15	20 Tu	0454 1137 1718 2339	3.1 -0.2 2.3 -0.1	94 -6 70 -3
6 Th	0453 1115 1719 2343	2.6 0.5 2.8 0.4	79 15 85 12	21 F	0403 1018 1622 2254	2.5 0.6 2.8 0.3	76 18 85 9	6 Su	0601 1238 1822	2.9 0.4 2.4	88 12 73	21 M	0517 1155 1739	3.2 0.0 2.6	98 0 79	6 Tu	0613 1253 1834	2.8 0.3 2.1	85 9 64	21 W	0549 1235 1813	3.3 -0.3 2.3	101 -9 70
7 F	0546 1211 1808	2.7 0.4 2.8	82 12 85	22 Sa	0455 1116 1716 2343	2.8 0.4 2.9 0.1	85 12 88 3	7 M	0037 0642 1323 1903	0.5 3.0 0.3 2.4	15 91 9 73	22 Tu	0003 0607 1251 1830	-0.1 3.4 -0.3 2.6	-3 104 79 79	7 W	0041 0655 1335 1917	0.5 2.9 0.2 2.2	15 88 6 67	22 Th	0036 0641 1330 1905	-0.2 3.4 -0.4 2.4	-6 104 73 73
8 Sa	0031 0629 1302 1850	0.4 2.9 0.4 2.7	12 88 12 82	23 Su	0543 1213 1805	3.1 0.1 2.9	94 3 88	8 Tu	0117 0720 1403 1942	0.5 3.1 0.2 2.4	15 94 6 73	23 W	0055 0656 1345 1920	-0.2 3.6 -0.4 2.7	-6 110 -12 82	8 Th	0123 0735 1415 1958	0.5 2.9 0.1 2.2	15 88 3 67	23 F	0131 0732 1422 1955	-0.3 3.5 -0.5 76	-9 107 -15 76
9 Su	0114 0709 1347 1929	0.4 3.0 0.3 2.7	12 91 9 82	24 M	0032 0629 1308 1853	0.0 3.4 -0.1 3.0	0 104 -3 91	9 W	0155 0759 1441 2022	0.5 3.1 0.2 2.4	15 94 6 73	24 Th	0147 0745 1437 2010	-0.2 3.7 -0.5 2.7	-6 113 -15 82	9 F	0204 0814 1453 2039	0.4 2.9 0.0 2.3	12 88 0 70	24 Sa	0224 0822 1511 2046	-0.3 3.4 -0.6 2.5	-9 104 -18 76
10 M	0152 0746 1428 2007	0.4 3.1 0.3 2.7	12 94 9 82	25 Tu	0120 0715 1401 1940	-0.1 3.6 -0.3 3.0	-3 110 -9 91	10 Th	0232 0837 1518 2102	0.5 3.1 0.1 2.4	15 94 3 73	25 F	0238 0835 1527 2102	-0.3 3.7 -0.6 2.7	-9 113 -18 82	10 Sa	0244 0854 1532 2121	0.4 2.9 -0.1 2.3	12 88 -3 70	25 Su	0316 0912 1558 2138	-0.3 3.4 -0.5 2.6	-9 104 -15 79
11 Tu	0228 0824 1506 O 2046	0.4 3.2 0.2 2.6	12 98 6 79	26 W	0209 0803 1453 ● 2029	-0.2 3.8 -0.5 3.0	-6 116 -15 91	11 F	0308 0916 1556 2144	0.5 3.1 0.1 2.4	15 94 3 73	26 Sa	0330 0927 1617 2155	-0.2 3.7 -0.5 2.7	-6 113 -15 82	11 M	0324 0933 1612 2204	0.3 2.9 -0.1 2.3	9 88 -3 70	26 M	0407 1003 1645 2229	-0.3 3.2 -0.4 2.6	-9 98 -12 79
12 W	0303 0903 1543 2126	0.5 3.2 0.2 2.6	15 15 6 79	27 Th	0258 0853 1544 2120	-0.2 3.9 -0.5 2.9	-6 119 -15 88	12 Sa	0346 0956 1636 2228	0.5 3.0 0.1 2.4	15 91 3 73	27 Tu	0422 1021 1708 2250	-0.2 3.5 -0.4 2.7	-6 107 -12 82	12 M	0405 1013 1654 2247	0.3 2.9 -0.1 2.3	9 88 -3 70	27 Tu	0458 1052 1732 2321	-0.2 3.0 -0.3 2.6	-6 91 -9 79
13 Th	0337 0943 1621 2208	0.5 3.2 0.2 2.6	15 98 6 79	28 F	0348 0945 1636 2213	-0.2 3.8 -0.4 2.8	-6 116 -12 85	13 Su	0425 1037 1719 2312	0.5 3.0 0.1 2.3	15 91 3 70	28 M	0517 1115 1800 2346	0.0 3.3 -0.2 2.6	0 101 -6 79	13 Tu	0449 1053 1738 2330	0.3 2.9 -0.1 2.3	9 88 -3 70	28 W	0551 1142 1820 2048	0.0 2.8 -0.1 0.3	0 85 -3 9
14 F	0412 1023 1701 2251	0.6 3.1 0.3 2.5	18 94 9 76	29 Sa	0440 1040 1729 2309	-0.1 3.7 -0.3 2.7	-3 113 -9 82	14 M	0508 1118 1805 2356	0.6 2.9 0.2 2.3	18 88 6 70	29 Tu	0615 1209 1854	0.1 3.0 0.0	3 91 0 0	14 W	0538 1135 1825	0.3 2.8 -0.1	9 85 -3 0	29 Th	0012 0646 1231 1909	2.6 0.1 2.6 0.0	79 3 79 0
15 Sa	0450 1104 1745 2336	0.7 3.0 0.4 2.4	21 91 12 73	30 Su	0536 1136 1826	0.1 3.5 -0.1	3 98 -3 3	15 Tu	0557 1200 1855	0.6 2.8 0.2	18 85 6 0	30 W	0042 0716 1305 1949	2.6 0.3 2.8 0.1	79 9 85 3	30 Th	0015 0633 1220 1914	2.4 0.3 2.7 0.1	79 9 82 0	30 F	0104 0744 1322 1958	2.6 0.3 2.3 0.2	79 9 70 6
				31 M	0007 0637 1235 1924	2.7 0.3 3.2 0.1	82 9 98 3									31 Sa	0158 0843 1417 2048	2.5 0.4 2.1 0.3	76 12 64 9				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bridgeport, Connecticut, 2011

Times and Heights of High and Low Waters

January			February			March		
Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0212 0.1 3 0825 7.4 226 1458 -0.4 -12 2100 6.4 195	16 Su 0145 0.7 21 0759 6.7 204 1432 0.1 3 2037 6.0 183	1 Tu 0345 0.1 3 0954 7.0 213 1618 -0.3 -9 2220 6.6 201	16 W 0305 -0.1 -3 0915 7.4 226 1542 -0.6 -18 2147 7.0 213	1 Tu 0239 0.4 12 0848 6.7 204 1510 0.1 3 2114 6.5 198	16 W 0145 0.3 9 0755 7.1 216 1422 -0.1 -3 2027 7.0 213			
	2 Su 0307 0.0 0 0918 7.4 226 1549 -0.5 -15 2151 6.6 201	17 M 0238 0.4 12 0850 7.0 213 1522 -0.3 -9 2126 6.3 192	2 W 0430 0.0 0 1037 7.0 213 1658 -0.3 -9 2301 6.7 204	17 Th 0357 -0.6 -18 1006 7.7 235 1629 -1.0 -30 2234 7.5 229	2 W 0328 0.2 6 0935 6.8 207 1553 0.0 0 2157 6.8 207	17 Th 0242 -0.2 -6 0851 7.4 226 1513 -0.5 -15 2119 7.5 229		
	3 M 0357 0.0 0 1007 7.4 226 1636 -0.5 -15 2238 6.6 201	18 Tu 0328 0.1 3 0939 7.3 223 1609 -0.6 -18 2213 6.7 204	3 Th 0512 -0.1 -3 1118 7.0 213 1735 -0.3 -9 2340 6.8 207	18 F 0447 -0.9 -27 1055 7.9 241 1716 -1.2 -37 2321 7.9 241	3 Th 0411 0.1 3 1017 6.8 207 1631 0.0 0 2236 6.9 210	18 F 0336 -0.7 -21 0944 7.7 235 1602 -0.8 -24 2208 8.0 244		
	4 Tu 0445 0.0 0 1053 7.3 223 1719 -0.5 -15 2322 6.7 204	19 W 0417 -0.3 -9 1027 7.6 232 1655 -0.9 -27 2259 7.0 213	4 F 0551 -0.1 -3 1157 6.9 210 1810 -0.2 -6	19 Sa 0538 -1.2 -37 1144 7.9 241 1802 -1.2 -37	4 F 0451 -0.1 -3 1056 6.9 210 1706 0.0 0 2312 7.0 213	19 Sa 0428 -1.1 -34 1035 7.9 241 1649 -1.0 -30 2257 8.4 256		
5 W 0529 0.0 0 1137 7.2 219 1800 -0.4 -12	20 Th 0506 -0.6 -18 1114 7.8 238 1740 -1.1 -34 2345 7.3 223	5 Sa 0017 6.9 210 0629 0.0 0 1235 6.7 204 1845 -0.1 -3	20 Su 0009 8.1 247 0628 -1.2 -37 1233 7.8 238 1849 -1.1 -34	5 Sa 0528 -0.1 -3 1133 6.8 207 1740 0.0 0 2347 7.1 216	20 Su 0519 -1.3 -40 1124 7.9 241 1737 -1.0 -30 2345 8.5 259			
6 Th 0004 6.7 204 0612 0.1 3 1219 7.0 213 1839 -0.2 -6	21 F 0555 -0.8 -24 1202 7.8 238 1826 -1.1 -34	6 Su 0053 6.8 207 0708 0.1 3 1313 6.5 198 1920 0.1 3	21 M 0057 8.2 250 0720 -1.1 -34 1324 7.5 229 1938 -0.9 -27	6 Su 0604 -0.1 -3 1209 6.7 204 1813 0.1 3	21 M 0610 -1.3 -40 1214 7.7 235 1825 -0.9 -27			
7 F 0045 6.7 204 0655 0.2 6 1301 6.8 207 1918 0.0 0	22 Sa 0032 7.5 229 0645 -0.8 -24 1251 7.7 235 1913 -1.1 -34	7 M 0130 6.8 207 0747 0.2 6 1352 6.3 192 1957 0.3 9	22 Tu 0147 8.0 244 0814 -0.8 -24 1417 7.1 216 2030 -0.5 -15	7 M 0021 7.1 216 0640 -0.1 -3 1246 6.6 201 1848 0.2 6	22 Tu 0034 8.5 259 0701 -1.2 -37 1305 7.5 229 1915 -0.6 -18			
8 Sa 0126 6.6 201 0737 0.3 9 1343 6.5 198 1957 0.2 6	23 Su 0120 7.6 232 0738 -0.8 -24 1342 7.4 226 2002 -0.9 -27	8 Tu 0208 6.7 204 0829 0.4 12 1434 6.0 183 2037 0.5 15	23 W 0241 7.7 235 0911 -0.5 -15 1514 6.7 204 2126 -0.1 -3	8 Tu 0056 7.0 213 0717 0.0 0 1323 6.4 195 1923 0.4 12	23 W 0124 8.2 250 0754 -0.8 -24 1358 7.1 216 2008 -0.2 -6			
9 Su 0207 6.5 198 0822 0.5 15 1426 6.2 189 2037 0.4 12	24 M 0211 7.6 232 0833 -0.6 -18 1436 7.0 213 2054 -0.6 -18	9 W 0249 6.5 198 0914 0.5 15 1520 5.8 177 2122 0.7 21	24 Th 0339 7.3 223 1012 -0.1 -3 1615 6.3 192 2228 0.3 9	9 W 0132 6.9 210 0756 0.2 6 1403 6.2 189 2003 0.6 18	24 Th 0218 7.8 238 0850 -0.4 -12 1454 6.8 207 2105 0.2 6			
10 M 0250 6.4 195 0908 0.6 18 1513 5.9 180 2120 0.6 18	25 Tu 0305 7.5 229 0932 -0.4 -12 1534 6.6 201 2150 -0.2 -6	10 Th 0335 6.4 195 1005 0.7 21 1611 5.6 171 2213 0.9 27	25 F 0441 6.9 210 1117 0.2 6 1721 6.0 183 2334 0.6 18	10 Th 0210 6.7 204 0839 0.4 12 1446 6.0 183 2046 0.8 24	25 F 0315 7.3 223 0949 0.1 3 1554 6.4 195 2207 0.6 18			
11 Tu 0336 6.4 195 0959 0.8 24 1602 5.7 174 2207 0.8 24	26 W 0403 7.3 223 1035 -0.2 -6 1636 6.3 192 2250 0.1 3	11 F 0426 6.2 189 1102 0.8 24 1708 5.5 168 2310 1.0 30	26 Sa 0548 6.6 201 1223 0.3 9 1827 6.0 183 2310 1.0 30	11 F 0255 6.6 201 0928 0.6 18 1535 5.8 177 2137 1.0 30	26 Sa 0417 6.8 207 1051 0.4 12 1657 6.2 189 2313 0.8 24			
12 W 0424 6.3 192 1052 0.8 24 1656 5.5 168 2259 0.9 27	27 Th 0504 7.1 216 1140 0.0 0 1741 6.0 183 2354 0.3 9	12 Sa 0524 6.2 189 1202 0.7 21 1809 5.5 168	27 Su 0041 0.6 18 0653 6.5 198 1326 0.3 9 1930 6.1 186	12 Sa 0346 6.4 195 1024 0.7 21 1631 5.7 174 2235 1.1 34	27 Su 0523 6.5 198 1155 0.6 18 1801 6.2 189			
13 Th 0516 6.2 189 1148 0.8 24 1753 5.4 165 2354 0.9 27	28 F 0608 6.9 210 1245 0.1 3 1847 6.0 183	13 Su 0012 0.9 27 0625 6.3 192 1303 0.5 15 1908 5.7 174	28 M 0144 0.6 18 0754 6.6 201 1421 0.2 6 2026 6.3 192	13 Su 0446 6.4 195 1125 0.7 21 1732 5.8 177 2339 1.0 30	28 M 0019 0.9 27 0628 6.4 195 1255 0.7 21 1902 6.3 192			
14 F 0611 6.3 192 1245 0.6 18 1850 5.5 168	29 Sa 0058 0.4 12 0712 6.9 210 1347 0.0 0 1949 6.1 186	14 M 0112 0.7 21 0725 6.6 201 1400 0.2 6 2005 6.1 186		14 M 0550 6.5 198 1227 0.5 15 1834 6.0 183	29 Tu 0121 0.8 24 0729 6.4 195 1350 0.6 18 1957 6.5 198			
15 Sa 0050 0.9 27 0706 6.4 195 1340 0.4 12 1945 5.7 174	30 Su 0159 0.3 9 0811 6.9 210 1443 -0.1 -3 2045 6.2 189	15 Tu 0210 0.3 9 0822 7.0 213 1453 -0.2 -6 2057 6.5 198		15 Tu 0043 0.7 21 0654 6.7 204 1327 0.2 6 1933 6.4 195	30 W 0216 0.6 18 0822 6.5 198 1437 0.5 15 2045 6.7 204			
	31 M 0255 0.2 6 0905 7.0 213 1533 -0.2 -6 2136 6.4 195				31 Th 0304 0.4 12 0909 6.6 201 1519 0.4 12 2127 7.0 213			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bridgeport, Connecticut, 2011

Times and Heights of High and Low Waters

April					May					June									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time					
1 F 0346 0951 1558 2206	0.2 6.7 0.4 7.1	ft 204 12 216	cm 6 229 -15 256	16 Sa 0316 0922 1534 2143	-0.7 7.5 -0.5 8.4	ft 229 -15 256	cm -21 198 21 223	1 Su 0356 1001 1559 2210	0.2 6.5 0.7 7.3	ft 198 21 223	cm 6 223 -24 259	1 W 0352 0955 1601 2212	-0.8 7.3 -0.2 8.5	ft 223 -24 -6 259	cm -24 201 -6 226	16 Th 0446 1053 1649 2257	0.1 6.6 0.8 7.4	ft 201 24 21 226	cm 3 219 6 244
	0425 1030 1634 2242	0.0 6.7 0.3 7.3	ft 204 232 9 223	cm 0 232 -18 262	17 Su 0410 1014 1624 2233	-1.0 7.6 -0.6 8.6	ft 232 -18 262	cm -30 201 -18 226	2 M 0435 1041 1637 2246	0.1 6.6 0.7 7.4	ft 201 21 21 226	cm 3 226 -27 259	2 Th 0527 1134 1731 2337	0.0 6.7 0.7 7.5	ft 204 21 21 229	cm 0 219 9 244			
	0502 1108 1709 ● 2317	0.0 6.7 0.3 7.3	ft 204 235 9 223	cm 0 235 -18 265	18 M 0501 1105 1713 2322	-1.2 7.7 -0.6 8.7	ft 235 -18 265	cm -37 204 -21 226	3 Tu 0513 1119 1715 ● 2323	0.0 6.7 0.7 7.4	ft 204 21 21 226	cm 0 204 -24 253	3 F 0608 1215 1814	-0.1 6.8 0.7	ft 207 21 21	cm -3 216 12 238			
	0538 1144 1743 2351	-0.1 6.7 0.4 7.3	ft 204 232 12 223	cm -3 232 -15 223	19 Tu 0552 1156 1803	-1.2 7.6 -0.5	ft 232 -15	cm -37 204	4 W 0550 1158 1754	0.0 6.7 0.7	ft 204 21 21	cm 0 204 -21 3	4 Sa 0019 0650 1258 1859	7.5 -0.1 229 0.6	ft 229 -3 210 18	cm 229 -3 210 18			
5 Tu 0614 1221 1819	-0.1 6.6 0.5	-3 201 15	ft 201 643 1247 1854	cm 8.5 -1.0 226 -6	20 W 0012 0643 1247 1854	8.5 -1.0 226 -6	ft 259 -30 226 -6	cm -259 0 204 -24	5 Th 0000 0629 1237 1834	7.4 0.0 6.6 0.8	ft 226 0 201 24	cm 244 -12 223 9	5 Su 0044 0714 1319 1927	8.0 -0.4 7.1 0.3	ft 244 -12 216 9	cm 229 -3 210 18			
	0026 0651 1258 1856	7.2 0.0 6.5 0.6	ft 219 0 198 18	cm 219 0 198 18	21 Th 0103 0734 1339 1948	8.2 -0.6 -18	ft 250 -18	cm -250 3	6 F 0038 0709 1318 1916	7.3 0.1 6.6 0.8	ft 223 3 201 24	cm 232 -3 213 9	6 M 0151 0822 1430 2039	7.4 -0.1 7.0 0.6	ft 226 -3 213 18	cm 229 -3 210 24			
	0102 0730 1338 1936	7.1 0.1 6.4 0.8	ft 216 3 195 24	cm 216 -6 223 -6	21 Th 0156 0827 1433 2044	7.7 -0.2 6.9 0.5	ft 235 -6 223 -15	cm -235 3 223 -6	7 Sa 0120 0753 1402 2002	7.3 0.1 6.6 0.9	ft 223 3 201 27	cm 223 -9 216 27	7 Tu 0227 0854 1502 2116	7.2 0.3 6.8 0.9	ft 219 9 207 27	cm 223 -3 219 15			
	0141 0813 1421 2021	7.0 0.3 6.3 0.9	ft 213 9 192 27	cm 213 6 201 24	8 F 0252 0923 1530 2143	7.2 0.2 6.6 0.8	ft 219 6 201 24	cm -250 6 201 24	8 Su 0206 0841 1450 2054	7.2 0.2 6.6 0.9	ft 219 6 201 27	cm 207 18 204 30	8 W 0321 0945 1556 2213	6.8 -0.1 6.7 1.0	ft 207 18 204 30	cm 216 3 223 15			
9 Sa 0226 0901 1510 2112	6.9 0.4 6.2 1.0	210 12 189 30	ft 210 1020 1629 2246	cm 210 0.5 6.5 1.0	24 Su 0351 1020 1629 2246	6.8 0.5 15 30	ft 207 15 198 30	cm 207 15 198 30	9 M 0258 0933 1542 2152	7.1 0.3 6.6 0.9	ft 216 9 201 27	cm 195 9 204 34	9 Th 0416 1036 1649 ● 2311	6.4 0.8 6.7 1.1	ft 195 9 204 34	cm 210 6 229 9			
	0318 0955 1604 2210	6.7 0.5 6.1 1.0	ft 204 15 186 30	cm 204 15 186 34	10 Su 0452 1118 1729 2349	6.5 0.8 6.4 1.1	ft 198 24 195 34	cm 198 24 195 34	10 Tu 0356 1028 1638 ● 2254	6.9 0.3 6.8 0.7	ft 210 9 207 21	cm 210 9 207 21	10 W 0513 1127 1743	6.2 1.0 6.7	ft 189 30 204	cm 207 30 204			
	0417 1054 1703 ● 2314	6.7 0.6 6.3 0.9	ft 204 18 192 27	cm 204 18 192 27	11 Tu 0554 1215 1826 ● 2254	6.3 0.9 6.5 0.7	ft 192 27 198 34	cm 192 27 198 34	11 W 0458 1126 1737 2358	6.9 0.3 7.1 0.5	ft 210 9 216 15	cm 192 9 216 15	11 Sa 0042 0643 1255 1909	0.1 6.7 0.3 7.9	ft 189 204 241	cm 3 204 9 241			
	0522 1155 1804	6.7 0.5 6.5	ft 204 15 198	cm 204 15 198	12 Tu 0048 0652 1307 1919	1.0 6.2 0.9 6.7	ft 30 189 27 204	cm 30 6 226	12 W 0602 1223 1835 ● 2254	6.9 0.2 7.4 7.4	ft 210 6 226 21	cm 210 6 226 21	12 Th 0102 0704 1307 1924	1.0 6.0 1.1 6.9	ft 30 183 247	cm 213 6 206			
13 W 0019 0626 1254 1902	0.6 6.8 0.3 7.0	18 207 9 213	ft 18 207 9 213	cm 18 207 9 213	28 Th 0143 0746 1355 2007	0.8 6.2 0.9 6.9	ft 24 189 27 210	cm 24 189 27 210	13 F 0143 0746 1355 2007	0.2 6.9 0.1 7.8	ft 6 186 3 238	cm 24 186 3 238	13 M 0241 0842 1449 2101	-0.3 6.9 0.2 8.2	ft -9 210 6 250	cm 210 9 6 250			
	0122 0728 1350 1958	0.2 7.1 0.0 7.5	ft 6 216 0 229	cm 18 216 0 229	14 Th 0231 0835 1439 2051	0.6 6.3 0.8 7.1	ft 18 192 24 216	cm 18 192 24 216	14 Sa 0201 0804 1415 2027	-0.2 7.1 0.0 8.2	ft -6 216 0 250	cm 20 189 30 250	14 Tu 0336 0938 1440 2054	-0.4 7.0 1.0 7.2	ft -12 213 30 250	cm 12 213 30 250			
	0221 0827 1443 2052	-0.3 7.3 -0.3 8.0	ft -9 223 -9 244	cm 12 223 -9 244	29 F 0231 0835 1439 2051	0.4 6.4 0.7 7.2	ft 12 192 21 219	cm 12 192 21 219	29 W 0231 0835 1439 2051	0.4 6.4 0.7 7.2	ft -15 223 3 229	cm 12 223 3 229	29 M 0334 0940 1537 2148	0.4 6.4 0.9 7.3	ft 12 213 27 223	cm 12 213 27 223			
	0316 0919 1520 2131	0.4 6.4 0.7 7.2	ft 12 195 21 219	cm 12 195 21 219	30 Sa 0258 0901 1509 2120	-0.5 7.2 -0.2 8.4	ft -15 219 -6 256	cm -15 219 -6 256	30 M 0323 0929 1524 2136	0.4 6.3 0.9 1.1	ft 12 192 21 250	cm 12 192 21 250	30 Th 0428 1031 1636 ● 2246	-0.5 7.1 0.1 8.2	ft -15 216 3 250	cm 12 216 3 250			
15 F 0221 0827 1443 2052	-0.3 7.3 -0.3 8.0	-9 223 -9 244	ft -9 223 -9 244	cm -9 223 -9 244	31 Tu 0405 1012 1607 2217	0.3 6.5 0.9 7.4	ft 9 198 27 226	cm 9 198 27 226	31 W 0405 1012 1607 2217	0.3 6.5 0.9 7.4	ft 9 198 27 226	cm 9 198 27 226	31 Th 0419 1025 1623 2232	0.1 6.6 0.7 7.5	ft 3 201 21 229	cm 3 201 21 229			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Bridgeport, Connecticut, 2011

Times and Heights of High and Low Waters

July			August			September						
Time	Height		Time	Height		Time	Height					
h m	ft	cm	h m	ft	cm	h m	ft	cm				
1 F 1108 1708 ● 2315	-0.1 6.8 0.5 7.7	-3 207 15 235	16 Sa 1148 1757	0.1 0.3 9	-3 219 9	1 M 1210 1822	-0.6 -0.2 -6	-18 238 -6				
2 Sa 1152 1754	-0.3 7.0 0.4	-9 213 12	17 Su 0625 1231 1842	7.5 7.2 0.4	229 219 12	2 Tu 0027 1256 1913	8.0 8.0 -0.3	244 244 -9				
3 Su 0629 1236 1841	0.0 7.2 0.3	3 M 0705 1313 1926	7.3 7.2 0.6	238 219 18	18 W 0745 1345 2006	6.9 8.1 -0.2	210 219 18	17 Sa 0150 0749 1358	6.5 1.0 7.0	198 30 213		
4 M 0713 1321 1931	7.8 -0.4 7.4	238 -12 226	19 Tu 0129 1355 2010	7.0 7.1 0.7	213 216 21	4 Th 0208 1436 2102	7.5 8.0 -0.1	229 244 -3	18 Su 0233 0833 1443	6.3 1.2 6.8	192 37 207	
5 Tu 0800 1409 2024	7.7 7.6 0.2	235 232 6	20 W 0213 0824 1437 2056	6.7 0.6 7.0 0.9	204 18 213 27	5 F 0303 0918 1531 2202	7.2 0.0 7.9 0.1	219 0 241 3	19 M 0322 0923 1533	6.1 1.4 6.7	186 43 204	
6 W 0848 1459 2120	7.5 7.7 0.2	229 235 6	21 Th 0259 0906 1521 2145	6.4 0.8 6.9 1.0	195 24 210 30	6 Sa 0402 1016 1630 2305	6.8 0.3 7.7 0.3	207 9 235 9	20 Tu 0416 1019 1630 2307	6.0 1.4 6.6 1.1	183 43 201 34	
7 Th 0940 1553 2220	7.2 7.7 0.2	219 235 6	22 F 0347 0951 1608 2236	6.1 1.0 6.8 1.1	186 30 207 34	7 Su 0505 1117 1733	6.6 0.5 7.6	201 15 232	21 W 0514 1119 1731	6.1 1.4 6.7	186 43 204	
8 F 1036 1650 ● 2322	6.9 0.2 7.7	210 235 6	23 Sa 0439 1040 1659 ● 2330	5.9 1.2 6.7 1.2	180 37 204 37	8 M 0010 0610 1221 1836	0.4 6.5 0.7 7.5	12 198 21 229	22 Th 0452 1053 1708 2344	5.9 1.4 6.6 1.2	180 43 204 27	
9 Sa 1135 1750	6.7 0.3 7.7	204 9 235	24 Su 0534 1133 1752	5.8 1.3 6.7	177 40 204	9 Tu 0113 0714 1324 1938	0.4 6.5 0.7 7.5	12 198 21 229	23 W 0550 1152 1806 2020	5.9 1.4 6.7 7.2	180 24 219 219	
10 Su 0625 1235 1851	0.2 0.5 7.8	6 198 15 238	25 M 0025 0630 1229 1846	1.1 5.8 1.3 6.7	34 177 40 204	10 W 0212 0814 1424 2035	0.3 6.6 0.6 7.5	9 201 18 229	24 Sa 0244 0648 1250 1904	0.4 6.0 1.2 6.9	12 30 23 210	
11 M 0728 1336 1950	0.1 0.5 7.8	3 201 15 238	26 Tu 0120 0725 1324 1939	1.0 6.0 1.2 6.9	30 183 37 210	11 Th 0306 0908 1518 2128	0.2 6.8 0.5 7.5	6 207 15 229	25 Sa 0329 0934 1549 2154	0.3 7.2 0.4 7.3	9 219 223 223	
12 Tu 0828 1435 2047	0.0 0.4 7.8	0 204 12 238	27 W 0213 0818 1417 2030	0.7 6.2 1.0 7.1	21 189 30 216	12 F 0354 0957 1607 2215	0.1 7.0 0.4 7.5	3 213 12 229	26 M 0447 1053 1710 2141	0.3 7.4 0.3 7.8	9 226 27 219	
13 W 0923 1530 2141	-0.1 0.4 7.8	-3 207 12 238	28 Th 0302 0908 1508 2119	0.4 6.5 0.8 7.4	12 198 24 226	13 Sa 0437 1041 1652 ● 2258	0.1 7.2 0.3 7.5	3 219 9 229	27 M 0404 1010 1622 ● 2229	-0.3 7.6 -0.2 8.0	-9 232 -6 244	
14 Th 1015 1622 2231	-0.2 0.3 7.8	-6 9 238	29 F 0349 0955 1557 2206	0.1 6.8 0.5 7.7	3 207 20 235	29 Su 0517 1122 1735 2340	0.1 7.3 0.3 7.4	3 223 9 226	28 W 0450 1056 1712 2317	-0.5 8.0 -0.5 8.1	-15 244 -15 247	
15 F 1103 1711 ● 2318	-0.2 0.3 7.7	-6 9 235	30 Sa 0435 1040 1645 ● 2253	-0.2 7.2 0.2 7.9	-6 219 6 241	30 M 0555 1201 1815	0.2 7.3 0.4 7.9	6 223 12 241	29 W 0557 1205 1825	0.5 7.4 0.4	15 226 12 15	
			31 Su 1125 1733 2339	0.4 -0.1 8.0	-12 -3 244	31 W 0006 1143 1802	8.0 8.3 -0.7	244 253 -21	30 F 0037 0646 1257	7.7 -0.4 8.5	-18 235 -18	
							31 W 0622 1230 1853	-0.6 8.5 -0.6	244 259 -18			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Bridgeport, Connecticut, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0130	7.4	226	16 Su 0122	6.4	195	1 Tu 0305	6.8	207	1 Th 0227	6.3	192
0740	-0.1	-3	0720	1.0	30	0919	0.6	18	W 0831	0.9	27
1351	8.2	250	1326	7.0	216	1528	7.1	216	1436	6.8	207
2023	-0.2	-6	1957	0.6	18	2159	0.4	12	2109	0.4	12
2 Su 0227	7.1	216	17 M 0205	6.3	192	2 O 0406	6.6	201	17 F 0429	6.5	198
0838	0.3	9	0804	1.2	37	W 1023	0.8	24	17 Th 0926	0.9	27
1449	7.8	238	1410	6.8	207	1631	6.7	204	1531	6.7	204
2123	0.1	3	2044	0.8	24	2258	0.6	18	2202	0.4	12
3 M 0327	6.8	207	18 Tu 0253	6.2	189	3 Th 0507	6.6	201	18 F 0412	6.5	198
0940	0.6	18	0854	1.3	40	1127	0.9	24	18 Sa 1027	0.8	24
1552	7.3	223	1501	6.7	204	1733	6.5	198	1631	6.7	204
2226	0.4	12	2137	0.8	24	2356	0.7	21	2258	0.4	12
4 Tu 0431	6.6	201	19 W 0346	6.2	189	4 F 0606	6.7	204	4 Su 0004	0.8	24
1046	0.8	24	0950	1.3	40	1228	0.8	24	19 Sa 1129	0.5	15
1657	7.0	213	1558	6.7	204	1832	6.4	195	1733	6.7	204
2329	0.6	18	2233	0.8	24	2355	0.2	6	1848	5.9	180
5 W 0535	6.6	201	20 Th 0442	6.3	192	5 Sa 0049	0.7	21	5 Su 0606	7.2	219
1152	0.9	27	1051	1.2	37	0700	6.8	207	20 M 0054	0.8	24
1802	6.9	210	1659	6.7	204	1323	0.7	21	20 Tu 0709	6.7	204
2331	0.7	21	2331	0.7	21	1927	6.4	195	1338	0.6	18
6 Th 0030	0.7	21	21 F 0540	6.5	198	6 Su 0138	0.7	21	6 Tu 0142	0.8	24
0637	6.7	204	1154	0.9	27	0749	7.0	213	21 M 0702	7.6	232
1255	0.8	24	1801	6.8	207	1413	0.5	15	1330	-0.2	-6
1903	6.8	207	2331	0.7	21	2016	6.5	198	1933	6.9	210
7 F 0126	0.6	18	22 M 0028	0.5	15	7 M 0222	0.7	21	7 W 0228	0.8	24
0733	6.9	210	0637	6.9	210	0833	7.1	216	7 Th 0841	6.9	210
1351	0.7	21	1254	0.5	15	1458	0.3	9	1509	0.2	6
1958	6.9	210	1900	7.1	216	2101	6.5	198	2114	6.2	189
8 Sa 0215	0.5	15	23 Su 0122	0.2	6	8 Tu 0303	0.6	18	8 Th 0311	0.7	21
0822	7.1	216	0731	7.4	226	0914	7.2	219	23 F 0923	7.0	213
1441	0.5	15	1352	0.0	0	1539	0.2	6	1551	0.1	3
2046	6.9	210	1957	7.3	223	2143	6.6	201	2156	6.3	192
9 Su 0258	0.5	15	24 M 0214	-0.1	-3	9 W 0343	0.6	18	9 F 0353	0.6	18
0906	7.3	223	0823	8.0	244	0953	7.3	223	24 Sa 1004	7.0	213
1526	0.3	9	1447	-0.5	-15	1618	0.1	3	1631	0.0	0
2130	7.0	213	2051	7.5	229	2223	6.6	201	2237	6.4	195
10 M 0338	0.5	15	25 Tu 0304	-0.4	-12	10 Th 0421	0.6	18	10 O 0434	0.5	15
0946	7.4	226	0913	8.4	256	1030	7.3	223	10 Sa 1043	7.1	216
1606	0.2	6	1539	-0.8	-24	1655	0.1	3	1710	-0.1	-3
2210	6.9	210	2143	7.7	235	2301	6.6	201	2317	6.4	195
11 Tu 0415	0.5	15	26 W 0353	-0.5	-15	11 F 0458	0.6	18	11 O 0514	0.5	15
1023	7.5	229	1003	8.7	265	1107	7.3	223	26 M 1126	8.4	256
1644	0.2	6	1631	-1.0	-30	1733	0.1	3	11 Su 1757	-0.9	-27
2249	6.9	210	2235	7.7	235	2340	6.6	201	1749	-0.2	-6
12 W 0450	0.5	15	27 Th 0443	-0.6	-18	12 Sa 0536	0.7	21	12 M 1201	7.1	216
1059	7.5	229	1053	8.8	268	1144	7.2	219	12 Su 1218	8.1	247
1721	0.2	6	1723	-1.1	-34	1811	0.1	3	1848	-0.7	-21
2326	6.8	207	2326	7.7	235	1933	0.3	9	27 Tu 0608	-0.3	-9
13 Th 0526	0.6	18	28 F 0534	-0.5	-15	13 M 0018	6.5	198	13 W 0701	-0.1	-3
1134	7.4	226	1144	8.7	265	0615	0.8	24	13 Su 1222	7.7	235
1758	0.2	6	1814	-0.9	-27	1222	7.1	216	13 Th 1939	-0.4	-12
2022	6.9	210	2002	-0.3	-9	1851	0.2	6	13 Th 1911	-0.2	-6
14 F 0004	6.7	204	29 M 0018	7.5	229	14 M 0058	6.4	195	14 W 0144	7.0	213
0602	0.8	24	0626	-0.3	-9	0657	0.8	24	29 Tu 0756	0.2	6
1210	7.3	223	1236	8.4	256	1302	7.0	213	14 Tu 1404	7.3	223
1835	0.3	9	1907	-0.6	-18	1933	0.3	9	29 Tu 2031	-0.1	-3
15 Sa 0042	6.6	201	30 Su 0111	7.3	223	15 M 0141	6.4	195	14 W 0118	6.6	201
0639	0.9	27	0720	0.0	0	0741	0.9	27	30 M 0853	0.5	15
1247	7.1	216	1331	8.0	244	1346	6.9	210	30 Th 0811	0.4	12
1914	0.5	15	2002	-0.3	-9	2019	0.3	9	30 W 1415	6.9	210
16 M 0207	7.0	213	31 M 0818	0.3	9	2124	0.2	6	30 Th 2042	-0.1	-3
0818	0.3	9	1428	7.5	229	2059	0.1	3	31 W 0207	6.8	207
1428	7.5	229	2059	0.1	3				31 Th 0822	0.2	6

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kings Point, Long Island, New York, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm		h m	ft	cm		h m	ft	cm					
1 Sa	0300	-0.1	-3	16 Su	0130	0.7	21	1 Tu	0431	-0.3	-9	16 Tu	0309	-0.1	-3
0855	8.1	247		0746	7.1	216	1026	7.8	238	W	0907	8.0	244		
1543	-0.8	-24		1508	0.2	6	1702	-0.7	-21		1609	-0.6	-18		
2132	7.1	216		2046	6.5	198	2252	7.4	226		2143	7.6	232		
2 Su	0354	-0.2	-6	17 M	0231	0.4	12	2 W	0516	-0.3	-9	17 Th	0407	-0.7	-21
0948	8.2	250		0839	7.5	229	1108	7.8	238		0958	8.4	256		
1634	-0.9	-27		1554	-0.2	-6	1743	-0.7	-21		1652	-1.0	-30		
2221	7.3	223		2128	6.8	207	● 2333	7.4	226		2229	8.2	250		
3 M	0445	-0.3	-9	18 Tu	0327	0.0	0	3 Th	0558	-0.3	-9	18 F	0459	-1.1	-34
1035	8.1	247		0927	7.9	241	1146	7.7	235		1047	8.6	262		
1721	-0.9	-27		1636	-0.6	-18	1820	-0.5	-15		1733	-1.3	-40		
2308	7.3	223		2208	7.3	223	○ 2315	8.6	262						
4 Tu	0532	-0.2	-6	19 W	0419	-0.4	-12	4 F	0010	7.4	226	19 Sa	0550	-1.3	-40
1120	8.0	244		1014	8.3	253	0634	-0.2	-6		1136	8.6	262		
1805	-0.8	-24		1716	-0.9	-27	1220	7.5	229		1815	-1.4	-43		
● 2352	7.3	223		○ 2250	7.6	232	1850	-0.3	-9		● 2342	7.7	235		
5 W	0615	-0.1	-3	20 Th	0508	-0.7	-21	5 Sa	0041	7.3	223	20 Su	0001	8.8	268
1201	7.8	238		1100	8.5	259	0703	0.0	0		0640	-1.4	-43		
1846	-0.6	-18		1755	-1.1	-34	Sa	1248	7.3	223	Sa	1226	8.5	259	
				2334	8.0	244		1902	0.0	0		1858	-1.2	-37	
6 Th	0033	7.3	223	21 F	0557	-0.9	-27	6 Su	0103	7.3	223	21 M	0050	8.9	271
0655	0.1	3		1148	8.5	259	0715	0.2	6		0733	-1.3	-40		
1239	7.6	232		1835	-1.2	-37	1311	7.0	213		1318	8.1	247		
1922	-0.3	-9					1910	0.1	3		1945	-0.9	-27		
7 F	0111	7.2	219	22 Sa	0021	8.2	250	7 M	0121	7.2	219	22 Tu	0141	8.7	265
0730	0.3	9		0647	-1.0	-30	0735	0.2	6		0833	-0.9	-27		
1314	7.3	223		1238	8.4	256	1338	6.8	207		1414	7.7	235		
1950	0.0	0		1918	-1.2	-37	1940	0.2	6		2038	-0.5	-15		
8 Sa	0146	7.0	213	23 Su	0110	8.3	253	8 Tu	0150	7.1	216	23 W	0237	8.3	253
0753	0.5	15		0741	-0.9	-27	0810	0.4	12		0943	-0.5	-15		
1345	7.0	213		1330	8.1	247	1414	6.6	201		1518	7.2	219		
1955	0.2	6		2005	-1.0	-30	2019	0.4	12		2148	0.0	0		
9 Su	0214	6.9	210	24 M	0202	8.3	253	9 W	0226	7.1	216	24 Th	0341	7.8	238
0814	0.6	18		0841	-0.7	-21	0852	0.5	15		1058	-0.2	-6		
1418	6.7	204		1426	7.7	235	1455	6.4	195		1635	6.8	207		
2020	0.4	12		2057	-0.6	-18	2103	0.6	18		● 2312	0.4	12		
10 M	0242	6.8	207	25 Tu	0258	8.1	247	10 Th	0309	6.9	210	25 F	0502	7.4	226
0851	0.8	24		0956	-0.4	-12	0940	0.7	21		1207	0.0	0		
1456	6.4	195		1528	7.2	219	1543	6.2	189		1755	6.6	201		
2059	0.6	18		2203	-0.2	-6	2153	0.8	24						
11 Tu	0317	6.7	204	26 W	0401	7.9	241	11 F	0357	6.8	207	26 Sa	0026	0.5	15
0937	0.9	27		1116	-0.2	-6	1036	0.8	24		0624	7.2	219		
1540	6.2	189		1645	6.7	204	1636	6.1	186		1312	0.0	0		
2144	0.7	21		● 2326	0.1	3	● 2247	0.9	27		1906	6.6	201		
12 W	0359	6.7	204	27 Th	0518	7.6	232	12 Sa	0452	6.8	207	27 Su	0132	0.4	12
1031	1.0	30		1228	-0.2	-6	1140	0.8	24		0733	7.2	219		
1632	6.0	183		1810	6.5	198	1738	6.0	183		1410	-0.1	-3		
● 2234	0.9	27					2348	0.9	27		2008	6.8	207		
13 Th	0448	6.6	201	28 F	0042	0.3	9	13 Su	0554	6.8	207	28 M	0231	0.2	6
1137	1.0	30		0639	7.5	229	1302	0.7	21		0832	7.4	226		
1733	5.9	180		1332	-0.2	-6	1849	6.2	189		1504	-0.2	-6		
2329	1.0	30		1924	6.6	201					2101	7.1	216		
14 F	0543	6.6	201	29 Sa	0148	0.2	6	14 M	0053	0.7	21	29 Tu	0520	7.0	213
1313	0.8	24		0748	7.5	229	0702	7.1	216		1213	0.7	21		
1850	5.9	180		1432	-0.4	-12	1427	0.3	9		1808	6.5	198		
				2026	6.8	207	2000	6.5	198						
15 Sa	0028	0.9	27	30 Su	0248	0.1	3	15 Tu	0202	0.3	9	15 Tu	0025	0.7	21
0645	6.8	207		0847	7.7	235	0810	7.5	229		0630	7.2	219		
1416	0.5	15		1526	-0.6	-18	1522	-0.2	-6		1338	0.4	12		
1958	6.1	186		2120	7.0	213	2056	7.1	216		1921	7.0	213		
				31 M	0342	-0.1	-3					31 Th	0347	0.0	0
				0939	7.8	238					0943	7.4	226		
				1616	-0.7	-21					1606	0.1	3		
				2208	7.2	219					2202	7.8	238		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kings Point, Long Island, New York, 2011

Times and Heights of High and Low Waters

April					May					June				
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time
1 F 0431 0.431	-0.2	16 Sa 0345 0.926	-0.8	1 Su 0441 1.033	0.0	16 M 0429 1.009	-1.0	1 W 0522 1.110	0.0	16 Th 0600 1.114	-0.8	1 F 0431 0.926	-0.2	
1024 7.5	229	1588 8.2	250	1033 7.3	223	1642 0.7	21	1009 8.0	244	1106 7.2	219	1144 7.9	241	
1645 0.1	3	2144 9.1	277	1642 7.9	241	1633 0.3	-9	1633 0.0	24	1648 0.8	24	1809 0.1	3	
2239 7.9	241	2236 7.9	241	2218 9.2	280	2218 9.2	280	● 2241 7.9	241	2352 8.6	262	2352 8.6	262	
2 Sa 0510 1.019	-0.3	17 Su 0440 1.019	-1.2	2 M 0517 1.107	-0.1	17 Tu 0522 1.101	-1.2	2 Th 0548 1.128	0.0	17 F 0647 1.1234	-0.7	21 238 0.2	-21	
1101 7.5	229	1718 8.4	256	1702 0.7	21	1726 0.3	-9	1723 0.6	18	1723 0.6	18	1858 0.2	6	
2310 7.8	238	○ 2233 9.4	287	2254 7.8	238	2308 9.2	280	2315 8.1	247	2352 8.6	262	2352 8.6	262	
3 Su 0545 1.0531	-0.2	18 M 0531 1.110	-1.4	3 Tu 0547 1.134	0.0	18 W 0612 1.153	-1.1	3 F 0612 1.158	-0.1	18 Sa 0041 1.0733	8.3	253		
1134 7.4	226	1736 8.4	256	1715 0.7	21	1817 0.1	-3	1803 0.5	15	1323 7.7	235	1947 0.4	12	
● 2331 7.8	238	2321 9.4	287	● 2309 7.9	241	2359 8.9	271	2356 8.2	250	1947 0.4	12	1947 0.4	12	
4 M 0612 1.0622	-0.1	19 Tu 0622 1.1202	-1.4	4 W 0604 1.1152	0.0	19 Th 0702 1.1246	-0.9	4 Sa 0645 1.1236	-0.1	19 F 0129 1.0818	8.0	244		
1159 7.3	223	1824 8.3	253	1743 0.6	18	1909 0.1	3	1846 0.4	12	1410 7.6	232	2036 0.7	21	
1745 0.4	12	2342 7.7	235	2338 7.9	241	2338 7.9	241	2338 7.9	241	2128 0.9	27	2128 0.9	27	
5 Tu 0622 1.0011	-0.1	20 W 0714 1.1256	-3	5 Th 0624 1.1218	0.0	20 F 0052 1.0753	8.6	5 Su 0041 1.0724	8.2	20 M 0217 1.0902	7.6	232		
1216 7.2	219	2196 8.0	244	1820 0.6	18	1341 7.7	235	1320 7.6	232	1458 7.5	229	2128 0.9	27	
1808 0.4	12	1916 0.2	-6	2003 0.4	12	1934 0.4	12	1934 0.4	12	2128 0.9	27	2128 0.9	27	
6 W 0005 1.0104	7.8	238	21 Th 0809 1.1353	-0.7	6 F 0015 1.1254	8.0	21 Sa 0147 1.0846	8.1	6 M 0129 1.0809	8.2	219 Tu 0306 1.0943	7.2	219	
0641 0.0	0	2014 0.2	6	1902 0.6	18	1436 7.5	229	1408 7.8	238	1545 7.3	223	2222 1.1	34	
1240 7.2	219	2014 0.2	6	1902 0.6	18	2102 0.7	21	2026 0.4	12	2026 0.4	12	2026 0.4	12	
1842 0.5	15	2006 0.6	18	2038 0.7	21	2306 1.1	34	2230 0.5	15	2230 0.5	15	2230 0.5	15	
7 Th 0040 1.0202	7.8	238	22 F 0909 1.1455	-0.3	7 Sa 0058 1.0737	8.0	22 Su 0245 1.0940	7.7	7 Tu 0221 1.0858	8.0	22 W 0358 1.1022	6.8	207	
0714 0.1	3	216	2123 0.6	18	1337 7.3	223	2220 0.9	27	1500 7.9	241	1633 7.2	219	2318 1.2	37
1315 7.1	216	2233 0.8	24	1948 0.6	18	2204 0.9	27	2123 0.5	15	2123 0.5	15	2123 0.5	15	
1922 0.5	15	2233 0.8	24	2038 0.7	21	2306 1.1	34	2230 0.5	15	2230 0.5	15	2230 0.5	15	
8 F 0120 1.0307	7.7	235	23 Sa 0104 1.1011	7.7	8 Su 0145 1.0823	7.9	23 M 0347 1.1035	7.2	8 W 0316 1.0952	7.8	238 Th 0455 1.1054	6.6	201	
0755 0.2	6	2333 0.8	24	1424 0.7	21	1424 0.7	21	1631 7.2	219	1555 8.0	244	1725 7.1	216	
1357 7.0	213	2233 0.8	24	2038 0.7	21	2306 1.1	34	● 2230 0.5	15	● 2230 0.5	15	● 2230 0.5	15	
2006 0.6	18	2233 0.8	24	2038 0.7	21	2306 1.1	34	2230 0.5	15	2230 0.5	15	2230 0.5	15	
9 Sa 0206 1.0419	7.6	232	24 Su 0419 1.1113	7.3	9 M 0237 1.0915	7.8	24 Th 0450 1.1129	6.9	9 Th 0417 1.1051	7.5	229 F 0014 1.1057	1.2	37	
0841 0.4	12	213	2106 0.7	213	1706 0.7	213	1728 0.9	27	1728 0.9	27	1656 8.1	247	1132 1.4	43
1443 7.0	213	2339 0.9	27	2135 0.7	21	2135 0.7	21	2135 0.4	12	2354 0.4	12	1819 7.1	216	
2056 0.8	24	2339 0.9	27	2135 0.7	21	2135 0.7	21	2135 0.7	21	2135 0.4	12	2135 0.4	12	
10 Su 0256 1.0531	7.5	229	25 M 0531 1.1212	7.0	10 Tu 0332 1.1012	7.6	25 W 0004 1.0552	1.1	10 F 0526 1.1158	7.3	223 Sa 0108 1.0658	1.1	34	
0934 0.5	15	210	1810 0.6	18	1614 7.5	229	1222 1.0	30	1803 8.3	253	1226 1.5	46	1912 7.1	216
1536 6.9	210	210	210 7.0	213	2239 0.7	21	1824 7.2	219	1824 7.2	219	1912 7.1	216	1912 7.1	216
2152 0.8	24	210 7.0	213	2038 0.7	21	2038 0.7	21	2038 0.7	21	2038 0.7	21	2038 0.7	21	
11 M 0352 1.0040	7.4	226	26 Tu 0636 1.1307	0.9	11 W 0433 1.1114	7.5	26 Th 0100 1.0652	1.0	11 F 0117 1.0646	0.1	26 Su 0200 1.0753	1.0	30	
1034 0.6	18	216	2108 0.7	219	1717 7.7	235	1312 1.1	34	1315 0.4	12	1327 1.5	46	2001 7.2	219
1634 6.9	210	210	2047 7.6	232	2354 0.5	15	1917 7.3	223	1914 8.5	259	2001 7.2	219	2001 7.2	219
● 2255 0.8	24	2047 7.6	232	2047 7.6	232	2047 7.6	232	2047 7.6	232	2047 7.6	232	2047 7.6	232	
12 Tu 0454 1.0137	7.3	223	27 W 0734 1.1358	0.7	12 Th 0542 1.1223	7.4	27 F 0152 1.0746	0.8	12 Su 0224 1.0803	-0.2	27 M 0249 1.0843	0.8	24	
1141 0.6	18	216	2000 7.4	226	1824 8.0	244	1400 1.2	37	1427 0.3	9	1419 1.4	43	2042 7.4	226
1740 7.1	216	210 7.4	226	2038 0.7	21	2006 7.4	226	2019 8.7	265	2019 8.7	265	2019 8.7	265	
13 W 0006 1.0229	0.6	18	28 Th 0826 1.1446	0.5	13 F 0122 1.0658	0.2	28 Sa 0241 1.0836	0.6	13 M 0324 1.0906	-0.5	28 Tu 0335 1.1503	0.5	15	
0603 7.4	226	2146 0.7	21	1334 0.2	6	1445 1.1	34	1445 1.1	34	1530 0.1	3	2115 7.6	232	
1255 0.4	12	2047 7.6	232	1932 8.4	256	2050 7.6	232	2118 8.8	268	2118 8.8	268	2115 7.6	232	
1850 7.5	229	2047 7.6	232	2047 7.6	232	2047 7.6	232	2047 7.6	232	2047 7.6	232	2047 7.6	232	
14 Th 0128 1.0317	0.3	9	29 F 0912 1.1529	0.3	14 Sa 0234 1.0812	-0.3	29 Su 0327 1.0921	0.4	14 Tu 0419 1.1002	-0.8	29 W 0416 1.1003	0.3	9	
0718 7.6	232	2129 0.7	216	1529 0.6	18	1440 0.0	0	1526 1.1	34	1626 0.0	0	1544 0.9	27	
1406 0.0	0	2129 0.7	216	2032 8.8	268	2128 7.7	235	2211 8.9	271	2211 8.9	271	2143 7.8	238	
1956 8.1	247	2129 0.7	216	2126 9.1	277	2126 7.7	235	2303 8.8	268	2303 8.8	268	2217 8.1	247	
15 F 0244 1.0401	-0.3	-9	30 Sa 0955 1.1608	0.1	15 Su 0334 1.1539	-0.7	30 M 0410 1.1002	0.2	15 W 0511 1.1054	-0.9	30 Th 0454 1.1034	0.1	3	
0828 7.9	241	2206 0.7	219	1608 0.6	18	1539 -0.2	-6	1559 1.0	30	1719 0.0	0	1624 0.7	21	
1505 -0.3	-9	2206 0.7	219	2206 7.9	241	2126 9.1	277	2158 7.7	235	2203 8.8	268	2217 8.1	247	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Kings Point, Long Island, New York, 2011

Times and Heights of High and Low Waters

July				August				September						
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height			
h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 0527	-0.1	-3		16 0627	-0.5	-15		1 0609	-0.6	-18				
F 1102	7.4	226	Sa	1216	7.9	241	M	1156	8.5	259	Tu			
● 1705	0.4	12		1842	0.2	6		1823	-0.4	-12				
● 2256	8.3	253												
2 0557	-0.3	-9	17 0026	8.1	247	2 0011	8.6	262	17 0110	7.4	226			
Sa 1137	7.7	235	Su	0708	-0.2	-6	Tu	0649	-0.7	-21	W 0706	0.6	18	
1749	0.2	6		1258	7.8	238		1242	8.8	268	1319	7.7	235	
2340	8.4	256		1924	0.4	12		1913	-0.5	-15	1941	0.7	21	
3 0631	-0.4	-12	18 0106	7.8	238	3 W 0101	8.5	259	18 0137	7.2	219			
Su 1218	7.9	241	M	0744	0.1	3	Th	0732	-0.6	-18	Th 0728	0.7	21	
1834	0.1	3		1337	7.7	235		1331	8.9	271	1342	7.6	232	
				2004	0.6	18		2007	-0.3	-9	2004	0.8	24	
4 0026	8.4	256	19 0145	7.5	229	4 Th 0154	8.2	250	19 0208	7.0	213			
M 0710	-0.4	-12	Tu	0809	0.5	15	F	0820	-0.3	-9	F 0804	0.9	27	
1303	8.1	247		1413	7.6	232		1423	8.8	268	1415	7.5	229	
1923	0.0	0		2040	0.8	24		2110	-0.1	-3	2041	1.0	30	
5 0115	8.3	253	20 0221	7.2	219	5 F 0251	7.8	238	20 0247	6.8	207			
Tu 0753	-0.4	-12	W	0817	0.7	21	Th	0915	0.1	3	Sa 0846	1.1	34	
1351	8.3	253		1443	7.4	226		1519	8.6	262	1456	7.3	223	
2016	0.0	0		2108	1.0	30		2229	0.1	3	2127	1.1	34	
6 0207	8.1	247	21 0257	6.9	210	6 Sa 0356	7.4	226	21 0332	6.6	201			
W 0840	-0.2	-6	Th	0847	0.9	27	Th	1023	0.4	12	Su 0935	1.3	40	
1442	8.4	256		1513	7.3	223		1624	8.3	253	1542	7.2	219	
2116	0.1	3		2140	1.2	37		● 2347	0.2	6	● 2220	1.3	40	
7 0303	7.8	238	22 0338	6.6	201	7 Su 0518	7.0	213	22 0423	6.4	195			
Th 0932	0.0	0	F	0928	1.1	34	Th	1153	0.7	21	M 1028	1.4	43	
1537	8.4	256		1550	7.2	219		1745	8.0	244	1634	7.1	216	
2228	0.2	6		2229	1.3	40				2323	1.3	40		
8 0404	7.4	226	23 0428	6.4	195	8 M 0057	0.2	6	23 0524	6.3	192			
F 1033	0.3	9	Sa	1015	1.3	40	Th	0642	7.0	213	Tu 1127	1.5	46	
1638	8.3	253		1634	7.0	213		1310	0.7	21	Th 1733	7.1	216	
● 2355	0.2	6		● 2353	1.3	40		1906	8.0	244				
9 0517	7.1	216	24 0532	6.2	189	9 Tu 0159	0.0	0	24 0045	1.2	37			
Sa 1148	0.5	15	Su	1108	1.5	46	Th	0751	7.1	216	W 0637	6.5	198	
1749	8.2	250		1727	7.0	213		1415	0.6	18	Th 1230	1.4	43	
								2013	8.1	247	1840	7.2	219	
10 0109	0.1	3	25 0106	1.3	40	10 W 0257	-0.1	-3	25 0205	0.9	27			
Su 0644	7.0	213	Th	0653	6.2	189	Th	0850	7.4	226	Th 0747	6.8	207	
1312	0.6	18		1206	1.5	46		1513	0.4	12		1337	1.0	30
1907	8.3	253		1829	7.0	213		2110	8.2	250		1946	7.6	232
11 0213	-0.1	-3	26 0204	1.1	34	11 Th 0350	-0.3	-9	26 0258	0.5	15			
M 0758	7.1	216	Tu	0755	6.4	195	Th	0942	7.7	235	F 0838	7.3	223	
1422	0.5	15		1308	1.4	43		1606	0.2	6	F 1443	0.6	18	
2016	8.4	256		1934	7.2	219		2200	8.3	253	2043	8.0	244	
12 0312	-0.3	-9	27 0255	0.8	24	12 W 0438	-0.4	-12	27 0342	0.1	3			
Tu 0900	7.4	226	Th	0843	6.7	204	Th	1029	7.9	241	Sa 0922	7.8	238	
1524	0.3	9		1412	1.2	37		1655	0.0	0	Th 1541	0.1	3	
2115	8.5	259		2027	7.5	229		2245	8.3	253	2132	8.4	256	
13 0406	-0.5	-15	28 0341	0.5	15	13 Su 0522	-0.4	-12	28 0423	-0.3	-9			
W 0954	7.6	232	Th	0923	7.0	213	Th	1113	8.0	244	Su 1004	8.4	256	
1619	0.2	6		1510	0.8	24		1740	0.0	0	Th 1632	-0.3	-9	
2208	8.5	259		2112	7.9	241		● 2327	8.1	247	● 2219	8.7	265	
14 0457	-0.6	-18	29 0421	0.1	3	14 Su 0602	-0.2	-6	29 0502	-0.6	-18			
Th 1044	7.8	238	F	0958	7.4	226	Th	1152	8.0	244	Th 1047	8.8	268	
1710	0.1	3		1601	0.4	12		1821	0.1	3	Th 1722	-0.7	-21	
2257	8.5	259		2155	8.2	250					2306	8.8	268	
15 0544	-0.6	-18	30 0458	-0.2	-6	15 M 0006	8.0	244	30 0543	-0.8	-24			
F 1131	7.8	238	Sa	1034	7.8	238	Th	0638	0.1	3	Th 1131	9.2	280	
1757	0.1	3		1649	0.1	3		1228	8.0	244	1811	-0.8	-24	
● 2343	8.3	253		● 2238	8.5	259		1858	0.3	9	2355	8.7	265	
31 0533	-0.5	-15	Su	1113	8.2	250					31 0625	-0.7	-21	
				1735	-0.2	-6					W 1219	9.3	283	
				2324	8.7	265					1902	-0.8	-24	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Kings Point, Long Island, New York, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0129 8.1 247	ft cm	16 Su 0101 7.1 216	ft cm	1 Tu 0332 7.3 223	ft cm	16 W 0202 7.0 213	ft cm	1 Th 0408 7.2 219	ft cm	16 F 0229 7.5 229	ft cm
0746 0.0 0		0703 0.9 27		1005 0.7 21		0814 0.8 24		1043 0.7 21		0850 0.2 6	
1344 8.9 271		1303 7.7 235		1550 7.6 232		1412 7.6 232		1627 7.0 213		1445 7.5 229	
2055 -0.3 -9		1938 0.6 18		2248 0.2 6		2050 0.4 12		2310 0.4 12		2118 -0.1 -3	
2 Su 0233 7.7 235	ft cm	17 M 0140 7.0 213	ft cm	2 W 0441 7.2 219	ft cm	17 Th 0251 7.1 216	ft cm	2 F 0508 7.1 216	ft cm	17 Sa 0322 7.6 232	ft cm
0856 0.4 12		0746 1.0 30		1114 0.8 24		0908 0.8 24		1144 0.8 24		0949 0.3 9	
1449 8.4 256		1347 7.6 232		1704 7.3 223		1505 7.5 229		1731 6.7 204		1542 7.3 223	
2206 0.0 0		2023 0.7 21		2348 0.4 12		2144 0.4 12		2213 0.0 0		2213 0.0 0	
3 M 0348 7.3 223	ft cm	18 Tu 0225 6.9 210	ft cm	3 Th 0546 7.2 219	ft cm	18 F 0346 7.2 219	ft cm	3 Sa 0004 0.6 18	ft cm	18 Su 0418 7.7 235	ft cm
1022 0.8 24		0835 1.1 34		1217 0.8 216		1008 0.8 24		0606 7.1 216		1058 0.2 6	
1608 7.9 241		1435 7.5 229		1810 7.1 216		1603 7.3 223		1241 0.7 21		1644 7.0 213	
2314 0.3 9		2114 0.8 24		2242 0.4 12		2242 0.4 12		1832 6.5 198		2314 0.1 3	
4 Tu 0504 7.2 219	ft cm	19 W 0316 6.8 207	ft cm	4 F 0044 0.4 12	ft cm	19 Sa 0445 7.5 229	ft cm	4 Su 0056 0.7 21	ft cm	19 M 0521 7.9 241	ft cm
1136 0.9 27		0929 1.2 37		0646 7.4 226		1116 0.6 18		0700 7.2 219		1225 0.1 3	
1729 7.6 232		1529 7.4 226		1315 0.6 18		1707 7.3 223		1335 0.5 15		1755 6.9 210	
2211 0.9 27		2211 0.9 27		1910 7.1 216		2343 0.3 9		1928 6.5 198			
5 W 0018 0.3 9	ft cm	20 Th 0412 6.9 210	ft cm	5 Sa 0137 0.5 15	ft cm	20 Su 0548 7.8 238	ft cm	5 M 0146 0.8 24	ft cm	20 Tu 0022 0.1 3	ft cm
0614 7.2 219		1030 1.2 37		0739 7.6 232		1233 0.3 9		0751 7.3 223		0629 8.0 244	
1242 0.8 24		1628 7.3 223		1408 0.4 12		1816 7.3 223		1426 0.4 12		1346 -0.2 -6	
1840 7.5 229		2313 0.8 24		2004 7.2 219		2019 6.6 201		2019 6.6 201		1916 7.0 213	
6 Th 0116 0.3 9	ft cm	21 F 0513 7.1 216	ft cm	6 Su 0225 0.5 15	ft cm	21 M 0048 0.1 3	ft cm	6 Tu 0233 0.8 24	ft cm	21 W 0139 0.0 0	ft cm
0716 7.4 226		1136 1.0 30		0827 7.8 238		0653 8.2 250		0837 7.4 226		0740 8.3 253	
1341 0.6 18		1733 7.4 226		1458 0.2 6		1352 -0.1 -3		1513 0.2 6		1451 -0.6 -18	
1940 7.6 232				2052 7.2 219		1929 7.4 226		2106 6.7 204		2028 7.2 219	
7 F 0210 0.2 6	ft cm	22 Sa 0019 0.6 18	ft cm	7 M 0311 0.5 15	ft cm	22 Tu 0152 -0.1 -3	ft cm	7 W 0316 0.8 24	ft cm	22 Th 0251 -0.2 -6	ft cm
0810 7.7 235		0619 7.5 229		0911 7.9 241		0755 8.6 262		0919 7.5 229		0844 8.5 259	
1436 0.3 9		1249 0.6 18		1544 0.0 0		1458 -0.6 -18		1557 0.0 0		1549 -1.0 -30	
2033 7.7 235		1842 7.6 232		2136 7.3 223		2034 7.7 235		2149 6.8 207		2128 7.4 226	
8 Sa 0259 0.2 6	ft cm	23 Su 0123 0.3 9	ft cm	8 Tu 0352 0.5 15	ft cm	23 W 0255 -0.3 -9	ft cm	8 Th 0355 0.7 21	ft cm	23 F 0352 -0.4 -12	ft cm
0858 8.0 244		0723 8.1 247		0950 8.0 244		0851 9.0 274		0956 7.6 232		0941 8.7 265	
1526 0.1 3		1404 0.1 3		1626 -0.1 -3		1556 -1.0 -30		1637 -0.1 -3		1642 -1.2 -37	
2120 7.7 235		1950 7.9 241		2216 7.3 223		2131 7.9 241		2227 6.9 210		2222 7.6 232	
9 Su 0344 0.2 6	ft cm	24 M 0222 -0.1 -3	ft cm	9 W 0428 0.6 18	ft cm	24 Th 0353 -0.5 -15	ft cm	9 F 0426 0.7 21	ft cm	24 Sa 0448 -0.5 -15	ft cm
0941 8.2 250		0819 8.7 265		1024 8.0 244		0944 9.2 280		1024 7.6 232		1034 8.7 265	
1611 0.0 0		1508 -0.5 -15		1704 -0.1 -3		1650 -1.2 -37		1714 -0.1 -3		1733 -1.3 -40	
2203 7.7 235		2049 8.2 250		2253 7.3 223		2225 8.0 244		2300 6.9 210		2313 7.7 235	
10 M 0425 0.2 6	ft cm	25 Tu 0315 -0.4 -12	ft cm	10 Th 0456 0.7 21	ft cm	25 F 0448 -0.5 -15	ft cm	10 Sa 0445 0.6 18	ft cm	25 Su 0540 -0.6 -18	ft cm
1020 8.2 250		0910 9.2 280		1050 7.9 241		1036 9.3 283		1041 7.6 232		1125 8.6 262	
1653 -0.1 -3		1604 -0.9 -27		1738 0.0 0		1742 -1.3 -40		1744 -0.1 -3		1822 -1.2 -37	
2242 7.7 235		2143 8.4 256		2324 7.2 219		2318 8.0 244		2325 6.9 210			
11 Tu 0501 0.4 12	ft cm	26 W 0406 -0.6 -18	ft cm	11 F 0506 0.7 21	ft cm	26 Sa 0541 -0.5 -15	ft cm	11 M 0510 0.4 12	ft cm	26 F 0004 7.7 235	ft cm
1054 8.2 250		0959 9.5 290		1104 7.8 238		1128 9.1 277		1105 7.7 235		0631 -0.5 -15	
1731 0.0 0		1657 -1.2 -37		1803 0.1 3		1834 -1.2 -37		1804 -0.1 -3		1215 8.4 256	
2317 7.6 232		2234 8.5 259		2346 7.1 216		2346 7.1 216		2345 7.0 213		1909 -1.0 -30	
12 W 0529 0.6 18	ft cm	27 Th 0456 -0.6 -18	ft cm	12 Sa 0527 0.7 21	ft cm	27 Su 0012 7.9 241	ft cm	12 M 0544 0.3 9	ft cm	27 Tu 0054 7.6 232	ft cm
1121 8.1 247		1048 9.6 293		1125 7.8 238		0636 -0.3 -9		1139 7.8 238		0720 -0.3 -9	
1804 0.1 3		1749 -1.3 -40		1815 0.2 6		1222 8.8 268		1828 -0.2 -6		1305 8.0 244	
2348 7.4 226		2326 8.4 256		1926 -0.9 -27		1926 -0.9 -27		1955 -0.6 -18			
13 Th 0536 0.7 21	ft cm	28 F 0546 -0.5 -15	ft cm	13 Su 0005 7.0 213	ft cm	28 M 0108 7.7 235	ft cm	13 Tu 0017 7.1 216	ft cm	28 W 0144 7.5 229	ft cm
1135 7.9 241		1138 9.5 290		0601 0.7 21		0732 0.0 0		0624 0.3 9		0811 0.0 0	
1825 0.3 9		1843 -1.1 -34		1158 7.8 238		1318 8.3 253		1220 7.8 238		1355 7.6 232	
2317 7.6 232		2144 8.0 259		1841 0.2 6		2020 -0.5 -15		1902 -0.2 -6		2041 -0.3 -9	
14 F 0009 7.3 223	ft cm	29 M 0020 8.2 250	ft cm	14 M 0037 7.0 213	ft cm	29 Tu 0207 7.5 229	ft cm	14 W 0056 7.2 219	ft cm	29 Th 0233 7.3 223	ft cm
0551 0.8 24		0639 -0.3 -9		0641 0.7 21		0834 0.3 9		0709 0.2 6		0905 0.3 9	
1153 7.9 241		1231 9.1 277		1238 7.8 238		1418 7.8 238		1305 7.8 238		1445 7.1 216	
1832 0.4 12		1939 -0.8 -24		1918 0.2 6		2116 -0.2 -6		1943 -0.2 -6		2127 0.1 3	
15 Sa 0029 7.2 219	ft cm	30 Su 0119 7.9 241	ft cm	15 Tu 0116 7.0 213	ft cm	30 W 0307 7.3 223	ft cm	15 Th 0141 7.3 223	ft cm	30 F 0323 7.1 216	ft cm
0624 0.8 24		0738 0.1 3		0725 0.7 21		0939 0.5 15		0757 0.2 6		1002 0.6 18	
1224 7.8 238		1330 8.6 262		1323 7.7 235		1522 7.4 226		1353 7.7 235		1539 6.7 204	
1859 0.5 15		2040 -0.4 -12		2001 0.3 9		2213 0.2 6		2028 -0.2 -6		2214 0.5 15	
31 M 0223 7.6 232	ft cm	31 F 0849 0.4 12	ft cm							31 Sa 0415 6.9 210	ft cm
1436 8.1 247		1436 8.1 247								1101 0.8 24	
2144 0.0 0		2144 0.0 0								1638 6.3 192	
										2305 0.8 24	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

New York (The Battery), New York, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm		h m	ft	cm		h m	ft	cm					
1 Sa	0532	5.1	155	16 Su	0451	4.4	134	1 Tu	0041	-0.1	-3	16 W	0005	-0.3	-9
	1200	-0.3	-9		1143	0.2	6		0657	4.9	149		0609	5.1	155
	1800	4.1	125		1732	3.7	113		1319	-0.4	-12		1252	-0.5	-15
					2336	0.1	3		1923	4.3	131		1844	4.6	140
2 Su	0008	-0.3	-9	17 M	0544	4.7	143	2 W	0128	-0.2	-6	17 Th	0058	-0.6	-18
	0625	5.2	158		1232	-0.1	-3		0739	5.0	152		0658	5.4	165
	1251	-0.5	-15		1822	4.0	122		1402	-0.5	-15		1339	-0.8	-24
	1851	4.2	128						2004	4.4	134		1930	5.0	152
3 M	0058	-0.3	-9	18 Tu	0026	-0.2	-6	3 Th	0212	-0.2	-6	18 F	0150	-0.9	-27
	0712	5.2	158		0632	5.1	155		0818	4.9	149		0745	5.6	171
	1340	-0.5	-15		1319	-0.5	-15		1442	-0.5	-15		1426	-1.1	-34
	1939	4.3	131		1907	4.3	131		2044	4.4	134		02017	5.3	162
4 Tu	0146	-0.3	-9	19 W	0117	-0.5	-15	4 F	0254	-0.2	-6	19 Sa	0241	-1.1	-34
	0756	5.2	158		0716	5.3	162		0857	4.8	146		0833	5.6	171
	1426	-0.6	-18		1406	-0.8	-24		1519	-0.4	-12		1511	-1.2	-37
	2024	4.3	131		1952	4.5	137		2122	4.4	134		2106	5.5	168
5 W	0232	-0.3	-9	20 Th	0207	-0.7	-21	5 Sa	0333	-0.1	-3	20 Su	0331	-1.1	-34
	0838	5.1	155		0801	5.5	168		0935	4.6	140		0923	5.4	165
	1509	-0.6	-18		1451	-1.0	-30		1554	-0.3	-9		1556	-1.1	-34
	2108	4.3	131		2038	4.8	146		2201	4.3	131		2157	5.5	168
6 Th	0315	-0.2	-6	21 F	0256	-0.9	-27	6 Su	0410	0.1	3	21 M	0421	-0.9	-27
	0921	4.9	149		0848	5.5	168		1013	4.4	134		1017	5.1	155
	1549	-0.4	-12		1536	-1.1	-34		1626	-0.1	-3		1642	-0.9	-27
	2153	4.2	128		2128	4.9	149		2238	4.3	131		2252	5.4	165
7 F	0357	0.0	0	22 Sa	0345	-0.9	-27	7 M	0447	0.3	9	22 Tu	0514	-0.6	-18
	1004	4.7	143		0939	5.3	162		1052	4.2	128		1115	4.8	146
	1627	-0.3	-9		1620	-1.1	-34		1656	0.1	3		1732	-0.5	-15
	2239	4.1	125		2221	5.0	152		2313	4.2	128		2348	5.2	158
8 Sa	0437	0.2	6	23 Su	0435	-0.7	-21	8 Tu	0524	0.5	15	23 W	0612	-0.3	-9
	1047	4.5	137		1033	5.1	155		1131	3.9	119		1213	4.5	137
	1704	-0.1	-3		1706	-0.9	-27		1721	0.3	9		1828	-0.1	-3
	2323	4.0	122		2316	5.0	152		2346	4.1	125				
9 Su	0517	0.5	15	24 M	0529	-0.5	-15	9 W	0605	0.7	21	24 Th	0045	5.0	152
	1130	4.2	128		1130	4.8	146		1211	3.7	113		0717	0.1	3
	1740	0.2	6		1757	-0.6	-18		1749	0.5	15		1313	4.2	128
10 M	0005	4.0	122	25 Tu	0012	4.9	149	10 Th	0021	4.1	125	25 F	0144	4.7	143
	0603	0.7	21		0631	-0.2	-6		0705	0.9	27		0825	0.3	9
	1213	3.9	119		1228	4.5	137		1254	3.5	107		1415	3.9	119
	1819	0.4	12		1855	-0.3	-9		1832	0.7	21		2041	0.4	12
11 Tu	0045	3.9	119	26 W	0108	4.9	149	11 F	0102	4.0	122	26 Sa	0247	4.5	137
	0658	0.9	27		0739	0.1	3		0819	1.0	30		0930	0.3	9
	1256	3.7	113		1327	4.2	128		1343	3.4	104		1522	3.8	116
	1903	0.6	18		1959	-0.1	-3		1949	0.8	24		2144	0.4	12
12 W	0125	3.9	119	27 Th	0206	4.7	143	12 Sa	0153	4.1	125	27 M	0353	4.5	137
	0804	1.0	30		0848	0.1	3		0924	0.8	24		1028	0.2	6
	1341	3.5	107		1430	3.9	119		1443	3.4	104		1629	3.9	119
	2000	0.7	21		2103	0.0	0		2111	0.7	21		2241	0.4	12
13 Th	0207	3.9	119	28 F	0309	4.7	143	13 Su	0255	4.2	128	28 Tu	0457	4.5	137
	0906	0.9	27		0951	0.1	3		1021	0.6	18		1120	0.1	3
	1433	3.4	104		1539	3.8	116		1552	3.5	107		1729	4.1	125
	2058	0.7	21		2203	0.1	3		2214	0.5	15		2333	0.3	9
14 F	0256	4.0	122	29 M	0415	4.6	140	14 M	0407	4.4	134	14 M	0215	4.4	134
	1002	0.7	21		1049	0.0	0		1113	0.2	6		0948	0.6	18
	1532	3.4	104		1647	3.8	116		1659	3.8	116		1518	3.8	116
	2153	0.5	15		2259	0.0	0		2311	0.1	3		2148	0.6	18
15 Sa	0353	4.2	128	30 Tu	0517	4.7	143	15 Tu	0513	4.7	143	15 Tu	0329	4.5	137
	1054	0.5	15		1142	-0.1	-3		1203	-0.1	-3		1042	0.3	9
	1636	3.5	107		1747	4.0	122		1755	4.2	128		1627	4.2	128
	2245	0.3	9		2351	-0.1	-3						2248	0.2	6
31	0611	4.8	146	31 M	1232	-0.3	-9					31	0608	4.6	140
					1838	4.1	125						1217	0.2	6
													1832	4.7	143

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

New York (The Battery), New York, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0042 0.3 9 0649 4.7 143 1257 0.1 3 1910 4.9 149	16 Sa 0021 -0.4 -12 0614 5.2 158 1242 -0.6 -12 1844 5.9 180		1 Su 0057 0.3 9 0658 4.5 137 1258 0.4 12 1911 5.2 158		16 M 0058 -0.5 -15 0650 5.0 152 1308 -0.4 -12 1913 6.2 189		1 W 0156 0.2 6 0748 4.3 131 1346 0.5 15 1943 5.3 162		16 Th 0225 -0.5 -15 0821 4.8 146 1431 0.0 0 2036 5.8 177		
	2 Sa 0125 0.1 3 0728 4.7 143 1336 0.1 3 1944 5.0 152	17 Su 0115 -0.7 -21 0707 5.3 162 1332 -0.7 -21 O 1933 6.2 189	2 M 0140 0.2 6 0737 4.5 137 1337 0.4 12 1942 5.2 158	17 Tu 0151 -0.7 -21 0743 5.0 152 1359 -0.4 -12 O 2003 6.2 189	2 Th 0239 0.1 3 0827 4.3 131 1428 0.4 12 2016 5.4 165		17 F 0313 -0.5 -15 0913 4.8 146 1520 0.1 3 2125 5.6 171				
	3 Su 0206 0.1 3 0804 4.7 143 1412 0.1 3 ● 2016 5.0 152	18 M 0208 -0.9 -27 0758 5.3 162 1421 -0.7 -21 2021 6.2 189	3 Tu 0221 0.1 3 0814 4.4 134 1415 0.4 12 ● 2011 5.2 158	18 W 0243 -0.7 -21 0836 5.0 152 1450 -0.2 -6 2053 6.0 183	3 F 0320 0.0 0 0907 4.3 131 1509 0.4 12 2052 5.4 165		18 Sa 0358 -0.3 -9 1006 4.7 143 1606 0.3 9 2216 5.3 162				
	4 M 0246 0.0 0 0840 4.6 140 1447 0.2 6 2044 5.0 152	19 Tu 0259 -0.9 -27 0850 5.2 158 1510 -0.6 -18 2112 6.1 186	4 W 0301 0.1 3 0851 4.4 134 1452 0.5 15 2038 5.2 158	19 Th 0332 -0.6 -18 0931 4.9 149 1539 0.0 0 2146 5.8 177	4 Sa 0400 0.0 0 0951 4.4 134 1550 0.4 12 2136 5.3 162		19 Su 0443 -0.1 -3 1058 4.6 140 1653 0.6 18 2306 5.1 155				
5 Tu 0323 0.1 3 0915 4.4 134 1519 0.3 9 2110 5.0 152	20 W 0349 -0.8 -24 0946 5.0 152 1558 -0.3 -9 2206 5.8 177	5 Th 0340 0.1 3 0929 4.3 131 1527 0.5 15 2109 5.1 155	20 F 0420 -0.4 -12 1028 4.7 143 1628 0.3 9 2240 5.4 165	5 Su 0442 0.0 0 1041 4.4 134 1634 0.5 15 2226 5.2 158	20 M 0526 0.1 3 1149 4.6 140 1741 0.9 27 2354 4.8 146		20 Tu 0526 0.1 3 1149 4.6 140 1741 0.9 27 2354 4.8 146				
	6 W 0400 0.2 6 0951 4.2 128 1549 0.4 12 2136 4.9 149	21 Th 0439 -0.5 -15 1045 4.8 146 1648 0.1 3 2303 5.5 168	6 F 0418 0.2 6 1010 4.2 128 1602 0.6 18 2148 5.1 155	21 Sa 0509 -0.1 -3 1124 4.6 140 1718 0.6 18 2335 5.1 155	6 M 0525 0.1 3 1133 4.5 137 1724 0.6 18 2322 5.1 155		21 Tu 0611 0.4 12 1236 4.5 137 1835 1.1 34				
	7 Th 0435 0.3 9 1029 4.1 125 1617 0.6 18 2210 4.8 146	22 F 0531 -0.2 -6 1144 4.6 140 1742 0.5 15	7 Sa 0458 0.3 9 1056 4.1 125 1640 0.7 21 2236 5.0 152	22 Su 0559 0.2 6 1218 4.5 137 1813 0.9 27	7 Tu 0615 0.2 6 1225 4.7 143 1826 0.7 21		22 W 0041 4.5 137 0659 0.6 18 1321 4.5 137 1934 1.3 40				
	8 F 0512 0.5 15 1111 4.0 122 1650 0.7 21 2253 4.7 143	23 Sa 0000 5.1 155 0628 0.2 6 1241 4.4 134 1842 0.8 24	8 Su 0542 0.5 15 1147 4.2 128 1727 0.8 24 2332 4.9 149	23 M 0027 4.8 146 0652 0.4 12 1310 4.4 134 1914 1.2 37	8 W 0019 5.0 152 0711 0.2 6 1317 4.9 149 ● 1939 0.7 21		23 Th 0126 4.3 131 0749 0.8 24 1405 4.5 137 ● 2035 1.3 40				
9 Sa 0555 0.7 21 1159 3.9 119 1732 0.9 27 2347 4.7 143	24 Su 0056 4.8 146 0728 0.5 15 1337 4.3 131 ● 1949 1.1 34	9 M 0637 0.5 15 1240 4.3 131 1832 0.9 27	24 Tu 0118 4.6 140 0747 0.6 18 1400 4.4 134 ● 2017 1.3 40	9 Th 0117 4.8 146 0812 0.2 6 1412 5.1 155 ● 2049 0.6 18	24 F 0214 4.0 122 0839 0.9 27 1451 4.5 137 2131 1.2 37		24 O 0214 4.0 122 0839 0.9 27 1451 4.5 137 2131 1.2 37				
	10 Su 0658 0.8 24 1252 3.9 119 1835 1.0 30	25 M 0152 4.6 140 0829 0.6 18 1433 4.3 131 2053 1.1 34	10 Tu 0031 4.9 149 0740 0.5 15 1334 4.5 137 ● 1955 0.9 27	25 W 0208 4.3 131 0840 0.7 21 1449 4.4 134 2115 1.2 37	10 F 0218 4.7 143 0911 0.1 3 1510 5.3 162 2153 0.4 12		25 Sa 0306 3.9 119 0928 0.9 27 1539 4.6 140 2222 1.1 34				
	11 M 0046 4.6 140 0811 0.8 24 1350 4.0 122 ● 2012 1.0 30	26 Tu 0248 4.4 134 0924 0.6 18 1530 4.3 131 2150 1.0 30	11 W 0132 4.8 146 0842 0.4 12 1431 4.7 143 2107 0.7 21	26 Th 0300 4.2 128 0929 0.7 21 1540 4.5 137 2208 1.1 34	11 Sa 0324 4.6 140 1007 0.0 0 1611 5.5 168 2251 0.1 3		26 Su 0404 3.8 116 1014 0.9 27 1629 4.7 143 2310 0.9 27				
	12 Tu 0150 4.6 140 0915 0.6 18 1452 4.3 131 2126 0.7 21	27 W 0345 4.3 131 1012 0.6 18 1624 4.4 134 2241 0.9 27	12 Th 0236 4.7 143 0939 0.2 6 1532 5.0 152 2210 0.4 12	27 F 0355 4.1 125 1014 0.7 21 1630 4.7 143 2256 0.9 27	12 Su 0433 4.5 137 1101 -0.1 -3 1711 5.7 174 2347 -0.1 -3		27 M 0501 3.9 119 1059 0.8 24 1717 4.9 149 2357 0.6 18				
13 W 0259 4.7 143 1010 0.3 9 1558 4.6 140 2228 0.3 9	28 Th 0441 4.3 131 1057 0.5 15 1714 4.6 140 2328 0.7 21	13 F 0344 4.8 146 1032 0.0 0 1633 5.4 165 2308 0.0 0	28 Sa 0450 4.1 125 1056 0.7 21 1717 4.8 146 2342 0.7 21	13 M 0538 4.6 140 1154 -0.1 -3 1806 5.9 180	28 Tu 0553 4.0 122 1145 0.7 21 1801 5.1 155		28 O 0553 4.0 122 1145 0.7 21 1801 5.1 155				
	14 Th 0411 4.8 146 1102 -0.1 -3 1659 5.1 155 2326 -0.1 -3	29 F 0532 4.3 131 1138 0.5 15 1758 4.9 149	14 Sa 0452 4.8 146 1124 -0.2 -6 1731 5.8 177	29 Su 0540 4.1 125 1138 0.6 18 1759 5.0 152	14 Tu 0042 -0.3 -9 0636 4.7 143 1248 -0.1 -3 1858 6.0 183		29 W 0044 0.4 12 0638 4.1 125 1232 0.6 18 1840 5.3 162				
	15 F 0517 5.0 152 1152 -0.4 -12 1754 5.5 168	30 Sa 0013 0.5 15 0617 4.4 134 1218 0.4 12 1836 5.0 152	15 Su 0004 -0.3 -9 0554 4.9 149 1216 -0.3 -9 1823 6.1 186	30 M 0028 0.5 15 0626 4.2 128 1221 0.6 18 1836 5.2 158	15 W 0135 -0.4 -12 0730 4.8 146 1340 -0.1 -3 1947 6.0 183		30 Th 0129 0.2 6 0720 4.3 131 1319 0.4 12 1918 5.4 165				
	31 O 0113 0.3 9 0708 4.3 131 1303 0.5 15 1910 5.3 162			31 Tu 0113 0.3 9 0708 4.3 131 1303 0.5 15 1910 5.3 162							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

New York (The Battery), New York, 2011

Times and Heights of High and Low Waters

July			August			September						
Time	Height		Time	Height		Time	Height		Time	Height		
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 F 0213 0.0 0 0801 4.5 137 1406 0.3 9 ● 1957 5.5 168			16 Sa 0250 -0.3 -9 0852 4.8 146 1459 0.2 6 2103 5.5 168			1 M 0312 -0.5 -15 0904 5.2 158 1522 -0.2 -6 2108 5.7 174			1 Th 0414 -0.5 -15 1020 5.9 180 1647 -0.2 -6 2240 5.2 158			16 F 0406 0.6 18 1012 4.9 149 1647 0.8 24 2246 4.3 131
2 Sa 0256 -0.2 -6 0843 4.6 140 1452 0.2 6 2038 5.6 171			17 Su 0332 -0.2 -6 0939 4.8 146 1543 0.4 12 2147 5.2 158			2 Tu 0355 -0.6 -18 0954 5.4 165 1611 -0.1 -3 2200 5.5 168			2 W 0413 0.2 6 1027 4.8 146 1638 0.7 21 2240 4.6 140			17 Sa 0433 0.8 24 1045 4.8 146 1727 1.1 34 2330 4.0 122
3 Su 0338 -0.3 -9 0929 4.7 143 1537 0.1 3 2124 5.5 168			18 M 0412 -0.1 -3 1025 4.7 143 1626 0.6 18 2232 5.0 152			3 W 0439 -0.5 -15 1047 5.5 168 1702 0.0 0 2256 5.2 158			3 Th 0445 0.5 15 1106 4.7 143 1718 1.0 30 2323 4.4 134			18 Su 0500 1.0 30 1123 4.7 143 1815 1.3 40
4 M 0420 -0.3 -9 1019 4.8 146 1624 0.2 6 2215 5.4 165			4 Tu 0451 0.1 3 1111 4.7 143 1709 0.8 24 2317 4.7 143			4 Th 0526 -0.3 -9 1142 5.5 168 1800 0.2 6 2354 5.0 152			4 F 0515 0.7 21 1145 4.6 140 1803 1.2 37			19 M 0017 3.9 119 0536 1.2 37 1208 4.6 140 1922 1.4 43
5 Tu 0504 -0.3 -9 1112 5.0 152 1716 0.3 9 2310 5.2 158			20 W 0528 0.4 12 1155 4.6 140 1755 1.1 34			5 F 0619 0.0 0 1237 5.5 168 1905 0.4 12			5 Sa 0007 4.1 125 0543 1.0 30 1222 4.6 140 1900 1.4 43			20 Tu 0106 3.8 116 0632 1.4 43 1301 4.6 140 2030 1.3 40
6 W 0551 -0.2 -6 1205 5.1 155 1815 0.5 15			21 Th 0002 4.4 134 0606 0.7 21 1236 4.6 140 1848 1.3 40			6 Sa 0054 4.7 143 0720 0.3 9 1334 5.4 165 ● 2015 0.6 18			6 Su 0052 3.9 119 0621 1.2 37 1302 4.5 137 ● 2007 1.4 43			21 W 0201 3.9 119 0810 1.3 40 1400 4.7 143 2129 1.1 34
7 Th 0007 5.0 152 0644 0.0 0 1258 5.2 158 1923 0.6 18			22 F 0046 4.2 128 0648 0.9 27 1317 4.5 137 1949 1.4 43			7 Su 0155 4.4 134 0826 0.4 12 1433 5.3 162 2120 0.5 15			7 M 0140 3.8 116 0730 1.3 40 1347 4.5 137 2109 1.3 40			22 Th 0302 4.0 122 0924 1.1 34 1505 4.8 146 2221 0.7 21
8 F 0104 4.8 146 0745 0.1 3 1352 5.3 162 ● 2032 0.6 18			8 Sa 0131 4.0 122 0739 1.1 34 1358 4.5 137 ● 2050 1.4 43			8 M 0301 4.3 131 0930 0.5 15 1538 5.3 162 2220 0.4 12			8 Tu 0235 3.7 113 0850 1.3 40 1442 4.6 140 2204 1.1 34			23 F 0404 4.3 131 1023 0.8 24 1612 5.0 152 2309 0.4 12
9 Sa 0204 4.5 137 0847 0.2 6 1450 5.4 165 2137 0.4 12			24 Su 0221 3.8 116 0836 1.1 34 1443 4.5 137 2146 1.2 37			9 Tu 0411 4.3 131 1028 0.4 12 1642 5.3 162 2315 0.3 9			9 W 0338 3.8 116 0952 1.1 34 1545 4.8 146 2254 0.8 24			24 Sa 0502 4.7 143 1118 0.4 12 1712 5.3 162 2356 0.0 0
10 Su 0310 4.4 134 0946 0.2 6 1552 5.4 165 2236 0.3 9			25 M 0317 3.7 113 0932 1.1 34 1535 4.6 140 2237 1.0 30			10 W 0516 4.4 134 1123 0.4 12 1741 5.4 165			10 Th 0440 4.1 125 1047 0.8 24 1648 5.0 152 2341 0.5 15			25 Su 0029 0.2 6 0640 4.9 149 1245 0.4 12 1854 5.3 162
11 M 0420 4.3 131 1043 0.2 6 1655 5.5 168 2332 0.1 3			26 Tu 0419 3.8 116 1024 1.0 30 1631 4.8 146 2326 0.8 24			11 Th 0007 0.1 3 0612 4.6 140 1216 0.3 9 1831 5.5 168			11 F 0534 4.4 134 1140 0.5 15 1742 5.4 165			26 M 0042 -0.3 -9 0640 5.7 174 1304 -0.3 -9 1854 5.7 174
12 Tu 0527 4.4 134 1138 0.1 3 1753 5.6 171			27 W 0517 3.9 119 1114 0.8 24 1725 5.0 152			12 F 0055 0.0 0 0701 4.8 146 1305 0.3 9 1916 5.5 168			12 Sa 0028 0.1 3 0622 4.9 149 1232 0.1 3 1830 5.6 171			27 Tu 0151 0.1 3 0757 5.2 158 1413 0.3 9 ● 2010 5.2 158
13 W 0025 -0.1 -3 0625 4.6 140 1231 0.1 3 1845 5.7 174			28 Th 0013 0.5 15 0607 4.2 128 1204 0.5 15 1812 5.3 162			13 Sa 0141 -0.1 -3 0745 4.9 149 1352 0.3 9 ● 1957 5.5 168			13 Tu 0228 0.1 3 0833 5.2 158 1324 -0.1 -3 ● 1916 5.8 177			28 W 0216 -0.7 -21 0812 6.2 189 1448 -0.6 -18 2032 5.6 171
14 Th 0117 -0.2 -6 0717 4.7 143 1323 0.1 3 1933 5.7 174			29 F 0100 0.2 6 0651 4.5 137 1255 0.3 9 1855 5.5 168			14 Su 0223 -0.1 -3 0826 5.0 152 1437 0.3 9 2037 5.3 162			14 M 0159 -0.5 -15 0751 5.6 171 1415 -0.4 -12 2002 5.9 180			29 Th 0303 -0.7 -21 0902 6.2 189 1539 -0.6 -18 2126 5.4 165
15 F 0205 -0.3 -9 0805 4.8 146 1413 0.1 3 ● 2018 5.6 171			30 Su 0145 -0.1 -3 0734 4.8 146 1344 0.1 3 ● 1937 5.7 174			15 M 0302 -0.1 -3 0907 5.0 152 1519 0.4 12 2117 5.1 155			15 Tu 0244 -0.6 -18 0837 5.8 177 1505 -0.5 -15 2050 5.7 174			30 F 0337 0.4 12 0940 5.0 152 1610 0.6 18 2204 4.5 137
			31 Su 0229 -0.3 -9 0818 5.0 152 1433 -0.1 -3 2021 5.8 177			31 W 0329 -0.7 -21 0927 5.9 180 1555 -0.4 -12 2142 5.5 168						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

New York (The Battery), New York, 2011

Times and Heights of High and Low Waters

October				November				December							
	Time	Height			Time	Height			Time	Height					
	h m	ft cm		h m	ft cm			h m	ft cm		h m				
1 Sa	0440	-0.2	-6	16 Su	0404	0.8	24	1 Tu	0016	4.5	137	16 Th	0047	4.3	131
	1055	5.8	177		0957	4.9	149		0615	0.6	18		0649	0.7	21
	1726	-0.1	-3		1701	0.8	24		1235	5.1	155		1259	4.5	137
	2329	4.8	146		2258	4.0	122		1905	0.4	12		1926	0.3	9
2 Su	0535	0.2	6	17 M	0434	0.9	27	2 W	0115	4.4	134	2 F	0139	4.2	128
	1156	5.6	171		1038	4.7	143		0722	0.9	27		0754	0.9	27
	1827	0.3	9		1744	1.0	30		1332	4.8	146		1351	4.3	131
					2347	3.9	119		2007	0.5	15		2022	0.4	12
3 M	0032	4.6	140	18 Tu	0511	1.1	34	3 Th	0212	4.3	131	18 F	0108	4.1	125
	0638	0.6	18		1129	4.7	143		0829	1.0	18		1302	4.6	140
	1258	5.3	162		1842	1.1	34		1429	4.6	140		2013	0.4	12
	1933	0.5	15						2105	0.5	15				
4 Tu	0135	4.4	134	19 W	0039	3.9	119	4 F	0310	4.4	134	19 Sa	0203	4.4	134
	0748	0.9	27		0606	1.2	37		0929	0.9	27		0834	0.8	24
	1358	5.1	155		1227	4.6	140		1525	4.5	137		1404	4.6	140
	2039	0.6	18		1950	1.1	34		2155	0.4	12		2111	0.2	6
5 W	0237	4.4	134	20 Th	0133	4.0	122	5 Sa	0405	4.5	137	20 Su	0301	4.7	143
	0855	0.9	27		0737	1.2	37		1023	0.8	24		0940	0.4	12
	1500	4.9	149		1328	4.7	143		1620	4.4	134		1509	4.6	140
	2137	0.5	15		2052	0.8	24		2240	0.4	12		2205	-0.1	-3
6 Th	0339	4.4	134	21 F	0231	4.2	128	6 Su	0456	4.7	143	21 M	0401	5.0	152
	0955	0.9	27		0858	1.0	30		1111	0.6	18		1038	0.1	3
	1600	4.8	146		1432	4.7	143		1711	4.4	134		1616	4.6	140
	2229	0.4	12		2146	0.5	15		2322	0.3	9		2256	-0.3	-9
7 F	0438	4.6	140	22 Sa	0331	4.5	137	7 M	0541	4.8	146	22 Tu	0500	5.4	165
	1048	0.7	21		1001	0.6	18		1156	0.5	15		1134	-0.3	-9
	1656	4.8	146		1538	4.9	149		1757	4.4	134		1720	4.8	146
	2315	0.3	9		2236	0.2	6					2347	-0.5	-15	
8 Sa	0529	4.8	146	23 Su	0430	5.0	152	8 Tu	0002	0.3	9	23 W	0554	5.8	177
	1136	0.6	18		1057	0.2	6		0621	5.0	152		1229	-0.6	-18
	1744	4.9	149		1642	5.1	155		1240	0.3	9		1817	4.9	149
	2357	0.3	9		2324	-0.2	-6		1839	4.5	137				
9 Su	0613	5.0	152	24 M	0525	5.5	168	9 W	0042	0.3	9	24 Th	0039	-0.7	-21
	1222	0.5	15		1152	-0.2	-6		0657	5.1	155		0645	6.0	183
	1827	4.9	149		1740	5.3	162		1323	0.2	6		1323	-0.8	-24
									1919	4.5	137		1911	4.9	149
10 M	0038	0.2	6	25 Tu	0013	-0.5	-15	10 F	0121	0.3	9	25 F	0131	-0.7	-21
	0652	5.2	158		0615	5.9	180		0730	5.2	158		0735	6.1	186
	1306	0.4	12		1246	-0.5	-15		1404	0.1	3		1415	-0.9	-27
	1906	4.9	149		1834	5.4	165		1956	4.4	134		2003	4.9	149
11 Tu	0116	0.2	6	26 W	0102	-0.6	-18	11 F	0159	0.3	9	26 Sa	0222	-0.7	-21
	0727	5.3	162		0703	6.2	189		0800	5.1	155		0826	6.0	183
	1348	0.3	9		1339	-0.7	-21		1445	0.1	3		1506	-0.9	-27
	1944	4.9	149		1925	5.4	165		2033	4.3	131		2058	4.8	146
12 W	0154	0.2	6	27 Th	0151	-0.7	-21	12 Sa	0236	0.4	12	27 M	0313	-0.5	-15
	0800	5.3	162		0751	6.3	192		0829	5.1	155		0918	5.8	177
	1429	0.3	9		1431	-0.8	-24		1524	0.2	6		1556	-0.7	-21
	2020	4.7	143		2016	5.3	162		2110	4.1	125		2155	4.7	143
13 Th	0230	0.3	9	28 F	0241	-0.6	-18	13 Su	0311	0.4	12	28 M	0403	-0.3	-9
	0830	5.2	158		0841	6.3	192		0857	5.0	152		1014	5.5	168
	1508	0.3	9		1522	-0.7	-21		1602	0.3	9		1645	-0.5	-15
	2057	4.6	140		2111	5.1	155		2149	4.0	122		2254	4.5	137
14 F	0303	0.5	15	29 Sa	0331	-0.5	-15	14 M	0345	0.5	15	29 Tu	0454	0.1	3
	0859	5.1	155		0935	6.0	183		0931	4.9	149		1111	5.1	155
	1546	0.5	15		1614	-0.5	-15		1641	0.4	12		1736	-0.2	-6
	2134	4.3	131		2211	4.9	149		2233	3.9	119		2352	4.4	134
15 Sa	0335	0.6	18	30 Su	0421	-0.2	-6	15 Tu	0419	0.6	18	30 W	0549	0.4	12
	0926	5.0	152		1034	5.7	174		1013	4.8	146		1207	4.8	146
	1623	0.6	18		1707	-0.2	-6		1722	0.5	15		1830	0.1	3
	2214	4.1	125		2314	4.6	140		2323	3.9	119				
31 Sa	0515	0.2	6	31 M	1135	5.4	165					31 W	0711	0.8	24
					1803	0.1	3						1310	4.0	122
													1930	0.4	12

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bayonne Bridge, Staten Island, New York, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m 0530 Sa 1211 1755	ft 5.5 -0.3 4.6	cm 168 -9 140	h m 16 Su 1153 1732 2342	ft 4.9 0.2 -6 0.0	cm 149 6 125 0	h m 1 Tu 0053 1331 1921	ft -0.2 -0.5 4.7	cm -6 -15 143	h m 16 W 0014 0611 1304 1848	ft -0.3 5.6 -0.6 5.1	cm -9 171 -18 155				
0624 1303 1849	5.7 -0.5 4.7	174 -15 143	0545 M 1243 1825	5.3 -0.2 -6 4.4	162 W 0740 1414 ● 2002	1.0 -0.5 4.9	149	0109 Th 0702 1353 1935	-0.7 6.0 -30 5.6	-21 183 -30 171	0033 W 0637 1302 1859	0.1 5.2 -0.2 4.9	3 17 Th 1822	158 158 -6 149	162 -3 -6 -6
0713 1353 1937	5.7 -0.6 4.8	174 -18 146	0035 Tu 0635 1332 1912	-0.3 5.6 -18 4.8	189 F 0818 1453 2040	-0.3 5.4 -18 4.9	149	0202 F 0748 1439 ○ 2021	-1.0 6.2 -40 5.9	-30 189 -40 180	0118 Th 0718 1343 1938	0.0 5.3 -0.3 5.1	18 171 Th 1822	162 183 -9 155	0544 -18 171 171
0757 1438 ● 2021	5.7 -0.7 4.8	174 -21 146	0128 W 0721 1420 ○ 1956	-0.6 5.9 -0.9 5.1	188 F 0855 1528 2116	-0.2 5.3 -0.5 4.9	149	0253 Sa 0835 1524 2107	-1.2 6.2 -1.4 6.0	-37 189 -43 183	0200 F 0755 1420 ● 2013	-0.1 5.3 -0.3 5.2	19 186 Th 186 158	144 186 -3 195	0144 -34 -30 195
0838 1520 2104	5.6 -0.6 4.8	171 -18 146	0220 Th 0805 1505 2041	-0.8 6.1 -1.2 5.3	244 Sa 0929 1600 2150	-0.1 5.1 -0.4 4.8	155	0343 Su 0923 1608 2157	-1.3 6.0 -1.3 6.0	-40 183 -40 183	0239 Sa 0830 1455 2045	-0.2 5.2 -0.3 5.2	20 189 Su 2045	236 189 -37 201	0236 -37 -37 201
0918 1558 2147	5.4 -0.5 4.7	165 -15 143	0309 F 0849 1548 2128	-1.0 6.1 -1.3 5.4	241 Su 1003 1628 2221	0.0 4.8 -0.2 4.7	0 146 -6 143	0431 M 1014 1652 2251	-1.1 5.7 -1.1 5.9	-34 174 -34 180	0316 Su 0902 1526 2112	-0.1 5.1 -0.2 5.2	21 183 M 1544	327 183 -37 198	0327 -37 -37 198
0959 1633 2230	5.1 -0.3 4.5	155 -9 137	0357 Sa 0937 1631 2219	-1.0 5.9 -1.2 5.5	244 M 1036 1654 2251	0.2 4.5 0.0 4.6	6 137 0 140	0521 Tu 1111 1738 2348	-0.8 5.3 -0.7 5.7	-24 162 -21 174	0350 M 0932 1555 2135	0.0 4.9 -0.1 5.1	22 174 Tu 2227	416 174 -34 189	0416 -24 -34 189
1039 1705 2312	4.8 -0.1 4.4	146 -3 134	0445 Su 1029 1715 2314	-0.9 5.7 -1.1 5.5	245 Tu 1110 1720 2323	0.4 4.3 0.2 4.5	12 131 6 137	0516 W 1210 1830	-0.4 4.9 -0.2 6	-12 149 -6 152	0422 Tu 1000 1621 2200	0.1 4.6 0.1 5.0	23 162 W 2325	506 162 -21 180	0506 -12 -21 180
1120 1734 2353	4.5 0.1 4.3	137 3 131	0536 M 1126 1802	-0.6 5.3 -0.8	246 W 1150 1751	0.6 4.1 0.4	18 125 12	0550 Th 1310 1934	0.6 4.6 0.2	18 140 6	0446 W 1030 1751	0.3 4.4 0.2	24 152 Th 1807	558 152 -9 3	0558 -9 -9 3
1202 1805	4.3 0.3	131 9	0011 Tu 0633 1225 1855	5.4 -0.2 -6 5.0 -0.4	247 Th 0004 0635 1237 1832	4.5 0.9 3.9 0.6	137 27 137 18	0004 Th 0635 1237 1832	4.5 0.9 3.9 0.6	137 27 131 18	0145 F 0832 1411 2046	5.2 0.3 4.3 0.4	10 128 128 149	525 128 15 149	0024 6 168
0633 1245 1841	0.9 4.1 0.5	131 125 15	0108 W 0741 1324 ● 2000	5.3 0.1 3 4.6 -0.1	248 W 0051 0754 1331 ● 1934	4.5 1.0 3.8 0.7	162 137 116 21	0246 Sa 0940 1515 2154	5.0 0.4 4.2 0.5	152 128 128 15	0604 F 1200 1758	0.8 4.1 0.7	11 125 F 1758	123 15 15 24	0123 15 158
0739 1330 ● 1933	1.1 3.9 0.6	134 119 18	0206 Th 0854 1425 2109	5.2 0.2 6 4.4 0.1	249 Sa 0922 1433 2101	4.6 0.9 113 0.7	140 27 113 21	0350 Su 1040 1621 2252	4.8 0.3 4.2 0.4	146 9 128 12	0008 Sa 1258 1853	4.9 1.0 4.0 0.8	12 30 122 24	222 152 18 27	0222 18 152
0858 1421 2043	1.0 3.8 0.7	134 116 21	0306 F 1001 1530 2212	5.1 0.2 6 4.2 0.1	250 Su 1027 1544 2215	4.7 3.9 0.5	143 119 15	0249 M 1132 1722 2345	4.6 0.1 4.4 0.2	143 134 134 6	0453 M 1020 1401 2022	0.3 4.0 0.9	13 122 122 27	322 137 2230 24	0322 15 146
1004 1522 2149	0.8 3.7 0.5	137 113 15	0411 Sa 1101 1638 2309	5.0 0.0 0 4.2 0.0	251 M 1123 1656 2317	4.9 4.2 149 0.1	149 128 149 3	0401 M 1123 1656 2317	4.9 4.2 149 0.1	149 128 149 3	0212 M 0953 1511 2149	4.9 0.7 4.2 0.6	14 21 128 18	423 12 143 18	0423 12 146
1101 1629 2247	0.5 3.8 0.3	140 116 9	0514 Su 1154 1741	5.1 -0.2 -6 4.3 -0.3	252 Tu 1215 1757	5.2 -0.2 158 4.6	158 -6 140	0512 Tu 1215 1757	5.2 -0.2 158 4.6	158 -6 140	0324 Tu 1051 1623 2255	5.0 0.3 4.5 0.2	15 9 137 6	324 9 149	0519 9 149
1162 1629 2247	3.8 3.8 0.3	140 116 9	0003 M 0610 1244 1835	-0.1 5.2 -9 -0.3 -9	253 M 0610 1244 1835	-0.1 5.2 -3					0008 Th 0608 1227 1830	0.4 5.0 12 5.2	31 12 158	008 152	008 152

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bayonne Bridge, Staten Island, New York, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0052 0.2 6 0650 5.1 155 1306 0.1 3 1909 5.4 165	16 Sa 0030 -0.5 -15 0615 5.8 177		1 Su 0105 0.3 9 0658 5.0 152		16 M 0108 -0.6 -18 0649 5.6 171		1 W 0206 0.2 6 0746 4.8 146		16 Th 0238 -0.5 -15 0818 5.3 162		
	1253 -0.7 -21 1847 6.5 198		1304 0.4 12 1910 5.7 174		1318 -0.4 -12 1915 6.8 207		1353 0.5 15 ● 1942 5.9 180		1442 0.0 0 2036 6.4 195		
			2 Sa 0134 0.1 3 0728 5.2 158 1343 0.0 0 1943 5.5 168	17 Su 0126 -0.8 -24 0708 6.0 183		2 M 0148 0.2 6 0736 5.0 152	17 Tu 0203 -0.7 -21 0741 5.7 174		2 Th 0249 0.1 3 0823 4.8 146	17 F 0326 -0.5 -15 0908 5.3 162	
	O 1936 6.8 207		1343 0.3 9 1940 5.8 177		1410 -0.4 -12 2004 6.8 207		1437 0.4 12 2014 6.0 183		1531 0.1 3 2124 6.1 186		
3 Su 0214 0.0 0 0803 5.1 155 1419 0.0 0 ● 2012 5.6 171	18 M 0219 -1.0 -30 0758 6.0 183		3 Tu 0230 0.1 3 0811 4.9 149	18 W 0255 -0.8 -24 0833 5.6 171		3 F 0331 0.0 0 0900 4.8 146	18 Sa 0410 -0.4 -12 1001 5.2 158				
	1433 -0.8 -24 2023 6.8 207		1422 0.4 12 ● 2007 5.8 177		1501 -0.3 -9 2053 6.6 201		1519 0.4 12 2049 6.0 183		1616 0.4 12 2214 5.8 177		
4 M 0253 0.0 0 0836 5.0 152 1453 0.1 3 2037 5.5 168	19 Tu 0311 -1.0 -30 0849 5.8 177		4 W 0310 0.1 3 0843 4.8 146	19 Th 0344 -0.7 -21 0926 5.4 165		4 Sa 0411 0.0 0 0942 4.8 146	19 Su 0452 -0.1 -3 1054 5.1 155				
	1521 -0.7 -21 2112 6.7 204		1459 0.4 12 2033 5.8 177		1550 -0.1 -3 2145 6.3 192		1601 0.4 12 2131 5.9 180		1700 0.6 18 2305 5.5 168		
5 Tu 0329 0.0 0 0906 4.9 149 1525 0.2 6 2100 5.5 168	20 W 0401 -0.9 -27 0942 5.6 171		5 Th 0348 0.1 3 0916 4.7 143	20 F 0432 -0.5 -15 1022 5.2 158		5 Su 0451 0.0 0 1031 4.9 149	20 M 0533 0.1 3 1146 5.0 152				
	1609 -0.4 -12 2205 6.4 195		1535 0.5 15 2104 5.7 174		1637 0.2 6 2239 5.9 180		1644 0.5 15 2219 5.8 177		1743 0.9 27 2355 5.2 158		
6 W 0404 0.1 3 0934 4.7 143 1555 0.3 9 2126 5.4 165	21 Th 0449 -0.6 -18 1040 5.3 162		6 F 0425 0.2 6 0952 4.6 140	21 Sa 0518 -0.2 -6 1121 5.0 152		6 M 0532 0.0 0 1126 5.0 152	21 Tu 0612 0.4 12 1234 4.9 149				
	1656 0.0 0 2302 6.0 183		1611 0.6 18 2142 5.7 174		1724 0.6 18 2336 5.6 171		1731 0.6 18 2316 5.6 171		1831 1.2 37		
7 Th 0438 0.3 9 1007 4.5 137 1625 0.5 15 2201 5.4 165	22 F 0540 -0.2 -6 1140 5.0 152		7 Sa 0503 0.3 9 1038 4.6 140	22 Su 0605 0.2 6 1217 4.9 149		7 Tu 0617 0.1 3 1221 5.1 155	22 W 0042 4.9 149 0653 0.7 21				
	1746 0.4 12		1649 0.7 149 2229 5.6 171		1815 1.0 30		1827 0.7 21		1319 4.9 149 1927 1.4 43		
8 F 0512 0.5 15 1048 4.4 134 1659 0.6 18 2246 5.3 162	23 Sa 0002 5.6 171 0633 0.2 6		8 Su 0544 0.4 12 1133 4.6 140	23 M 0030 5.3 162 0655 0.5 15		8 W 0016 5.5 168 0710 0.2 6	23 Th 0127 4.7 143 0739 0.9 27				
	1240 4.8 146 1843 0.8 24		1734 0.8 24 2325 5.5 168		1309 4.9 149 1913 1.2 37		1316 5.4 165 1936 0.8 24		1401 4.9 149 2031 1.4 43		
9 Sa 0551 0.7 21 1141 4.3 131 1740 0.8 24 2341 5.2 158	24 Su 0059 5.3 162 0733 0.5 15		9 M 0633 0.5 15 1232 4.7 143	24 Tu 0120 5.0 152 0748 0.7 21		9 Th 0115 5.4 165 0812 0.2 6	24 F 0213 4.5 137 0830 1.0 30				
	1336 4.7 143 ● 1951 1.1 34		1830 0.9 27		1358 4.9 149 ● 2018 1.4 43		1410 5.6 171 2051 0.7 21		1444 5.0 152 2131 1.4 43		
10 Su 0645 0.8 24 1241 4.3 131 1835 1.0 30	25 M 0154 5.0 152 0836 0.7 21		10 Tu 0027 5.4 165 0736 0.6 18	25 W 0209 4.8 146 0842 0.8 24		10 F 0216 5.3 162 0914 0.2 6	25 Sa 0301 4.3 131 0922 1.0 30				
	1430 4.7 143 2100 1.2 37		1330 4.9 149 ● 1948 1.0 30		1445 4.9 149 2120 1.3 40		1507 5.8 177 2158 0.5 15		1530 5.1 155 2225 1.2 37		
11 M 0042 5.2 158 0803 0.8 24 1343 4.5 137 ● 2000 1.0 30	26 Tu 0248 4.8 146 0932 0.7 21		11 W 0130 5.3 162 0843 0.4 12	26 Th 0259 4.6 140 0932 0.8 24		11 Sa 0319 5.1 155 1012 0.0 0	26 Su 0356 4.3 131 1011 0.9 27				
	1524 4.7 143 2159 1.1 34		1428 5.2 158 2108 0.8 24		1534 5.0 152 2214 1.2 37		1607 6.0 183 2259 0.2 6		1620 5.2 158 2315 0.9 27		
12 Tu 0147 5.2 158 0917 0.6 18 1448 4.7 143 2127 0.8 24	27 W 0343 4.7 143 1021 0.7 21		12 Th 0234 5.3 162 0944 0.2 6	27 F 0351 4.5 137 1017 0.8 24		12 Su 0427 5.1 155 1108 -0.1 -3	27 M 0454 4.3 131 1059 0.8 24				
	1618 4.9 149 2251 0.9 27		1529 5.5 168 2216 0.4 12		1623 5.1 155 2303 1.0 30		1708 6.3 192 2356 -0.1 -3		1711 5.4 165		
13 W 0256 5.2 158 1017 0.3 9 1554 5.1 155 2234 0.4 12	28 Th 0438 4.7 143 1104 0.6 18		13 F 0341 5.3 162 1040 0.0 0	28 Sa 0445 4.5 137 1059 0.7 21		13 M 0533 5.2 158 1202 -0.1 -3	28 Tu 0004 0.7 21 0549 4.4 134				
	1709 5.1 155 2337 0.7 21		1631 5.9 180 2315 0.0 0		1711 5.3 162 2349 0.7 21		1806 6.5 198 1758 5.6 171		1147 0.7 21		
14 Th 0408 5.4 165 1111 -0.1 -3 1658 5.6 171 2334 -0.1 -3	29 F 0530 4.8 146 1145 0.5 15		14 Sa 0449 5.4 165 1132 -0.2 -6	29 Su 0538 4.6 140 1755 5.5 168		14 Tu 0052 -0.3 -9 0632 5.3 162	29 W 0052 0.4 12 0637 4.6 140				
	1754 5.3 162 1834 5.6 171		1730 6.3 192 ● 1948 6.5 198		1257 -0.1 -3 1859 6.6 201		1237 0.5 15 1840 5.8 177		1327 0.4 12		
15 F 0516 5.6 171 1202 -0.4 -12 1756 6.1 186	30 Sa 0022 0.5 15 0616 4.9 149		15 Su 0013 -0.3 -9 0552 5.5 168	30 M 0035 0.5 15 0625 4.7 143		15 W 0146 -0.4 -12 0726 5.3 162	30 Th 0140 0.2 6 0720 4.8 146				
	1224 0.4 12 1834 5.6 171		1225 -0.4 -12 1825 6.6 201		1224 0.6 18 1835 5.7 174		1351 -0.1 -3 1948 6.5 198		1327 0.4 12 1919 6.0 183		
			31 Tu 0121 0.3 9 0707 4.8 146	31 Tu 0121 0.3 9 1308 0.5 15							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bayonne Bridge, Staten Island, New York, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0226 0.0 0 0801 4.9 149 1416 0.3 9 ● 1958 6.1 186	16 Sa 0303 -0.3 -9 0848 5.3 162 1510 0.2 6 2102 6.0 183		1 M 0326 -0.6 -18 0905 5.7 174 1535 -0.2 -6 2109 6.3 192		16 Tu 0348 0.0 0 0940 5.3 162 1605 0.5 15 2153 5.3 162		1 Th 0426 -0.7 -21 1021 6.4 195 1658 -0.3 -9 2238 5.8 177		16 F 0411 0.5 15 0955 5.3 162 1647 0.8 24 2226 4.7 143		
2 Sa 0309 -0.2 -6 0842 5.1 155 1503 0.2 6 2038 6.2 189	17 Su 0344 -0.3 -9 0934 5.2 158 1553 0.4 12 2145 5.7 174		2 Tu 0408 -0.7 -21 0953 5.9 180 1623 -0.2 -6 2158 6.1 186		17 W 0419 0.2 6 1017 5.2 158 1641 0.7 21 2231 5.0 152		2 F 0512 -0.4 -12 1119 6.3 192 1751 0.0 0 2340 5.4 165		17 Sa 0438 0.7 21 1025 5.2 158 1721 1.0 30 2306 4.5 137		
3 Su 0351 -0.4 -12 0926 5.2 158 1549 0.1 3 2121 6.1 186	18 M 0422 -0.1 -3 1020 5.1 155 1633 0.6 18 2229 5.4 165		3 W 0450 -0.6 -18 1046 6.0 183 1712 -0.1 -3 2253 5.8 177		18 Th 0447 0.4 12 1053 5.1 155 1715 0.9 27 2311 4.7 143		3 Sa 0602 0.0 0 1219 6.1 186 1852 0.3 9		18 Su 0508 0.9 27 1105 5.2 158 1800 1.2 37 2355 4.3 131		
4 M 0432 -0.4 -12 1015 5.3 162 1635 0.2 6 2211 6.0 183	19 Tu 0457 0.1 3 1106 5.1 155 1711 0.8 24 2314 5.1 155		4 Th 0534 -0.4 -12 1142 6.0 183 1806 0.2 6 2352 5.5 168		19 F 0514 0.6 18 1128 5.0 152 1751 1.2 37 2353 4.5 137		4 Su 0042 5.1 155 0701 0.4 12 1318 5.9 180 ● 2001 0.6 18		19 M 0545 1.1 34 1155 5.1 155 1856 1.4 43		
5 Tu 0513 -0.4 -12 1109 5.4 165 1724 0.3 9 2306 5.8 177	20 W 0529 0.4 12 1150 5.0 152 1750 1.1 34 2359 4.8 146		5 F 0623 -0.1 -3 1239 6.0 183 1908 0.4 12		20 Sa 0544 0.9 27 1206 5.0 152 1836 1.4 43		5 M 0143 4.9 149 0811 0.7 21 1418 5.7 174 2110 0.7 21		20 Tu 0050 4.2 128 0635 1.2 37 1252 5.1 155 ● 2018 1.4 43		
6 W 0557 -0.2 -6 1204 5.6 171 1818 0.4 12	21 Th 0600 0.6 18 1231 5.0 152 1834 1.3 40		6 Sa 0052 5.2 158 0721 0.2 6 1335 5.9 180 ● 2019 0.6 18		21 Su 0039 4.3 131 0621 1.0 30 1248 5.0 152 ● 1945 1.5 46		6 Tu 0245 4.8 146 0921 0.7 21 1518 5.6 171 2212 0.6 18		21 W 0148 4.3 131 0752 1.3 40 1352 5.2 158 2129 1.2 37		
7 Th 0005 5.5 168 0646 -0.1 -3 1258 5.7 174 1923 0.6 18	22 F 0042 4.6 140 0633 0.8 24 1310 4.9 149 1932 1.4 43		7 Su 0152 5.0 152 0829 0.4 12 1432 5.8 177 2128 0.6 18		22 M 0127 4.2 128 0715 1.2 37 1337 5.0 152 2103 1.4 43		7 W 0348 4.8 146 1023 0.7 21 1620 5.5 168 2306 0.4 12		22 Th 0250 4.4 134 0918 1.1 34 1457 5.3 162 2226 0.8 24		
8 F 0103 5.3 162 0745 0.1 3 1352 5.8 177 ● 2035 0.6 18	23 Sa 0126 4.4 134 0717 1.0 30 1349 5.0 152 ● 2041 1.5 46		8 M 0254 4.8 146 0935 0.5 15 1533 5.8 177 2230 0.5 15		23 Tu 0222 4.2 128 0833 1.2 37 1432 5.1 155 2206 1.2 37		8 Th 0451 4.9 149 1117 0.6 18 1719 5.6 171 2354 0.3 9		23 F 0356 4.7 143 1025 0.8 24 1605 5.5 168 2316 0.4 12		
9 Sa 0202 5.1 155 0849 0.2 6 1448 5.9 180 2143 0.5 15	24 Su 0212 4.2 128 0817 1.1 34 1432 5.0 152 2145 1.3 40		9 Tu 0400 4.7 143 1036 0.4 12 1637 5.8 177 2326 0.3 9		24 W 0324 4.2 128 0947 1.1 34 1535 5.3 162 2300 0.8 24		9 F 0547 5.1 155 1208 0.5 15 1810 5.7 174		24 Sa 0458 5.2 158 1124 0.4 12 1710 5.8 177		
10 Su 0304 4.9 149 0951 0.2 6 1548 6.0 183 2244 0.3 9	25 M 0306 4.2 128 0922 1.1 34 1523 5.1 155 2241 1.1 34		10 W 0506 4.8 146 1132 0.4 12 1737 5.8 177		25 Th 0431 4.5 137 1049 0.8 24 1641 5.5 168 2350 0.4 12		10 Sa 0039 0.1 3 0635 5.3 162 1255 0.4 12 1854 5.7 174		25 Su 0005 -0.1 -3 0553 5.7 174 1219 0.0 0 1807 6.1 186		
11 M 0411 4.8 146 1050 0.2 6 1651 6.0 183 2341 0.1 3	26 Tu 0407 4.2 128 1021 0.9 27 1621 5.3 162 2332 0.8 24		11 Th 0018 0.1 3 0605 5.0 152 1225 0.3 9 1830 5.9 180		26 F 0532 4.9 149 1146 0.4 12 1741 5.9 180		11 Su 0122 0.1 3 0717 5.5 168 1340 0.3 9 1934 5.7 174		26 M 0053 -0.4 -12 0643 6.2 189 1314 -0.4 -12 1857 6.3 192		
12 Tu 0518 4.9 149 1145 0.1 3 1751 6.1 186	27 W 0510 4.3 131 1116 0.7 21 1720 5.5 168		12 F 0107 0.0 0 0656 5.2 158 1315 0.3 9 1916 6.0 183		27 Sa 0038 0.1 3 0624 5.3 162 1241 0.1 3 1833 6.2 189		12 M 0201 0.1 3 0755 5.6 171 1422 0.3 9 ● 2011 5.6 171		27 Tu 0141 -0.7 -21 0730 6.6 201 1408 -0.6 -18 ● 1946 6.4 195		
13 W 0036 -0.1 -3 0619 5.0 152 1240 0.1 3 1845 6.2 189	28 Th 0022 0.5 15 0605 4.6 140 1209 0.5 15 1811 5.8 177		13 Sa 0152 -0.1 -3 0741 5.3 162 1403 0.3 9 ● 1958 5.9 180		28 Tu 0126 -0.3 -9 0710 5.8 177 1335 -0.2 -6 ● 1920 6.4 195		13 M 0238 0.1 3 0829 5.6 171 1502 0.4 12 2046 5.5 168		28 W 0229 -0.8 -24 0816 6.8 207 1500 -0.8 -24 2034 6.2 189		
14 Th 0128 -0.2 -6 0712 5.2 158 1333 0.1 3 1933 6.2 189	29 F 0110 0.1 3 0653 4.9 149 1303 0.3 9 1857 6.1 186		14 Su 0235 -0.1 -3 0823 5.4 165 1447 0.3 9 2037 5.8 177		29 M 0213 -0.6 -18 0755 6.1 186 1427 -0.4 -12 2005 6.5 198		14 W 0312 0.2 6 0901 5.6 171 1539 0.5 15 2119 5.2 158		29 Th 0317 -0.8 -24 0905 6.8 207 1551 -0.7 -21 2126 6.0 183		
15 F 0218 -0.3 -9 0801 5.3 162 1424 0.2 6 ● 2018 6.1 186	30 Sa 0158 -0.2 -6 0737 5.3 162 1355 0.0 0 ● 1940 6.3 192		15 M 0313 -0.1 -3 0902 5.4 165 1528 0.4 12 2115 5.6 171		30 Tu 0258 -0.8 -24 0840 6.4 195 1518 -0.5 -15 2052 6.3 192		15 W 0342 -0.8 -24 0928 6.4 195 1607 -0.5 -15 2142 6.1 186		30 F 0403 -0.6 -18 0957 6.6 201 1642 -0.5 -15 2223 5.6 171		
	31 Su 0243 -0.4 -12 0820 5.5 168 1446 -0.1 -3 2023 6.4 195				31 W 0342 -0.8 -24 0928 6.4 195 1607 -0.5 -15 2142 6.1 186						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bayonne Bridge, Staten Island, New York, 2011

Times and Heights of High and Low Waters

October				November				December															
	Time	Height			Time	Height			Time	Height													
1 Sa	0451 0.456 1056 1735 2326	-0.3 6.4 -0.1 5.3	-9 195 162	16 Su	0412 0946 1701 2233	0.7 5.4 0.8 4.4	21 165 24 134	1 Tu	0014 0619 1237 1910	5.0 0.5 5.5 0.4	152 15 168 12	16 W	0510 1056 1806	0.7 5.3 0.5	21 162 15 15	1 Th	0045 0650 1301 1928	4.7 0.7 4.9 0.4	143 21 149 12	16 F	0549 1137 1831	0.4 5.1 0.0	12 155 0
2 Su	0542 1159 1833	0.1 6.0 0.2	3 183 6	17 M	0444 1027 1739 2323	0.9 5.3 0.9 4.3	27 162 27 131	2 W	0113 0724 1334 2013	4.8 0.9 5.3 0.5	146 27 162 15	17 Th	0001 0558 1155 1900	4.4 0.8 5.2 0.6	134 24 158 18	2 O	0137 0755 1352 2024	4.7 1.0 4.7 0.5	143 30 143 15	17 O	0036 0650 1237 1929	4.8 0.5 5.0 0.0	146 155 0
3 M	0030 0641 1300 1939	5.1 0.5 5.8 0.5	155 15 177 15	18 Tu	0522 1119 1827	1.0 5.2 1.1	30 34	3 Th	0209 0835 1429 2112	4.8 1.0 5.0 0.6	146 30 152 18	18 F	0059 0704 1257 2007	4.6 0.9 5.1 0.5	140 27 155 15	3 O	0226 0900 1442 2117	4.6 1.0 4.4 0.6	140 30 134 18	18 Sa	0132 0807 1338 2036	5.0 0.5 4.8 0.0	152 155 0
4 Tu	0132 0751 1359 2046	4.9 0.8 5.5 0.7	149 24 168 21	19 W	0022 0611 1219 1936	4.3 1.1 5.2 1.1	131 34	4 F	0303 0938 1523 2203	4.8 1.0 4.9 0.5	146 30 155 15	19 Sa	0156 0828 1400 2112	4.8 0.8 5.1 0.3	146 24 155 9	4 O	0316 0958 1535 2205	4.7 0.9 4.3 0.6	143 27 131 18	19 M	0229 0923 1441 2140	5.2 0.3 4.7 0.1	158 9 143 -3
5 W	0231 0902 1458 2147	4.8 0.9 5.3 0.6	146 27 162 18	20 Th	0122 0723 1322 2049	4.4 1.2 5.2 0.9	134 37	5 Sa	0357 1032 1617 2248	4.9 0.9 4.8 0.5	149 27 155 15	20 Su	0255 0942 1504 2209	5.2 0.5 5.1 0.0	158 15 155 0	5 M	0407 1049 1630 2249	4.8 0.7 4.3 0.5	146 21 131 15	20 Tu	0331 1028 1550 2239	5.4 0.0 4.7 0.3	165 0 143 -9
6 Th	0330 1004 1556 2239	4.9 0.9 5.3 0.5	149 27 162 15	21 F	0222 0852 1426 2149	4.6 1.1 5.3 0.6	140 37	6 Su	0449 1120 1709 2329	5.1 0.7 4.8 0.4	155 21 146 12	21 M	0356 1045 1612 2303	5.5 0.1 5.2 0.3	168 3 158 -9	6 Tu	0458 1135 1723 2331	4.9 0.5 4.3 0.4	149 12 131 12	21 W	0436 1128 1700 2336	5.7 -0.3 4.8 -0.5	174 9 146 -15
7 F	0428 1058 1652 2324	5.0 0.7 5.3 0.4	152 21 162 12	22 Sa	0324 1003 1533 2242	5.0 0.7 5.4 0.2	152 21 6	7 M	0536 1205 1757	5.3 0.5 4.9	162 15 149	22 Tu	0458 1143 1718 2356	5.9 -0.3 5.3 -0.5	180 9 149 -15	7 W	0545 1221 1812	5.1 0.3 4.4	155 9 134	22 Th	0538 1225 1804	6.0 -0.6 4.9	183 18 149
8 Sa	0522 1146 1743	5.2 0.6 5.3	158 18 162	23 Su	0426 1104 1640 2332	5.5 0.2 5.6 -0.2	168 6	8 Tu	0009 0619 1248 1840	0.3 5.5 0.3 4.9	9 168 168 149	23 W	0555 1239 1818	6.3 -0.6 5.4	192 165	8 O	0013 0627 1306 1855	0.3 5.3 0.1 4.5	9 162 13 137	23 F	0031 0634 1320 1900	-0.6 6.2 0.8 5.1	-18 189 24 155
9 Su	0007 0609 1231 1827	0.3 5.4 0.5 5.4	9 165 15 165	24 M	0524 1200 1741	6.0 -0.2 5.8	183 177	9 W	0048 0656 1331 1920	0.3 5.6 0.2 4.9	9 171 149	24 Th	0049 0648 1334 1912	-0.7 6.6 0.8 5.5	-21 201 24 168	9 O	0056 0704 1350 1935	0.2 5.4 0.0 4.6	6 165 0 140	24 Sa	0126 0726 1412 1952	-0.7 6.3 1.0 5.2	-21 192 30 158
10 M	0046 0649 1315 1908	0.2 5.6 0.4 5.4	6 -15 12 165	25 Tu	0022 0617 1256 1836	-0.5 -0.5 6.0	-15 183	10 W	0127 0729 1413 1956	0.3 5.7 0.1 4.9	9 174 149	25 F	0142 0739 1428 2004	-0.8 6.7 -1.0 5.5	-24 204 30 168	10 O	0139 0736 1432 2011	0.1 5.5 -0.2 4.6	3 168 6 140	25 O	0219 0815 1502 2042	-0.8 6.2 1.1 5.2	-24 189 34 158
11 Tu	0125 0726 1357 1945	0.2 5.7 0.3 5.4	6 174 9 165	26 O	0112 0707 1350 1927	-0.7 -0.8 6.0	-21 183	11 F	0205 0758 1454 2030	0.3 5.7 0.1 4.8	9 174 149	26 Sa	0235 0828 1519 2056	-0.7 6.6 1.0 5.4	-21 201 165	11 M	0221 0806 1513 2045	0.1 5.6 -0.2 4.5	3 171 6 137	26 W	0309 0903 1548 2132	-0.7 6.0 1.0 5.1	-21 183 30 155
12 W	0201 0758 1437 2019	0.2 5.8 0.3 5.2	6 177 9 158	27 Th	0203 0755 1444 2018	-0.8 6.9 0.9	-24 180	12 Sa	0243 0824 1532 2102	0.3 5.6 0.2 4.6	9 171 149	27 Su	0325 0919 1608 2151	-0.6 6.4 0.8 5.2	-18 195 158	12 M	0302 0836 1552 2120	0.1 5.5 -0.3 4.5	3 168 9 137	27 Tu	0356 0952 1631 2224	-0.5 5.7 0.8 4.9	-15 174 24 149
13 Th	0237 0826 1515 2052	0.3 5.7 0.3 5.0	9 174 9 152	28 F	0254 0844 1535 2110	-0.7 6.9 0.8	-21 174	13 Su	0319 0851 1610 2135	0.4 5.5 0.2 4.5	12 168 149 137	28 M	0414 1014 1656 2250	-0.4 6.0 0.6 5.0	-12 183 152 137	13 O	0341 0911 1629 2200	0.1 5.5 -0.2 4.5	3 168 9 137	28 W	0440 1042 1713 2317	-0.2 5.4 0.5 4.8	-6 165 15 146
14 F	0310 0850 1551 2123	0.4 5.6 0.4 4.8	12 171 12 146	29 Sa	0343 0937 1626 2207	-0.6 6.6 0.7	-18 165	14 M	0354 0924 1646 2214	0.5 5.5 0.3 4.4	15 168 149 134	29 Tu	0503 1111 1744 2349	0.0 5.6 -0.3 4.8	0 171 149 146	14 W	0421 0952 1706 2247	0.1 5.4 -0.2 4.5	3 165 16 137	29 O	0524 1133 1753	0.1 5.0 -0.2 6	3 152
15 Sa	0341 0915 1626 2154	0.6 5.5 0.6 4.6	18 171 18 140	30 Su	0432 1035 1717 2310	-0.3 6.2 0.3 5.2	-9 189 158	15 Tu	0430 1005 1723 2303	0.6 5.4 0.4 4.3	18 165 149 131	30 W	0553 1208 1834	0.4 5.3 0.1 4.0	12 162 3 131	15 O	0502 1041 1745 2341	0.2 5.3 -0.1 4.6	6 162 13 140	30 F	0008 0610 1222 1834	4.6 0.5 4.7 0.2	140 15 143 6
				31 M	0523 1137 1811	0.1 5.9 0.0	3 180 0	31 Sa	0523 1137 1811	0.1 5.9 0.0	3 180 0					31 W	0556 0704 1310	4.5 0.8 4.3	137 24 131				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Albany, New York, 2011

Times and Heights of High and Low Waters

January				February				March								
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height					
h m	ft	cm		h m	ft	cm		h m	ft	cm						
1 Sa	0158	3.9	119	16 Su	0142	3.8	116	1 Tu	0329	4.1	125	16 W				
	0827	-0.3	-9		0818	0.0	0		0950	0.0	0		0212	4.3	131	16 W
	1430	5.5	168		1412	5.3	162		1550	5.4	165		0836	0.3	9	
	2111	-0.5	-15		2108	0.1	3		2228	-0.4	-12		1437	5.4	165	
2 Su	0256	3.9	119	17 M	0236	3.9	119	2 W	0417	4.2	128	17 Th	0350	4.7	143	2 W
	0920	-0.2	-6		0908	-0.1	-3		1039	0.0	0		1022	-0.2	-6	
	1523	5.5	168		1502	5.4	165		1635	5.4	165		1609	5.7	174	
	2203	-0.6	-18		2157	-0.1	-3	●	2313	-0.4	-12		2300	-0.3	-9	
3 M	0349	4.0	122	18 Tu	0326	4.0	122	3 Th	0501	4.3	131	18 F	0439	5.0	152	3 Th
	1011	-0.2	-6		0957	-0.2	-6		1125	0.1	3		1112	-0.2	-6	
	1612	5.5	168		1548	5.6	171		1717	5.3	162		1656	5.7	174	
	2252	-0.6	-18		2243	-0.3	-9		2356	-0.4	-12	○	2345	-0.5	-15	
4 Tu	0438	4.0	122	19 W	0415	4.2	128	4 F	0542	4.4	134	19 Sa	0527	5.3	162	4 F
	1100	-0.1	-3		1044	-0.3	-9		1211	0.2	6		1202	-0.3	-9	
	1657	5.4	165		1633	5.7	174		1756	5.1	155		1742	5.6	171	
●	2338	-0.6	-18	○	2328	-0.4	-12					●	2326	-0.1	-3	○
5 W	0523	4.1	125	20 Th	0501	4.5	137	5 Sa	0037	-0.3	-9	20 Su	0031	-0.5	-15	5 Sa
	1147	0.0	0		1132	-0.3	-9		0621	4.5	137		0615	5.5	168	
	1740	5.3	162		1717	5.7	174		1255	0.3	9		1253	-0.3	-9	
									1833	5.0	152		1828	5.5	168	
6 Th	0023	-0.6	-18	21 F	0013	-0.5	-15	6 Su	0118	-0.2	-6	21 M	0117	-0.5	-15	6 Su
	0606	4.1	125		0548	4.7	143		0700	4.7	143		0704	5.6	171	
	1233	0.1	3		1220	-0.3	-9		1340	0.4	12		1345	-0.2	-6	
	1820	5.2	158		1801	5.6	171		1910	4.8	146		1917	5.3	162	
7 F	0106	-0.5	-15	22 Sa	0057	-0.6	-18	7 M	0159	-0.1	-3	22 Tu	0206	-0.3	-9	7 M
	0648	4.2	128		0635	4.9	149		0739	4.8	146		0755	5.7	174	
	1319	0.2	6		1310	-0.3	-6		1426	0.5	15		1439	-0.1	-3	
	1900	5.0	152		1846	5.5	168		1947	4.6	140		2008	5.0	152	
8 Sa	0149	-0.4	-12	23 Su	0143	-0.6	-18	8 Tu	0242	0.0	0	23 W	0257	-0.2	-6	8 Tu
	0729	4.3	131		0724	5.1	155		0820	4.9	149		0848	5.7	174	
	1406	0.3	9		1403	-0.2	-6		1515	0.6	18		1535	0.1	3	
	1939	4.8	146		1934	5.2	158		2027	4.5	137		2104	4.7	143	
9 Su	0232	-0.3	-9	24 M	0231	-0.5	-15	9 W	0326	0.1	3	24 Th	0351	0.0	0	9 W
	0812	4.4	134		0816	5.2	158		0904	5.0	152		0945	5.6	171	
	1455	0.5	15		1458	-0.1	-3		1606	0.7	21		1633	0.2	6	
	2020	4.6	140		2025	4.9	149		2112	4.3	131		2204	4.4	134	
10 M	0317	-0.2	-6	25 Tu	0322	-0.4	-12	10 Th	0414	0.2	6	25 F	0448	0.2	6	10 Th
	0857	4.5	137		0911	5.3	162		0954	5.0	152		1045	5.5	168	
	1546	0.5	15		1556	0.0	0		1700	0.8	24		1732	0.2	6	
	2105	4.4	134		2122	4.6	140		2204	4.1	125		2308	4.2	128	
11 Tu	0403	-0.1	-3	26 W	0416	-0.3	-9	11 F	0505	0.3	9	26 Sa	0547	0.3	9	11 F
	0945	4.6	140		1009	5.3	162		1048	5.1	155		1146	5.4	165	
	1639	0.6	18		1656	0.0	0		1756	0.7	21		1831	0.2	6	
	2154	4.2	128	○	2224	4.3	131	○	2303	4.0	122					○
12 W	0452	0.0	0	27 Th	0513	-0.2	-6	12 Sa	0559	0.3	9	27 Su	0012	4.1	125	12 Sa
	1037	4.7	143		1110	5.3	162		1145	5.1	155		0645	0.4	12	
	1734	0.6	18		1757	0.0	0		1851	0.6	18		1246	5.4	165	
●	2249	4.0	122		2329	4.1	125						1928	0.2	6	●
13 Th	0543	0.0	0	28 F	0611	-0.1	-3	13 Su	0006	3.9	119	28 M	0114	4.1	125	13 Su
	1132	4.8	146		1211	5.3	162		0653	0.3	9		0742	0.4	12	
	1830	0.5	15		1856	0.0	0		1243	5.2	158		1343	5.4	165	
	2347	3.8	116						1945	0.5	15		2022	0.1	3	
14 F	0635	0.0	0	29 Sa	0034	3.9	119	14 M	0107	4.0	122					14 M
	1227	4.9	149		0709	0.0	0		0747	0.2	6					14 M
	1925	0.4	12		1312	5.3	162		1339	5.4	165					14 M
					1954	-0.1	-3		2037	0.3	9					14 M
15 Sa	0046	3.8	116	30 Su	0137	3.9	119	15 Tu	0205	4.2	128		0035	4.4	134	15 Tu
	0727	0.0	0		0805	0.0	0		0840	0.1	3		0719	0.5	15	
	1321	5.1	155		1409	5.4	165		1431	5.5	168		1304	5.5	168	
	2018	0.2	6		2049	-0.2	-6		2127	0.0	0		2005	0.4	12	
				31 M	0236	4.0	122		0859	0.0	0					31 Th
					1502	5.4	165		1502	5.4	165					31 Th
					2140	-0.3	-9		2140	-0.3	-9					31 Th

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean low water during lowest river stages which is the chart datum of soundings.

Albany, New York, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
1 F	0322	5.0	152	16	0303	5.7	174	1	0334	5.4	165	16	0333	6.1	186
	0952	0.5	15	Sa	0942	0.0	0	Su	1014	0.4	12	M	1016	-0.3	-9
	1541	5.1	155		1522	5.4	165		1554	4.7	143		1556	4.9	149
	2212	0.2	6		2203	0.0	0		2223	0.3	9		2228	-0.1	-3
2 Sa	0406	5.2	158	17	0355	6.0	183	2	0416	5.6	171	17	0424	6.2	189
	1039	0.5	15	Su	1034	-0.1	-3	M	1100	0.4	12	Tu	1108	-0.3	-9
	1624	5.1	155		1615	5.4	165		1636	4.7	143		1648	4.8	146
	2255	0.2	6	O	2252	-0.1	-3		2305	0.3	9	O	2318	0.0	0
3 Su	0446	5.4	165	18	0445	6.2	189	3	0455	5.6	171	18	0514	6.2	189
	1124	0.5	15	M	1126	-0.2	-6	Tu	1144	0.4	12	W	1158	-0.4	-12
	1704	5.0	152		1705	5.3	162		1716	4.6	140		1738	4.7	143
	● 2336	0.3	9		2340	0.0	0	●	2347	0.4	12				
4 M	0524	5.5	168	19	0534	6.3	192	4	0533	5.7	174	19	0008	0.1	3
	1208	0.5	15	Tu	1217	-0.2	-6	W	1228	0.4	12	Th	0602	6.1	186
	1741	4.9	149		1755	5.2	158		1754	4.5	137		1248	-0.3	-9
													1828	4.6	140
5 Tu	0017	0.4	12	20	0029	0.1	3	5	0028	0.5	15	20	0057	0.2	6
	0601	5.6	171	W	0622	6.3	192	Th	0610	5.8	177	F	0649	5.9	180
	1252	0.6	18		1308	-0.1	-3		1312	0.5	15		1337	-0.2	-6
	1818	4.8	146		1845	5.0	152		1831	4.5	137		1916	4.6	140
6 W	0057	0.5	15	21	0119	0.2	6	6	0110	0.6	18	21	0148	0.4	12
	0637	5.6	171	Th	0711	6.2	189	F	0647	5.8	177	Sa	0737	5.7	174
	1336	0.7	21		1359	0.0	0		1356	0.5	15		1426	-0.1	-3
	1853	4.7	143		1935	4.9	149		1910	4.5	137		2006	4.5	137
7 Th	0138	0.6	18	22	0210	0.4	12	7	0153	0.6	18	22	0239	0.5	15
	0714	5.7	174	F	0801	6.0	183	Sa	0727	5.8	177	Su	0825	5.5	168
	1421	0.8	24		1451	0.1	3		1441	0.6	18		1515	0.0	0
	1930	4.6	140		2027	4.7	143		1953	4.6	140		2057	4.5	137
8 F	0220	0.7	21	23	0304	0.6	18	8	0240	0.7	21	23	0333	0.6	18
	0754	5.7	174	Sa	0853	5.8	177	Su	0812	5.7	174	M	0915	5.2	158
	1508	0.8	24		1543	0.2	6		1529	0.6	18		1606	0.1	3
	2012	4.6	140		2122	4.6	140		2043	4.6	140		2150	4.5	137
9 Sa	0306	0.7	21	24	0359	0.7	21	9	0333	0.7	21	24	0427	0.7	21
	0840	5.7	174	Su	0948	5.5	168	M	0901	5.6	171	Tu	1007	5.0	152
	1558	0.9	27		1637	0.3	9		1619	0.5	15		1656	0.1	3
	2102	4.6	140	O	2219	4.6	140		2140	4.7	143	O	2244	4.6	140
10 Su	0358	0.8	24	25	0456	0.8	24	10	0430	0.7	21	25	0523	0.7	21
	0931	5.6	171	M	1044	5.3	162	Tu	0957	5.5	168	W	1101	4.7	143
	1650	0.9	27		1731	0.4	12		1712	0.4	12		1747	0.1	3
	2200	4.6	140		2318	4.6	140	O	2242	4.9	149		2339	4.7	143
11 M	0455	0.8	24	26	0553	0.8	24	11	0530	0.6	18	26	0619	0.7	21
	1029	5.6	171	Tu	1141	5.1	155	W	1058	5.3	162	Th	1157	4.6	140
	1744	0.8	24		1824	0.4	12		1806	0.3	9		1838	0.1	3
	● 2304	4.7	143						2345	5.1	155				
12 Tu	0554	0.7	21	27	0015	4.7	143	12	0631	0.5	15	27	0122	5.5	168
	1130	5.5	168	W	0649	0.8	24	Th	1201	5.2	158	Su	0807	-0.2	-6
	1838	0.6	18		1237	5.0	152		1900	0.2	6		1342	4.4	134
					1915	0.3	9					1928	0.1	3	
13 W	0008	4.8	146	28	0110	4.9	149	13	0046	5.3	162	28	0125	5.0	155
	0653	0.6	18	Th	0744	0.7	21	F	0730	0.3	9	Sa	0807	0.5	15
	1231	5.5	168		1330	4.9	149		1304	5.0	152		1345	4.3	131
	1931	0.4	12		2005	0.3	9		1953	0.1	3		2017	0.1	3
14 Th	0110	5.1	155	29	0202	5.1	155	14	0144	5.6	171	29	0214	5.2	158
	0751	0.4	12	F	0836	0.6	18	Sa	0827	0.1	3	Th	0858	0.3	9
	1331	5.5	168		1422	4.9	149		1404	5.0	152		1435	4.3	131
	2023	0.2	6		2053	0.3	9		2046	0.0	0		2104	0.1	3
15 F	0208	5.4	165	30	0249	5.3	162	15	0240	5.9	180	30	0301	5.4	165
	0847	0.2	6	Sa	0926	0.5	15	Su	0923	-0.1	-3	M	0947	0.2	6
	1428	5.5	168		1509	4.8	146		1501	4.9	149		1523	4.2	128
	2114	0.1	3		2139	0.3	9		2137	-0.1	-3		2150	0.1	3
												31	0345	5.5	168
												Tu	1034	0.2	6
												1607	4.2	128	
												2235	0.2	6	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean low water during lowest river stages which is the chart datum of soundings.

Albany, New York, 2011

Times and Heights of High and Low Waters

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean low water during lowest river stages which is the chart datum of soundings.

Albany, New York, 2011

Times and Heights of High and Low Waters

October				November				December							
	Time	Height		Time	Height		Time	Height		Time	Height				
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm				
1 Sa	0153	-0.6	-18	16 Su	0203	0.2	6	1 Tu	0318	-0.4	-12	16 W	0308	0.2	6
	0724	4.5	137		0717	4.0	122		0857	4.2	128		0822	4.1	125
	1406	-0.3	-9		1402	0.2	6		1534	0.2	6		1510	0.4	12
	1957	5.5	168		1937	5.2	158		2122	5.1	155		2035	5.1	155
2 Su	0247	-0.4	-12	17 M	0249	0.3	9	2 W	0412	-0.3	-9	17 Th	0356	0.1	3
	0819	4.3	131		0758	4.0	122		0955	4.2	128		0915	4.2	128
	1501	-0.2	-6		1448	0.3	9		1632	0.3	9		1605	0.4	12
	2052	5.4	165		2020	5.1	155		2219	4.9	149		2128	5.0	152
3 M	0343	-0.3	-9	18 Tu	0338	0.4	12	3 Th	0506	-0.2	-6	18 F	0447	0.1	3
	0917	4.2	128		0845	4.0	122		1054	4.2	128		1014	4.4	134
	1558	0.0	0		1539	0.4	12		1730	0.3	9		1704	0.4	12
	2150	5.2	158		2109	5.1	155		2317	4.7	143		2226	4.8	146
4 Tu	0440	-0.2	-6	19 W	0429	0.4	12	4 F	0600	-0.2	-6	19 Sa	0539	0.0	0
	1018	4.0	122		0940	4.0	122		1153	4.3	131		1115	4.6	140
	1656	0.1	3		1634	0.4	12		1827	0.3	9		1804	0.3	9
	2250	5.0	152		2204	5.0	152						2328	4.7	143
5 W	0537	-0.2	-6	20 Th	0522	0.3	9	5 Sa	0014	4.5	137	20 Su	0632	-0.1	-3
	1121	4.0	122		1041	4.1	125		0652	-0.2	-6		1217	4.9	149
	1756	0.1	3		1731	0.4	12		1249	4.5	137		1903	0.1	3
	2350	4.9	149		2303	4.9	149		1923	0.2	6				
6 Th	0632	-0.2	-6	21 F	0615	0.2	6	6 Su	0110	4.4	134	21 M	0031	4.6	140
	1223	4.1	125		1143	4.3	131		0743	-0.2	-6		0726	-0.2	-6
	1854	0.1	3		1830	0.2	6		1342	4.7	143		1316	5.2	158
									2017	0.1	3		2001	-0.1	-3
7 F	0048	4.8	146	22 Sa	0003	4.9	149	7 M	0202	4.3	131	22 Tu	0133	4.5	137
	0726	-0.3	-9		0707	0.0	0		0832	-0.2	-6		0818	-0.3	-9
	1321	4.2	128		1244	4.5	137		1431	4.9	149		1412	5.4	165
	1949	0.1	3		1927	0.1	3		2108	0.0	0		2056	-0.4	-12
8 Sa	0144	4.7	143	23 Su	0103	4.9	149	8 Tu	0252	4.3	131	23 W	0231	4.5	137
	0817	-0.3	-9		0758	-0.2	-6		0918	-0.2	-6		0910	-0.4	-12
	1414	4.4	134		1341	4.9	149		1517	5.0	152		1506	5.7	174
	2042	0.0	0		2023	-0.1	-3		2156	-0.1	-3		2150	-0.6	-18
9 Su	0235	4.7	143	24 M	0200	4.9	149	9 W	0338	4.2	128	24 Th	0327	4.5	137
	0905	-0.4	-12		0848	-0.3	-9		1003	-0.2	-6		0901	-0.5	-15
	1502	4.6	140		1436	5.2	158		1559	5.2	158		1558	5.8	177
	2133	-0.1	-3		2117	-0.4	-12		2242	-0.1	-3		2242	-0.7	-21
10 M	0322	4.6	140	25 Tu	0254	4.9	149	10 W	0421	4.1	125	9 F	0353	3.9	119
	0951	-0.4	-12		0937	-0.5	-15		1047	-0.1	-3		1001	-0.1	-3
	1547	4.8	146		1527	5.5	168		1639	5.3	162		1558	5.8	177
	2221	-0.1	-3		2209	-0.5	-15		2327	-0.1	-3		2333	-0.8	-24
11 Tu	0406	4.5	137	26 W	0346	4.8	146	11 F	0501	4.1	125	10 Sa	0436	3.9	119
	1034	-0.3	-9		1025	-0.5	-15		1129	0.0	0		1101	-0.1	-3
	1628	4.9	149		1617	5.7	174		1718	5.3	162		1652	5.4	165
	2306	-0.1	-3		2300	-0.7	-21					2346	-0.2	-6	
12 W	0447	4.4	134	27 Th	0437	4.8	146	12 Sa	0011	-0.1	-3	12 Su	0029	-0.2	-6
	1117	-0.2	-6		1114	-0.5	-15		0540	4.0	122		0555	4.0	122
	1707	5.0	152		1706	5.9	180		1210	0.1	3		1226	0.1	3
	2351	-0.1	-3		2351	-0.7	-21		1755	5.3	162		1807	5.4	165
13 Th	0526	4.3	131	28 F	0528	4.7	143	13 Su	0054	0.0	0	13 M	0112	-0.2	-6
	1158	-0.1	-3		1203	-0.5	-15		0617	4.0	122		0634	4.1	125
	1745	5.1	155		1755	5.9	180		1252	0.2	6		1310	0.1	3
									1831	5.3	162		1844	5.3	162
14 F	0035	0.0	0	29 Sa	0042	-0.7	-21	14 M	0138	0.1	3	14 Tu	0202	-0.6	-18
	0603	4.2	128		0618	4.6	140		0655	4.0	122		0743	4.3	131
	1239	0.0	0		1253	-0.3	-9		1334	0.2	6		1416	0.1	3
	1821	5.1	155		1844	5.8	177		1909	5.3	162		2002	5.3	162
15 Sa	0118	0.1	3	30 Su	0133	-0.6	-18	15 Tu	0222	0.1	3	15 W	0252	-0.5	-15
	0640	4.1	125		0709	4.5	137		0735	4.1	125		0834	4.3	131
	1320	0.1	3		1344	-0.2	-6		1420	0.3	9		1509	0.2	6
	1858	5.2	158		1935	5.6	171		1950	5.2	158		2052	5.0	152
31 M	0225	-0.5	-15	31 M	0802	4.3	131					15 Th	0238	-0.2	-6
					1438	0.0	0					30 F	0310	-0.4	-12
					2027	5.4	165					31 Sa	0358	-0.3	-9
												0946	4.5	137	

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Sandy Hook, New Jersey, 2011

Times and Heights of High and Low Waters

January				February				March											
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height								
h m	ft	cm		h m	ft	cm		h m	ft	cm									
1 Sa	0459	5.3	162	16	0422	4.6	140	1 Tu	0011	-0.1	-3	16	0543	5.3	162				
Sa	1132	-0.3	-9	Su	1111	0.2	6	Tu	0625	5.1	155	Tu	1140	0.1	3				
	1725	4.2	128		1659	3.8	116		1222	-0.5	-15		1102	-0.1	-3				
	2336	-0.3	-9		2303	0.0	0		1817	4.8	146		1659	4.8	146				
2 Su	0553	5.4	165	17	0517	4.9	149	2 W	0058	-0.2	-6	2 W	0602	4.9	149				
Su	1223	-0.4	-12	M	1201	-0.1	-3	W	0708	5.2	158	W	1222	-0.1	-3				
	1818	4.3	131		1752	4.1	125		1333	-0.4	-12		1827	4.6	140				
					2355	-0.3	-9	●	1932	4.5	137								
3 M	0027	-0.3	-9	18	0607	5.3	162	3 Th	0142	-0.2	-6	18	0121	-0.9	-27	3 Th	0037	0.0	0
M	0641	5.4	165	Tu	1249	-0.4	-12	Th	0747	5.1	155	F	0722	5.8	177	F	0644	5.0	152
	1312	-0.5	-15		1841	4.4	134		1412	-0.4	-12		1357	-1.1	-34		1302	-0.2	-6
	1907	4.4	134						2012	4.6	140	O	1954	5.5	168		1907	4.8	146
4 Tu	0115	-0.3	-9	19	0047	-0.5	-15	4 F	0223	-0.2	-6	19	0212	-1.1	-34	4 F	0119	-0.1	-3
Tu	0726	5.4	165	W	0654	5.6	171	F	0826	5.0	152	Sa	0810	5.8	177	Sa	0723	5.0	152
	1357	-0.5	-15		1337	-0.7	-21		1448	-0.4	-16		1442	-1.2	-37		1340	-0.2	-6
●	1952	4.5	137	O	1927	4.7	143		2050	4.6	140		2042	5.7	174	●	1944	4.9	149
5 W	0201	-0.2	-6	20	0138	-0.7	-21	5 Sa	0301	-0.1	-3	20	0302	-1.1	-34	5 Sa	0200	-0.1	-3
W	0809	5.3	162	Th	0741	5.7	174	Sa	0903	4.8	146	Su	0859	5.7	174	Sa	0759	5.0	152
	1439	-0.5	-15		1423	-0.9	-27		1522	-0.3	-9		1527	-1.1	-34		1415	-0.2	-6
	2036	4.4	134		2014	5.0	152		2128	4.5	137		2133	5.7	174		2018	4.9	149
6 Th	0244	-0.2	-6	21	0228	-0.9	-27	6 Su	0338	0.0	0	21	0352	-1.0	-30	6 Su	0238	-0.1	-3
Th	0851	5.1	155	F	0827	5.7	174	Su	0941	4.6	140	M	0951	5.4	165	M	0835	4.8	146
	1518	-0.4	-12		1507	-1.1	-34		1554	-0.2	-6		1612	-0.9	-27		1448	-0.1	-3
	2120	4.3	131		2103	5.1	155		2205	4.4	134		2226	5.6	171		2052	4.9	149
7 F	0325	0.0	0	22	0317	-0.9	-27	7 M	0414	0.2	6	22	0443	-0.7	-21	7 M	0314	0.0	0
F	0932	4.9	149	Sa	0917	5.6	171	Tu	1020	4.3	131	Tu	1046	5.0	152	Tu	0911	4.6	140
	1555	-0.3	-9		1551	-1.1	-34		1624	0.0	0		1659	-0.6	-18		1519	0.0	0
	2203	4.2	128		2155	5.2	158		2241	4.3	131		2321	5.4	165		2123	4.8	146
8 Sa	0404	0.2	6	23	0407	-0.8	-24	8 Tu	0450	0.4	12	23	0539	-0.3	-9	8 Tu	0349	0.2	6
Sa	1015	4.6	140	Su	1009	5.4	165	Tu	1100	4.1	125	W	1143	4.6	140	W	1047	4.4	134
	1630	-0.1	-3		1636	-0.9	-27		1654	0.2	6		1752	-0.2	-6		1549	0.2	6
	2247	4.1	125		2250	5.2	158		2318	4.3	131						2257	5.6	171
9 Su	0443	0.4	12	24	0459	-0.5	-15	9 W	0530	0.7	21	24	0017	5.2	158	9 W	0424	0.4	12
Su	1058	4.4	134	M	1104	5.0	152	Tu	1141	3.8	116	Th	0642	0.1	3	Th	1025	4.1	125
	1705	0.1	3		1724	-0.7	-21		1727	0.4	12		1242	4.3	131		1618	0.4	12
	2330	4.1	125		2345	5.1	155		2358	4.2	128	●	1855	0.2	6		2228	4.6	140
10 M	0525	0.7	21	25	0557	-0.2	-6	10 Th	0620	0.9	27	25	0114	4.9	149	10 Th	0459	0.6	18
M	1141	4.1	125	Tu	1201	4.7	143		1227	3.7	113		0753	0.3	9		1106	3.9	119
	1741	0.3	9		1818	-0.4	-12		1811	0.6	18		1342	4.1	125		1650	0.5	15
11 Tu	0012	4.1	125	26	0041	5.1	155	11 F	0043	4.2	128	26	0214	4.7	143	11 F	0541	0.8	24
Tu	0615	0.9	27	W	0704	0.1	3	Sa	0731	1.0	30	Sa	0901	0.4	12	Sa	0726	0.5	15
	1225	3.9	119		1258	4.3	131		1318	3.5	107		1445	3.9	119		1324	4.2	128
	1823	0.5	15	●	1921	-0.1	-3	●	1916	0.7	21		2113	0.5	15	●	1941	0.8	24
12 W	0054	4.1	125	27	0138	5.0	152	12 Sa	0135	4.3	131	27	0317	4.6	140	12 Sa	0644	0.9	27
W	0717	1.0	30	Th	0815	0.2	6	Su	0844	0.9	27	Su	1001	0.3	9	Su	0833	0.6	18
	1311	3.7	113		1358	4.1	125		1417	3.5	107		1550	3.9	119		1424	4.1	125
●	1916	0.6	18		2028	0.1	3		2033	0.7	21		2212	0.4	12	●	2050	0.9	27
13 Th	0138	4.1	125	28	0237	4.9	149	13 Su	0236	4.4	134	28	0419	4.6	140	13 Su	0056	4.5	137
Th	0825	0.9	27	F	0922	0.2	6	Su	0946	0.6	18	M	1053	0.2	6	M	0932	0.6	18
	1402	3.5	107		1502	3.9	119		1522	3.7	113		1651	4.1	125		1524	4.1	125
	2017	0.6	18		2131	0.1	3		2140	0.4	12		2304	0.3	9		2150	0.8	24
14 F	0227	4.2	128	29	0340	4.8	146	14 M	0343	4.6	140					14 M	0200	4.6	140
F	0926	0.8	24	Sa	1022	0.1	3		1041	0.3	9					29 Tu	1022	0.4	12
	1459	3.5	107		1608	3.9	119		1627	3.9	119					Tu	1623	4.3	131
	2116	0.5	15		2229	0.1	3		2239	0.1	3						2241	0.6	18
15 Sa	0323	4.4	134	30	0441	4.9	149	15 Tu	0447	4.9	149					15 Tu	0309	4.7	143
Sa	1021	0.5	15	Su	1115	-0.1	-3		1133	-0.1	-3						1010	0.3	9
	1600	3.6	110		1710	4.0	122		1725	4.3	131						1558	4.3	131
	2211	0.3	9		2322	0.0	0		2334	-0.3	-9						2216	0.2	6
31 M	0537	5.0	152													31 Th	1147	0.2	6
	1205	-0.2	-6														1758	4.8	146

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Sandy Hook, New Jersey, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0012 0.3 9 0615 4.8 146 1225 0.1 3 1837 5.0 152	16 Sa 0548 5.5 168 1211 -0.6 -18 1820 6.1 186	1 Su 0026 0.3 9 0624 4.6 140 1225 0.3 9 1840 5.3 162	16 M 0028 -0.5 -15 0622 5.2 158 1236 -0.4 -12 1849 6.4 195	1 W 0125 0.2 6 0716 4.5 137 1314 0.4 12 1920 5.5 168	16 Th 0157 -0.4 -12 0750 5.0 152 1400 0.0 0 2009 6.1 186						
2 Sa 0054 0.1 3 0654 4.9 149 1303 0.1 3 1913 5.2 158	17 Su 0045 -0.7 -21 0641 5.6 171 1301 -0.7 -21 1909 6.4 195	2 M 0109 0.2 6 0704 4.6 140 1304 0.3 9 1914 5.4 165	17 Tu 0122 -0.7 -21 0714 5.2 158 1328 -0.4 -12 1938 6.4 195	2 Th 0208 0.1 3 0756 4.5 137 1357 0.4 12 1957 5.6 171	17 F 0245 -0.4 -12 0840 4.9 149 1449 0.1 3 2057 5.8 177						
3 Su 0135 0.0 0 0732 4.8 146 1339 0.1 3 ● 1946 5.2 158	18 M 0139 -0.9 -27 0732 5.6 171 1351 -0.7 -21 1958 6.5 198	3 Tu 0150 0.1 3 0742 4.6 140 1343 0.3 9 1947 5.4 165	18 W 0214 -0.7 -21 0806 5.2 158 1419 -0.3 -9 2027 6.3 192	3 F 0250 0.0 0 0838 4.5 137 1440 0.4 12 2036 5.5 168	18 Sa 0330 -0.3 -9 0931 4.8 146 1536 0.3 9 2145 5.5 168						
4 M 0214 0.0 0 0808 4.7 143 1415 0.1 3 2018 5.2 158	19 Tu 0230 -0.9 -27 0823 5.4 165 1439 -0.6 -18 2047 6.3 192	4 W 0230 0.1 3 0820 4.5 137 1421 0.4 12 2019 5.4 165	19 Th 0304 -0.6 -18 0859 5.0 152 1508 -0.1 -3 2118 6.0 183	4 Sa 0330 0.0 0 0922 4.5 137 1523 0.4 12 2120 5.5 168	19 M 0412 -0.1 -3 1022 4.7 143 1620 0.5 15 2234 5.2 158						
5 Tu 0252 0.1 3 0844 4.6 140 1448 0.2 6 2047 5.1 155	20 W 0320 -0.8 -24 0916 5.2 158 1528 -0.4 -12 2139 6.1 186	5 Th 0309 0.2 6 0858 4.4 134 1458 0.5 15 2053 5.3 162	20 F 0351 -0.4 -12 0953 4.9 149 1556 0.2 6 2210 5.6 171	5 Su 0411 0.0 0 1011 4.5 137 1607 0.4 12 2209 5.4 165	20 M 0453 0.1 3 1112 4.6 140 1706 0.8 24 2321 4.9 149						
6 W 0328 0.2 6 0920 4.4 134 1521 0.4 12 2118 5.0 152	21 Th 0410 -0.5 -15 1012 4.9 149 1616 0.0 0 2234 5.7 174	6 F 0347 0.2 6 0940 4.3 131 1536 0.5 15 2133 5.2 158	21 Sa 0438 -0.1 -3 1048 4.7 143 1645 0.5 15 2303 5.3 162	6 M 0453 0.1 3 1104 4.6 140 1655 0.5 15 2304 5.3 162	21 Tu 0535 0.4 12 1200 4.6 140 1755 1.1 34						
7 Th 0403 0.3 9 0959 4.2 128 1553 0.5 15 2153 4.9 149	22 F 0500 -0.2 -6 1109 4.7 143 1707 0.4 12 2330 5.3 162	7 Sa 0426 0.3 9 1027 4.3 131 1615 0.6 12 2221 5.1 155	22 Su 0526 0.2 6 1143 4.6 140 1737 0.9 27 2355 5.0 152	7 Tu 0540 0.1 3 1157 4.8 146 1752 0.6 18	22 W 0008 4.7 143 0618 0.6 18 1245 4.6 140 1852 1.3 40						
8 F 0440 0.5 15 1042 4.1 125 1627 0.7 21 2237 4.9 149	23 Sa 0554 0.2 6 1207 4.5 137 1805 0.8 24	8 Su 0509 0.4 12 1119 4.3 131 1702 0.7 21 2316 5.1 155	23 M 0616 0.4 12 1234 4.5 137 1835 1.1 34	8 W 0000 5.2 158 0634 0.2 6 1251 5.0 152 1901 0.7 21	23 Th 0054 4.4 134 0706 0.7 21 1330 4.6 140 1954 1.3 40						
9 Sa 0521 0.7 21 1133 4.0 122 1710 0.8 24 2331 4.8 146	24 Su 0025 5.0 152 0654 0.5 15 1302 4.4 134 1911 1.0 30	9 M 0559 0.5 15 1213 4.4 134 1801 0.8 24	24 Tu 0045 4.7 143 0709 0.6 18 1324 4.5 137 1939 1.3 40	9 Th 0057 5.0 152 0735 0.2 6 1346 5.2 158 2014 0.6 18	24 F 0141 4.2 128 0757 0.8 24 1415 4.6 140 2054 1.2 37						
10 Su 0617 0.8 24 1228 4.0 122 1810 0.9 27	25 M 0119 4.7 143 0756 0.7 21 1357 4.3 131 2019 1.1 34	10 Tu 0015 5.0 152 0700 0.5 15 1309 4.6 140 1916 0.9 27	25 W 0134 4.5 137 0803 0.7 21 1413 4.5 137 2040 1.2 37	10 Th 0156 4.9 149 0836 0.1 3 1443 5.4 165 2120 0.4 12	25 Sa 0231 4.0 122 0848 0.9 27 1502 4.7 143 2147 1.1 34						
11 M 0031 4.8 146 0729 0.8 24 1326 4.1 125 ● 1933 0.9 27	26 Tu 0213 4.5 137 0852 0.7 21 1452 4.4 134 2119 1.0 30	11 W 0114 5.0 152 0806 0.4 12 1406 4.8 146 2031 0.7 21	26 Th 0224 4.3 131 0853 0.7 21 1502 4.6 140 2135 1.1 34	11 Sa 0258 4.8 146 0934 0.0 0 1543 5.7 174 2221 0.2 6	26 M 0325 4.0 122 0938 0.8 24 1552 4.8 146 2237 0.9 27						
12 Tu 0134 4.8 146 0838 0.6 18 1427 4.4 134 2051 0.7 21	27 W 0308 4.4 134 0942 0.6 18 1546 4.5 137 2211 0.9 27	12 Th 0216 5.0 152 0906 0.2 6 1506 5.2 158 2137 0.4 12	27 F 0317 4.2 128 0939 0.7 21 1552 4.7 143 2224 0.9 27	12 Su 0403 4.7 143 1029 -0.1 -3 1642 4.7 143 2318 -0.1 -3	27 M 0422 4.0 122 1025 0.7 21 1643 5.0 152 2325 0.7 21						
13 W 0240 4.9 149 0938 0.3 9 1531 4.8 146 2156 0.3 9	28 Th 0402 4.4 134 1025 0.5 15 1636 4.7 143 2258 0.7 21	13 F 0320 5.0 152 1000 -0.1 -3 1606 5.6 171 2237 0.0 0	28 Sa 0410 4.2 128 1022 0.6 18 1640 4.9 149 2311 0.7 21	13 M 0507 4.8 146 1122 -0.1 -3 1739 6.1 186	28 Tu 0516 4.1 125 1112 0.6 18 1730 5.2 158						
14 Th 0347 5.1 155 1031 -0.1 -3 1632 5.2 158 2255 -0.1 -3	29 F 0454 4.5 137 1106 0.4 12 1722 4.9 149 2342 0.5 15	14 Sa 0425 5.0 152 1053 -0.3 -9 1704 5.9 180 2333 -0.3 -9	29 Su 0502 4.2 128 1104 0.6 18 1724 5.1 155 2356 0.5 15	14 Tu 0013 -0.3 -9 0605 4.9 149 1216 -0.2 -6 1831 6.2 189	29 W 0012						

Sandy Hook, New Jersey, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0144 0.0 0 0733 4.6 140 1336 0.2 6 ● 1938 5.7 174	0222 -0.2 -6 0819 4.9 149 1429 0.2 6 2033 5.7 174	16 Sa 0913 5.1 155 1453 -0.2 -6 2049 5.9 180	0244 -0.5 -15 0839 5.4 165 1527 0.5 15 2127 5.1 155	16 Tu 0913 5.1 155 1527 0.5 15 2127 5.1 155	0307 0.0 0 0955 6.1 186 1617 -0.3 -9 2215 5.4 165	1 Th 0955 6.1 186 1617 -0.3 -9 2215 5.4 165	0344 -0.5 -15 1051 6.0 183 1711 0.0 0 2313 5.1 155	16 F 1613 0.8 24 2213 4.4 134	0336 0.5 15 0944 5.0 152 1613 0.8 24 2213 4.4 134		
2 Sa 0227 -0.1 -3 0816 4.8 146 1423 0.1 3 2021 5.8 177	17 Su 0905 4.9 149 1512 0.3 9 2117 5.4 165	2 Tu 0928 5.6 171 1542 -0.2 -6 2139 5.7 174	3 W 0953 5.0 152 1605 0.7 21 2207 4.8 146	17 Th 0953 5.0 152 1643 0.9 27 2250 4.5 137	0340 0.2 6 1032 4.9 149 1643 0.9 27	2 F 1051 6.0 183 1711 0.0 0 2313 5.1 155	17 Sa 1019 4.9 149 1651 1.0 30 2257 4.2 128	0406 0.7 21 1100 4.8 146 1734 1.2 37 2345 4.0 122			
3 Su 0309 -0.2 -6 0902 4.9 149 1509 0.1 3 2106 5.7 174	18 M 0950 4.8 146 1554 0.5 15 2200 5.2 158	3 W 0409 -0.5 -15 1020 5.6 171 1632 -0.1 -3 2232 5.5 168	18 Th 0412 0.4 12 1032 4.9 149 1643 0.9 27	3 Sa 1149 5.8 177 1812 0.4 12	0522 0.1 3 1149 5.8 177	18 Su 1100 4.8 146 1734 1.2 37 2345 4.0 122					
4 M 0351 -0.3 -9 0952 5.0 152 1556 0.1 3 2156 5.6 171	19 Tu 0418 0.1 3 1035 4.8 146 1635 0.7 21 2244 4.9 149	4 Th 0454 -0.3 -9 1115 5.7 174 1727 0.2 6 2329 5.2 158	19 F 0444 0.6 18 1111 4.8 146 1723 1.1 34 2334 4.2 128	4 Su 0013 4.8 146 0622 0.4 12 1247 5.6 171 ● 1922 0.6 18	0013 4.8 146 0622 0.4 12 1247 5.6 171 ● 1922 0.6 18	19 M 0517 1.1 34 1148 4.7 143 1831 1.3 40					
5 Tu 0433 -0.3 -9 1044 5.1 155 1645 0.2 6 2249 5.4 165	20 W 0453 0.3 9 1119 4.7 143 1717 1.0 30 2329 4.6 140	5 F 0544 -0.1 -3 1210 5.6 171 1830 0.4 12	20 Sa 0517 0.9 27 1152 4.7 143 1813 1.3 40	5 M 0114 4.6 140 0732 0.7 21 1346 5.4 165 2032 0.7 21	0114 4.6 140 0732 0.7 21 1346 5.4 165 2032 0.7 21	20 Tu 0037 3.9 119 0612 1.3 40 1242 4.7 143 ● 1945 1.3 40					
6 W 0518 -0.2 -6 1137 5.2 158 1741 0.4 12 2344 5.2 158	21 Th 0528 0.6 18 1201 4.7 143 1805 1.2 37	6 Sa 0027 4.9 149 0643 0.2 6 1306 5.6 171 ● 1940 0.6 18	21 Su 0020 4.0 122 0558 1.1 34 1235 4.7 143 ● 1917 1.4 43	6 Tu 0216 4.4 134 0843 0.8 24 1448 5.2 158 2135 0.6 18	0216 4.4 134 0843 0.8 24 1448 5.2 158 2135 0.6 18	21 W 0132 4.0 122 0732 1.3 40 1341 4.8 146 2052 1.1 34					
7 Th 0609 0.0 0 1231 5.4 165 1846 0.5 15	22 F 0013 4.3 131 0608 0.8 24 1243 4.6 140 1903 1.3 40	7 Su 0126 4.6 140 0750 0.4 12 1404 5.5 168 2049 0.6 18	22 M 0109 3.9 119 0657 1.2 37 1323 4.7 143 2027 1.4 43	7 W 0321 4.4 134 0945 0.7 21 1549 5.2 158 2229 0.5 15	0321 4.4 134 0945 0.7 21 1549 5.2 158 2229 0.5 15	22 Th 0232 4.1 125 0848 1.1 34 1444 4.9 149 2147 0.8 24					
8 F 0041 5.0 152 0707 0.1 3 1326 5.5 168 ● 1957 0.6 18	23 Sa 0059 4.1 125 0656 1.0 30 1325 4.6 140 ● 2007 1.4 43	8 M 0228 4.4 134 0857 0.5 15 1505 5.4 165 2152 0.5 15	23 Tu 0203 3.9 119 0811 1.2 37 1419 4.7 143 2128 1.2 37	8 Th 0423 4.6 140 1040 0.6 18 1647 5.3 162 2316 0.3 9	0203 3.9 119 0811 1.2 37 1419 4.7 143 2128 1.2 37	23 F 0333 4.4 134 0951 0.7 21 1547 5.2 158 2237 0.4 12					
9 Sa 0139 4.7 143 0810 0.2 6 1423 5.5 168 2105 0.5 15	24 Su 0148 3.9 119 0754 1.1 34 1412 4.7 143 2108 1.3 40	9 Tu 0334 4.4 134 0958 0.5 15 1608 5.4 165 2248 0.3 9	24 W 0304 4.0 122 0918 1.0 30 1520 4.9 149 2221 0.9 27	9 F 0518 4.8 146 1129 0.5 15 1738 5.4 165	0518 4.8 146 1129 0.5 15 1738 5.4 165	24 Sa 0432 4.9 149 1047 0.3 9 1647 5.5 168 2325 0.0 0					
10 Su 0241 4.5 137 0912 0.2 6 1523 5.6 171 2206 0.3 9	25 M 0242 3.9 119 0854 1.0 30 1504 4.7 143 2203 1.1 34	10 W 0439 4.5 137 1054 0.4 12 1707 5.5 168 2340 0.2 6	25 Th 0405 4.2 128 1015 0.7 21 1621 5.2 158 2310 0.5 165	10 Sa 0000 0.2 6 0606 5.0 152 1216 0.4 12 1822 5.4 165	0000 0.2 6 0606 5.0 152 1216 0.4 12 1822 5.4 165	25 Su 0526 5.4 165 1141 -0.1 -3 1741 5.8 177					
11 M 0347 4.5 137 1011 0.2 6 1624 5.7 174 2303 0.1 3	26 Tu 0341 3.9 119 0950 0.9 27 1600 4.9 149 2253 0.8 24	11 Th 0537 4.7 143 1146 0.3 9 1759 5.6 171	26 F 0503 4.6 140 1109 0.4 12 1717 5.5 168 2358 0.1 3	11 Su 0041 0.1 3 0648 5.2 158 1300 0.3 9 1902 5.4 165	0041 0.1 3 0648 5.2 158 1300 0.3 9 1902 5.4 165	26 M 0012 -0.4 -12 0615 5.9 180 1234 -0.4 -12 1832 5.9 180					
12 Tu 0452 4.5 137 1107 0.1 3 1723 5.8 177 2357 0.0 0	27 W 0440 4.1 125 1042 0.7 21 1656 5.2 158 2342 0.5 15	12 F 0027 0.1 3 0627 4.9 149 1236 0.3 9 1845 5.7 174	27 Sa 0554 5.0 152 1202 0.1 3 1807 5.8 177	12 M 0120 0.1 3 0726 5.3 162 1342 0.3 9 ● 1940 5.3 162	0120 0.1 3 0726 5.3 162 1342 0.3 9 ● 1940 5.3 162	27 Tu 0059 -0.6 -18 0703 6.3 192 1327 -0.6 -18 ● 1920 6.0 183					
13 W 0551 4.7 143 1200 0.1 3 1816 5.9 180	28 Th 0534 4.3 131 1133 0.5 15 1746 5.5 168 ● 1927 5.7 174	13 Sa 0112 0.0 0 0712 5.0 152 1322 0.2 6 ● 1857 6.1 186	28 Su 0044 -0.2 -6 0642 5.4 165 1254 -0.2 -6 ● 1857 6.1 186	13 Tu 0156 0.1 3 0802 5.3 162 1422 0.3 9 2017 5.2 158	0156 0.1 3 0802 5.3 162 1422 0.3 9 2017 5.2 158	28 W 0146 -0.7 -21 0750 6.5 198 1419 -0.7 -21 2010 5.8 177					
14 Th 0049 -0.1 -3 0644 4.8 146 1253 0.1 3 1904 5.9 180	29 F 0029 0.2 6 0622 4.7 143 1224 0.2 6 1833 5.8 177	14 Su 0153 -0.1 -3 0754 5.1 155 1406 0.3 9 2008 5.5 168	29 M 0554 5.0 152 0728 5.8 177 1345 -0.4 -12 1941 6.1 186	14 W 0231 0.2 6 0837 5.3 162 1500 0.4 12 2055 4.9 149	0231 0.2 6 0837 5.3 162 1500 0.4 12 2055 4.9 149	29 Th 0233 -0.7 -21 0839 6.5 198 1510 -0.6 -18 2102 5.6 171					
15 F 0137 -0.2 -6 0733 4.9 149 1342 0.1 3 ● 1950 5.8 177	30 Sa 0115 -0.1 -3 0708 5.0 152 1315 0.0 0 ● 1917 5.9 180	15 M 0232 0.0 0 0834 5.1 155 1447 0.3 9 2047 5.3 162	30 Tu 0215 -0.6 -18 0814 6.0 183 1436 -0.5 -15 2029 6.0 183	15 Th 0304 0.3 9 0910 5.2 158 1537 0.6 18 2133 4.7 143	0304 0.3 9 0910 5.2 158 1537 0.6 18 2133 4.7 143	30 F 0321 -0.5 -15 0932 6.3 192 1601 -0.4 -12 2158 5.3 162					
		31 Su 0200 -0.3 -9 0753 5.2 158 1404 -0.2 -6 2002 6.0 183	31 W 0300 -0.7 -21 0903 6.1 186 1526 -0.5 -15 2120 5.8 177								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Sandy Hook, New Jersey, 2011

Times and Heights of High and Low Waters

October				November				December							
	Time	Height			Time	Height			Time	Height					
	h m	ft cm		h m	ft cm			h m	ft cm		h m	ft cm			
1 Sa	0410	-0.2	-6	16 Su	0338	0.7	21	1 Tu	0540	0.6	18	16 W	0438	0.7	21
	1028	6.1	186		0939	5.0	152		1203	5.2	158		1049	4.8	146
	1655	-0.1	-3		1627	0.7	21		1831	0.4	12		1734	0.5	15
	2258	4.9	149		2227	4.1	125						2348	4.1	125
2 Su	0502	0.2	6	17 M	0412	0.9	27	2 W	0040	4.5	137	17 Th	0529	0.8	24
	1127	5.7	174		1020	4.9	149		0646	0.9	27		1146	4.8	146
	1753	0.3	9		1708	0.9	27		1259	4.9	149		1829	0.5	15
	2359	4.7	143		2317	4.0	122		1934	0.5	15		1945	0.4	12
3 M	0602	0.6	18	18 Tu	0452	1.0	30	3 Th	0137	4.4	134	18 F	0042	4.2	128
	1227	5.4	165		1112	4.8	146		0756	1.0	18		0638	0.8	24
	1859	0.6	18		1758	1.0	30		1354	4.7	143		1245	4.7	143
	●								2033	0.5	15		1933	0.4	12
4 Tu	0100	4.5	137	19 W	0011	4.0	122	4 F	0232	4.4	134	19 Sa	0138	4.5	137
	0712	0.9	27		0545	1.1	34		0859	0.9	27		0756	0.7	21
	1326	5.2	158		1210	4.8	146		1448	4.6	140		1344	4.7	143
	2008	0.7	21		1905	1.0	30		2125	0.5	15		2035	0.2	6
5 W	0201	4.4	134	20 Th	0106	4.1	125	5 Sa	0327	4.5	137	20 Su	0235	4.8	146
	0824	1.0	30		0701	1.2	37		0954	0.8	24		0906	0.4	12
	1425	5.0	152		1310	4.8	146		1542	4.5	137		1447	4.8	146
	2110	0.6	18		2013	0.9	27		2209	0.4	12		2131	-0.1	-3
6 Th	0301	4.5	137	21 F	0204	4.3	131	6 Su	0418	4.7	143	21 M	0334	5.2	158
	0927	0.9	27		0821	1.0	30		1041	0.6	18		1007	0.1	3
	1523	4.9	149		1412	4.9	149		1634	4.5	137		1551	4.8	146
	2201	0.5	15		2112	0.5	15		2250	0.3	9		2223	-0.3	-9
7 F	0359	4.6	140	22 Sa	0303	4.7	143	7 M	0505	4.9	149	22 Tu	0433	5.6	171
	1020	0.7	21		0928	0.6	18		1126	0.5	15		1104	-0.3	-9
	1619	4.9	149		1515	5.1	155		1722	4.5	137		1653	4.9	149
	2246	0.4	12		2204	0.2	6		2329	0.2	6		2315	-0.6	-18
8 Sa	0452	4.8	146	23 Su	0402	5.1	155	8 Tu	0547	5.1	155	23 W	0528	6.0	183
	1108	0.6	18		1026	0.2	6		1209	0.3	9		1159	-0.6	-18
	1709	5.0	152		1617	5.2	158		1806	4.6	140		1751	5.0	152
	2327	0.3	9		2253	-0.2	-6								
9 Su	0538	5.1	155	24 M	0458	5.6	171	9 W	0008	0.2	6	24 Th	0007	-0.7	-21
	1152	0.4	12		1121	-0.2	-6		0625	5.3	162		0621	6.3	192
	1754	5.0	152		1716	5.4	165		1251	0.2	6		1253	-0.8	-24
	●				2341	-0.5	-15		1846	4.6	140		1845	5.1	155
10 M	0006	0.2	6	25 Tu	0550	6.1	186	10 Th	0047	0.2	6	25 F	0059	-0.7	-21
	0619	5.3	162		1215	-0.5	-15		0700	5.3	162		0711	6.3	192
	1235	0.3	9		1810	5.6	171		1333	0.1	3		1347	-0.9	-27
	1834	5.1	155						●	1925	4.5	137		1937	5.1	155
11 Tu	0044	0.2	6	26 W	0030	-0.7	-21	11 F	0125	0.2	6	26 Sa	0152	-0.7	-21
	0656	5.4	165		0640	6.4	195		0734	5.3	162		0801	6.3	192
	1317	0.3	9		1309	-0.7	-21		1413	0.1	3		1438	-0.9	-27
	●	1913	5.0	152	●	1901	5.6	171		2003	4.4	134		2030	5.0	152
12 W	0120	0.2	6	27 Th	0120	-0.7	-21	12 Sa	0204	0.3	9	27 M	0243	-0.5	-15
	0730	5.4	165		0729	6.6	201		0806	5.2	158		0852	6.0	183
	1357	0.3	9		1402	-0.8	-24		1453	0.2	6		1528	-0.7	-21
	1950	4.9	149		1952	5.5	168		2041	4.3	131		2124	4.8	146
13 Th	0156	0.3	9	28 F	0210	-0.7	-21	13 Su	0241	0.4	12	28 W	0333	-0.3	-9
	0803	5.4	165		0819	6.5	198		0839	5.1	155		0946	5.7	174
	1436	0.3	9		1454	-0.8	-24		1531	0.3	9		1616	-0.5	-15
	2027	4.7	143		2045	5.3	162		2120	4.1	125		2221	4.6	140
14 F	0231	0.4	12	29 Sa	0300	-0.5	-15	14 M	0318	0.5	15	29 W	0423	0.0	0
	0834	5.3	162		0911	6.3	192		0915	5.0	152		1040	5.3	162
	1513	0.4	12		1545	-0.6	-18		1609	0.4	12		1705	-0.2	-6
	2104	4.5	137		2141	5.0	152		2204	4.0	122		2318	4.5	137
15 Sa	0305	0.5	15	30 Su	0351	-0.2	-6	15 Tu	0356	0.6	18	30 W	0515	0.4	12
	0905	5.1	155		1007	5.9	180		0958	4.9	149		1134	5.0	152
	1550	0.6	18		1637	-0.3	-9		1648	0.5	15		1756	0.1	3
	2143	4.3	131		2241	4.8	146		2254	4.0	122				
31 M	0443	0.2	6	31 M	1105	5.6	171					31 W	0443	0.2	6
		1731	0.1	3		1731	0.1	3					1105	5.6	171
		2341	4.6	140		2341	4.6	140					1731	0.1	3

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Atlantic City, New Jersey, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0446 4.7 143	16 Su 0412 4.1 125	1 Tu 0609 4.5 137	16 W 0524 4.7 143	1 Tu 0504 4.2 128	16 W 0402 4.5 137						
1110 -0.2 -6	1045 0.3 9	1232 -0.3 -9	1151 -0.4 -12	1124 0.1 3	1030 -0.1 -3						
1709 3.4 104	1636 3.0 91	1833 3.5 107	1753 3.8 116	1730 3.5 107	1637 3.9 119						
2307 -0.3 -9	2224 -0.1 -3		2350 -0.7 -21	2328 0.1 3	2236 -0.3 -9						
2 Su 0537 4.8 146	17 M 0501 4.4 134	2 W 0030 -0.2 -6	17 Th 0613 5.0 152	2 W 0547 4.3 131	17 Th 0458 4.7 143						
1202 -0.3 -9	1133 -0.1 -3	0650 4.5 137	1237 -0.7 -21	1206 0.0 0	1120 -0.4 -12						
1801 3.5 107	1727 3.3 101	1312 -0.3 -9	1842 4.2 128	1811 3.7 113	1730 4.3 131						
2357 -0.4 -12	2316 -0.3 -9	● 1913 3.6 110			2333 -0.6 -18						
3 M 0624 4.8 146	18 Tu 0549 4.7 143	3 Th 0112 -0.3 -9	18 F 0042 -0.9 -27	3 Th 0012 0.0 0	18 F 0550 4.9 149						
1250 -0.4 -12	1219 -0.4 -12	0728 4.5 137	F 0701 5.1 155	0627 4.3 131	1208 -0.7 -21						
1848 3.5 107	1816 3.5 107	1350 -0.3 -9	1323 -1.0 -30	1243 -0.1 -3	1819 4.8 146						
		1950 3.7 113	O 1930 4.5 137	1848 3.8 116							
4 Tu 0044 -0.3 -9	19 W 0007 -0.6 -18	4 F 0151 -0.2 -6	19 Sa 0134 -1.0 -30	4 F 0052 -0.1 -3	19 Sa 0028 -0.9 -27						
0708 4.8 146	0635 5.0 152	0804 4.4 134	0749 5.1 155	0703 4.3 131	0640 5.0 152						
1334 -0.4 -12	1304 -0.6 -18	1425 -0.3 -9	1408 -1.1 -34	1317 -0.2 -6	1255 -0.9 -27						
● 1932 3.5 107	O 1903 3.8 116	2026 3.7 113	2018 4.8 146	● 1923 4.0 122	O 1908 5.1 155						
5 W 0129 -0.3 -9	20 Th 0057 -0.8 -24	5 Sa 0230 -0.1 -3	20 Su 0227 -1.0 -30	5 Sa 0130 -0.1 -3	20 Su 0120 -1.0 -30						
0749 4.7 143	0721 5.1 155	0840 4.2 128	0836 4.9 149	0738 4.3 131	0729 5.0 152						
1416 -0.4 -12	1349 -0.8 -24	1458 -0.2 -6	1454 -1.0 -30	1349 -0.1 -3	1341 -1.0 -30						
2014 3.5 107	1950 4.0 122	2101 3.7 113	2107 4.8 146	1956 4.1 125	1956 5.3 162						
6 Th 0212 -0.2 -6	21 F 0148 -0.9 -27	6 Su 0308 0.0 0	21 M 0320 -0.9 -27	6 Su 0207 -0.1 -3	21 M 0213 -1.0 -30						
0829 4.6 140	0807 5.1 155	0914 4.0 122	0925 4.6 140	0812 4.1 125	0818 4.8 146						
1456 -0.3 -9	1434 -0.9 -27	1530 -0.1 -3	1542 -0.9 -27	1420 -0.1 -3	1428 -0.9 -27						
2055 3.5 107	2039 4.2 128	2136 3.7 113	2159 4.8 146	2029 4.1 125	2046 5.3 162						
7 F 0253 0.0 0	22 Sa 0239 -0.8 -24	7 M 0346 0.2 6	22 Tu 0416 -0.6 -18	7 M 0243 0.0 0	22 Tu 0306 -0.9 -27						
0908 4.4 134	0854 5.0 152	0949 3.8 116	1017 4.2 128	0846 3.9 119	0908 4.5 137						
1535 -0.2 -6	1520 -0.9 -27	1601 0.0 0	1632 -0.6 -18	1450 0.0 0	1517 -0.7 -21						
2134 3.4 104	2128 4.3 131	2212 3.6 110	2253 4.6 140	2101 4.1 125	2136 5.2 158						
8 Sa 0335 0.2 6	23 Su 0333 -0.7 -21	8 Tu 0426 0.4 12	23 W 0515 -0.3 -9	8 Tu 0319 0.2 6	23 W 0401 -0.6 -18						
0946 4.1 125	0943 4.7 143	1025 3.5 107	1113 3.8 116	0919 3.7 113	1001 4.1 125						
1612 0.0 0	1608 -0.8 -24	1634 0.2 6	1727 -0.3 -9	1520 0.1 3	1608 -0.4 -12						
2215 3.4 104	2221 4.3 131	2250 3.6 110	2353 4.4 134	2134 4.0 122	2230 4.9 149						
9 Su 0418 0.3 9	24 M 0430 -0.5 -15	9 W 0510 0.6 18	24 Th 0619 0.0 0	9 W 0357 0.3 9	24 Th 0458 -0.3 -9						
1025 3.8 116	1034 4.3 131	1104 3.2 98	1216 3.4 104	0953 3.5 107	1057 3.8 116						
1648 0.1 3	1658 -0.7 -21	1711 0.3 9	1827 0.0 0	1552 0.3 9	1704 0.0 0						
2257 3.3 101	2317 4.3 131	2334 3.6 110	O	2209 4.0 122	2329 4.6 140						
10 M 0503 0.5 15	25 Tu 0531 -0.3 -9	10 Th 0602 0.7 21	25 F 0059 4.2 128	10 Th 0438 0.5 15	25 F 0600 0.1 3						
1105 3.5 107	1131 3.9 119	1149 3.0 91	0727 0.2 6	1029 3.2 98	1200 3.4 104						
1726 0.2 6	1752 -0.5 -15	1755 0.4 12	1328 3.2 98	1629 0.4 12	1805 0.3 9						
2341 3.3 101	O 1851 -0.2 -6	O 1849 0.4 12	1933 0.2 6	2250 3.9 119							
11 Tu 0554 0.7 21	26 W 0018 4.2 128	11 F 0026 3.6 110	26 Sa 0208 4.1 125	11 F 0526 0.7 21	26 Sa 0032 4.3 131						
1150 3.2 98	0637 0.0 0	0702 0.8 24	0836 0.3 9	1113 3.0 91	0705 0.3 9						
1806 0.3 9	1233 3.5 107	1246 2.8 85	1441 3.1 94	1714 0.5 15	1310 3.2 98						
O	1851 -0.2 -6	O 1849 0.4 12	2041 0.3 9	2340 3.9 119	O 1912 0.5 15						
12 W 0031 3.4 104	27 Th 0124 4.2 128	12 Sa 0127 3.6 110	27 Su 0315 4.1 125	12 Sa 0624 0.8 24	27 Su 0140 4.1 125						
0651 0.8 24	0746 0.1 3	0809 0.8 24	0941 0.3 9	1209 2.9 88	0810 0.5 15						
1241 3.0 91	1343 3.2 98	1354 2.7 82	1547 3.1 94	1811 0.5 15	1421 3.2 98						
O 1851 0.4 12	1954 -0.1 -3	1951 0.4 12	2144 0.3 9	O	2019 0.6 18						
13 Th 0125 3.4 104	28 F 0231 4.2 128	13 Su 0233 3.8 116	28 M 0414 4.1 125	13 Su 0042 3.9 119	28 M 0246 4.0 122						
0752 0.8 24	0855 0.2 6	0913 0.6 18	1037 0.2 6	0730 0.7 21	0912 0.5 15						
1339 2.9 88	1455 3.1 94	1504 2.8 85	1643 3.3 101	1319 2.9 88	1524 3.3 101						
1942 0.4 12	2058 0.0 0	2056 0.2 6	2239 0.2 6	1918 0.5 15	2122 0.6 18						
14 F 0222 3.6 110	29 Sa 0335 4.2 128	14 M 0336 4.1 125	14 O 0152 4.0 122	14 O 0526 0.7 21	29 O 0344 4.0 122						
0854 0.7 21	1000 0.1 3	1011 0.3 9	0836 0.6 18	1113 3.0 91	1005 0.4 12						
1441 2.8 85	1601 3.1 94	1606 3.1 94	1433 3.1 94	1714 0.5 15	1618 3.5 107						
2036 0.3 9	2159 0.0 0	2158 0.0 0	2028 0.3 9	2340 3.9 119	2217 0.5 15						
15 Sa 0319 3.8 116	30 Su 0433 4.3 131	15 Tu 0432 4.4 134	15 O 0300 4.2 128	15 O 0434 4.0 122	30 W 1050 0.3 9						
0952 0.5 15	1057 0.0 0	1103 -0.1 -3	0936 0.3 9	0936 0.3 9	1050 0.3 9						
1541 2.9 88	1659 3.2 98	1702 3.4 104	1539 3.4 104	1539 3.4 104	1703 3.7 113						
2131 0.1 3	2254 -0.1 -3	2255 -0.4 -12	2135 0.1 3	2135 0.1 3	2306 0.3 9						
O	31 M 0524 4.4 134	M 1147 -0.2 -6			31 Th 1130 4.1 125						
	1749 3.3 101	1749 3.3 101			1742 3.9 119						
	2344 -0.2 -6	2344 -0.2 -6			2349 0.2 6						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Atlantic City, New Jersey, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0557	4.1	125	16 Sa 0526	4.7	143	1 Su 0003	0.3	9	1 W 0058	0.2	6
1206	0.1	3	1138	-0.6	-18	0602	3.8	116	W 0652	3.6	110
1818	4.1	125	1757	5.2	158	1159	0.3	9	M 1203	-0.5	-15
						1820	4.5	137	1236	0.2	6
									● 1905	4.9	149
2 Sa 0029	0.1	3	17 Su 0013	-0.7	-21	2 M 0043	0.2	6	2 Th 0138	0.1	3
0634	4.1	125	0619	4.7	143	0641	3.8	116	0733	3.6	110
1239	0.1	3	1227	-0.8	-24	1233	0.2	6	Tu 1253	-0.5	-15
1852	4.3	131	○ 1847	5.5	168	1855	4.6	140	○ 1918	5.6	171
									1943	4.9	149
3 Su 0107	0.0	0	18 M 0106	-0.9	-27	3 Tu 0122	0.2	6	3 F 0219	0.1	3
0710	4.1	125	0710	4.7	143	0719	3.8	116	0814	3.6	110
1311	0.1	3	1315	-0.8	-24	1307	0.2	6	1358	0.2	6
● 1925	4.4	134	1936	5.6	171	● 1930	4.7	143	2023	5.0	152
4 M 0144	0.0	0	19 Tu 0159	-0.9	-27	4 W 0200	0.1	3	4 Sa 0300	0.1	3
0745	4.0	122	0801	4.5	137	0756	3.7	113	0856	3.6	110
1342	0.1	3	1404	-0.6	-18	1342	0.2	6	1442	0.2	6
1958	4.5	137	2025	5.5	168	2005	4.7	143	2104	4.9	149
5 Tu 0221	0.1	3	20 W 0251	-0.7	-21	5 Th 0238	0.2	6	5 Su 0343	0.0	0
0820	3.8	116	0852	4.3	131	0833	3.6	110	0941	3.7	113
1413	0.2	6	1454	-0.4	-12	1418	0.3	9	1530	0.3	9
2031	4.5	137	2116	5.3	162	2041	4.7	143	2148	4.8	146
6 W 0257	0.2	6	21 Th 0345	-0.5	-15	6 F 0318	0.2	6	6 M 0428	0.0	0
0854	3.7	113	0945	4.0	122	0911	3.5	107	1021	3.7	113
1446	0.3	9	1546	-0.1	-3	1458	0.4	12	1619	0.3	9
2104	4.4	134	2208	5.0	152	2120	4.7	143	2236	4.7	143
7 Th 0335	0.3	9	22 F 0440	-0.2	-6	7 Sa 0400	0.3	9	7 Tu 0516	0.0	0
0929	3.5	107	1041	3.7	113	0953	3.4	104	1125	3.6	110
1520	0.4	12	1642	0.2	6	1542	0.4	12	1714	0.6	18
2140	4.4	134	2303	4.7	143	2203	4.6	140	2328	4.3	131
8 F 0416	0.5	15	23 Sa 0537	0.1	3	8 Su 0446	0.4	12	8 W 0608	0.0	0
1007	3.3	101	1141	3.5	107	1042	3.4	104	1225	4.0	122
1600	0.5	15	1741	0.5	15	1634	0.5	15	1828	0.5	15
2221	4.3	131				2252	4.5	137	● 1912	1.0	30
9 Sa 0503	0.6	18	24 Su 0002	4.3	131	9 M 0538	0.4	12	9 Th 0030	4.3	131
1053	3.2	98	0637	0.4	12	1138	3.4	104	0703	0.0	0
1649	0.6	18	1245	3.4	104	1734	0.6	18	1327	4.2	128
2311	4.2	128	○ 1845	0.7	21	2349	4.4	134	1936	0.4	12
10 Su 0558	0.6	18	25 M 0104	4.1	125	10 Tu 0633	0.3	9	10 F 0135	4.1	125
1150	3.1	94	0736	0.5	15	1242	3.6	110	0800	0.0	0
1747	0.6	18	1350	3.4	104	1841	0.6	18	1429	4.5	137
			1950	0.9	27	● 0	1.0	30	2044	0.3	9
11 M 0010	4.1	125	26 Tu 0205	3.9	119	11 W 0052	4.3	131	11 Sa 0241	4.0	122
0659	0.6	18	0832	0.6	18	0731	0.2	6	0857	-0.1	-3
1258	3.2	98	1449	3.5	107	1348	3.9	119	1529	4.8	146
● 1856	0.6	18	2051	0.8	24	1951	0.5	15	2149	0.1	3
12 Tu 0118	4.2	128	27 W 0302	3.8	116	12 Th 0159	4.2	128	12 Su 0346	3.9	119
0802	0.4	12	0922	0.6	18	0829	0.1	3	0954	-0.2	-6
1409	3.5	107	1541	3.7	113	1451	4.2	128	1626	5.1	155
2008	0.4	12	2147	0.7	21	2059	0.2	6	2202	0.8	24
13 W 0227	4.3	131	28 Th 0353	3.8	116	13 F 0304	4.2	128	13 M 0447	3.9	119
0901	0.2	6	1006	0.5	15	0925	-0.1	-3	1050	-0.2	-6
1514	3.8	116	1626	3.9	119	1549	4.7	143	1721	5.3	162
2116	0.2	6	2237	0.6	18	2203	0.0	0	2347	-0.2	-6
14 Th 0332	4.4	134	29 F 0439	3.8	116	14 Sa 0406	4.3	131	14 Tu 0545	4.0	122
0956	-0.1	-3	1046	0.4	12	1019	-0.3	-9	1143	-0.3	-9
1612	4.3	131	1706	4.1	125	1644	5.1	155	1812	5.4	165
2219	-0.2	-6	2322	0.4	12	2303	-0.3	-9	2335	0.5	15
15 F 0431	4.6	140	30 Sa 0522	3.8	116	15 Su 0504	4.3	131	15 M 0040	-0.4	-12
1048	-0.4	-12	1123	0.3	9	1111	-0.5	-15	0639	4.0	122
1706	4.8	146	1744	4.3	131	1737	5.4	165	1236	-0.3	-9
2317	-0.5	-15				2359	-0.5	-15	○ 1902	5.5	168
									31 Tu 0017	0.4	12
									0611	3.6	110
									1156	0.3	9
									1826	4.8	146

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Atlantic City, New Jersey, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0113 0.1 3 0709 3.7 113 1254 0.1 3 ● 1922 5.1 155	16 Sa 0158 -0.1 -3 0759 4.0 122 1356 0.1 3 2014 5.1 155	1 M 0210 -0.3 -9 0815 4.5 137 1414 -0.2 -6 2028 5.3 162	16 Tu 0243 0.2 6 0848 4.3 131 1457 0.5 15 2101 4.5 137	1 Th 0312 -0.4 -12 0929 5.3 162 1547 -0.2 -6 2147 4.7 143	16 F 0306 0.6 18 0922 4.5 137 1547 0.8 24 2141 3.8 116						
2 Sa 0155 -0.1 -3 0753 3.8 116 1341 0.0 0 2004 5.2 158	17 Su 0240 -0.1 -3 0842 4.0 122 1441 0.2 6 2054 4.8 146	2 Tu 0253 -0.4 -12 0903 4.7 143 1506 -0.2 -6 2115 5.1 155	17 W 0316 0.3 9 0925 4.3 131 1537 0.6 18 2138 4.2 128	2 F 0401 -0.2 -6 1023 5.2 158 1646 0.1 3 2243 4.3 131	17 Sa 0339 0.8 24 0958 4.4 134 1629 1.0 30 2220 3.6 110						
3 Su 0237 -0.2 -6 0838 4.0 122 1429 0.0 0 2047 5.1 155	18 M 0320 0.0 0 0923 4.0 122 1525 0.4 12 2134 4.6 140	3 W 0339 -0.4 -12 0952 4.8 146 1601 -0.1 -3 2204 4.8 146	18 Th 0349 0.5 15 1001 4.2 128 1619 0.8 24 2215 3.9 119	3 Sa 0455 0.1 3 1122 5.1 155 1749 0.3 9 2345 4.0 122	18 Su 0415 0.9 27 1039 4.3 131 1717 1.1 34 2304 3.4 104						
4 M 0320 -0.2 -6 0924 4.1 125 1519 0.0 0 2133 5.0 152	19 Tu 0358 0.2 6 1004 4.0 122 1609 0.6 18 2214 4.3 131	4 Th 0427 -0.3 -9 1046 4.8 146 1700 0.1 3 2258 4.4 134	19 F 0423 0.7 21 1040 4.2 128 1703 1.0 30 2255 3.7 113	4 Su 0555 0.3 9 1227 4.9 149 1856 0.6 18 ● O	19 M 0459 1.0 30 1128 4.2 128 1813 1.2 37 2359 3.3 101						
5 Tu 0405 -0.2 -6 1014 4.2 128 1613 0.1 3 2221 4.8 146	20 W 0436 0.4 12 1046 3.9 119	5 F 0518 -0.1 -3 1143 4.8 146 1803 0.3 9 2357 4.1 125	20 Sa 0500 0.8 24 1124 4.1 125 1754 1.2 37 2341 3.4 104	5 M 0055 3.7 113 0701 0.5 15 1335 4.8 146 2005 0.7 21	20 Tu 0553 1.1 34 1226 4.2 128 1915 1.2 37 ● O						
6 W 0452 -0.2 -6 1107 4.3 131 1712 0.3 9 2314 4.5 137	21 Th 0513 0.5 15 1129 3.9 119	6 Sa 0615 0.1 3 1246 4.8 146 1910 0.5 15	21 Su 0542 0.9 27 1214 4.1 125 1852 1.3 40	6 Tu 0209 3.6 110 0809 0.7 21 1443 4.7 143 2110 0.6 18	21 W 0105 3.2 98 0657 1.1 34 1331 4.3 131 2016 1.1 34						
7 Th 0543 -0.1 -3 1205 4.4 134 1816 0.4 12	22 F 0552 0.7 21 1217 3.9 119	7 Su 0104 3.8 116 0716 0.3 9	22 M 0036 3.2 98 0633 1.0 30 1353 4.8 146 2019 0.5 15	7 W 0317 3.7 113 0914 0.6 18 1544 4.7 143 2208 0.5 15	22 Th 0214 3.4 104 0804 0.9 27 1436 4.5 137 2113 0.8 24						
8 F 0012 4.2 128 0637 0.0 0 1306 4.6 140 ● 1923 0.4 12	23 Sa 0027 3.4 104 0635 0.8 24	8 M 0216 3.6 110 0821 0.4 12 1459 4.8 146 2126 0.5 15	23 Tu 0140 3.2 98 0732 1.0 30 1414 4.2 128 2056 1.1 34	8 Th 0417 3.8 116 1012 0.6 18 1638 4.8 146 2258 0.4 12	23 F 0317 3.7 113 0909 0.7 21 1535 4.7 143 2204 0.5 15						
9 Sa 0117 3.9 119 0736 0.0 0 1410 4.7 143 2031 0.4 12	24 Su 0122 3.2 98 0723 0.8 24	9 Tu 0326 3.6 110 0925 0.4 12 1600 4.9 149 2226 0.4 12	24 W 0246 3.3 101 0834 0.9 27 1514 4.4 134 2151 0.9 27	9 F 0507 4.0 122 1105 0.5 15 1724 4.8 146 2342 0.3 9	24 Sa 0412 4.1 125 1009 0.3 9 1629 4.9 149 2252 0.1 3						
10 Su 0225 3.7 113 0836 0.1 3 1512 4.9 149 2137 0.3 9	25 M 0223 3.2 98 0816 0.8 24	10 W 0428 3.7 113 1024 0.3 9	25 Th 0347 3.5 107 0934 0.6 18 1609 4.7 143 2241 0.6 18	10 Sa 0550 4.2 128 1151 0.4 12 1805 4.8 146	25 Su 0503 4.6 140 1105 0.0 0 1720 5.1 155 2338 -0.2 -6						
11 M 0333 3.7 113 0936 0.1 3 1612 5.0 152 2238 0.2 6	26 Tu 0323 3.2 98 0910 0.7 21	11 Th 0523 3.9 119 1118 0.3 9	26 F 0440 3.8 116 1031 0.4 12 1700 5.0 152 2327 0.2 6	11 Su 0021 0.3 9 0629 4.4 134 1234 0.3 9 1843 4.8 146	26 M 0551 5.0 152 1159 -0.3 -9 1809 5.2 158						
12 Tu 0436 3.7 113 1035 0.0 0 1708 5.2 158 2335 0.0 0	27 W 0419 3.3 101 1004 0.6 18	12 F 0008 0.2 6 0611 4.0 122	27 Sa 0530 4.2 128 1125 0.1 3	12 M 0057 0.2 6 0705 4.5 137	27 Tu 0024 -0.4 -12 0639 5.4 165 1251 -0.5 -15 ● 1858 5.2 158						
13 W 0534 3.8 116 1130 0.0 0 1759 5.2 158	28 Th 0510 3.5 107 1055 0.3 9	13 Sa 0051 0.1 3 0654 4.1 125	28 Su 0012 -0.1 -3 0617 4.6 140	13 Tu 0131 0.3 9 0740 4.6 140	28 W 0110 -0.6 -18 0727 5.7 174						
14 Th 0026 -0.1 -3 0626 3.9 119 1221 0.0 0 1847 5.3 162	29 F 0001 0.3 9 0558 3.8 116	14 Su 0130 0.1 3 0734 4.2 128	29 M 0056 -0.3 -9 0704 4.9 149	14 W 0203 0.4 12 0813 4.6 140	29 Th 0157 -0.5 -15 0816 5.7 174						
15 F 0114 -0.1 -3 0714 4.0 122 1310 0.0 0 ● 1932 5.2 158	30 Sa 0044 0.0 0	15 M 0207 0.1 3 0812 4.3 131	30 Tu 0140 -0.5 -15 0751 5.2 158	15 Th 0234 0.5 15 0847 4.6 140	30 F 0246 -0.4 -12 0907 5.7 174						
	31 Su 0127 -0.2 -6	16 M 0225 0.1 3 0815 5.2 158	31 W 0225 -0.5 -15 0839 5.3 162	16 Tu 0208 0.6 18 1508 0.4 12 2105 4.1 125	30 M 1533 -0.3 -9 1531 4.5 137						
	31 Su 0729 4.3 131		31 W 0452 -0.2 -6 1452 -0.4 -12								
	31 Su 1324 -0.2 -6		31 W 0225 -0.5 -15 1452 -0.4 -12								
	31 Su 1943 5.4 165		31 W 0836 5.0 152								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Atlantic City, New Jersey, 2011

Times and Heights of High and Low Waters

October			November			December														
Time	Height		Time	Height		Time	Height		Time	Height										
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm									
1 Sa 0338 5.4 165 1002 0.0 0 1631 4.2 128 2228	-0.1	-3	16 Su 0304 0.7 21 0926 4.6 140 1603 0.8 24 2153 3.5 107	0.7	21	1 Tu 0516 0.5 15 1139 4.7 143 1813 0.3 9	0.5	15	16 W 0408 0.6 18 1028 4.4 134 1714 0.5 15 2312 3.3 101	0.6	18	1 Th 0550 0.6 18 1203 4.1 125 1833 0.3 9	0.6	18	16 F 0449 0.3 9 1057 4.2 128 1735 -0.1 -3 2348 3.7 113	0.3	9			
	5.2	158	17 M 0342 0.8 24 1006 4.5 137 1649 0.9 27 2238 3.3 101	0.8	24	2 W 0022 3.6 110 0621 0.7 21 1242 4.4 134 1914 0.5 15	3.6	110	17 Th 0504 0.7 21 1120 4.3 131 1806 0.4 12	0.7	21	2 O 0049 3.5 107 0652 0.7 21 1259 3.8 116 1925 0.4 12	0.3	9	17 Sa 0551 0.3 9 1153 4.0 122 1828 -0.1 -3	0.3	9			
	0.3	9	18 Tu 0428 0.9 27 1053 4.4 134 1741 1.0 30 2333 3.3 101	0.9	27	3 Th 0129 3.6 110 0727 0.8 24 1344 4.2 128 2011 0.5 15	3.6	110	18 F 0013 3.4 104 0609 0.7 21 1220 4.2 128 1901 0.3 9	3.4	104	3 Sa 0147 3.5 107 0754 0.8 24 1356 3.6 110 2015 0.4 12	0.8	24	18 Su 0049 3.9 119 0659 0.3 9 1256 3.8 116 1925 -0.2 -6	3.9	119			
	4.9	149	19 W 0536 0.5 15 1205 4.9 149 1838 0.5 15 O	1.0	30	4 F 0231 3.7 113 0831 0.9 27 1443 4.0 122 2103 0.5 15	3.7	113	19 Sa 0117 3.7 113 0718 0.6 18 1324 4.1 125 1958 0.1 3	3.7	113	4 Su 0241 3.6 110 0854 0.8 24 1450 3.4 104 2102 0.4 12	0.8	24	19 M 0153 4.1 125 0808 0.2 6 1403 3.7 113 2023 -0.3 -9	4.1	125			
4 Tu 0043 0.7 21 0644 4.6 140 1313 0.6 18 O	3.7	113	20 W 0524 1.0 30 1149 4.3 131 1839 0.9 27	1.0	30	5 Sa 0324 3.9 119 0929 0.8 24 1535 4.0 122 2149 0.5 15	3.9	119	20 Su 0220 4.1 125 0826 0.4 12 1429 4.1 125 2053 -0.1 -3	4.1	125	5 M 0330 3.8 116 0948 0.7 21 1542 3.4 104 2145 0.4 12	3.8	116	20 Tu 0256 4.4 134 0915 0.0 0 1511 3.6 110 2122 -0.4 -12	4.4	134			
	0.8	24	21 F 0155 3.7 113 0752 4.5 137 1419 0.6 18 2046	3.3	101	6 Su 0324 3.9 119 0929 0.8 24 1535 4.0 122 2149 0.5 15	3.9	119	21 M 0220 4.1 125 0931 0.1 3 1532 4.2 128 2147 -0.3 -9	4.1	125	6 Tu 0415 4.0 122 1037 0.5 15 1629 3.3 101 2226 0.3 9	4.0	122	21 W 0355 4.7 143 1019 -0.2 -6 1615 3.7 113 2219 -0.5 -15	4.7	143			
	4.5	137	22 Th 0356 3.9 119 0955 0.7 21 1611 4.5 137 2228	3.6	110	7 M 0145 3.6 110 0739 0.8 24 1358 4.4 134 2034 0.5 15	4.1	125	22 Tu 0451 4.3 131 106 0.5 15 1704 3.9 119 2307 0.4 12	4.3	131	7 W 0414 4.9 149 1032 -0.2 -6 1631 4.2 128 2240 -0.5 -15	4.9	149	22 Th 0456 4.2 128 1123 0.4 12 1714 3.4 104 2306 0.2 6	5.0	152			
	0.5	15	23 Sa 0443 4.1 125 1045 0.6 18 1656 4.5 137 2309	4.4	134	8 Tu 0344 4.4 134 0949 0.2 6 1559 4.6 140 2218 -0.1 -3	4.4	134	23 W 0529 4.4 134 1148 0.4 12 1745 3.9 119 2343 0.3 9	5.3	162	8 Th 0507 5.3 162 1129 -0.5 -15 1727 4.3 131 2332 -0.6 -18	4.4	134	23 F 0536 4.4 134 1205 0.2 6 1757 3.4 104 2345 0.1 3	5.2	158			
9 Su 0523 4.3 131 1131 0.5 15 1737 4.4 134 2346	4.9	149	24 M 0437 4.9 149 1047 -0.1 -3 1654 4.8 146 2307 -0.4 -12	4.6	140	9 W 0605 4.6 140 1228 0.3 9 1823 3.9 119	4.6	140	24 Th 0559 5.5 168 1224 -0.7 -21 1822 4.3 131	5.5	168	9 F 0615 4.5 137 1245 0.1 3 1838 3.4 104	4.5	137	24 Sa 0009 -0.7 -21 0637 5.3 162 1304 -0.7 -21 1903 3.9 119	-0.7	-21			
	0.5	15	25 M 0600 4.5 137 1212 0.4 12 1815 4.4 134	5.3	162	10 Tu 0527 5.3 162 1143 -0.4 -12 1746 4.8 146 2355 -0.6 -18	0.3	9	25 F 0017 0.3 9 0640 4.7 143 1307 0.3 9 1901 3.8 116	0.3	9	10 Sa 0024 -0.7 -21 0650 5.7 174 1317 -0.7 -21 1915 4.2 128	0.1	3	25 Su 0023 0.1 3 0652 4.6 140 1324 0.0 0 1917 3.4 104	0.1	3	25 M 0101 -0.7 -21 0727 5.3 162 1354 -0.8 -24 1953 3.9 119	-0.7	-21
	0.4	12	26 W 0620 0.3 9 0635 4.6 140 1251 0.4 12 O 1851 4.3 131	5.7	174	11 Tu 0617 5.7 174 1236 -0.6 -18 1838 4.8 146 ●	5.7	174	26 M 0052 0.3 9 0715 4.8 146 1345 0.3 9 1939 3.7 113	0.3	9	11 W 0115 -0.7 -21 0740 5.6 171 1409 -0.7 -21 2007 4.1 125	0.0	0	26 Th 0152 -0.6 -18 0814 5.1 155 1442 -0.7 -21 2042 3.8 116	-0.6	-18			
	4.2	128	27 W 0053 0.3 9 0709 4.7 143 1329 0.4 12 1927	-0.6	-18	12 Th 0044 -0.6 -18 0706 5.8 177 1330 -0.7 -21 1929 4.7 143	0.3	9	27 M 0126 0.3 9 0750 4.8 146 1423 0.3 9 2016 3.6 110	0.5	158	12 F 0207 -0.5 -15 0831 5.5 168 1501 -0.6 -18 2100 4.0 122	0.0	0	27 Tu 0242 -0.4 -12 0901 4.9 149 1529 -0.5 -15 2131 3.7 113	-0.4	-12			
13 Th 0125 0.4 12 0742 4.8 146 1406 0.4 12 2003 4.0 122	0.6	-18	28 F 0134 -0.6 -18 0757 5.8 177 1423 -0.6 -18 2021 4.5 137	0.4	12	13 M 0201 0.4 12 0826 4.7 143 1502 0.4 12 2054 3.5 107	0.4	12	28 W 0300 -0.3 -9 0922 5.2 158 1554 -0.4 -12 2155 3.8 116	0.0	0	13 Th 0221 0.0 0 0844 4.6 140 1521 0.0 0 2117 3.4 104	0.0	0	28 W 0331 -0.2 -6 0947 4.6 140 1615 -0.3 -9 2219 3.6 110	-0.2	-6			
	0.5	15	29 F 0225 -0.4 -12 0848 5.7 174 1518 -0.4 -12 2116 4.2 128	-0.4	-12	14 M 0239 0.4 12 0903 4.6 140 1542 0.4 12 2134 3.4 104	0.4	12	29 W 0354 0.0 0 1014 4.8 146 1647 -0.1 -3 2251 3.6 110	0.0	0	14 Th 0306 0.1 3 0924 4.5 137 1602 0.0 0 2202 3.4 104	0.1	3	29 Th 0422 0.1 3 1032 4.2 128 1700 -0.1 -3 2309 3.5 107	0.1	3	29 F 0422 0.1 3 1032 4.2 128 1700 -0.1 -3 2309 3.5 107	0.1	3
	0.4	12	30 Sa 0318 -0.1 -3 0942 5.4 165 1614 -0.1 -3 2213 4.0 122	0.5	15	15 Tu 0320 0.5 15 0943 4.5 137 1626 0.5 15 2219 3.3 101	0.5	15	30 W 0451 0.3 9 1107 4.4 134 1740 0.1 3 2350 3.5 107	0.3	9	15 Th 0354 0.2 6 1008 4.4 134 1647 -0.1 -3 2252 3.5 107	0.2	6	30 F 0514 0.4 12 1119 3.8 116 1745 0.1 3 2359 3.4 104	0.4	12	30 Sa 0610 0.6 18 1209 3.5 107 1831 0.3 9	0.6	18
	0.3	113	31 M 0414 0.2 6 1039 5.0 152 1713 0.1 3 2315 3.8 116	0.2	6															

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Breakwater Harbor, Delaware, 2011

Times and Heights of High and Low Waters

January				February				March				
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	
h m	ft	cm		h m	ft	cm		h m	ft	cm		
1 Sa 0600	4.7	143		16 Su 0525	4.3	131		1 Tu 0049	-0.2	-6		
1217 -0.1	-3			16 Su 1148	0.3	9		16 W 0004	-0.4	-12		
1823 3.5	107			16 M 1747	3.2	98		16 Tu 0727	4.6	140		
				16 Su 2334	-0.1	-3		16 W 1340	-0.1	-3		
								16 Tu 1947	3.6	110		
								16 W 1256	-0.3	-9		
								16 Tu 1905	4.0	122		
2 Su 0009	-0.3	-9		17 M 0617	4.6	140		2 W 0134	-0.3	-9		
0653 4.8	146			17 M 1237	0.0	0		2 Th 0057	-0.7	-21		
1309 -0.2	-6			17 M 1839	3.4	104		2 W 0808	4.6	140		
1915 3.5	107							2 Th 0732	5.1	155		
								2 W 1419	-0.2	-6		
								2 Th 1342	-0.6	-18		
								2 W 1955	4.4	134		
									2 Th 1924	3.8	116	
3 M 0100	-0.3	-9		18 Tu 0026	-0.4	-12		3 Th 0215	-0.3	-9		
0740 4.9	149			18 Tu 0707	4.9	149		3 Th 0845	4.6	140		
1356 -0.3	-9			18 Tu 1324	-0.3	-9		3 Th 1455	-0.2	-6		
2002 3.6	110			18 Tu 1929	3.6	110		3 Th 2100	3.8	116		
4 Tu 0147	-0.4	-12		19 W 0116	-0.6	-18		4 F 0254	-0.3	-9		
0824 4.9	149			19 W 0754	5.1	155		4 F 0919	4.5	137		
1440 -0.3	-9			19 W 1409	-0.5	-15		4 F 1528	-0.2	-6		
● 2044 3.6	110			19 O 2017	3.9	119		4 F 2135	3.9	119		
5 W 0231	-0.3	-9		20 Th 0205	-0.8	-24		5 Sa 0332	-0.2	-6		
0905 4.8	146			20 Th 0841	5.2	158		5 Sa 0953	4.4	134		
1520 -0.3	-9			20 Th 1454	-0.7	-21		5 Sa 1601	-0.2	-6		
2124 3.6	110			20 Th 2104	4.1	125		5 Sa 2210	3.9	119		
6 Th 0313	-0.3	-9		21 F 0255	-0.9	-27		6 Su 0409	-0.1	-3		
0943 4.7	143			21 F 0927	5.2	158		6 Su 1027	4.2	128		
1559 -0.2	-6			21 F 1539	-0.8	-24		6 Su 1634	-0.1	-3		
2203 3.6	110			21 F 2152	4.3	131		6 Su 2246	3.9	119		
7 F 0354	-0.1	-3		22 M 0346	-0.9	-27		7 M 0448	0.1	3		
1021 4.5	137			22 M 1014	5.1	155		7 M 1102	3.9	119		
1636 -0.1	-3			22 M 1624	-0.9	-27		7 M 1707	0.0	0		
2242 3.6	110			22 M 2242	4.4	134		7 M 2324	3.9	119		
8 Sa 0435	0.0	0		23 Su 0438	-0.8	-24		8 Tu 0529	0.3	9		
1059 4.2	128			23 Su 1102	4.8	146		8 Tu 1140	3.7	113		
1713 0.0	0			23 Su 1711	-0.8	-24		8 Tu 1743	0.2	6		
2322 3.6	110			23 Su 2334	4.5	137						
9 Su 0518	0.2	6		24 M 0534	-0.5	-15		9 W 0006	3.9	119		
1137 4.0	122			24 M 1153	4.4	134		9 W 0613	0.5	15		
1751 0.1	3			24 M 1801	-0.6	-18		9 W 1222	3.4	104		
								9 W 1823	0.3	9		
10 M 0004	3.6	110		25 Tu 0029	4.5	137		10 Th 0052	3.8	116		
0603 0.4	12			25 Tu 0633	-0.3	-9		10 Th 0705	0.6	18		
1218 3.7	113			25 Tu 1247	4.0	122		10 Th 1309	3.2	98		
1830 0.2	6			25 Tu 1854	-0.4	-12		10 Th 1910	0.4	12		
11 Tu 0050	3.6	110		26 W 0129	4.4	134		11 F 0146	3.8	116		
0653 0.6	18			26 W 0738	0.0	0		11 F 0803	0.7	21		
1303 3.4	104			26 W 1347	3.6	110		11 F 1405	3.0	91		
1913 0.3	9			26 W 1952	-0.2	-6		11 F 2004	0.4	12		
12 W 0140	3.6	110		27 Th 0233	4.3	131		12 Sa 0245	3.9	119		
0749 0.7	21			27 Th 0848	0.2	6		12 Sa 0908	0.7	21		
1353 3.2	98			27 Th 1455	3.4	104		12 Sa 1508	3.0	91		
● 2000 0.4	12			27 Th 2054	-0.1	-3		12 Sa 2104	0.3	9		
13 Th 0234	3.7	113		28 F 0342	4.3	131		13 Su 0349	4.0	122		
0850 0.7	21			28 F 1000	0.2	6		13 Su 1013	0.6	18		
1449 3.0	91			28 F 1606	3.2	98		13 Su 1614	3.1	94		
2051 0.4	12			28 F 2159	0.0	0		13 Su 2207	0.2	6		
14 F 0332	3.8	116		29 M 0449	4.4	134		14 M 0451	4.3	131		
0953 0.7	21			29 M 1107	0.2	6		14 M 1113	0.3	9		
1549 3.0	91			29 M 1715	3.2	98		14 M 1716	3.3	101		
2146 0.3	9			29 M 2302	0.0	0		14 M 2307	-0.1	-3		
15 Sa 0429	4.0	122		30 M 0549	4.5	137		15 Tu 0549	4.6	140		
1053 0.5	15			30 M 1206	0.1	3		15 Tu 1207	0.0	0		
1650 3.0	91			30 M 1814	3.3	101		15 Tu 1813	3.6	110		
2241 0.1	3			30 M 2359	-0.1	-3						
31 M 0642	4.6	140										

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Breakwater Harbor, Delaware, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0057	0.2	6	16 Sa 0023	-0.5	-15	1 Su 0111	0.3	9	16 M 0103	-0.5	-15
0715	4.2	128	0642	4.7	143	0716	3.9	119	0714	4.3	131
1314	0.2	6	1242	-0.5	-15	1306	0.3	9	1305	-0.5	-15
1930	4.3	131	1909	5.3	162	1932	4.6	140	1940	5.6	171
2 Sa 0136	0.1	3	17 Su 0118	-0.7	-21	2 M 0149	0.2	6	17 Tu 0157	-0.5	-15
0750	4.2	128	0734	4.7	143	0754	3.8	116	0807	4.3	131
1346	0.2	6	1330	-0.7	-21	1340	0.3	9	1355	-0.5	-15
2004	4.4	134	O 1959	5.6	171	2008	4.8	146	O 2031	5.7	174
3 Su 0213	0.0	0	18 M 0211	-0.8	-24	3 Tu 0226	0.2	6	18 W 0249	-0.5	-15
0824	4.1	125	0825	4.7	143	0832	3.8	116	0859	4.2	128
1418	0.1	3	1418	-0.7	-21	1415	0.2	6	1445	-0.4	-12
● 2037	4.6	140	2049	5.7	174	● 2045	4.8	146	2121	5.6	171
4 M 0248	0.0	0	19 Tu 0303	-0.8	-24	4 W 0303	0.2	6	19 Th 0340	-0.5	-15
0858	4.0	122	0916	4.5	137	0909	3.8	116	0949	4.1	125
1449	0.1	3	1506	-0.6	-18	1451	0.2	6	1535	-0.2	-6
2111	4.6	140	2138	5.6	171	2123	4.9	149	2210	5.4	165
5 Tu 0324	0.1	3	20 W 0355	-0.6	-18	5 Th 0341	0.2	6	20 F 0430	-0.3	-9
0933	3.9	119	1006	4.3	131	0948	3.7	113	1040	4.0	122
1522	0.2	6	1556	-0.4	-12	1530	0.3	9	1626	0.0	0
2146	4.6	140	2229	5.4	165	2202	4.9	149	2259	5.1	155
6 W 0400	0.2	6	21 Th 0447	-0.4	-12	6 F 0421	0.2	6	21 Sa 0521	-0.1	-3
1009	3.8	116	1058	4.1	125	1029	3.6	110	1131	3.9	119
1556	0.2	6	1647	-0.1	-3	1611	0.3	9	1718	0.3	9
2223	4.6	140	2321	5.2	158	2244	4.8	146	2350	4.8	146
7 Th 0439	0.3	9	22 F 0542	-0.1	-3	7 Sa 0504	0.2	6	22 Su 0612	0.1	3
1047	3.6	110	1152	3.9	119	1113	3.6	110	1223	3.7	113
1634	0.3	9	1741	0.2	6	1657	0.3	9	1813	0.5	15
2304	4.5	137				2330	4.7	143			
8 F 0521	0.4	12	23 Sa 0016	4.8	146	8 Su 0551	0.3	9	23 M 0041	4.5	137
1128	3.5	107	0638	0.2	6	1202	3.6	110	0703	0.3	9
1716	0.4	12	1249	3.7	113	1748	0.4	12	1317	3.7	113
2349	4.5	137	1840	0.5	15				1911	0.7	21
9 Sa 0609	0.5	15	24 Su 0114	4.5	137	9 M 0020	4.6	140	24 Tu 0133	4.2	128
1216	3.4	104	0738	0.4	12	0642	0.3	9	0755	0.5	12
1805	0.5	15	1351	3.6	110	1256	3.7	113	1412	3.7	113
● 1944	0.7	21	O 1944	0.7	21	1846	0.4	12	O 2011	0.8	24
10 Su 0040	4.4	134	25 M 0215	4.2	128	10 Tu 0115	4.5	137	25 W 0227	3.9	119
0702	0.5	15	0839	0.5	15	0737	0.3	9	0846	0.6	18
1311	3.4	104	1455	3.6	110	1356	3.8	116	1507	3.8	143
1903	0.5	15	2050	0.8	24	O 1949	0.4	12	2113	0.9	27
11 M 0138	4.3	131	26 Tu 0317	4.0	122	11 W 0215	4.4	134	26 Th 0321	3.8	116
0802	0.5	15	0937	0.6	18	0834	0.2	6	0934	0.6	18
1414	3.5	107	1555	3.6	110	1458	4.1	125	1559	3.9	125
● 2007	0.5	15	2155	0.8	24	2056	0.3	9	2147	0.2	6
12 Tu 0241	4.4	134	27 W 0416	3.9	119	12 Th 0317	4.4	134	27 F 0414	3.6	110
0904	0.4	12	1028	0.6	18	0931	0.0	0	1020	0.6	18
1519	3.7	113	1649	3.8	116	1559	4.4	134	1648	4.1	125
2115	0.3	9	2253	0.7	21	2203	0.2	6	2307	0.8	24
13 W 0346	4.4	134	28 Th 0508	3.9	119	13 F 0419	4.3	131	28 Sa 0505	3.6	110
1003	0.2	6	1114	0.5	15	1027	-0.1	-3	1103	0.5	15
1623	4.0	122	1735	4.0	122	1659	4.8	146	1734	4.3	131
2222	0.1	3	2344	0.6	18	2307	-0.1	-3	2356	0.6	18
14 Th 0448	4.5	137	29 F 0555	3.9	119	14 Sa 0520	4.3	131	29 Tu 0554	3.5	107
1059	0.0	0	1154	0.4	12	1121	-0.3	-9	1144	0.5	15
1722	4.5	137	1817	4.3	131	1755	5.1	155	1818	4.5	137
2324	-0.2	-6									
15 F 0547	4.7	143	30 Sa 0029	0.4	12	15 Su 0007	-0.3	-9	30 M 0041	0.5	15
1152	-0.3	-9	0637	3.9	119	0618	4.3	131	0639	3.5	107
1817	4.9	149	1231	0.4	12	1213	-0.4	-12	1225	0.4	12
			1855	4.5	137	1848	5.4	165	1859	4.7	143
									31 Tu 0122	0.4	12
									0722	3.6	110
									1304	0.3	9
									1940	4.8	146

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Breakwater Harbor, Delaware, 2011

Times and Heights of High and Low Waters

July			August			September									
Time	Height		Time	Height		Time	Height		Time	Height					
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm				
1 F 0217 0.1 3 0822 3.7 113 1403 0.0 0 ● 2041 5.2 158			16 Sa 0302 -0.1 -3 0911 4.0 122 1457 0.0 0 2129 5.0 152			1 M 0315 -0.3 -9 0930 4.5 137 1522 -0.4 -12 2149 5.3 162			1 Th 0347 0.2 6 0959 4.3 131 1559 0.3 9 2215 4.5 137			16 F 0417 -0.5 -15 1046 5.4 165 1653 -0.3 -9 2307 4.7 143			
2 Sa 0259 0.0 0 0907 3.9 119 1450 -0.1 -3 2125 5.2 158			17 Su 0344 0.0 0 0952 4.0 122 1542 0.1 3 2209 4.8 146			2 Tu 0359 -0.4 -12 1019 4.7 143 1614 -0.3 -9 2236 5.1 155			2 W 0421 0.3 9 1036 4.3 131 1640 0.5 15 2252 4.2 128			17 Sa 0451 0.6 18 1119 4.5 137 1734 0.8 24 2339 3.7 113			
3 Su 0342 -0.2 -6 0953 4.0 122 1538 -0.1 -3 2210 5.2 158			18 M 0423 0.0 0 1033 4.0 122 1626 0.3 9 2248 4.6 140			3 W 0445 -0.4 -12 1109 4.9 149 1708 -0.2 -6 2326 4.8 146			3 Th 0456 0.4 12 1115 4.3 131 1722 0.6 18 2330 4.0 122			18 Su 0531 0.7 21 1204 4.4 134 1822 0.9 27			
4 M 0425 -0.2 -6 1041 4.2 128 1628 -0.1 -3 2256 5.0 152			4 Th 0532 -0.4 -12 1202 4.9 149 1805 0.0 0			19 F 0532 0.5 15 1156 4.3 131 1807 0.8 24			4 Su 0101 4.0 122 0657 0.2 6 1339 5.0 152 ● 1959 0.5 15			19 M 0025 3.5 107 0617 0.8 24 1254 4.4 134 1915 1.0 30			
5 Tu 0511 -0.3 -9 1130 4.3 131 1722 0.0 0 2345 4.8 146			20 W 0540 0.3 9 1155 4.0 122 1757 0.6 18			5 F 0018 4.4 134 0623 -0.2 -6 1258 4.9 149 1907 0.2 6			5 M 0206 3.8 116 0801 0.4 12 1446 4.8 146 2108 0.6 18			20 Tu 0118 3.4 104 0710 0.9 27 1350 4.4 134 ● 2014 1.0 30			
6 W 0558 -0.3 -9 1223 4.5 137 1819 0.1 3			21 Th 0008 4.1 125 0618 0.4 12 1239 4.0 122 1846 0.8 24			6 Sa 0115 4.1 125 0718 0.0 0 1359 4.9 149 ● 2013 0.4 12			21 Su 0058 3.5 107 0656 0.7 15 1332 4.2 128 ● 1952 1.1 34			21 W 0218 3.4 104 0809 0.8 24 1450 4.4 134 2115 0.9 27			
7 Th 0036 4.5 137 0648 -0.2 -6 1319 4.6 140 1921 0.2 6			22 F 0051 3.8 116 0659 0.5 15 1326 4.1 125 1939 0.9 27			7 Su 0218 3.8 116 0818 0.1 3 1503 4.9 149 2122 0.5 15			22 M 0151 3.4 104 0747 0.8 24 1428 4.3 131 2052 1.1 34			22 Th 0426 3.7 113 1014 0.5 15 1657 4.8 146 2314 0.5 15			
8 F 0132 4.2 128 0741 -0.1 -3 1418 4.7 143 ● 2026 0.3 9			8 Sa 0139 3.5 107 0744 0.6 18 1417 4.1 125 ● 2036 1.0 30			23 M 0326 3.7 113 0921 0.2 6 1609 4.9 149 2230 0.5 15			23 Tu 0249 3.3 101 0844 0.8 24 1527 4.4 134 2153 1.0 30			23 F 0526 3.9 119 1115 0.5 15 1753 4.8 146 2306 0.4 12			
9 Sa 0232 4.0 122 0838 -0.1 -3 1519 4.8 146 2134 0.3 9			24 Su 0231 3.3 101 0832 0.7 21 1511 4.2 128 2136 1.0 30			9 Tu 0435 3.6 110 1024 0.3 9 1712 4.9 149 2331 0.4 12			24 W 0351 3.4 104 0943 0.6 18 1626 4.6 140 2250 0.8 24			24 Sa 0005 0.4 12 0618 4.0 12 1208 0.4 12 1840 4.8 146			
10 Su 0337 3.8 116 0937 0.0 0 1622 4.9 149 2240 0.3 9			25 M 0328 3.3 101 0924 0.6 18 1607 4.3 131 2235 0.9 27			10 W 0539 3.7 113 1125 0.2 6 1809 5.0 152			25 Th 0451 3.5 107 1041 0.4 12 1722 4.8 146 2342 0.5 15			25 Su 0049 0.3 9 0702 4.2 128 1255 0.3 9 1922 4.8 146			
11 M 0443 3.7 113 1036 0.0 0 1723 5.1 155 2343 0.2 6			26 M 0427 3.3 101 1018 0.6 18 1702 4.5 137 2329 0.7 21			11 Th 0026 0.3 9 0634 3.8 116 1220 0.2 6 1900 5.0 152			26 F 0547 3.8 116 1137 0.2 6 1814 5.0 152			26 M 0127 0.3 9 0741 4.3 131 1338 0.3 9 2000 4.7 143			
12 Tu 0547 3.7 113 1135 0.0 0 1820 5.2 158			27 W 0524 3.4 104 1111 0.4 12 1754 4.7 143			27 F 0030 0.2 6 0639 4.2 128 1231 -0.1 -3 1904 5.2 158			27 M 0203 0.2 6 0817 4.5 137 1417 0.3 9 ● 2035 4.6 140			27 Tu 0129 -0.4 -12 0752 5.4 165 1357 -0.6 -18 ● 2015 5.1 155			
13 W 0039 0.1 3 0646 3.8 116 1230 -0.1 -3 1913 5.2 158			28 Th 0018 0.5 15 0617 3.5 107 1203 0.2 6 1844 5.0 152			13 Sa 0156 0.1 3 0806 4.1 125 1355 0.1 3 ● 2026 4.9 149			28 Tu 0116 -0.1 -3 0729 4.5 137 1323 -0.3 -9 ● 1952 5.3 162			28 W 0236 0.3 9 0851 4.6 140 1456 0.3 9 2109 4.5 137			
14 Th 0131 0.0 0 0738 3.8 116 1322 -0.1 -3 2002 5.2 158			29 F 0104 0.3 9 0708 3.8 116 1253 0.0 0 1931 5.2 158			29 M 0235 0.1 3 0845 4.2 128 1438 0.1 3 2103 4.8 146			29 W 0200 -0.3 -9 0817 4.9 149 1414 -0.5 -15 2039 5.3 162			29 Th 0309 0.3 9 0926 4.6 140 1533 0.4 12 2144 4.3 131			
15 F 0218 -0.1 -3 0826 3.9 119 1411 -0.1 -3 ● 2047 5.1 155			30 Sa 0148 0.0 0 0756 4.0 122 1342 -0.2 -6 ● 2017 5.3 162			30 M 0312 0.1 3 0923 4.3 131 1519 0.2 6 2139 4.7 143			30 Tu 0245 -0.5 -15 0906 5.1 155 1506 -0.5 -15 2127 5.2 158			30 F 0341 0.4 12 1001 4.6 140 1612 0.5 15 2220 4.1 125			
			31 Su 0231 -0.2 -6 0843 4.3 131 1432 -0.3 -9 2103 5.3 162			31 W 0330 -0.5 -15 0955 5.3 162 1558 -0.4 -12 2216 5.0 152									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Breakwater Harbor, Delaware, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
1 Sa	0442	-0.2	-6	16 Su	0417	0.6	18	1 Tu	0025	3.8	116
	1118	5.5	168		1049	4.7	143		0615	0.3	9
	1735	0.0	0		1708	0.7	21		1252	4.8	146
	2344	4.2	128		2313	3.6	110		1915	0.3	9
2 Su	0537	0.1	3	17 M	0459	0.6	18	2 W	0129	3.7	113
	1216	5.2	158		1133	4.6	140		0719	0.6	18
	1836	0.2	6		1754	0.7	21		1354	4.5	137
					2359	3.5	107		2017	0.5	15
3 M	0045	3.9	119	18 Tu	0546	0.7	21	3 Th	0234	3.7	113
	0637	0.3	9		1222	4.5	137		0827	0.7	21
	1318	5.0	152		1845	0.8	24		1456	4.3	131
	●	1941	0.5	15					2115	0.5	15
4 Tu	0152	3.8	116	19 W	0052	3.4	104	4 F	0336	3.8	116
	0743	0.6	18		0640	0.8	24		0933	0.7	21
	1425	4.7	143		1317	4.4	134		1555	4.1	125
	2048	0.6	18		●	1941	0.8	24		2209	0.5	15
5 W	0301	3.7	113	20 Th	0152	3.5	107	5 Sa	0432	3.9	119
	0852	0.7	21		0741	0.7	21		1033	0.7	21
	1531	4.6	140		1416	4.4	134		1649	4.0	122
	2151	0.6	18		2039	0.6	18		2255	0.5	15
6 Th	0407	3.8	116	21 F	0254	3.7	113	6 Su	0520	4.1	125
	0959	0.7	21		0846	0.6	18		1126	0.6	15
	1633	4.5	137		1517	4.5	137		1736	4.0	122
	2247	0.6	18		2136	0.4	12		2337	0.4	12
7 F	0505	4.0	122	22 Sa	0355	4.0	122	7 M	0602	4.3	131
	1059	0.6	18		0951	0.4	12		1213	0.5	15
	1726	4.5	137		1616	4.6	140		1819	3.9	119
	2335	0.5	15		2230	0.2	6				
8 Sa	0553	4.2	128	23 Su	0452	4.5	137	8 Tu	0015	0.3	9
	1151	0.5	15		1053	0.1	3		0641	4.5	137
	1812	4.5	137		1714	4.7	143		1256	0.4	12
					2321	-0.1	-3		1859	3.9	119
9 Su	0016	0.4	12	24 M	0547	4.9	149	9 W	0050	0.3	9
	0635	4.3	131		1152	-0.2	-6		0718	4.7	143
	1236	0.4	12		1809	4.8	146		1335	0.3	9
	1853	4.4	134						1937	3.8	116
10 M	0053	0.3	9	25 Tu	0011	-0.4	-12	10 Th	0125	0.2	6
	0712	4.5	137		0639	5.3	162		0754	4.8	146
	1318	0.3	9		1248	-0.4	-12		1413	0.3	9
	1930	4.3	131		1902	4.8	146		●	2014	3.8
11 Tu	0127	0.3	9	26 W	0100	-0.6	-18	11 F	0200	0.2	6
	0747	4.7	143		0730	5.6	171		0830	4.8	146
	1356	0.3	9		1342	-0.6	-18		1449	0.3	9
	●	2005	4.3	131	●	1953	4.7	143		2051	3.7	113
12 W	0200	0.3	9	27 Th	0148	-0.6	-18	12 Sa	0235	0.2	6
	0821	4.8	146		0821	5.8	177		0907	4.8	146
	1434	0.3	9		1435	-0.6	-18		1526	0.3	9
	2040	4.1	125		2045	4.6	140		2130	3.6	110
13 Th	0232	0.3	9	28 F	0237	-0.6	-18	13 Su	0312	0.3	9
	0856	4.8	146		0911	5.8	177		0946	4.8	146
	1510	0.4	12		1528	-0.6	-18		1605	0.3	9
	2116	4.0	122		2137	4.4	134		2209	3.6	110
14 F	0305	0.4	12	29 Sa	0328	-0.5	-15	14 M	0352	0.3	9
	0931	4.8	146		1003	5.7	174		1026	4.7	143
	1547	0.4	12		1621	-0.4	-12		1646	0.4	12
	2152	3.9	119		2230	4.2	128		2252	3.5	107
15 Sa	0340	0.5	15	30 Su	0420	-0.2	-6	15 Tu	0435	0.4	12
	1009	4.7	143		1057	5.4	165		1110	4.6	140
	1626	0.5	15		1717	-0.1	-3		1730	0.4	12
	2231	3.7	113		2326	4.0	122		2338	3.5	107
31 M	0515	0.0	0	31 M	1153	5.1	155				
					1815	0.1	3				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Reedy Point, Delaware, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm		h m	ft	cm		h m	ft	cm					
1 Sa	0231	-0.4	-12	16 Su	0155	0.0	0	1 Tu	0356	-0.3	-9	16 W	0322	-0.3	-9
0822	5.6	171		0756	5.3	162		0948	5.5	168		0909	5.8	177	
1519	-0.3	-9		1457	0.1	3		1640	-0.3	-9		1614	-0.3	-9	
2049	4.9	149		2029	4.6	140		2212	5.0	152		2140	5.2	158	
2 Su	0325	-0.4	-12	17 M	0251	-0.2	-6	2 W	0444	-0.3	-9	17 Th	0418	-0.5	-15
0915	5.6	171		0846	5.5	168		1033	5.5	168		1000	5.9	180	
1613	-0.4	-12		1551	-0.1	-3		1724	-0.3	-9		1703	-0.5	-15	
2141	4.9	149		2118	4.7	143	●	2256	5.0	152		2229	5.5	168	
3 M	0416	-0.4	-12	18 Tu	0346	-0.4	-12	3 Th	0528	-0.3	-9	18 F	0512	-0.7	-21
1005	5.7	174		0935	5.7	174		1115	5.5	168		1050	6.0	183	
1703	-0.4	-12		1642	-0.3	-9		1804	-0.2	-6		1751	-0.6	-18	
2230	4.9	149		2206	4.9	149		2337	5.0	152	○	2317	5.7	174	
4 Tu	0504	-0.3	-9	19 W	0438	-0.5	-15	4 F	0610	-0.2	-6	19 Sa	0605	-0.8	-24
1051	5.6	171		1022	5.8	177		1154	5.4	165		1139	6.0	183	
1750	-0.4	-12		1731	-0.5	-15		1842	-0.1	-3		1838	-0.7	-21	
● 2316	4.9	149	○	2252	5.0	152					● 2311	5.4	165		
5 W	0550	-0.3	-9	20 Th	0529	-0.6	-18	5 Sa	0016	5.0	152	20 Su	0004	5.9	180
1135	5.6	171		1109	5.9	180		0650	-0.1	-3		0657	-0.8	-24	
1833	-0.3	-9		1818	-0.6	-18		1232	5.3	162		1228	5.9	180	
				2338	5.2	158		1917	-0.1	-3		1925	-0.6	-18	
6 Th	0001	4.8	146	21 F	0620	-0.7	-21	6 Su	0053	5.0	152	21 M	0053	5.9	180
0633	-0.2	-6		1156	6.0	183		0728	0.0	0		0750	-0.7	-21	
1217	5.5	168		1904	-0.7	-21		1309	5.2	158		1319	5.7	174	
1913	-0.2	-6						1950	0.0	0		2013	-0.5	-15	
7 F	0043	4.8	146	22 Sa	0025	5.3	162	7 M	0128	5.0	152	22 Tu	0144	5.9	180
0714	-0.1	-3		0712	-0.7	-21		0807	0.0	0		0845	-0.5	-15	
1258	5.3	162		1245	5.9	180		1347	5.1	155		1413	5.5	168	
1952	-0.1	-3		1951	-0.7	-21		2021	0.1	3		2102	-0.4	-12	
8 Sa	0125	4.8	146	23 Su	0114	5.4	165	8 Tu	0203	5.0	152	23 W	0238	5.8	177
0755	0.0	0		0805	-0.6	-18		0847	0.2	6		0941	-0.3	-9	
1339	5.2	158		1335	5.7	174		1426	4.9	149		1510	5.2	158	
2029	0.0	0		2038	-0.6	-18		2054	0.1	3		2155	-0.2	-6	
9 Su	0206	4.8	146	24 M	0206	5.5	168	9 W	0239	5.1	155	24 Th	0336	5.6	171
0836	0.1	3		0900	-0.5	-15		0932	0.3	9		1039	-0.1	-3	
1421	5.1	155		1430	5.5	168		1510	4.7	143		1611	5.0	152	
2106	0.1	3		2128	-0.5	-15		2131	0.2	6	○	2251	0.0	0	
10 M	0249	4.8	146	25 Tu	0301	5.4	165	10 Th	0321	5.1	155	10 F	0439	5.4	165
0920	0.2	6		0958	-0.3	-9		1023	0.4	12		1139	0.1	3	
1506	4.9	149		1528	5.2	158		1600	4.6	140		1714	4.8	146	
2143	0.1	3		2220	-0.4	-12		2217	0.2	6		2349	0.1	3	
11 Tu	0334	4.8	146	26 W	0400	5.4	165	11 F	0411	5.1	155	11 Sa	0543	5.3	162
1009	0.3	9		1058	-0.2	-6		1121	0.5	15		1240	0.1	3	
1555	4.7	143		1630	5.0	152		1657	4.5	137		1817	4.8	146	
2225	0.1	3	○	2316	-0.3	-9	○	2312	0.2	6					
12 W	0422	4.8	146	27 Th	0502	5.3	162	12 Sa	0511	5.1	155	12 M	0049	0.1	3
1103	0.3	9		1200	-0.1	-3		1223	0.5	15		0645	5.3	162	
1649	4.6	140		1733	4.8	146		1758	4.5	137		1339	0.1	3	
● 2311	0.1	3									1917	4.9	149		
13 Th	0514	4.9	149	28 F	0014	-0.2	-6	13 Su	0614	5.2	158	13 M	0147	0.1	3
1201	0.4	12		0605	5.3	162		1326	0.4	12		0744	5.4	165	
1745	4.5	137		1302	-0.1	-3		1858	4.5	137		1434	0.1	3	
				1836	4.7	143					2012	5.0	152		
14 F	0003	0.1	3	29 Sa	0112	-0.2	-6	14 M	0120	0.1	3	14 Tu	0532	5.4	165
0608	5.0	152		0707	5.3	162		0716	5.3	162		1253	0.5	15	
1301	0.3	9		1403	-0.1	-3		1425	0.2	6		1824	4.8	146	
1842	4.5	137		1936	4.7	143		1955	4.7	143					
15 Sa	0059	0.1	3	30 M	0210	-0.2	-6	15 Tu	0223	-0.1	-3	15 W	0051	0.3	9
0703	5.1	155		0805	5.4	165		0815	5.6	171		0641	5.5	168	
1400	0.2	6		1500	-0.2	-6		1521	0.0	0		1353	0.3	9	
1937	4.5	137		2032	4.8	146		2049	4.9	149		1925	5.1	155	
31 M	0305	-0.2	-6	31 M	0859	5.4	165					31 Th	0306	0.2	6
				1552	-0.3	-9					0858	5.5	168		
				2124	4.9	149					1535	0.2	6		
											2122	5.7	174		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Reedy Point, Delaware, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0354 0.1 3 0943 5.6 171 1617 0.2 6 2204 5.8 177	16 Sa 0341 -0.1 -3 0914 6.0 183 1604 -0.1 -3 2141 6.5 198	1 Su 0412 0.3 9 0954 5.4 165 1618 0.4 12 2211 6.1 186	16 M 0421 -0.1 -3 0947 5.7 174 1629 0.0 0 2210 6.7 204	1 W 0516 0.3 9 1047 5.1 155 1705 0.6 18 2253 6.2 189	16 Th 0551 0.0 0 1114 5.4 165 1750 0.3 9 2332 6.5 198						
	2 Sa 0439 0.1 3 1024 5.5 168 1656 0.2 6 2243 5.8 177	17 Su 0438 -0.3 -9 1007 6.0 183 1655 -0.2 -6 O 2231 6.6 201	2 M 0457 0.3 9 1035 5.4 165 1657 0.5 15 2247 6.1 186	17 Tu 0516 -0.2 -6 1040 5.7 174 1720 0.1 3 O 2301 6.7 204	2 Th 0601 0.3 9 1126 5.1 155 1747 0.6 18 2328 6.3 192	17 F 0640 0.0 0 1204 5.4 165 1838 0.4 12					
	3 Su 0522 0.1 3 1104 5.5 168 1732 0.3 9 ● 2318 5.8 177	18 M 0532 -0.4 -12 1059 5.9 180 1744 -0.2 -6 2320 6.7 204	3 Tu 0540 0.3 9 1114 5.3 162 1735 0.6 18 ● 2320 6.1 186	18 W 0609 -0.2 -6 1132 5.6 171 1811 0.2 6 2350 6.6 201	3 F 0645 0.3 9 1205 5.1 155 1829 0.6 18	18 Sa 0019 6.3 192 0726 0.1 3 1253 5.4 165 1925 0.6 18					
	4 M 0603 0.1 3 1141 5.4 165 1807 0.4 12 2350 5.8 177	19 Tu 0626 -0.4 -12 1151 5.8 177 1833 -0.1 -3	4 W 0623 0.3 9 1151 5.2 158 1811 0.6 18 2351 6.1 186	19 Th 0700 -0.1 -3 1224 5.5 168 1900 0.3 9	4 Sa 0005 6.3 192 0728 0.3 9 1246 5.2 158 1913 0.6 18	19 Su 0105 6.1 186 0810 0.2 6 1341 5.3 162 2012 0.7 21					
5 Tu 0643 0.2 6 1216 5.2 158 1839 0.5 15	20 W 0010 6.6 201 0718 -0.3 -9 1243 5.6 171 1923 0.1 3	5 Th 0704 0.4 12 1227 5.1 155 1847 0.6 18	20 F 0039 6.4 195 0749 0.0 0 1315 5.4 165 1949 0.5 15	5 Su 0045 6.3 192 0812 0.3 9 1329 5.3 162 2001 0.6 18	20 M 0152 5.9 180 0853 0.4 12 1430 5.3 162 2058 0.8 24						
6 W 0019 5.8 177 0723 0.3 9 1250 5.1 155 1910 0.5 15	21 Th 0100 6.4 195 0810 -0.1 -3 1336 5.5 168 2013 0.3 9	6 F 0023 6.1 186 0746 0.5 15 1305 5.1 155 1925 0.7 21	21 Sa 0129 6.2 189 0838 0.2 6 1408 5.3 162 2039 0.7 21	6 M 0130 6.3 192 0858 0.3 9 1417 5.4 165 2054 0.6 18	21 Tu 0240 5.7 174 0935 0.4 12 1520 5.4 165 2147 0.9 27						
7 Th 0047 5.9 180 0803 0.4 12 1326 5.1 155 1943 0.6 18	22 F 0152 6.2 189 0902 0.1 3 1431 5.3 162 2105 0.5 15	7 Sa 0059 6.2 189 0830 0.5 15 1346 5.1 155 2008 0.7 21	22 Su 0221 6.0 183 0925 0.3 9 1502 5.3 162 2130 0.8 24	7 Tu 0222 6.2 189 0945 0.3 9 1511 5.5 168 2152 0.6 18	22 W 0331 5.6 171 1017 0.5 15 1610 5.4 165 2238 1.0 30						
8 F 0120 5.9 180 0845 0.5 15 1405 5.0 152 2022 0.6 18	23 Sa 0247 5.9 180 0954 0.3 9 1529 5.2 158 2159 0.6 18	8 Su 0142 6.2 189 0916 0.5 15 1433 5.2 158 2100 0.7 21	23 M 0314 5.8 177 1013 0.4 12 1556 5.3 162 2222 0.9 27	8 W 0320 6.0 183 1035 0.2 6 1609 5.7 174 ● 2254 0.6 18	23 Th 0423 5.4 165 1100 0.6 18 1701 5.5 168 ● 2331 1.0 30						
9 Sa 0201 5.9 180 0932 0.6 18 1452 5.0 152 2110 0.6 18	24 Su 0345 5.7 174 1046 0.4 12 1627 5.2 158 ● 2254 0.8 24	9 M 0234 6.1 186 1005 0.5 15 1529 5.3 162 2159 0.7 21	24 Tu 0409 5.6 171 1100 0.5 15 1651 5.4 165 ● 2316 0.9 27	9 Th 0423 5.8 177 1128 0.2 6 1710 5.9 180 2359 0.6 18	24 F 0518 5.3 162 1145 0.6 18 1752 5.6 171						
10 Su 0252 5.9 180 1025 0.6 18 1548 5.0 152 2210 0.6 18	25 M 0445 5.5 168 1139 0.5 15 1726 5.3 162 2351 0.8 24	10 Tu 0334 6.0 183 1058 0.5 15 1629 5.4 165 ● 2305 0.7 21	25 W 0505 5.5 168 1147 0.5 15 1745 5.5 168	10 F 0528 5.7 174 1224 0.2 6 1810 6.1 186	25 Sa 0026 0.9 27 0613 5.2 158 1233 0.6 18 1843 5.8 177						
11 M 0353 5.8 177 1123 0.6 18 1651 5.1 155 ● 2318 0.6 18	26 Tu 0544 5.5 168 1231 0.5 15 1822 5.4 165	11 W 0440 5.9 180 1154 0.4 12 1731 5.6 171	26 Th 0010 0.9 27 0601 5.4 165 1235 0.6 18 1837 5.7 174	11 Sa 0104 0.5 15 0633 5.6 171 1320 0.2 6 1909 6.3 192	26 Su 0122 0.9 27 0706 5.1 155 1322 0.6 18 1932 5.9 180						
12 Tu 0502 5.7 174 1222 0.5 15 1756 5.3 162	27 W 0047 0.7 21 0641 5.5 168 1321 0.5 15 1915 5.6 171	12 Th 0013 0.6 18 0548 5.8 177 1251 0.3 9 1832 5.9 180	27 F 0105 0.8 24 0655 5.3 162 1322 0.5 15 1926 5.8 177	12 Su 0207 0.4 12 0735 5.5 168 1417 0.2 6 2006 6.5 198	27 M 0217 0.7 21 0758 5.1 155 1412 0.6 18 2019 6.0 183						
13 W 0029 0.5 15 0612 5.7 174 1321 0.4 12 1857 5.5 168	28 Th 0142 0.6 18 0734 5.5 168 1408 0.4 12 2004 5.8 177	13 F 0120 0.5 15 0653 5.8 177 1347 0.2 6 1930 6.2 189	28 Sa 0159 0.7 21 0746 5.3 162 1409 0.5 15 2013 6.0 183	13 M 0308 0.2 6 0834 5.5 168 1513 0.1 3 2101 6.6 201	28 Tu 0311 0.6 18 0847 5.1 155 1502 0.5 15 2104 6.1 186						
14 Th 0137 0.3 9 0717 5.8 177 1418 0.2 6 1955 5.9 180	29 F 0234 0.5 15 0824 5.5 168 1454 0.4 12 2050 5.9 180	14 Sa 0223 0.3 9 0754 5.8 177 1443 0.1 3 2026 6.5 198	29 Su 0252 0.6 18 0835 5.3 162 1455 0.5 15 2057 6.1 186	14 Tu 0405 0.1 3 0929 5.5 168 1607 0.2 6 2153 6.6 201	29 W 0402 0.5 15 0934 5.1 155 1550 0.5 15 2146 6.2 189						
15 F 0241 0.1 3 0817 5.9 180 1512 0.0 0 2049 6.2 189	30 Sa 0324 0.4 12 0911 5.5 168 1537 0.4 12 2132 6.0 183	15 Su 0324 0.1 3 0852 5.7 174 1537 0.0 0 2119 6.6 201	30 M 0342 0.5 15 0922 5.2 158 1539 0.5 15 2138 6.2 189	15 W 0500 0.0 0 1023 5.4 165 1659 0.2 6 ● 2243 6.6 201	30 Th 0450 0.4 12 1018 5.1 155 1638 0.5 15 2227 6.3 192						
				31 Tu 0430 0.4 12 1005 5.2 158 1623 0.5 15 2217 6.2 189							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Reedy Point, Delaware, 2011

Times and Heights of High and Low Waters

July				August				September									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height						
h m	ft	cm		h m	ft	cm		h m	ft	cm							
1 F 1101 1725 ● 2307	0.3 5.2 0.4 6.4	9 158 12 195	16 Sa 1143 1816 2357	0.1 5.4 0.4 6.2	3 165 12 189	1 M 1203 1846	0.0 0.1	0 177 3	16 Tu 0014 1239 1916	6.0 5.6 0.7	183 171 21	1 Th 0048 1316 2018	6.3 6.4 0.2	192 195 6	16 F 0102 0729 1313 2010	5.5 0.7 5.8 0.9	168 21 177 27
2 Sa 1143 1813 2348	0.2 0.4 6.4	6 162 12 195	17 Su 1228 1900	0.2 0.6	6 165 18	2 Tu 0016 1249 1938	6.5 6.0 0.2	198 183 24	17 W 0053 1317 1956	5.8 5.6 0.8	177 171 24	2 F 0140 1409 2114	6.0 6.4 0.3	183 195 9	17 Sa 0139 1346 2052	5.3 5.8 1.0	162 177 30
3 Su 1225 1901	0.1 5.4 0.4	3 165 12 19	18 M 0040 0738 1311 1943	6.1 0.3 5.4 0.7	186 9 165 21	3 W 0105 0811 1338 2032	6.4 -0.1 6.1 0.3	195 186 186 9	18 Th 0132 0810 1355 2038	5.7 0.6 5.6 0.9	174 18 171 27	3 Sa 0237 0926 1507 2213	5.7 0.2 6.2 0.5	174 6 189 15	18 Su 0218 0835 1424 2140	5.2 0.8 5.8 1.1	158 24 177 34
4 M 0751 1311 1951	6.4 0.1 5.5	195 3 12	19 Tu 0123 0816 1355 2027	5.9 0.4 5.5 0.8	180 12 168 24	4 Th 0156 0858 1431 2129	6.1 0.0 6.1 0.4	186 0 186 12	19 F 0213 0843 1433 2123	5.5 0.7 5.7 1.0	168 21 174 30	4 Su 0338 1021 1609 2313	5.5 0.3 6.1 0.6	168 9 186 18	19 M 0304 0919 1511 2234	5.1 0.8 5.8 1.1	155 24 177 34
5 Tu 0836 1359 2045	0.1 5.7 0.4	192 3 12	20 W 0206 0853 1438 2111	5.7 0.5 5.5 0.9	174 15 168 27	5 F 0252 0948 1528 2229	5.9 0.1 6.1 0.5	180 3 186 15	20 Sa 0257 0919 1516 2213	5.3 0.7 5.7 1.1	162 21 174 34	5 M 0442 1120 1714	5.3 0.5 6.0	162 15 183	20 Tu 0359 1013 1609 2332	5.0 0.8 5.8 1.1	152 24 177 34
6 W 0922 1452 2142	6.2 5.8 0.5	189 177 15 15	21 Th 0251 0930 1523 2159	5.5 0.6 5.5 1.0	168 18 168 30	6 Sa 0353 1042 1629 2331	5.6 0.2 6.1 0.6	171 6 186 18	21 Su 0347 1002 1605 2308	5.1 0.7 5.7 1.1	155 21 174 34	6 Tu 0014 0546 1220 1818	0.6 5.3 0.5 6.0	18 162 15 183	21 W 0500 1115 1715	4.9 0.8 5.8	149 24 177
7 Th 1012 1549 2242	6.0 5.9 0.6	183 3 18	22 F 0340 1009 1611 2251	5.3 0.6 5.5 1.0	162 18 168 30	7 Su 0457 1140 1732	5.4 0.3 6.1	165 9 186	22 M 0442 1053 1701	5.0 0.8 5.7	152 24 174	7 W 0114 0649 1319 1917	0.6 5.3 0.5 6.1	18 162 186 186	22 Th 0031 0602 1222 1820	1.0 5.1 0.7 5.9	30 155 21 180
8 F 1104 1649 ● 2345	5.7 0.1 6.0	174 3 18	23 Sa 0433 1053 1702 ● 2346	5.2 0.7 5.6 1.0	158 21 171 30	8 M 0033 0602 1239 1835	0.6 5.3 0.4 6.1	162 162 12 186	23 Tu 0007 0541 1151 1800	1.1 4.9 0.8 5.8	34 149 24 177	8 Th 0210 0746 1416 2012	0.5 5.4 0.4 6.1	15 165 12 186	23 F 0129 0702 1328 1920	0.8 5.3 0.6 6.1	24 162 18 186
9 Sa 1200 1750	5.5 6.1	168 186	24 Su 0528 1141 1755	5.0 0.7 5.7	152 21 174	9 Tu 0135 0704 1338 1935	0.6 5.3 0.4 6.2	18 162 12 189	24 W 0106 0640 1254 1859	1.0 5.0 0.7 5.9	30 152 21 180	9 F 0302 0839 1509 2102	0.4 5.6 0.4 6.2	12 171 12 189	24 Sa 0224 0757 1430 2016	0.5 5.6 0.3 6.3	15 171 9 192
10 Su 0616 1258 1851	0.6 0.2 6.2	18 6 189	25 M 0044 0624 1235 1848	1.0 5.0 0.7 5.8	30 152 21 177	10 W 0233 0803 1436 2031	0.4 5.3 0.4 6.3	12 162 12 192	25 Th 0204 0736 1355 1954	0.8 5.1 0.6 6.1	24 155 186	10 Sa 0350 0928 1559 2147	0.3 5.7 0.3 6.2	9 174 9 189	25 Su 0316 0849 1529 2109	0.3 5.9 0.1 6.4	9 180 3 195
11 M 0719 1356 1950	0.5 0.2 6.3	15 6 192	26 Tu 0142 0719 1331 1939	0.9 5.0 0.6 5.9	27 152 152 180	11 Th 0328 0858 1530 2122	0.3 5.4 0.3 6.3	9 165 9 192	26 F 0258 0829 1454 2046	0.6 5.3 0.4 6.3	18 162 12 192	11 Sa 0434 1012 1645 2230	0.3 5.8 0.4 6.1	9 177 12 186	26 M 0406 0938 1625 2200	0.0 6.2 0.0 6.4	0 189 0 195
12 Tu 0818 1454 2045	0.3 0.2 6.4	9 6 195	27 W 0238 0812 1426 2029	0.8 5.0 0.6 6.1	24 152 152 186	12 F 0418 0949 1621 2209	0.2 5.5 0.3 6.3	6 168 9 192	27 Sa 0350 0918 1550 2135	0.4 5.6 0.2 6.5	12 180 6 198	12 M 0514 1053 1729 2310	0.3 5.9 0.4 6.0	9 180 12 183	27 Tu 0455 1027 1720 ● 2249	-0.1 6.5 -0.2 6.4	-3 198 -6 195
13 W 0914 1548 2138	0.2 0.2 6.4	6 6 195	28 Th 0331 0901 1521 2116	0.6 5.1 0.4 6.3	18 155 12 192	13 Sa 0504 1036 1708 ● 2253	0.2 5.6 0.4 6.2	6 171 12 189	28 Su 0438 1006 1644 ● 2223	0.1 5.8 0.1 6.6	3 177 3 201	13 Tu 0551 1132 1810 2348	0.4 5.9 0.5 5.9	12 180 15 180	28 W 0542 1115 1813 2339	-0.2 6.6 -0.2 6.3	-6 201 -6 192
14 Th 1006 1640 2227	0.1 0.3 6.4	3 9 195	29 F 0421 0948 1613 2201	0.4 5.3 0.3 6.4	12 165 12 195	14 Su 0547 1119 1753 2334	0.2 5.6 0.4 6.1	6 171 12 186	29 M 0525 1052 1737 2310	0.0 6.1 0.0 6.6	0 186 0 201	14 W 0626 1207 1850 1923	0.5 5.9 0.6 0.0	15 180 18 0	29 Th 0630 1203 1907	-0.2 6.7 -0.1	-6 204 -3
15 F 1056 1729 ● 2313	0.1 0.3 6.3	3 9 192	30 F 0509 1033 1705 ● 2246	0.2 5.4 0.2 6.5	6 165 12 198	15 M 0626 1200 1835 ● 2246	0.3 5.6 0.6 6.5	9 171 6 198	30 Tu 0611 1139 1830 2358	-0.1 6.3 0.0 6.5	-3 192 0 198	15 Th 0025 0659 1241 1930	5.7 0.6 5.8 0.8	174 18 177 24	30 F 0030 0719 1254 2002	6.1 -0.1 6.6 0.1	186 -3 201 3
			31 Su 0555 1118 1755 2331	0.1 5.6 0.2 6.5	3 171 6 198	31 W 0657 1226 1923	-0.1 6.4 0.0	-3 195 0 0									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Reedy Point, Delaware, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
	h m	ft cm		h m	ft cm			h m	ft cm		
1 Sa	0123	5.8 177		16 Su	0110 5.1 155		1 Tu	0300 5.1 155	16 W	0206 4.8 146	
	0810	0.1 3		0727 0.6 18			0936 0.3 9	0833 0.4 12	1002 0.3 9	0917 0.1 3	
	1348	6.4 195		1309 5.9 180			1523 5.8 177	1411 5.8 177	1550 5.3 162	1448 5.5 168	
	2057	0.3 9		2029 0.8 24			2226 0.3 9	2140 0.5 15	2243 0.1 3	2204 -0.1 -3	
2 Su	0220	5.5 168		17 M	0147 5.0 152		2 W	0400 5.1 155	17 Th	0257 4.9 149	
	0903	0.2 6		0804 0.7 21			1032 0.5 15	0928 0.4 12	1056 0.4 12	1017 0.1 3	
	1445	6.2 189		1347 5.9 180			1624 5.6 171	1506 5.7 174	1647 5.2 158	1548 5.4 165	
	2154	0.4 12		2115 0.9 27			2320 0.4 12	2231 0.4 12	2331 0.2 6	2255 -0.1 -3	
3 M	0320	5.3 162		18 Tu	0231 4.9 149		3 Th	0501 5.1 155	18 F	0355 5.0 152	
	0959	0.4 12		0849 0.7 21			1129 0.5 15	1030 0.4 12	1102 0.1 3	1122 0.1 3	
	1547	6.0 183		1434 5.8 177			1724 5.5 168	1609 5.6 171	1743 5.1 155	1653 5.2 158	
	2252	0.5 15		2205 0.9 27			2325 0.3 9		2351 -0.2 -6		
4 Tu	0424	5.2 158		19 W	0323 4.9 149		4 F	0012 0.4 12	19 Sa	0457 5.1 155	
	1058	0.5 15		0944 0.7 21			0559 5.2 158	1138 0.4 12	0616 5.1 155	0532 5.4 165	
	1652	5.9 180		1531 5.8 177			1226 0.5 15	1716 5.5 168	1247 0.3 9	1228 0.0 0	
	2350	0.6 18		2300 0.8 24			1821 5.5 168		1838 5.0 152	1759 5.1 155	
5 W	0527	5.2 158		20 Th	0424 5.0 152		5 Sa	0103 0.3 9	20 Su	0021 0.1 3	
	1157	0.6 18		1049 0.7 21			0654 5.4 165	0559 5.4 165	0708 5.3 162	0634 5.5 168	
	1755	5.8 177		1637 5.8 177			1322 0.4 12	1245 0.2 6	1341 0.2 6	1333 -0.1 -3	
				2357 0.7 21			1915 5.5 168	1822 5.5 168	1930 5.0 152	1903 5.0 152	
6 Th	0047	0.5 15		21 F	0528 5.1 155		6 Su	0152 0.2 6	21 M	0117 0.0 0	
	0628	5.3 162		1157 0.6 18			0745 5.6 171	0659 5.7 174	0757 5.4 165	0734 5.7 174	
	1256	0.5 15		1745 5.8 177			1415 0.3 9	1350 0.1 3	1434 0.1 3	1436 -0.2 -6	
	1853	5.8 177					2005 5.5 168	1924 5.5 168	2020 5.0 152	2003 5.0 152	
7 F	0140	0.4 12		22 Sa	0054 0.5 15		7 M	0238 0.2 6	22 Tu	0213 -0.2 -6	
	0724	5.5 168		0629 5.4 165			0832 5.7 174	0756 6.0 183	0843 5.5 168	0832 5.9 180	
	1352	0.5 15		1305 0.4 12			1505 0.2 6	1452 -0.1 -3	1524 0.0 0	1536 -0.4 -12	
	1947	5.9 180		1849 5.9 180			2052 5.5 168	2022 5.5 168	2107 5.0 152	2101 5.1 155	
8 Sa	0230	0.3 9		23 Su	0150 0.3 9		8 Tu	0321 0.2 6	23 W	0307 -0.3 -9	
	0815	5.7 174		0727 5.7 174			0916 5.8 177	0850 6.2 189	0926 5.6 171	0927 6.0 183	
	1444	0.4 12		1409 0.2 6			1553 0.1 3	1551 -0.3 -9	1612 0.0 0	1632 -0.5 -15	
	2036	5.9 180		1949 6.0 183			2136 5.4 165	2117 5.5 168	2151 4.9 149	2155 5.1 155	
9 Su	0316	0.3 9		24 M	0243 0.0 0		9 W	0403 0.2 6	24 Th	0401 -0.4 -12	
	0902	5.8 177		0821 6.1 186			0956 5.9 180	0943 6.4 195	1006 5.6 171	1019 6.0 183	
	1534	0.3 9		1509 0.0 0			1639 0.1 3	1647 -0.4 -12	1658 0.0 0	1725 -0.5 -15	
	2122	5.9 180		2044 6.1 186			2218 5.3 162	2211 5.5 168	2232 4.8 146	2247 5.1 155	
10 M	0359	0.2 6		25 Tu	0335 -0.1 -3		10 F	0442 0.2 6	25 F	0453 -0.5 -15	
	0945	5.9 180		0913 6.4 195			1034 5.8 177	1035 6.4 195	1044 5.6 171	1110 6.0 183	
	1620	0.3 9		1607 -0.2 -6			1723 0.2 6	1742 -0.4 -12	1743 0.0 0	1815 -0.5 -15	
	2204	5.9 180		2137 6.1 186			2258 5.2 158	2303 5.4 165	2311 4.8 146	2338 5.1 155	
11 Tu	0439	0.3 9		26 W	0426 -0.3 -9		11 Sa	0520 0.3 9	11 Su	0532 0.0 0	
	1026	6.0 183		1003 6.6 201			1109 5.8 177	1125 6.3 192	1119 5.6 171	1159 5.9 180	
	1704	0.3 9		1703 -0.3 -9			1805 0.2 6	1834 -0.4 -12	1825 0.0 0	1903 -0.5 -15	
	2244	5.7 174		2229 6.0 183			2335 5.1 155	2355 5.3 162	2349 4.7 143		
12 W	0516	0.4 12		27 Th	0516 -0.3 -9		12 Sa	0556 0.3 9	27 Su	0636 -0.3 -9	
	1103	6.0 183		1053 6.7 204			1141 5.8 177	1216 6.2 189	1153 5.7 174	0705 -0.4 -12	
	1746	0.4 12		1757 -0.3 -9			1846 0.3 9	1925 -0.3 -9	1907 0.0 0	1246 5.7 174	
	2323	5.6 171		2320 5.9 180					1949 -0.4 -12	1949 -0.4 -12	
13 Th	0551	0.5 15		28 F	0606 -0.3 -9		13 Su	0011 4.9 149	28 M	0047 5.2 158	
	1137	5.9 180		1143 6.6 201			0631 0.4 12	0726 -0.2 -6	0653 0.0 0	0753 -0.2 -6	
	1827	0.5 15		1851 -0.2 -6			1212 5.8 177	1307 6.0 183	1229 5.7 174	1334 5.5 168	
	2359	5.4 165					1928 0.4 12	2015 -0.2 -6	1949 0.0 0	2033 -0.2 -6	
14 F	0624	0.5 15		29 Sa	0012 5.7 174		14 M	0046 4.9 149	29 Tu	0140 5.1 155	
	1208	5.9 180		0656 -0.2 -6			0707 0.4 12	0817 0.0 0	0736 0.0 0	0841 -0.1 -3	
	1907	0.6 18		1234 6.5 198			1245 5.8 177	1400 5.7 174	1309 5.7 174	1423 5.3 162	
				1944 -0.1 -3			2010 0.5 15	2105 0.0 0	2031 0.0 0	2117 -0.1 -3	
15 Sa	0035	5.3 162		30 Su	0105 5.5 168		15 Tu	0123 4.8 146	30 W	0234 5.0 152	
	0656	0.6 18		0748 0.0 0			0746 0.4 12	0909 0.1 3	0823 0.0 0	0929 0.1 3	
	1238	5.9 180		1327 6.3 192			1324 5.8 177	1454 5.5 168	1355 5.6 171	1513 5.1 155	
	1947	0.7 21		2038 0.1 3			2053 0.5 15	2154 0.1 3	2116 0.0 0	2200 0.0 0	
31 M	0201	5.3 162		31 M	0841 0.2 6					31 Sa	0345 4.8 146
				1423 6.0 183						1606 4.9 149	
				2132 0.2 6						2244 0.1 3	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Philadelphia, Pennsylvania, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm		h m	ft	cm		h m	ft	cm					
1 Sa	0506	-0.5	-15	16 Su	0439	-0.4	-12	1 Tu	0629	-0.5	-15	16 W	0602	-0.5	-15
1049	6.1	186		1034	5.7	174	1212	5.9	180	1144	6.3	192			
1751	-0.4	-12		1733	-0.2	-6	1910	-0.5	-15	1849	-0.4	-12			
2317	5.3	162		2304	4.9	149									
2 Su	0559	-0.5	-15	17 M	0534	-0.5	-15	2 W	0038	5.3	162	17 Th	0013	5.6	171
1141	6.2	189		1123	5.9	180	0717	-0.5	-15	0657	-0.6	-18			
1844	-0.5	-15		1826	-0.4	-12	1258	5.9	180	1234	6.4	195			
				2353	5.0	152	● 1955	-0.5	-15	1939	-0.5	-15			
3 M	0008	5.3	162	18 Tu	0627	-0.6	-18	3 Th	0124	5.3	162	18 F	0102	5.9	180
0650	-0.5	-15		1211	6.1	186	0802	-0.5	-15	0751	-0.8	-24			
1230	6.2	189		1917	-0.5	-15	1342	5.8	177	1324	6.5	198			
1934	-0.5	-15					2037	-0.4	-12	○ 2027	-0.6	-18			
4 Tu	0057	5.3	162	19 W	0040	5.2	158	4 F	0207	5.3	162	19 Sa	0150	6.1	186
0739	-0.5	-15		0719	-0.7	-21	0846	-0.4	-12	0843	-0.8	-24			
1317	6.1	186		1258	6.3	192	1424	5.8	177	1413	6.5	198			
● 2021	-0.5	-15		○ 2006	-0.6	-18	2117	-0.4	-12	2115	-0.7	-21			
5 W	0145	5.2	158	20 Th	0127	5.3	162	5 Sa	0248	5.4	165	20 Su	0239	6.3	192
0825	-0.4	-12		0810	-0.8	-24	0928	-0.4	-12	0936	-0.8	-24			
1402	6.0	183		1345	6.3	192	1505	5.7	174	1504	6.3	192			
2105	-0.4	-12		2053	-0.7	-21	2155	-0.3	-9	2202	-0.7	-21			
6 Th	0230	5.2	158	21 F	0214	5.5	168	6 Su	0329	5.4	165	21 M	0329	6.4	195
0909	-0.3	-9		0901	-0.9	-27	1009	-0.3	-9	1028	-0.8	-24			
1446	5.9	180		1433	6.3	192	1547	5.5	168	1556	6.1	186			
2148	-0.4	-12		2141	-0.8	-24	2231	-0.3	-9	2251	-0.7	-21			
7 F	0315	5.2	158	22 Sa	0302	5.6	171	7 M	0409	5.4	165	22 Tu	0421	6.4	195
0953	-0.3	-9		0952	-0.9	-27	1051	-0.3	-9	1122	-0.7	-21			
1530	5.8	177		1522	6.2	189	1629	5.4	165	1650	5.9	180			
2228	-0.3	-9		2228	-0.9	-27	2307	-0.3	-9	2341	-0.6	-18			
8 Sa	0359	5.1	155	23 Su	0352	5.8	177	8 Tu	0450	5.4	165	23 W	0515	6.3	192
1036	-0.3	-9		1045	-0.9	-27	1134	-0.3	-9	1217	-0.5	-15			
1615	5.6	171		1614	6.1	186	1714	5.2	158	1747	5.6	171			
2307	-0.3	-9		2316	-0.9	-27	2344	-0.3	-9						
9 Su	0444	5.1	155	24 M	0444	5.8	177	9 W	0532	5.4	165	24 Th	0032	-0.4	-12
1119	-0.3	-9		1139	-0.8	-24	1219	-0.2	-6	1012	6.2	189			
1701	5.4	165		1709	5.8	177	1801	5.1	155	1314	-0.3	-9			
2347	-0.3	-9					● 1845	5.4	165	2308	0.1	3			
10 M	0530	5.2	158	25 Tu	0006	-0.8	-24	10 Th	0025	-0.3	-9	10 F	0127	-0.3	-9
1205	-0.2	-6		0539	5.8	177	0618	5.4	165	0711	6.0	183			
1749	5.3	162		1235	-0.7	-21	1310	-0.1	-3	1412	-0.2	-6			
				1806	5.5	168	1852	4.9	149	1945	5.3	162			
11 Tu	0027	-0.3	-9	26 W	0058	-0.8	-24	11 F	0111	-0.2	-6	11 Sa	0224	-0.2	-6
0617	5.2	158		0636	5.8	177	0709	5.5	168	0811	5.9	180			
1253	-0.2	-6		1334	-0.5	-15	1406	0.0	0	1510	-0.1	-3			
1840	5.1	155		● 1905	5.3	162	● 1946	4.8	146	2045	5.3	162			
12 W	0110	-0.3	-9	27 Th	0152	-0.7	-21	12 Sa	0205	-0.2	-6	12 Su	0322	-0.1	-3
0707	5.2	158		0735	5.8	177	0804	5.5	168	0911	5.8	177			
1346	-0.1	-3		1434	-0.4	-12	1505	0.1	3	1608	-0.1	-3			
● 1933	4.9	149		2006	5.1	155	2042	4.8	146	2143	5.3	162			
13 Th	0158	-0.3	-9	28 F	0249	-0.6	-18	13 Su	0305	-0.2	-6	13 M	0419	-0.1	-3
0758	5.3	162		0835	5.8	177	0901	5.6	171	1008	5.9	180			
1442	-0.1	-3		1534	-0.4	-12	1604	0.0	0	1703	-0.1	-3			
2027	4.8	146		2106	5.1	155	2138	4.9	149	2238	5.5	168			
14 F	0249	-0.3	-9	29 Sa	0346	-0.5	-15	14 M	0406	-0.2	-6	14 M	0233	0.3	9
0851	5.4	165		0934	5.8	177	0958	5.8	177	1052	6.0	183			
1540	-0.1	-3		1633	-0.4	-12	1702	0.0	0	1757	-0.2	-6			
2121	4.8	146		2204	5.1	155	2232	5.1	155	2324	5.3	162			
15 Sa	0344	-0.3	-9	30 Su	0443	-0.5	-15	15 Tu	0505	-0.3	-9	15 Tu	0337	0.2	6
0943	5.6	171		1030	5.8	177	1052	6.0	183	0924	6.2	189			
1637	-0.1	-3		1729	-0.5	-15	1757	-0.2	-6	1630	0.3	9			
2213	4.8	146		2259	5.1	155	2324	5.3	162	2201	5.7	174			
31 M	0537	-0.5	-15	31 M	1123	5.8	177								
				1822	-0.5	-15									
				2350	5.2	158									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Philadelphia, Pennsylvania, 2011

Times and Heights of High and Low Waters

April						May						June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm
1 F	0627	0.2 6	16	0618	0.2 6	1 Su	0002	7.0 213	16	0656	0.4 12	1 W	0052	7.2 219	16	0111	7.5 229
	1209	6.3 192	Sa	1146	6.9 210		0646	0.6 18	M	1218	6.7 204		0751	0.7 21	Th	0823	0.4 12
	1851	0.3 9		1841	0.3 9		1224	6.3 192		1906	0.5 15		1321	6.0 183		1343	6.2 189
							1856	0.8 24					1947	0.9 27		2025	0.7 21
2 Sa	0033	6.6 201	17	0012	7.5 229	2 M	0043	7.1 216	17	0040	7.8 238	2 Th	0131	7.2 219	17	0159	7.4 226
	0713	0.2 6	Su	0714	0.1 3		0732	0.6 18	Tu	0750	0.3 9		0836	0.7 21	F	0911	0.4 12
	1253	6.2 189		1239	6.8 207		1307	6.2 189		1310	6.6 201		1403	5.9 180		1433	6.2 189
	1932	0.4 12	O	1932	0.3 9		1937	0.9 27	O	1957	0.6 18		2031	0.9 27		2114	0.8 24
3 Su	0113	6.6 201	18	0102	7.6 232	3 Tu	0122	7.1 216	18	0130	7.8 238	3 F	0209	7.2 219	18	0248	7.2 219
	0757	0.3 9	M	0808	0.0 0		0816	0.6 21	W	0842	0.3 9		0921	0.7 21	Sa	0958	0.4 12
	1334	6.2 189		1331	6.8 207		1348	6.1 186		1402	6.5 198		1445	5.9 180		1523	6.1 186
	● 2010	0.5 15		2022	0.3 9		● 2016	0.9 27		2048	0.7 21		2115	0.9 27		2202	0.8 24
4 M	0151	6.6 201	19	0152	7.7 235	4 W	0158	7.1 216	19	0220	7.7 235	4 Sa	0248	7.2 219	19	0336	7.0 213
	0840	0.3 9	Tu	0901	0.1 3		0859	0.7 21	Th	0933	0.4 12		1006	0.6 18	Su	1043	0.5 15
	1415	6.1 186		1423	6.6 201		1429	6.0 183		1454	6.4 195		1528	6.0 183		1613	6.1 186
	2048	0.6 18		2111	0.4 12		2056	1.0 30		2137	0.8 24		2201	0.9 27		2249	0.9 27
5 Tu	0228	6.6 201	20	0242	7.6 232	5 Th	0234	7.1 216	20	0310	7.5 229	5 Su	0329	7.2 219	20	0425	6.8 207
	0922	0.4 12	W	0952	0.1 3		0943	0.7 21	F	1022	0.4 12		1051	0.6 18	M	1127	0.5 15
	1454	5.9 180		1515	6.5 198		1509	6.0 183		1547	6.3 192		1613	6.1 186		1703	6.2 189
	2124	0.7 21		2201	0.5 15		2136	1.0 30		2226	0.9 27		2249	0.8 24		2337	0.9 27
6 W	0302	6.6 201	21	0333	7.4 226	6 F	0309	7.1 216	21	0401	7.2 219	6 M	0416	7.2 219	21	0515	6.6 201
	1003	0.4 12	Th	1044	0.2 6		1026	0.7 21	Sa	1111	0.5 15		1137	0.5 15	Tu	1210	0.5 15
	1534	5.8 177		1609	6.3 192		1550	5.9 180		1640	6.2 189		1702	6.2 189		1753	6.2 189
	2201	0.7 21		2251	0.6 18		2218	0.9 27		2316	0.9 27		2341	0.8 24			
7 Th	0336	6.7 204	22	0426	7.2 219	7 Sa	0346	7.1 216	22	0453	7.0 213	7 Tu	0508	7.1 216	22	0025	0.9 27
	1046	0.5 15	F	1135	0.4 12		1111	0.7 21	Su	1159	0.6 18		1225	0.4 12	W	0606	6.4 195
	1614	5.8 177		1704	6.2 189		1634	6.0 183		1733	6.2 189		1755	6.4 195		1254	0.5 15
	2239	0.7 21		2342	0.7 21		2304	0.9 27							1844	6.3 192	
8 F	0411	6.7 204	23	0520	6.9 210	8 Su	0430	7.1 216	23	0006	1.0 30	8 W	0037	0.8 24	23	0116	1.0 30
	1130	0.6 18	Sa	1227	0.5 15		1158	0.7 21	M	0547	6.8 207		0606	6.9 210	Th	0659	6.2 189
	1657	5.7 174		1801	6.1 186		1723	6.0 183		1246	6.6 18		1316	0.4 12	O	1339	0.5 15
	2321	0.7 21					2354	0.9 27		1827	6.3 192		1851	6.6 201		1935	6.4 195
9 Sa	0452	6.7 204	24	0035	0.8 24	9 M	0522	7.0 213	24	0058	1.0 30	9 Th	0137	0.8 24	24	0209	0.9 27
	1218	0.6 18	Su	0617	6.7 204		1247	0.7 21	Tu	0641	6.6 201		0707	6.7 204	F	0753	6.1 186
	1746	5.7 174		1319	0.5 15		1816	6.2 189		1334	0.6 18		1409	0.4 12		1425	0.6 18
	● 1857	6.1 186							O	1921	6.3 192		1948	6.8 207		2026	6.5 198
10 Su	0010	0.7 21	25	0129	0.9 27	10 M	0051	0.9 27	25	0151	1.0 30	10 F	0239	0.8 24	25	0303	0.9 27
	0543	6.7 204	Tu	0715	6.5 198		0623	6.9 210	Th	0736	6.4 195		0808	6.6 201	Sa	0846	5.9 180
	1309	0.7 21		1411	0.6 18		1340	0.7 21		1422	0.6 18		1504	0.4 12		1514	0.6 18
	1840	5.8 177		1954	6.2 189		● 1913	6.3 192		2014	6.5 198		2045	7.1 216		2116	6.7 204
11 M	0107	0.7 21	26	0224	0.9 27	11 W	0152	0.9 27	26	0245	1.0 30	11 Th	0341	0.8 24	26	0358	0.9 27
	0646	6.6 201	Tu	0812	6.4 195		0726	6.8 207	Sa	0831	6.3 192		0909	6.5 198	Su	0939	5.9 180
	1405	0.7 21		1502	0.6 18		1435	0.6 18		1511	0.7 21		1600	0.4 12		1604	0.6 18
	● 1938	5.9 180		2049	6.3 192		2011	6.6 201		2106	6.6 201		2142	7.3 223		2205	6.8 207
12 Tu	0209	0.7 21	27	0320	0.9 27	12 Th	0255	0.9 27	27	0340	0.9 27	12 Su	0443	0.7 21	27	0453	0.8 24
	0751	6.6 201	W	0907	6.4 195		0829	6.8 207	F	0924	6.2 189		1007	6.4 195	M	1031	5.8 177
	1502	0.7 21		1553	0.6 18		1531	0.6 18		1559	0.7 21		1656	0.4 12		1654	0.7 21
	2036	6.1 186		2142	6.5 198		2108	6.9 210		2155	6.8 207		2237	7.5 229		2253	6.9 210
13 W	0314	0.7 21	28	0415	0.8 24	13 F	0359	0.8 24	28	0434	0.9 27	13 M	0542	0.5 15	28	0545	0.7 21
	0854	6.7 204	Th	1001	6.4 195		0930	6.8 207	Sa	1016	6.2 189		1104	6.3 192	Tu	1120	5.8 177
	1600	0.6 18		1642	0.6 18		1626	0.5 15		1647	0.7 21		1750	0.5 15		1743	0.7 21
	2134	6.4 195		2231	6.7 204		2204	7.3 223		2243	7.0 213		2330	7.6 232		2339	7.0 213
14 Th	0418	0.6 18	29	0508	0.7 21	14 Sa	0500	0.6 18	29	0526	0.8 24	14 Tu	0638	0.4 12	29	0636	0.6 18
	0954	6.7 204	F	1051	6.4 195		1028	6.7 204		1105	6.2 189		1844	0.5 15		1207	5.8 177
	1656	0.5 15		1729	0.6 18		1721	0.5 15		1734	0.8 24		2328	7.1 216		1832	0.7 21
	2229	6.8 207		2318	6.9 210		2258	7.5 229							1920	0.7 21	
15 F	0519	0.4 12	30	0558	0.6 18	15 Su	0559	0.5 15	30	0616	0.7 21	15 M	0021	7.6 232	30	0022	7.1 216
	1052	6.8 207	Sa	1139	6.4 195		1124	6.7 204		1153	6.1 186		0732	0.4 12		0724	0.6 18
	1749	0.4 12		1813	0.7 21		1814	0.5 15		1819	0.8 24		1251	6.3 192		1252	5.8 177
	2321	7.2 219					2349	7.7 235					● 1935	0.6 18			
													31	0011	7.1 216		
													Tu	0704	0.7 21		
													1238	6.0 183			
													1903	0.9 27			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Philadelphia, Pennsylvania, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0104	7.2	219	16 0140	7.1	216	1 0208	7.3	223	16 0245	6.7	204
F 0811	0.5	15	Sa 0847	0.3	9	M 0917	0.2	6	Tu 0939	0.5	15
1336	5.9	180	1411	6.1	186	1440	6.5	198	1512	6.4	195
● 2008	0.6	18	2051	0.6	18	2127	0.3	9	2155	0.8	24
2 0146	7.2	219	17 0226	7.0	213	2 0255	7.2	219	17 0328	6.5	198
Sa 0857	0.4	12	Su 0930	0.4	12	Tu 1003	0.1	3	W 1016	0.6	18
1420	6.0	183	1457	6.1	186	1527	6.6	201	1554	6.4	195
2055	0.6	18	2137	0.7	21	2219	0.3	9	2237	0.8	24
3 0228	7.2	219	18 0311	6.8	207	3 W 0344	7.0	213	18 0411	6.3	192
Su 0943	0.4	12	M 1012	0.4	12	W 1049	0.0	0	Th 1053	0.6	198
1504	6.1	186	1543	6.1	186	1617	6.8	207	1636	6.4	195
2144	0.6	18	2222	0.8	24	2312	0.4	12	2321	0.9	27
4 0313	7.2	219	19 0356	6.6	201	4 Th 0437	6.8	207	19 0457	6.1	186
M 1028	0.3	9	Tu 1052	0.5	15	Th 1137	0.0	0	F 1130	0.6	18
1551	6.2	189	1629	6.2	189	1710	6.9	210	1720	6.4	195
2235	0.5	15	2306	0.8	24						
5 0401	7.1	216	20 0443	6.4	195	5 F 0008	0.5	15	20 0007	0.9	27
Tu 1114	0.2	6	W 1132	0.5	15	F 0533	6.5	198	Sa 0544	5.9	180
1641	6.4	195	1715	6.2	189	1228	0.1	3	Sa 1210	0.6	18
2328	0.5	15	2352	0.8	24	1806	6.9	210	1807	6.4	195
6 0453	6.9	210	21 0531	6.2	189	6 Sa 0105	0.6	18	21 0056	1.0	30
W 1202	0.1	3	Th 1212	0.5	15	Sa 0632	6.3	192	Su 0635	5.8	177
1733	6.6	201	1803	6.3	192	Sa 1321	0.2	6	Su 1254	0.6	18
						● 1905	6.9	210	● 1857	6.4	195
7 0023	0.6	18	22 0040	0.9	27	7 Su 0205	0.6	18	22 0150	1.0	30
Th 0550	6.7	204	F 0621	6.0	183	Su 0732	6.1	186	M 0729	5.7	174
1252	0.1	3	1254	0.5	15	1417	0.3	9	1345	0.7	21
1829	6.7	204	1852	6.3	192	2004	6.9	210	1951	6.5	198
8 0122	0.6	18	23 0131	0.9	27	8 M 0306	0.7	21	23 0246	1.0	30
F 0649	6.5	198	Sa 0714	5.8	177	M 0834	6.0	183	Tu 0824	5.6	171
1344	0.2	6	Sa 1339	0.5	15	1515	0.4	12	Tu 1441	0.7	21
● 1926	6.9	210	● 1943	6.4	195	2104	6.9	210	2046	6.6	201
9 0222	0.7	21	24 0226	0.9	27	9 Tu 0406	0.6	18	9 W 0343	0.7	21
Sa 0750	6.3	192	Su 0808	5.7	174	Tu 0933	5.9	180	W 0916	6.1	186
1439	0.2	6	Su 1428	0.6	18	Tu 1613	0.4	12	W 1522	0.6	18
2024	7.0	213	2034	6.5	198	2202	7.0	213	2143	6.9	210
10 0324	0.7	21	25 0322	0.9	27	10 W 0503	0.5	15	10 Th 0440	0.9	27
Su 0850	6.1	186	M 0902	5.6	171	Th 1031	6.0	183	Th 1013	6.2	189
1536	0.3	9	M 1521	0.6	18	1709	0.4	12	1648	0.6	18
2122	7.1	216	2126	6.6	201	2256	7.0	213	2237	6.9	210
11 0425	0.6	18	26 0418	0.9	27	11 Th 0558	0.4	12	9 F 0532	0.5	15
M 0950	6.0	183	Tu 0955	5.6	171	Th 1125	6.1	186	Sa 1106	6.4	195
1633	0.3	9	Tu 1615	0.6	18	Th 1803	0.4	12	Tu 1741	0.5	15
2218	7.2	219	2217	6.8	207	2347	7.1	216	2327	7.0	213
12 0524	0.5	15	27 0513	0.8	24	12 F 0648	0.4	12	10 Th 0621	0.4	12
Tu 1047	6.0	183	W 1046	5.7	174	F 1215	6.2	189	Sa 1154	6.5	198
1729	0.4	12	1710	0.6	18	1854	0.5	15	Sa 1832	0.5	15
2313	7.3	223	2305	6.9	210				● 2044	0.6	18
13 0619	0.4	12	28 0605	0.6	18	13 Th 0035	7.0	213	11 Th 0013	7.0	213
W 1141	6.1	186	Sa 1135	5.8	177	Sa 0735	0.4	12	Su 0706	0.5	15
1823	0.4	12	1803	0.5	15	Sa 1302	6.3	192	Su 1239	6.6	201
			2352	7.1	216	● 1942	0.5	15	● 1919	0.6	18
14 0004	7.3	223	29 0656	0.5	15	14 Su 0119	7.0	213	12 M 0057	6.9	210
Th 0712	0.3	9	F 1222	5.9	180	M 0819	0.4	12	M 0748	0.5	15
1233	6.1	186	F 1855	0.5	15	M 1347	6.3	192	M 1322	6.7	204
1915	0.5	15				2028	0.6	18	● 2004	0.6	18
15 0053	7.2	219	30 0038	7.2	219	15 M 0203	6.9	210	12 Th 0057	6.9	223
F 0801	0.3	9	Sa 0744	0.4	12	Tu 0900	0.5	15	Tu 0732	0.3	9
1323	6.1	186	Sa 1308	6.1	186	M 1430	6.3	192	Tu 1300	7.4	226
● 2004	0.6	18	● 1945	0.4	12	2112	0.7	21	● 1958	0.3	9
31 0123	7.3	223	31 Su 0123	7.3	223	14 W 0220	6.6	201	27 0034	7.3	223
			Su 0831	0.3	9	M 0802	0.3	9	W 0827	0.6	18
			1354	6.3	192	M 1327	6.9	210	W 1402	6.7	204
			2036	0.4	12	Tu 2017	0.3	9	W 2047	0.7	21

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Philadelphia, Pennsylvania, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0359 6.6 201		16 Su 0356 5.9 180		1 Tu 0004 0.4 12		16 W 0457 5.5 168		1 Th 0026 0.0 0		16 F 0522 5.4 165	
1049 0.3 9		1022 0.8 24		0532 6.0 183		1129 0.4 12		0601 5.6 171		1206 -0.1 -3	
1623 7.4 226		1601 6.7 204		1211 0.5 15		1701 6.5 198		1238 0.2 6		1736 6.0 183	
2332 0.5 15		2312 1.0 30		1754 6.7 204				1821 6.0 183			
2 Su 0456 6.4 195		17 M 0438 5.8 177		2 W 0057 0.5 15		17 Th 0023 0.5 15		2 F 0115 0.0 0		17 Sa 0046 -0.3 -9	
1141 0.5 15		1102 0.8 24		0631 5.9 180		0547 5.6 171		0656 5.6 171		0615 5.6 171	
1720 7.2 219		1641 6.7 204		1306 0.5 15		1222 0.4 12		1331 0.2 6		1304 -0.1 -3	
		2359 1.0 30		1853 6.5 198		1757 6.4 195		1916 5.8 177		1835 5.9 180	
3 M 0027 0.6 18		18 Tu 0525 5.7 174		3 Th 0150 0.5 15		18 F 0113 0.4 12		3 Sa 0204 0.0 0		18 Su 0138 -0.3 -9	
0555 6.2 189		1148 0.8 24		0729 6.0 183		0643 5.7 174		0751 5.7 174		0713 5.8 177	
1236 0.6 18		1729 6.7 204		1402 0.6 18		1320 0.4 12		1426 0.2 6		1405 -0.1 -3	
1820 7.0 213				1951 6.4 195		1858 6.4 195		2012 5.7 174		1936 5.7 174	
4 Tu 0123 0.7 21		19 W 0048 1.0 30		4 F 0243 0.4 12		19 Sa 0206 0.3 9		4 Su 0254 0.0 0		19 M 0233 -0.3 -9	
0655 6.1 186		0617 5.7 174		0826 6.1 186		0740 5.9 180		0844 5.8 177		0811 5.9 180	
1332 0.6 18		1241 0.8 24		1459 0.6 18		1423 0.4 12		1521 0.2 6		1508 -0.1 -3	
1921 6.8 207		1827 6.7 204		2047 6.3 192		2001 6.3 192		2106 5.6 171		2038 5.6 171	
5 W 0220 0.7 21		20 Th 0142 0.9 27		5 Sa 0334 0.4 12		20 Su 0302 0.2 6		5 M 0343 0.0 0		20 Tu 0329 -0.4 -12	
0755 6.1 186		0713 5.8 177		0920 6.2 189		0838 6.2 189		0936 5.9 180		0910 6.2 189	
1430 0.7 21		1341 0.8 24		1554 0.5 15		1527 0.3 9		1615 0.1 3		1611 -0.2 -6	
2021 6.7 204		1929 6.7 204		2141 6.3 192		2101 6.3 192		2158 5.6 171		2138 5.6 171	
6 Th 0316 0.7 21		21 F 0237 0.8 24		6 Su 0424 0.3 9		21 M 0357 0.1 3		6 Tu 0431 0.0 0		21 W 0427 -0.4 -12	
0854 6.2 189		0811 6.0 183		1012 6.4 195		0935 6.5 198		1026 6.1 186		1007 6.4 195	
1527 0.7 21		1444 0.7 21		1648 0.4 12		1629 0.2 6		1708 0.0 0		1711 -0.3 -9	
2118 6.7 204		2030 6.7 204		2232 6.3 192		2200 6.3 192		2248 5.6 171		2236 5.6 171	
7 F 0410 0.6 18		22 Sa 0333 0.7 21		7 M 0512 0.3 9		22 Tu 0453 0.0 0		7 W 0519 0.0 0		22 Th 0523 -0.5 -15	
0950 6.4 195		0908 6.3 192		1059 6.6 201		1029 6.8 207		1112 6.2 189		1102 6.5 198	
1623 0.6 18		1548 0.6 18		1739 0.3 9		1729 0.1 3		1758 0.0 0		1809 -0.4 -12	
2212 6.8 207		2129 6.8 207		2320 6.3 192		2256 6.3 192		2336 5.5 168		2331 5.6 171	
8 Sa 0501 0.5 15		23 Su 0428 0.5 15		8 Tu 0557 0.3 9		23 W 0547 -0.1 -3		8 Th 0604 0.0 0		23 F 0618 -0.5 -15	
1041 6.5 198		1003 6.6 201		1144 6.7 204		1122 7.1 216		1157 6.2 189		1156 6.6 201	
1717 0.6 18		1649 0.5 15		1827 0.3 9		1827 0.1 -3		1847 0.1 -3		1905 -0.5 -15	
2302 6.8 207		2225 6.9 210		2350 6.3 192						1957 -0.5 -15	
9 Su 0548 0.5 15		24 M 0522 0.4 12		9 W 0005 6.2 189		24 Th 0640 -0.2 -6		9 F 0022 5.4 165		24 M 0025 5.6 171	
1129 6.7 204		1055 7.0 213		0640 0.3 9		1214 7.2 219		0649 0.0 0		0711 -0.6 -18	
1807 0.5 15		1748 0.3 9		1227 6.7 204		1922 0.1 -3		1239 6.3 192		1247 6.6 201	
2348 6.8 207		2319 7.0 213		1914 0.3 9				1933 -0.1 -3		● 1957 -0.5 -15	
10 M 0633 0.5 15		25 Tu 0614 0.2 6		10 Th 0049 6.1 186		25 F 0042 6.2 189		10 Sa 0105 5.4 165		25 Su 0116 5.5 168	
1213 6.8 207		1146 7.3 223		0721 0.4 12		0731 -0.2 -6		0732 0.0 0		0803 -0.6 -18	
1854 0.5 15		1845 0.2 6		1307 6.7 204		1305 7.2 219		1319 6.3 192		1338 6.5 198	
		● 1940 0.1 3		1958 0.4 12		● 2016 -0.2 -6		● 2017 0.0 0		2047 -0.5 -15	
11 Tu 0032 6.7 204		26 W 0011 7.0 213		11 F 0130 5.9 180		26 Sa 0134 6.1 186		11 Su 0146 5.3 162		26 M 0207 5.5 168	
0714 0.6 18		0705 0.1 3		0801 0.5 15		0823 -0.2 -6		0814 0.0 0		0853 -0.5 -15	
1255 6.9 210		1236 7.5 229		1345 6.7 204		1356 7.1 216		1358 6.2 189		1427 6.4 195	
○ 1939 0.6 18		● 1940 0.1 3		2041 0.4 12		2108 -0.1 -3		2101 0.0 0		2135 -0.5 -15	
12 W 0114 6.6 201		27 Th 0102 6.9 210		12 Sa 0211 5.8 177		27 Su 0226 6.0 183		12 M 0227 5.2 158		27 Tu 0257 5.5 168	
0754 0.7 21		0755 0.1 3		0840 0.5 15		0913 -0.1 -3		0857 0.0 0		0942 -0.5 -15	
1334 6.9 210		1325 7.6 232		1422 6.6 201		1447 7.0 213		1435 6.2 189		1516 6.2 189	
2023 0.7 21		2033 0.1 3		2124 0.5 15		2158 -0.1 -3		2144 0.0 0		2222 -0.4 -12	
13 Th 0155 6.4 195		28 F 0153 6.7 204		13 Su 0251 5.7 174		28 M 0319 5.8 177		13 Tu 0307 5.2 158		28 W 0347 5.4 165	
0832 0.8 24		0845 0.1 3		0919 0.5 15		1004 -0.1 -3		0940 -0.1 -3		1030 -0.4 -12	
1412 6.8 207		1415 7.6 232		1458 6.6 201		1539 6.7 204		1514 6.2 189		1606 6.0 183	
2105 0.8 24		2126 0.2 6		2207 0.6 18		2248 0.0 0		2228 -0.1 -3		2307 -0.4 -12	
14 F 0235 6.2 189		29 Sa 0245 6.5 198		14 M 0331 5.6 171		29 Tu 0412 5.7 174		14 W 0348 5.2 158		29 Th 0437 5.4 165	
0908 0.8 24		0935 0.2 6		0959 0.5 15		1054 0.0 0		1025 -0.1 -3		1118 -0.3 -9	
1449 6.8 207		1507 7.4 226		1534 6.6 201		1632 6.5 198		1555 6.2 189		1656 5.8 177	
2147 0.8 24		2219 0.3 9		2250 0.6 18		2337 0.0 0		2312 -0.1 -3		2352 -0.4 -12	
15 Sa 0315 6.1 186		30 Su 0339 6.3 192		15 Tu 0412 5.5 168		30 W 0506 5.6 171		15 Th 0433 5.3 162		30 F 0528 5.3 162	
0945 0.8 24		1026 0.3 9		1041 0.5 15		1145 0.1 3		1114 -0.1 -3		1207 -0.2 -6	
1525 6.7 204		1601 7.2 219		1614 6.5 198		2335 0.5 15		1642 6.2 189		1747 5.5 168	
2229 0.9 27		2311 0.4 12						2358 -0.2 -6			
16 M 0435 6.1 186		31 M 1118 0.4 12								31 Sa 0036 -0.3 -9	
1657 7.0 213		1657 7.0 213								1257 -0.2 -6	
										1840 5.3 162	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Ocean City, Maryland, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0446 3.9 119	16 0416 3.6 110	1 Tu 0612 3.6 110	16 0531 4.1 125	1 Tu 0509 3.4 104	16 0410 3.9 119						
1120 0.0 0	Su 1041 0.4 12	Tu 1242 -0.1 -3	W 1155 -0.2 -6	Tu 1136 0.2 6	W 1032 0.1 3						
1657 2.7 82	1628 2.7 82	1819 2.7 82	1747 3.3 101	1717 2.7 82	1630 3.4 104						
2306 -0.4 -12	2234 -0.1 -3		2359 -0.7 -21	2329 -0.2 -6	2244 -0.4 -12						
2 Su 0538 3.9 119	17 0507 3.9 119	2 W 0030 -0.5 -15	17 0621 4.3 131	2 W 0551 3.4 104	17 0504 4.1 125						
1213 -0.1 -3	M 1134 0.1 3	W 0654 3.7 113	Th 1242 -0.5 -15	W 1214 0.1 3	Th 1124 -0.2 -6						
1749 2.7 82	1719 2.9 88	1318 -0.1 -3	1838 3.6 110	1758 2.9 88	1724 3.8 116						
2357 -0.5 -15	2327 -0.4 -12	● 1902 2.9 88			2342 -0.7 -21						
3 M 0626 4.0 122	18 0556 4.2 128	3 Th 0112 -0.5 -15	18 0052 -1.0 -30	3 Th 0013 -0.2 -6	18 0556 4.2 128						
1259 -0.2 -6	Tu 1223 -0.1 -3	0733 3.7 113	F 0710 4.4 134	0629 3.5 107	F 1213 -0.5 -15						
1837 2.8 85	1810 3.1 94	1353 -0.2 -6	1328 -0.7 -21	1247 0.0 0	F 1816 4.1 125						
4 Tu 0045 -0.6 -18	19 0018 -0.6 -18	4 F 0152 -0.4 -12	19 0144 -1.1 -34	4 F 0053 -0.3 -9	19 0036 -0.9 -27						
0712 4.0 122	W 0645 4.3 131	0810 3.6 110	Sa 0759 4.3 131	0705 3.5 107	Sa 0646 4.2 128						
1341 -0.2 -6	1309 -0.4 -18	1427 -0.2 -6	1414 -0.9 -27	1319 0.0 0	1300 -0.7 -21						
● 1922 2.8 85	O 1900 3.3 101	2023 3.1 94	2020 4.1 125	● 1916 3.3 101	O 1908 4.4 134						
5 W 0129 -0.5 -15	20 0108 -0.8 -24	5 Sa 0231 -0.4 -12	20 0235 -1.0 -30	5 Sa 0131 -0.3 -9	20 0129 -1.0 -30						
0755 3.9 119	Th 0733 4.4 134	0847 3.5 107	Su 0847 4.1 125	0741 3.5 107	Su 0736 4.1 125						
1421 -0.2 -6	1355 -0.6 -18	1501 -0.1 -3	1500 -0.9 -27	1351 -0.1 -3	1346 -0.9 -27						
2007 2.9 88	1950 3.5 107	2102 3.2 98	2111 4.2 128	1954 3.4 104	1959 4.6 140						
6 Th 0212 -0.4 -12	21 0158 -0.9 -27	6 Su 0310 -0.2 -6	21 0329 -0.9 -27	6 Su 0208 -0.2 -6	21 0221 -1.0 -30						
0836 3.8 116	F 0821 4.4 134	0924 3.4 104	M 0935 3.8 116	0818 3.4 104	M 0825 3.9 119						
1459 -0.1 -3	1441 -0.7 -21	1535 0.0 0	1548 -0.8 -24	1424 0.0 0	1433 -0.8 -24						
2049 2.9 88	2040 3.6 110	2141 3.2 98	2202 4.1 125	2032 3.5 107	2050 4.6 140						
7 F 0254 -0.3 -9	22 0249 -0.9 -27	7 M 0352 0.0 0	22 0424 -0.6 -18	7 M 0246 -0.1 -3	22 0314 -0.8 -24						
0916 3.7 113	Sa 0908 4.3 131	1001 3.2 98	Tu 1024 3.5 107	0854 3.3 101	Tu 0914 3.7 113						
1537 -0.1 -3	1527 -0.7 -21	1612 0.1 3	1639 -0.6 -12	1458 0.0 0	1522 -0.7 -21						
2132 2.9 88	2131 3.7 113	2221 3.2 98	2255 4.0 122	2110 3.5 107	2141 4.4 134						
8 Sa 0337 -0.1 -3	23 0343 -0.8 -24	8 Tu 0435 0.2 6	23 0523 -0.3 -9	8 Tu 0325 0.0 0	23 0408 -0.5 -15						
0955 3.5 107	Su 0956 4.0 122	1039 3.0 91	W 1116 3.1 94	0930 3.2 98	W 1004 3.4 104						
1616 0.1 3	1616 -0.7 -21	1650 0.2 6	1732 -0.4 -12	1533 0.2 6	1613 -0.5 -15						
2214 2.9 88	2223 3.7 113	2303 3.1 94	2352 3.7 113	2149 3.5 107	2234 4.2 128						
9 Su 0422 0.1 3	24 0440 -0.6 -18	9 W 0522 0.4 12	24 0625 -0.1 -3	9 W 0406 0.2 6	24 0506 -0.2 -6						
1034 3.3 101	M 1045 3.7 113	1119 2.8 85	Th 1212 2.8 85	1008 3.0 91	1056 3.1 94						
1655 0.2 6	1706 -0.6 -18	1732 0.3 9	1830 -0.2 -6	1611 0.3 9	1708 -0.2 -6						
2257 2.9 88	2317 3.7 113	2350 3.1 94	● 2229 3.5 107	2229 3.5 107	2329 3.9 119						
10 M 0509 0.3 9	25 0539 -0.3 -9	10 Th 0612 0.5 15	25 0055 3.5 107	10 0451 0.4 12	25 0606 0.1 3						
1115 3.0 91	Tu 1137 3.3 101	1204 2.6 79	F 0731 0.2 6	Th 1047 2.8 85	F 1151 2.8 85						
1736 0.3 9	1759 -0.5 -15	1819 0.3 9	1315 2.5 76	1653 0.4 12	1807 0.0 0						
2344 2.9 88			1931 -0.1 -3	2314 3.4 104							
11 Tu 0559 0.5 15	26 0015 3.6 110	11 F 0042 3.1 94	26 0206 3.3 101	11 0541 0.5 15	26 0030 3.6 110						
1159 2.8 85	W 0643 -0.1 -3	0708 0.6 18	Sa 0840 0.3 9	1131 2.7 82	Sa 0710 0.3 9						
1819 0.3 9	1233 2.9 88	1257 2.5 76	1425 2.4 73	1742 0.4 12	1254 2.6 79						
● 1854 -0.4 -12	● 1911 0.3 9	● 1911 0.3 9	2035 0.0 0		● 1909 0.2 6						
12 W 0034 2.9 88	27 0119 3.5 107	12 Sa 0142 3.2 98	27 0318 3.3 101	12 0005 3.4 104	27 0138 3.3 101						
0652 0.6 18	Th 0749 0.1 3	0807 0.7 21	Su 0949 0.3 9	Sa 0636 0.6 18	Su 0814 0.4 12						
1248 2.6 79	1336 2.6 79	1357 2.4 73	1532 2.4 73	1223 2.6 79	1403 2.5 76						
● 1904 0.4 12	1953 -0.3 -9	2007 0.3 9	2139 0.0 0	● 1837 0.4 12	2013 0.3 9						
13 Th 0129 3.0 91	28 0228 3.4 104	13 Su 0244 3.3 101	28 0420 3.3 101	13 0104 3.4 104	28 0249 3.2 98						
0748 0.7 21	F 0858 0.2 6	0908 0.6 18	M 1049 0.3 9	Su 0735 0.7 21	M 0918 0.5 15						
1342 2.5 76	1443 2.4 73	1459 2.5 76	1630 2.6 79	1325 2.6 79	1511 2.6 79						
1953 0.3 9	2053 -0.2 -6	2107 0.1 3	2238 -0.1 -3	1937 0.3 9	2118 0.3 9						
14 F 0226 3.1 94	29 0335 3.5 107	14 M 0344 3.6 110	14 0209 3.5 107	14 0451 0.4 12	29 0350 3.2 98						
0846 0.7 21	Sa 1008 0.2 6	1008 0.4 12	M 0835 0.6 18	Th 1013 0.5 15	Tu 1606 2.8 85						
1439 2.5 76	1547 2.4 73	1558 2.7 82	1430 2.7 82	1606 2.8 85	2040 0.2 6						
2046 0.2 6	2155 -0.2 -6	2207 -0.2 -6	2040 0.2 6	2217 0.2 6							
15 Sa 0323 3.4 104	30 0435 3.5 107	15 Tu 0439 3.9 119	15 0209 3.5 107	15 0312 3.7 113	30 0438 3.2 98						
0944 0.5 15	Su 1110 0.1 3	1104 0.1 3	W 0935 0.4 12	W 1057 0.4 12	W 1651 3.0 91						
1535 2.5 76	1644 2.5 76	1654 3.0 91	1532 3.0 91	2143 -0.1 -3	2307 0.2 6						
2140 0.1 3	2253 -0.3 -9	2304 -0.5 -15									
31 M 0527 3.6 110											
1200 0.0 0											
1734 2.6 79											
2344 -0.4 -12											
31 M 1134 0.3 9											
1731 3.2 98											
2351 0.1 3											

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Ocean City, Maryland, 2011

Times and Heights of High and Low Waters

April						May						June							
Time		Height		Time		Height		Time		Height		Time		Height		Time		Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0556	3.3	101	16	0529	3.9	119	1	0004	0.3	9	16	0007	-0.4	-12	1	0057	0.3	9
	1208	0.2	6	Sa	1142	-0.5	-15	M	0557	3.2	98	M	0558	3.5	107	W	0647	3.1	94
	1809	3.5	107	Sa	1755	4.5	137		1201	0.3	9		1206	-0.6	-18		1246	0.1	3
2 Sa	0030	0.0	0	17	0021	-0.7	-21	2	0043	0.2	6	17	0100	-0.5	-15	2	0139	0.2	6
	0633	3.3	101	Su	0621	3.9	119	M	0637	3.2	98	Tu	0650	3.4	104	Th	0730	3.1	94
	1241	0.1	3	Su	1231	-0.7	-21		1238	0.2	6		1256	-0.6	-18		1328	0.1	3
	1847	3.7	113	O	1847	4.7	143		1856	4.0	122		1920	4.8	146		1955	4.3	131
3 Su	0108	-0.1	-3	18	0114	-0.8	-24	3	0122	0.1	3	18	0152	-0.5	-15	3	0221	0.2	6
	0710	3.3	101	M	0712	3.8	116	Tu	0717	3.2	98	W	0742	3.4	104	F	0814	3.1	94
	1314	0.1	3	M	1319	-0.8	-24		1315	0.2	6		1345	-0.6	-18		1411	0.1	3
	● 1925	3.8	116		1938	4.8	146		● 1936	4.1	125		2011	4.7	143		2038	4.4	134
4 M	0145	0.0	0	19	0206	-0.8	-24	4	0201	0.1	3	19	0242	-0.4	-12	4	0304	0.1	3
	0747	3.3	101	Tu	0803	3.7	113	W	0757	3.2	98	Th	0833	3.3	101	Sa	0859	3.2	98
	1348	0.1	3	Tu	1408	-0.7	-21		1353	0.2	6		1435	-0.4	-12		1457	0.1	3
	2003	3.9	119		2029	4.8	146		2017	4.2	128		2101	4.5	137		2123	4.3	131
5 Tu	0223	0.0	0	20	0258	-0.6	-18	5	0241	0.2	6	20	0333	-0.2	-6	5	0350	0.1	3
	0825	3.2	98	W	0853	3.5	107	M	0838	3.1	94	F	0923	3.2	98	Su	0945	3.2	98
	1423	0.2	6		1457	-0.6	-18		1433	0.2	6		1526	-0.2	-6		1546	0.1	3
	2042	3.9	119		2121	4.6	140		2059	4.1	125		2151	4.2	128		2208	4.2	128
6 W	0302	0.1	3	21	0351	-0.4	-12	6	0324	0.3	9	21	0424	0.0	0	6	0438	0.1	3
	0903	3.1	94	Th	0944	3.3	101	F	0919	3.1	94	Sa	1013	3.1	94	M	1034	3.3	101
	1500	0.2	6		1549	-0.3	-9		1515	0.3	9		1619	0.0	0		1640	0.2	6
	2121	3.9	119		2212	4.3	131		2141	4.1	125		2240	3.9	119		2256	4.1	125
7 Th	0343	0.3	9	22	0446	-0.1	-3	7	0409	0.3	9	22	0515	0.2	6	7	0528	0.1	3
	0941	3.0	91	F	1036	3.0	91	Sa	1003	3.0	91	Su	1105	3.0	91	Tu	1127	3.4	104
	1540	0.3	9		1644	-0.1	-3		1602	0.4	12		1714	0.3	9		1738	0.3	9
	2202	3.8	116		2306	3.9	119		2227	4.0	122		2329	3.6	110		2348	3.8	116
8 F	0428	0.4	12	23	0544	0.1	3	8	0458	0.4	12	23	0606	0.3	9	8	0619	0.1	3
	1022	2.9	88	Sa	1130	2.9	88	Su	1050	3.0	91	M	1158	2.9	88	W	1224	3.5	107
	1624	0.4	12		1742	0.2	6		1655	0.4	12		1811	0.5	15		1840	0.3	9
	2247	3.7	113						2316	3.9	119					O	1922	0.8	24
9 Sa	0518	0.5	15	24	0002	3.6	110	9	0550	0.4	12	24	0021	3.3	101	9	0044	3.6	110
	1107	2.8	85	Su	0642	0.4	12	M	1143	3.0	91	Tu	0655	0.4	12	F	0711	0.0	0
	1714	0.5	15		1229	2.7	82		1753	0.4	12		1254	2.9	88		1325	3.7	113
	2337	3.7	113		O	1843	0.4	12					1908	0.6	18		1944	0.3	9
10 Su	0612	0.6	18	25	0102	3.3	101	10	0010	3.8	116	25	0115	3.1	94	10	0144	3.4	104
	1200	2.8	85	M	0739	0.5	15	Tu	0644	0.4	12	W	0742	0.5	15	Sa	0820	0.6	18
	1812	0.5	15		1333	2.7	82		1242	3.2	98		1352	3.0	91		1452	3.4	104
					1945	0.5	15		O	1856	0.4	12		2006	0.7	21		2049	0.2	6
11 M	0034	3.6	110	26	0205	3.2	98	11	0109	3.7	113	26	0210	3.0	91	11	0246	3.3	101
	0708	0.6	18	Tu	0833	0.6	18	W	0738	0.3	9	Th	0827	0.6	18	Sa	0859	-0.2	-6
	1301	2.9	88		1436	2.8	85		1345	3.4	104		1447	3.1	94		1528	4.1	125
	● 1914	0.4	12		2046	0.6	18		2000	0.3	9		2103	0.7	21		2154	0.1	3
12 Tu	0137	3.6	110	27	0303	3.1	94	12	0211	3.6	110	27	0302	2.9	88	12	0346	3.2	98
	0806	0.5	15	W	0921	0.6	18	Th	0833	0.1	3	F	0911	0.5	15	Su	0955	-0.3	-9
	1406	3.0	91		1531	3.0	91		1448	3.7	113		1536	3.4	104		1625	4.3	131
	2018	0.3	9		2144	0.5	15		2105	0.1	3		2157	0.7	21		2257	0.0	0
13 W	0241	3.7	113	28	0353	3.1	94	13	0312	3.6	110	28	0351	2.9	88	13	0443	3.2	98
	0903	0.3	9	Th	1005	0.5	15	F	0927	-0.1	-3	Sa	0955	0.5	15	M	1051	-0.4	-12
	1509	3.4	104		1617	3.2	98		1547	4.0	122		1621	3.6	110		1719	4.5	137
	2123	0.1	3		2236	0.5	15		2209	-0.1	-3		2247	0.6	18		2355	-0.2	-6
14 Th	0340	3.8	116	29	0437	3.1	94	14	0409	3.6	110	29	0436	2.9	88	14	0538	3.2	98
	0959	0.0	0	F	1045	0.4	12	Sa	1021	-0.3	-9	Su	1039	0.4	12	W	1133	0.2	6
	1608	3.8	116		1658	3.5	107		1642	4.4	134		1704	3.8	116		1812	4.6	140
	2225	-0.2	-6		2322	0.4	12		2310	-0.3	-9		2333	0.5	15				
15 F	0436	3.9	119	30	0518	3.1	94	15	0504	3.5	107	30	0520	3.0	91	15	0048	-0.3	-9
	1052	-0.3	-9	Sa	1123	0.3	9	Su	1114	-0.5	-15	M	1122	0.3	9	W	0631	3.2	98
	1702	4.2	128		1737	3.7	113		1735	4.6	140		1746	4.0	122		1820	4.2	128
	2325	-0.5	-15									31	0016	0.4	12				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Ocean City, Maryland, 2011

Times and Heights of High and Low Waters

July			August			September								
Time	Height		Time	Height		Time	Height		Time	Height				
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm			
1 F 1306 ● 1933	0.2 3.2 -0.1 4.5	6 98 -3 137	16 Sa 1356 2018	0.1 0.2 -0.2 4.2	-3 98 -6 128	1 M 1424 2042	-0.2 -0.4 -12 4.5	-6 119 -12 137	16 Th 1457 2107	0.2 0.2 -0.2 3.7	6 110 -6 113	16 F 1556 2156	0.5 3.9	15 119
2 Sa 1352 2018	0.0 -0.2 4.5	0 -6 137	17 Su 1440 2059	0.0 -0.1 4.0	0 -3 122	2 Tu 1516 2128	-0.3 -0.2 -6	-9 113 -12	2 W 1539 2145	0.3 0.4 12	9 12 107	17 Sa 1637 2231	0.6 3.9 119	18 119
3 Su 1440 2103	0.2 -0.2 4.5	-3 137	18 M 1525 2139	0.1 3.8	101 116	3 W 1611 2216	-0.3 -0.2 -6	-9 128 122	18 Th 1623 2224	0.4 0.6 12	12 18 101	18 Su 1727 2315	0.8 3.8 24	24 116
4 M 1531 2149	-0.1 -0.1 4.3	-3 131	19 Tu 1610 2219	0.2 3.6	6 110	4 Th 1710 2307	-0.3 -0.2 -6	-9 128 113	19 F 1710 2304	0.5 0.8 15	15 24 94	19 Su 1820 ●	0.9 3.7 113	27 34
5 Tu 1626 2237	0.1 0.0 4.1	-3 125	20 W 1658 2300	0.3 3.3	9 101	5 F 1144 1812	-0.2 -0.2 -6	-6 125 6	20 Sa 1136 1800	0.7 1.0 21	21 30 88	20 M 1333 2010	2.9 4.0 88	88 34
6 W 1724 2327	0.1 0.1 3.8	-3 116	21 Th 1730 2343	0.4 3.1	12 94	6 Sa 1245 ●	0.0 0.4	101 12	21 Su 1854 ●	0.8 1.1 24	24 34 88	21 W 1347 2015	2.9 3.8 88	88 34
7 Th 1826	-0.1 0.2	-3 6	22 F 1839	0.5	15	7 Su 1351 2024	3.0 0.5	91 15	22 M 1325 1951	2.8 3.6 85	85 11 107	22 Th 1448 2112	3.0 3.9 91	91 27
8 F 1305 ● 1930	3.5 -0.1 0.3	107 -3 9	23 Sa 1311 ●	2.9 1.0	88 30	8 M 1459 2132	2.9 0.5	88 15	23 Tu 1425 2050	2.8 3.7 85	85 113 34	23 F 1544 2311	3.3 3.9 101	101 15
9 Sa 1408 2036	3.2 4.0 0.3	98 122 9	24 Su 1408 2030	2.7 1.0	82 30	9 Tu 1602 2237	2.8 0.4	85 12	24 W 1523 2147	2.9 3.9 88	88 119 27	24 Sa 1637 2257	3.6 4.3 110	91 3
10 Su 1512 2143	3.0 4.1 0.3	91 125 9	25 M 1504 2127	2.7 0.9	82 27	10 W 1658 2332	2.9 0.3	88 9	25 Th 1617 2241	3.0 4.1 91	91 125 6	25 Su 1727 2345	4.1 4.5 125	125 -3
11 M 1612 2247	2.9 4.2 0.2	88 128 6	26 Tu 1557 2223	2.7 0.8	82 24	11 Th 1746	3.0 4.1	91 125	26 F 1707 2331	3.3 0.3 101	101 110 9	26 M 1816	4.4 4.5 134	134 -9
12 Tu 1708 2345	2.9 4.3 0.1	88 131 3	27 W 1647 2315	2.9 0.6	88 18	12 F 1559 1831	0.2 4.1	6 125	27 Sa 1755	3.7 4.6 113	113 140 143	27 Tu 1301 ●	-0.3 -0.5 -9	-9 -15 134
13 W 1800	3.0 4.3	91 131	28 Th 1735	3.1 4.3	94 131	13 Sa 1253 ●	0.1 4.1	3 125	28 Su 1227 ●	0.1 -0.3 3	9 -9 143	28 W 1353 ●	-0.5 -0.5 -15	-15 -15 131
14 Th 1222 1848	0.0 -0.3 4.3	0 -9 131	29 F 1156 1822	0.4 4.5	12 137	14 Su 1336 1951	0.1 4.0	3 122	29 M 1318 1930	-0.2 -0.4 -6	-6 131 140	29 Th 1446 2045	-0.5 -0.4 -15	-15 -12 125
15 F 1310 ● 1934	-0.1 -0.3 4.3	-3 131	30 Sa 1245 ●	0.1 4.6	3 140	15 M 1416 2029	0.1 3.9	3 119	30 Tu 1409 2018	-0.4 -0.5 -12	-12 137 137	15 Th 1511 2113	0.4 0.5 12	-12 -6 116
			31 Su 1335 1955	0.1 4.6	-3 140	31 W 1501 2106	-0.1 4.3	-3 131	31 W 1501 2106	-0.4 -0.4 -12	-12 143 131			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Ocean City, Maryland, 2011

Times and Heights of High and Low Waters

October				November				December						
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height			
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm			
1 Sa 0343	-0.3	-9	16 Su 0321	0.6	18	1 Tu 0515	0.2	6	16 W 0429	0.5	15	1 Th 0548	0.3	9
1007	4.8	146	0947	4.1	125	1139	4.0	122	1053	4.0	122	1201	3.5	107
1638	0.1	3	1611	0.8	24	1819	0.4	12	1726	0.6	18	1837	0.3	9
2228	3.5	107	2204	3.1	94				2316	3.0	91			
2 Su 0438	0.0	0	17 M 0403	0.7	21	2 W 0004	3.0	91	17 Th 0524	0.6	18	2 F 0032	2.9	88
1103	4.5	137	1031	4.0	122	6 0618	0.4	12	1144	3.8	116	6 0647	0.5	15
1740	0.3	9	1700	0.9	27	1239	3.7	113	1818	0.6	18	1255	3.2	98
2324	3.2	98	2248	3.0	91	● 1919	0.5	15				1926	0.4	12
3 M 0538	0.2	6	18 Tu 0452	0.8	24	3 Th 0110	2.9	88	18 F 0013	3.1	94	3 Sa 0133	2.9	88
1204	4.2	128	1118	3.9	119	7 0722	0.6	18	0625	0.6	18	7 0747	0.6	18
1844	0.5	15	1752	1.0	30	1342	3.5	107	1239	3.7	113	1350	3.0	91
●			2338	3.0	91	2015	0.6	18	● 1910	0.4	12	2013	0.4	12
4 Tu 0027	3.0	91	19 W 0547	0.8	24	4 F 0218	3.0	91	19 Sa 0114	3.3	101	4 Su 0231	3.0	91
0641	0.4	12	1212	3.8	116	8 0825	0.7	21	0728	0.5	15	8 0846	0.7	21
1310	3.9	119	1847	1.0	30	1443	3.3	101	1339	3.6	110	1445	2.8	85
1950	0.7	21	●			2106	0.6	18	2004	0.3	9	2058	0.4	12
5 W 0137	2.9	88	20 Th 0037	3.0	91	5 Sa 0317	3.2	98	20 Su 0217	3.6	110	5 M 0324	3.2	98
0747	0.5	15	0647	0.8	24	9 0926	0.7	21	0832	0.4	12	9 0943	0.7	21
1421	3.7	113	1311	3.8	116	1535	3.3	101	1439	3.6	110	1535	2.8	85
2054	0.7	21	1942	0.8	24	2151	0.5	15	2057	0.1	3	2143	0.4	12
6 Th 0249	3.0	91	21 F 0141	3.2	98	6 Su 0405	3.4	104	21 M 0317	3.9	119	6 Tu 0410	3.4	104
0852	0.6	18	0750	0.7	21	1021	0.6	18	0936	0.2	6	1035	0.6	18
1524	3.7	113	1413	3.9	119	1620	3.2	98	1538	3.6	110	1621	2.8	85
2150	0.7	21	2037	0.6	18	2231	0.5	15	2151	-0.2	-6	2227	0.3	9
7 F 0349	3.2	98	22 Sa 0243	3.5	107	7 M 0446	3.6	110	22 Tu 0414	4.3	131	7 W 0454	3.6	110
0954	0.6	18	0853	0.5	15	1108	0.5	15	1038	-0.1	-3	1122	0.5	15
1616	3.6	110	1511	4.0	122	1700	3.2	98	1634	3.6	110	1705	2.8	85
2237	0.6	18	2131	0.4	12	2309	0.4	12	2245	-0.4	-12	2310	0.2	6
8 Sa 0436	3.4	104	23 Su 0341	3.9	119	8 Tu 0525	3.8	116	23 M 0508	4.6	140	8 Th 0536	3.8	116
1048	0.5	15	0956	0.2	6	1150	0.4	12	1137	-0.3	-9	1204	0.4	12
1658	3.6	110	1607	4.1	125	1739	3.2	98	1727	3.6	110	1748	2.9	88
2316	0.5	15	2223	0.1	3	2346	0.3	9	2337	-0.6	-18	2351	0.1	3
9 Su 0516	3.6	110	24 M 0436	4.3	131	9 W 0603	4.0	122	24 Th 0601	4.8	146	9 F 0617	3.9	119
1134	0.4	12	1055	0.0	0	1229	0.4	12	1232	-0.4	-12	1244	0.3	9
1736	3.6	110	1659	4.1	125	1818	3.3	101	1820	3.5	107	1830	3.0	91
2350	0.4	12	2313	-0.2	-6							● 1856	3.1	94
10 M 0554	3.8	116	25 Tu 0528	4.7	143	10 Th 0023	0.3	9	25 F 0029	-0.7	-21	10 Sa 0032	0.0	0
1215	0.3	9	1152	-0.3	-9	6 0642	4.1	125	0654	4.9	149	6 0659	4.1	125
1813	3.6	110	1750	4.1	125	1307	0.3	9	1325	-0.5	-15	1324	0.2	6
●			● 1841	4.0	122	1858	3.2	98	● 1913	3.5	107	● 1912	3.0	91
11 Tu 0024	0.4	12	26 W 0002	-0.4	-12	11 O 0100	0.2	6	26 F 0119	-0.8	-24	11 Su 0113	0.0	0
0631	4.0	122	0619	5.0	152	7 0722	4.2	128	0746	4.9	149	7 0741	4.1	125
1253	0.3	9	1246	-0.4	-12	F 1346	0.3	9	1416	-0.5	-15	1404	0.2	6
1850	3.6	110	● 1841	4.0	122	1938	3.2	98	2005	3.4	104	1955	3.0	91
12 W 0057	0.3	9	27 Th 0051	-0.6	-18	12 Sa 0137	0.2	6	27 Su 0210	-0.7	-21	12 M 0154	-0.1	-3
0709	4.1	125	0711	5.1	155	8 0802	4.2	128	0838	4.7	143	8 0822	4.2	128
1330	0.3	9	1338	-0.5	-15	1425	0.4	12	1508	-0.3	-9	1445	0.1	3
1927	3.5	107	1933	3.9	119	2018	3.2	98	2057	3.3	101	2038	3.0	91
13 Th 0131	0.3	9	28 F 0139	-0.6	-18	13 Su 0215	0.3	9	28 M 0301	-0.5	-15	13 Tu 0236	0.0	0
0747	4.2	128	0803	5.1	155	8 0843	4.2	128	0929	4.5	137	14 Sa 0904	4.1	125
1407	0.4	12	1431	-0.4	-12	1506	0.5	15	1600	-0.2	-6	1528	0.1	3
2005	3.5	107	2024	3.8	116	2059	3.1	94	2148	3.2	98	2121	3.1	94
14 F 0206	0.4	12	29 Sa 0229	-0.5	-15	14 M 0924	4.1	125	29 Tu 0354	-0.3	-9	14 W 0322	0.0	0
0826	4.2	128	0855	5.0	152	15 1549	0.5	15	1019	4.1	125	10 W 0947	4.1	125
1446	0.5	15	1525	-0.2	-6	2141	3.1	94	1652	0.0	0	1612	0.1	3
2044	3.4	104	2116	3.5	107				2241	3.0	91	2207	3.1	94
15 Sa 0242	0.5	15	30 Su 0321	-0.3	-9	15 Tu 1007	4.1	125	30 W 0450	0.0	0	15 Th 0411	0.1	3
0906	4.1	125	0948	4.7	143	1636	0.6	18	1109	3.8	116	1031	3.9	119
1527	0.6	18	1621	0.0	0	2226	3.0	91	1745	0.2	6	1659	0.1	3
2123	3.2	98	2209	3.3	101				2335	2.9	88	2256	3.2	98
31 M 0416	0.1	-3	31 M 1042	4.4	134							31 Sa 1208	0.3	9
			1719	0.2	6							1834	0.2	6
			2304	3.1	94									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Baltimore, Maryland, 2011

Times and Heights of High and Low Waters

January				February				March								
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height					
h m	ft	cm		h m	ft	cm		h m	ft	cm						
1 Sa	0316	0.6	18	16 Su	0250	0.5	15	1 Tu	0009	0.0	0	16 W	0416	0.8	24	
	0937	-0.4	-12		0900	-0.4	-12		0452	0.7	21		1038	-0.4	-12	
	1634	1.3	40		1557	1.1	34		1116	-0.4	-12		1710	1.2	37	
	2343	0.0	0		2315	0.0	0		1804	1.1	34		1759	1.2	37	
2 Su	0412	0.6	18	17 M	0346	0.5	15	2 W	0050	0.0	0	17 Th	0001	0.0	0	
	1029	-0.4	-12		0954	-0.4	-12		0540	0.7	21		0510	0.9	27	
	1727	1.3	40		1647	1.2	37		1204	-0.4	-12		1137	-0.4	-12	
								●	1844	1.1	34		1844	1.2	37	
3 M	0033	0.0	0	18 Tu	0001	0.0	0	3 Th	0126	0.0	0	18 F	0042	-0.1	-3	
	0506	0.6	18		0440	0.6	18		0626	0.8	24		0603	1.0	30	
	1120	-0.4	-12		1049	-0.4	-12		1248	-0.4	-12		1234	-0.4	-12	
	1816	1.3	40		1736	1.2	37		1920	1.1	34		○	1846	1.2	37
4 Tu	0119	0.0	0	19 W	0043	-0.1	-3	4 F	0157	0.0	0	19 Sa	0121	-0.2	-6	
	0557	0.7	21		0532	0.6	18		0709	0.8	24		0655	1.1	34	
	1209	-0.4	-12		1143	-0.5	-15		1329	-0.3	-9		1331	-0.4	-12	
	● 1901	1.3	40		○ 1823	1.3	40		1952	1.0	30		1932	1.2	37	
5 W	0200	0.0	0	20 Th	0124	-0.1	-3	5 Sa	0224	-0.1	-3	20 Su	0201	-0.2	-6	
	0644	0.7	21		0623	0.7	21		0752	0.8	24		0749	1.2	37	
	1255	-0.4	-12		1237	-0.5	-15		1409	-0.2	-6		1430	-0.3	-9	
	1942	1.2	37		1910	1.3	40		2024	1.0	30		2018	1.1	34	
6 Th	0238	0.0	0	21 F	0204	-0.2	-6	6 Su	0250	-0.1	-3	21 M	0241	-0.3	-9	
	0730	0.7	21		0714	0.8	24		0834	0.9	27		0843	1.3	40	
	1339	-0.3	-9		1333	-0.5	-15		1451	-0.1	-3		1531	-0.2	-6	
	2020	1.1	34		1955	1.2	37		2055	0.9	27		2105	1.0	30	
7 F	0312	0.0	0	22 Sa	0243	-0.2	-6	7 M	0316	-0.2	-6	22 Tu	0324	-0.3	-9	
	0816	0.7	21		0807	0.9	27		0916	0.9	27		0939	1.3	40	
	1423	-0.3	-9		1430	-0.4	-12		1535	-0.1	-3		1636	-0.1	-3	
	2056	1.1	34		2041	1.2	37		2128	0.9	27		2154	0.9	27	
8 Sa	0343	-0.1	-3	23 Su	0324	-0.3	-9	8 Tu	0345	-0.2	-6	23 W	0410	-0.3	-9	
	0902	0.7	21		0902	1.0	30		0959	0.9	27		1037	1.3	40	
	1507	-0.2	-6		1531	-0.3	-9		1625	0.0	0		1744	0.0	0	
	2132	1.0	30		2127	1.1	34		2204	0.8	24		2246	0.8	24	
9 Su	0413	-0.1	-3	24 M	0405	-0.4	-12	9 W	0418	-0.2	-6	24 Th	0502	-0.3	-9	
	0950	0.8	24		0959	1.0	30		1044	0.9	27		1139	1.3	40	
	1555	-0.1	-3		1637	-0.2	-6		1722	0.1	3		1854	0.1	3	
	2207	0.9	27		2215	1.0	30		2245	0.7	21		○ 2343	0.8	24	
10 M	0443	-0.2	-6	25 Tu	0449	-0.4	-12	10 Th	0456	-0.2	-6	25 F	0601	-0.2	-6	
	1040	0.8	24		1100	1.1	34		1132	1.0	30		1246	1.2	37	
	1648	0.0	0		1749	-0.1	-3		1828	0.1	3		2002	0.1	3	
	2243	0.8	24		2306	0.8	24		2331	0.7	21					
11 Tu	0516	-0.2	-6	26 W	0537	-0.4	-12	11 F	0541	-0.2	-6	26 Sa	0044	0.7	21	
	1132	0.8	24		1203	1.1	34		1224	1.0	30		0707	-0.2	-6	
	1751	0.1	3		1906	0.0	0		1938	0.2	6		1356	1.2	37	
	2323	0.8	24		○				○				2105	0.1	3	
12 W	0553	-0.2	-6	27 Th	0000	0.7	21	12 Sa	0024	0.6	18	27 Su	0147	0.7	21	
	1225	0.9	27		0629	-0.4	-12		0632	-0.2	-6		0816	-0.2	-6	
	1902	0.2	6		1310	1.1	34		1320	1.0	30		1506	1.1	34	
	○				2020	0.0	0		2044	0.1	3		2201	0.1	3	
13 Th	0007	0.7	21	28 F	0058	0.6	18	13 Su	0122	0.6	18	28 M	0248	0.8	24	
	0633	-0.3	-9		0726	-0.4	-12		0731	-0.2	-6		0921	-0.2	-6	
	1319	0.9	27		1418	1.1	34		1420	1.1	34		1608	1.1	34	
	2017	0.2	6		2129	0.0	0		2142	0.1	3		2250	0.1	3	
14 F	0057	0.6	18	29 Sa	0200	0.6	18	14 M	0221	0.6	18	14 Tu	0059	0.8	24	
	0718	-0.3	-9		0826	-0.4	-12		0834	-0.3	-9		0707	0.0	0	
	1413	1.0	30		1524	1.1	34		1520	1.1	34		1340	1.2	37	
	2125	0.1	3		2230	0.0	0		2233	0.1	3		2056	0.2	6	
15 Sa	0153	0.5	15	30 Su	0301	0.6	18	15 Tu	0320	0.7	21	15 Tu	0159	0.9	27	
	0808	-0.3	-9		0926	-0.4	-12		0937	-0.3	-9		0818	0.0	0	
	1506	1.0	30		1625	1.1	34		1617	1.2	37		1444	1.2	37	
	2224	0.1	3		2322	0.0	0		2319	0.0	0		2146	0.2	6	
16 Th	31 M	0359	0.6	18	31 M	1024	-0.4	-12		1718	1.1	34				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Baltimore, Maryland, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm	
1 F	0505	1.3 40		16 Sa	0434 1132	1.7 0.1 3	1 Su	0522 1223	1.7 0.4 12	16 M	0512 1232	2.1 0.3 9	1 W	0604 1332	1.9 0.5 58
	1149	0.1 3			1658	1.3 40		1729	1.1 34		1723	1.2 37		1821	1.1 34
	1737	1.1 34			2309	0.1 3		2317	0.3 9		2316	0.1 3		2350	0.4 12
	2345	0.2 6													
2 Sa	0547	1.4 43		17 Su	0528 1233	1.9 0.1 3	2 M	0559 1307	1.7 0.4 12	17 Tu	0604 1327	2.1 0.3 9	2 Th	0640 1411	1.9 0.4 58
	1232	0.2 6			1749	1.2 37		1808	1.1 34		1817	1.2 37		1906	1.1 34
	1810	1.1 34		O	2352	0.0 0		2349	0.3 9		O				
3 Su	0012	0.2 43		18 M	0620 1331	1.9 0.1 3	3 Tu	0632 1348	1.8 0.4 12	18 W	0005 0654	0.1 2.1 64	3 F	0034 0718	0.4 1.9 58
	0625	1.4 43			1840	1.2 37		1849	1.1 34		1419	0.3 9		1449	0.4 12
	1314	0.2 6									1911	1.2 37		1951	1.2 37
	● 1844	1.1 34													
4 M	0038	0.2 46		19 Tu	0036 0711	0.0 2.0 61	4 W	0023 0706	0.3 1.8 55	19 Th	0056 0744	0.2 2.1 64	4 Sa	0121 0759	0.4 1.9 58
	0701	1.5 46			1427	0.1 3		1428	0.4 12		1508	0.3 9		1527	0.4 12
	1355	0.2 6			1931	1.2 37		1930	1.1 34		2004	1.2 37		2037	1.2 37
	1918	1.1 34													
5 Tu	0106	0.2 46		20 W	0123 0802	0.1 2.0 61	5 Th	0100 0740	0.3 1.8 55	20 F	0150 0834	0.3 1.9 58	5 Su	0212 0843	0.5 1.9 58
	0735	1.5 46			1522	0.2 6		1508	0.4 12		1556	0.4 12		1605	0.4 12
	1436	0.3 9			2023	1.1 34		2013	1.1 34		2058	1.2 37		2126	1.3 40
	1954	1.0 30													
6 W	0137	0.2 46		21 Th	0213 0854	0.1 1.9 58	6 F	0140 0818	0.4 1.8 55	21 Sa	0247 0924	0.3 1.8 55	6 M	0309 0930	0.5 1.8 55
	0809	1.5 46			1616	0.3 9		1548	0.4 12		1642	0.4 12		1644	0.4 12
	1518	0.3 9			2117	1.1 34		2057	1.1 34		2152	1.3 40		2218	1.4 43
	2033	1.0 30													
7 Th	0212	0.2 49		22 F	0308 0948	0.2 1.8 55	7 Sa	0226 0901	0.4 1.8 55	22 Su	0347 1014	0.4 1.7 52	7 Tu	0413 1020	0.5 1.7 52
	0845	1.6 49			1710	0.3 9		1630	0.4 12		1727	0.5 40		1724	0.3 9
	1602	0.3 9			2213	1.2 37		2144	1.2 37		2248	1.3 40		2313	1.5 46
	2115	1.0 30													
8 F	0252	0.2 46		23 Sa	0410 1044	0.3 1.6 49	8 Su	0318 0949	0.4 1.7 52	23 M	0452 1105	0.5 1.6 49	8 W	0525 1112	0.6 1.6 49
	0926	1.5 46			1804	0.4 12		1713	0.4 12		1810	0.5 15		1806	0.3 9
	1648	0.3 9			2311	1.2 37		2234	1.2 37		2345	1.4 43		● 1822	0.4 12
	2200	1.0 30													
9 Sa	0338	0.2 46		24 Su	0518 1144	0.3 1.5 46	9 M	0418 1041	0.5 1.7 52	24 Tu	0602 1155	0.6 1.4 43	9 Th	0012 0645	1.6 0.6 46
	1012	1.5 46			1856	0.4 12		1758	0.4 12		1850	0.5 15		1206	1.5 46
	1737	0.3 9						2329	1.3 40		O			1849	0.3 9
	2250	1.0 30													
10 Su	0433	0.3 46		25 M	0010 0631	1.2 0.4 12	10 Tu	0528 1137	0.5 1.6 49	25 W	0044 0713	1.4 0.6 43	10 F	0112 0805	1.8 0.6 55
	1105	1.5 46			1245	1.4 43		1843	0.4 12		1245	1.3 40		1303	1.4 43
	1828	0.4 12			1945	0.5 15					1928	0.5 15		1933	0.2 6
	2344	1.1 34													
11 M	0538	0.3 43		26 Tu	0111 0744	1.3 0.4 12	11 W	0027 0646	1.4 0.5 43	26 Th	0142 0824	1.5 0.7 21	11 Sa	0212 0921	1.9 0.6 58
	1204	1.4 43			1344	1.3 40		1236	1.5 46		1334	1.3 40		1402	1.3 40
	1920	0.4 12			2029	0.5 15		1928	0.3 9		2003	0.4 12		2020	0.2 6
	●														
12 Tu	0042	1.1 9		27 W	0210 0852	1.4 0.4 12	12 Th	0126 0805	1.6 0.5 43	27 F	0237 0930	1.6 0.7 21	12 Su	0310 1030	2.0 0.5 61
	0652	0.3 9			1438	1.2 37		1335	1.4 43		1422	1.2 37		1503	1.2 37
	1306	1.4 43			2109	0.4 12		2013	0.3 9		2039	0.4 12		2109	0.2 6
	2011	0.3 9													
13 W	0141	1.3 40		28 Th	0306 0952	1.4 0.4 12	13 F	0226 0920	1.7 0.5 52	28 Sa	0327 1029	1.7 0.7 21	13 M	0406 1132	2.1 0.5 64
	0808	0.3 9			1526	1.2 37		1434	1.3 40		1511	1.1 34		1603	1.1 34
	1409	1.4 43			2144	0.4 12		2058	0.2 6		2114	0.4 12		2200	0.2 6
	2058	0.3 9													
14 Th	0240	1.4 6		29 F	0356 1047	1.5 0.4 12	14 Sa	0324 1030	1.9 0.4 12	29 Su	0412 1122	1.8 0.6 18	14 Tu	0500 1227	2.2 0.4 12
	0921	0.2 6			1609	1.2 37		1531	1.3 40		1559	1.1 34		1702	1.1 34
	1509	1.3 40			2216	0.4 12		2143	0.2 6		2151	0.3 9		2253	0.2 6
	2143	0.2 6													
15 F	0338	1.6 49		30 Sa	0442 1137	1.6 0.4 12	15 Su	0419 1133	2.0 0.4 12	30 M	0452 1209	1.8 0.6 18	15 W	0551 1317	2.2 0.4 12
	1029	0.2 6			1649	1.1 34		1628	1.2 37		1647	1.1 34		1758	1.2 37
	1605	1.3 40			2246	0.3 9		2229	0.1 3		2228	0.3 9		O 2347	0.2 6
	2226	0.2 6													
31 0528 Tu 1252 0.5 15 1735 1.1 34 2308 0.4 12															

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Baltimore, Maryland, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0616	2.0	61	16 Sa 0033	0.4	12	1 M 0106	0.4	12	1 Th 0307	0.6	18
1343	0.5	15	0711	1.9	58	0720	1.9	58	0825	1.6	49
● 1840	1.2	37	1418	0.5	15	1416	0.4	12	1431	0.5	15
			1924	1.4	43	1953	1.6	49	2031	1.6	49
									2118	2.0	61
2 Sa 0019	0.4	12	17 Su 0123	0.4	12	2 Tu 0204	0.5	15	2 F 0414	0.6	18
0658	2.0	61	0751	1.8	55	0804	1.9	58	0914	1.5	46
1420	0.4	12	1452	0.5	15	1452	0.3	9	1533	0.2	6
1927	1.3	40	2012	1.4	43	2045	1.7	52	2214	2.1	64
3 Su 0111	0.4	12	18 M 0212	0.5	15	3 W 0306	0.5	15	3 Sa 0524	0.7	21
0741	1.9	58	0829	1.8	55	0849	1.8	55	1007	1.4	43
1456	0.4	12	1522	0.5	15	1530	0.2	6	1621	0.2	6
2015	1.4	43	2100	1.5	46	2139	1.8	55	2314	2.0	61
4 M 0206	0.4	12	19 Tu 0302	0.6	18	4 Th 0414	0.6	18	4 Su 0635	0.7	21
0825	1.9	58	0905	1.7	52	0936	1.6	49	1105	1.3	40
1532	0.3	9	1550	0.4	12	1609	0.2	6	1717	0.3	9
2106	1.5	46	2148	1.5	46	2236	1.9	58			
5 Tu 0306	0.5	15	20 W 0354	0.7	21	5 F 0528	0.7	21	5 M 0018	2.0	61
0911	1.8	55	0940	1.6	49	1025	1.5	46	0744	0.7	21
1609	0.3	9	1618	0.4	12	1653	0.2	6	1208	1.3	40
2159	1.6	49	2238	1.6	49	2336	2.0	61	1821	0.3	9
6 W 0412	0.6	18	21 Th 0453	0.8	24	6 Sa 0645	0.7	21	6 Tu 0124	2.0	61
0958	1.7	52	1017	1.5	46	1120	1.4	43	0847	0.7	21
1648	0.3	9	1648	0.4	12	1742	0.2	6	1315	1.3	40
2256	1.7	52	2328	1.6	49				1931	0.4	12
7 Th 0526	0.6	18	22 F 0600	0.9	27	7 Su 0038	2.0	61	7 W 0230	1.9	58
1048	1.6	49	1056	1.4	43	0800	0.7	21	0943	0.7	21
1729	0.2	6	1721	0.4	12	1220	1.3	40	1422	1.3	40
2355	1.8	55				1836	0.2	6	2040	0.4	12
8 F 0646	0.7	21	23 Sa 0019	1.7	52	8 M 0142	2.0	61	8 Th 0330	1.9	58
1141	1.4	43	0714	0.9	27	0909	0.7	21	1033	0.6	18
1813	0.2	6	1141	1.3	40	1325	1.2	37	1525	1.4	43
●			○ 1800	0.3	9	1937	0.3	9	2145	0.4	12
9 Sa 0056	1.9	58	24 Su 0110	1.7	52	9 Tu 0245	2.0	61	9 F 0422	1.8	55
0806	0.7	21	0826	0.9	27	1009	0.6	18	1115	0.6	18
1238	1.3	40	1233	1.2	37	1432	1.2	37	1621	1.4	43
1900	0.2	6	1844	0.4	12	2042	0.3	9	2242	0.5	15
10 Su 0157	2.0	61	25 M 0200	1.8	55	10 W 0346	2.0	61	10 Th 0506	1.8	55
0920	0.6	18	0930	0.8	24	1102	0.6	18	1153	0.6	18
1339	1.2	37	1332	1.1	34	1535	1.2	37	1712	1.5	46
1953	0.2	6	1933	0.4	12	2145	0.3	9	2333	0.5	15
11 M 0257	2.1	64	26 Tu 0249	1.8	55	11 Th 0440	2.0	61	11 Su 0543	1.8	55
1025	0.6	18	1024	0.8	24	1149	0.6	18	1225	0.5	15
1443	1.1	34	1434	1.1	34	1634	1.3	40	1759	1.6	49
2049	0.2	6	2026	0.4	12	2244	0.4	12			
12 Tu 0355	2.1	64	27 W 0337	1.9	58	12 F 0528	1.9	58	12 M 0020	0.5	15
1122	0.5	15	1110	0.7	21	1230	0.6	18	0617	0.6	18
1547	1.1	34	1534	1.1	34	1727	1.4	43	1252	0.5	15
2147	0.2	6	2122	0.4	12	2337	0.4	12	1843	1.6	49
13 W 0450	2.1	64	28 Th 0423	1.9	58	13 Sa 0611	1.9	58	13 Tu 0105	0.6	18
1213	0.5	15	1151	0.6	18	1307	0.5	15	0649	1.6	49
1647	1.2	37	1630	1.2	37	1817	1.4	43	1316	0.5	15
2244	0.3	9	2219	0.4	12	○			1923	1.7	52
14 Th 0541	2.1	64	29 F 0509	1.9	58	14 Su 0027	0.4	12	14 W 0149	0.7	21
1258	0.5	15	1229	0.5	15	0648	1.8	55	0720	1.6	49
1742	1.2	37	1723	1.3	40	1339	0.5	15	1339	0.4	12
2340	0.3	9	2314	0.4	12	1903	1.5	46	2002	1.7	52
15 F 0628	2.0	61	30 Sa 0553	2.0	61	15 M 0113	0.5	15	15 Th 0234	0.7	21
1340	0.5	15	1305	0.5	15	0723	1.8	55	0753	1.5	46
1834	1.3	40	1812	1.4	43	1406	0.5	15	1405	0.4	12
○						1948	1.6	49	1931	1.9	58
31 Su 0010	0.4	12				31 W 0204	0.5	15			
0637	2.0	61				0739	1.7	52			
1341	0.4	12				1410	0.2	6			
1902	1.5	46				2024	2.0	61			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Baltimore, Maryland, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0408 0.6 18	16 0355 0.7 21	1 Tu 0549 0.4 12	16 0501 0.3 9	1 Th 0600 0.2 6	16 1055 0.0 0	W 0958 1.0 30	F 1033 0.9 27	Th 1112 1.0 30	F 1639 0.0 0	W 1728 0.1 3	F 2250 1.2 37
0855 1.4 43	Su 0843 1.2 37	Tu 1034 1.1 34	W 1545 0.2 6	Th 1234 1.2 37	W 2250 1.2 37	1502 0.2 6	1432 0.3 9	1643 0.2 6	2226 1.5 46	2344 1.2 37	2250 1.2 37
2152 2.1 64	2121 1.8 55	2328 1.6 49	2226 1.5 46	2344 1.2 37	2250 1.2 37	2252 2.0 61	2204 1.7 52	2317 1.5 46	2340 1.1 34	2340 1.1 34	2250 1.2 37
2 Su 0512 0.6 18	17 0442 0.7 21	2 W 0644 0.4 12	17 0545 0.3 9	2 Th 0645 0.1 3	17 0545 -0.1 -3	1557 0.2 6	1514 0.3 9	1753 0.3 9	1837 0.2 6	1752 0.1 3	2340 1.1 34
0951 1.3 40	M 0928 1.1 34	W 1137 1.1 34	W 1053 1.0 30	W 1215 1.0 30	W 1132 1.0 30	2252 2.0 61	2204 1.7 52	1753 0.3 9	1837 0.2 6	1752 0.1 3	2340 1.1 34
1557 0.2 6	1514 0.3 9	1753 0.3 9	1757 0.3 9	1837 0.2 6	1837 0.2 6	2355 1.9 58	2253 1.7 52	1906 0.4 12	1948 0.3 9	1912 0.1 3	2340 1.1 34
0617 0.6 18	18 0532 0.6 18	3 Th 0027 1.5 46	18 0629 0.2 6	3 Sa 0032 1.1 34	18 0627 -0.2 -6	1051 1.3 40	1017 1.1 34	1112 1.2 37	1233 1.1 34	1233 1.1 34	1912 0.1 3
1659 0.3 9	Tu 1603 0.4 12	Th 0736 0.4 12	F 1152 1.1 34	Sa 0726 0.1 3	Su 1233 0.1 3	2355 1.9 58	2253 1.7 52	1243 1.2 37	1319 1.0 30	1319 1.0 30	1912 0.1 3
2355 1.9 58	2253 1.7 52	1906 0.4 12	1948 0.3 9	Sa 0726 0.1 3	Su 1912 0.1 3	2355 1.9 58	2253 1.7 52	1948 0.3 9	1948 0.3 9	1948 0.3 9	1912 0.1 3
4 Tu 0719 0.6 18	19 0623 0.6 18	4 F 0123 1.4 43	19 0010 1.4 43	4 Su 0119 1.0 30	19 0033 1.0 30	1156 1.3 40	1701 0.4 12	0823 0.4 12	0804 0.0 0	0712 0.2 6	1336 1.2 37
1810 0.4 12	O 2347 1.7 52	F 1348 1.2 37	Sa 1253 1.2 37	Su 1421 1.1 34	Tu 2032 0.1 3	2347 1.7 52	2016 0.4 12	1915 0.3 9	2058 0.3 9	1421 1.1 34	2032 0.1 3
5 W 0100 1.8 55	20 0713 0.6 18	5 Sa 0214 1.4 43	20 0105 1.3 40	5 M 0205 0.9 27	20 0129 0.9 27	0816 0.6 18	1212 1.2 37	0904 0.3 9	0759 0.3 9	0759 0.3 9	2147 0.1 3
1303 1.3 40	Th 1809 0.4 12	Sa 1450 1.3 40	Su 0755 0.1 3	M 0840 0.0 0	Tu 0759 0.3 9	1923 0.4 12	2121 0.4 12	1536 1.3 40	1438 1.3 40	1438 1.3 40	2147 0.1 3
2137 0.5 15	1809 0.4 12	2121 0.4 12	2034 0.3 9	Su 1356 1.3 40	Tu 2253 0.3 9	2034 0.3 9	2201 0.3 9	2258 0.3 9	2253 0.0 0	2253 0.0 0	2253 0.0 0
6 Th 0204 1.7 52	21 0044 1.6 49	6 Su 0300 1.3 40	21 0200 1.2 37	6 Tu 0251 0.8 24	21 0227 0.8 24	0908 0.6 18	0800 0.5 15	0941 0.3 9	0850 0.4 12	0850 0.4 12	1539 1.4 43
1409 1.3 40	F 1314 1.3 40	Su 1546 1.4 43	M 0839 0.0 0	M 0916 -0.1 -3	W 1539 1.4 43	2034 0.5 15	1924 0.4 12	2221 0.4 12	1608 1.2 37	1608 1.2 37	2253 0.0 0
2034 0.5 15	1924 0.4 12	2221 0.4 12	2148 0.3 9	M 1456 1.5 46	Tu 2258 0.3 9	2034 0.5 15	2148 0.3 9	2148 0.3 9	2258 0.3 9	2253 0.0 0	2253 0.0 0
7 F 0301 1.7 52	22 0141 1.6 49	7 M 0342 1.2 37	22 0255 1.1 34	7 W 0337 0.8 24	22 0327 0.7 21	0954 0.6 18	0844 0.4 12	1013 0.2 6	0952 0.1 3	0942 0.5 15	1637 1.5 46
1510 1.4 43	Sa 1416 1.4 43	M 1636 1.5 46	Tu 0923 -0.1 -3	W 1652 0.1 3	Th 1637 1.5 46	2137 0.5 15	2039 0.4 12	2315 0.5 15	2349 0.3 9	2352 0.0 0	2352 0.0 0
2137 0.5 15	2039 0.4 12	2315 0.5 15	2256 0.2 6	W 1652 1.3 40	Tu 2352 0.0 0	2039 0.4 12	2150 0.4 12	2359 0.2 6	2359 0.2 6	2352 0.0 0	2352 0.0 0
8 Sa 0348 1.6 49	23 0236 1.6 49	8 Tu 0422 1.2 37	23 0350 1.1 34	8 Th 0423 0.8 24	23 0425 0.7 21	1033 0.5 15	0926 0.3 9	1042 0.2 6	1029 0.2 6	1037 0.5 15	1732 1.5 46
1606 1.5 46	Su 1515 1.5 46	Tu 1719 1.5 46	W 1008 -0.2 -6	W 1650 1.7 52	W 1732 1.5 46	2234 0.5 15	2150 0.4 12	1719 1.5 46	1731 1.3 40	1732 1.5 46	1732 1.5 46
2234 0.5 15	2150 0.4 12	1719 1.5 46	2359 0.2 6	W 1650 1.7 52	Tu 1732 1.5 46	2234 0.5 15	2150 0.4 12	2359 0.2 6	2359 0.2 6	1806 1.4 43	1825 1.5 46
9 Su 0429 1.6 49	24 0329 1.5 46	9 W 0004 0.5 15	24 0444 1.0 30	9 F 0033 0.2 6	24 0045 0.0 0	1106 0.5 15	1006 0.2 6	0501 1.1 34	0509 0.7 21	0521 0.7 21	1132 0.5 15
1656 1.6 49	M 1612 1.7 52	W 1111 0.1 3	Th 1744 1.8 55	F 1107 -0.2 -6	Sa 1132 0.5 15	2325 0.5 15	2257 0.4 12	1758 1.6 49	1806 1.4 43	1825 1.5 46	1825 1.5 46
2325 0.5 15	2257 0.4 12	1758 1.6 49	1758 1.6 49	Th 1744 1.8 55	Tu 1806 1.4 43	2325 0.5 15	2257 0.4 12	1758 1.6 49	1806 1.4 43	1825 1.5 46	1825 1.5 46
10 M 0506 1.5 46	25 0420 1.5 46	10 Th 0050 0.4 12	25 0057 0.1 3	10 Sa 0115 0.2 6	25 0135 -0.1 -3	1135 0.4 12	1046 0.1 3	0539 1.1 34	0553 0.7 21	0616 0.7 21	1226 0.5 15
1741 1.6 49	Tu 1707 1.9 58	Th 1142 0.1 3	F 1145 -0.3 -9	Sa 1147 -0.2 -6	Su 1226 0.5 15	1821 1.7 52	1759 2.0 61	1833 1.6 49	1841 1.4 43	1916 1.4 43	1916 1.4 43
1821 1.7 52	1759 2.0 61	1833 1.6 49	1833 1.6 49	F 1145 -0.3 -9	W 1841 1.4 43	1821 1.7 52	1821 1.7 52	1833 1.6 49	1841 1.4 43	1916 1.4 43	1916 1.4 43
11 Tu 0013 0.6 18	26 0000 0.4 12	11 F 0133 0.4 12	26 0151 0.1 3	11 M 0154 0.1 3	26 0222 -0.1 -3	0540 1.5 46	0510 1.4 43	0619 1.0 30	0632 0.9 27	0708 0.8 24	1320 0.4 12
1201 0.4 12	W 1128 0.0 0	F 1214 0.1 3	Sa 1236 -0.3 -9	Sa 1228 -0.2 -6	W 1320 0.4 12	O 1821 1.7 52	O 1759 2.0 61	1906 1.6 49	1928 1.8 55	1917 1.4 43	2004 1.4 43
O 1821 1.7 52	O 1759 2.0 61	1906 1.6 49	1928 1.8 55	Sa 1236 -0.3 -9	Tu 1917 1.4 43	1821 1.7 52	1821 1.7 52	1906 1.6 49	1928 1.8 55	1917 1.4 43	2004 1.4 43
12 W 0059 0.6 18	27 0101 0.3 9	12 Sa 0214 0.4 12	27 0244 0.1 3	12 M 0232 0.1 3	27 0306 -0.1 -3	0613 1.4 43	0601 1.3 40	0659 1.0 30	0726 0.9 27	0800 0.8 24	1420 0.4 12
1226 0.3 9	Th 1211 0.0 0	Sa 1249 0.1 3	Su 1329 -0.2 -6	Su 1310 -0.2 -6	W 1412 0.4 12	1858 1.7 52	1852 2.0 61	1940 1.6 49	2020 1.7 52	2050 1.3 40	2050 1.3 40
1858 1.7 52	1852 2.0 61	1940 1.6 49	1940 1.6 49	Su 1329 -0.2 -6	Tu 2050 1.3 40	1858 1.7 52	1858 1.7 52	1940 1.6 49	1955 1.4 43	2050 1.3 40	2050 1.3 40
13 Th 0143 0.6 18	28 0200 0.3 9	13 Su 0255 0.4 12	28 0334 0.1 3	13 M 0309 0.1 3	28 0348 -0.1 -3	0648 1.3 40	0651 1.2 37	0740 1.0 30	0820 0.9 27	0852 0.8 24	1505 0.3 9
1252 0.3 9	F 1257 0.0 0	Su 1327 0.1 3	M 1424 -0.2 -6	M 1355 -0.1 -3	W 1505 0.3 9	1933 1.8 55	1944 2.0 61	2016 1.6 49	2112 1.6 49	2134 1.2 37	2134 1.2 37
1933 1.8 55	1944 2.0 61	2016 1.6 49	2016 1.6 49	M 1424 -0.2 -6	Tu 2134 1.2 37	1933 1.8 55	1933 1.8 55	2016 1.6 49	2112 1.6 49	2134 1.2 37	2134 1.2 37
14 F 0226 0.6 18	29 0258 0.4 12	14 M 0336 0.4 12	29 0424 0.2 6	14 W 0347 0.0 0	29 0429 -0.1 -3	0723 1.3 40	0744 1.2 37	0823 0.9 27	0915 0.9 27	0945 0.8 24	1559 0.2 6
1322 0.3 9	Sa 1346 0.0 0	M 1408 0.1 3	Tu 1522 -0.1 -3	W 1443 -0.1 -3	Th 1559 0.2 6	2008 1.8 55	2037 2.0 61	2055 1.6 49	2204 1.5 46	2216 1.1 34	2216 1.1 34
2008 1.8 55	2037 2.0 61	2055 1.6 49	2055 1.6 49	Tu 1522 -0.1 -3	W 2216 1.1 34	2008 1.8 55	2008 1.8 55	2055 1.6 49	2118 1.3 40	2216 1.1 34	2216 1.1 34
15 Sa 0310 0.7 21	30 0355 0.4 12	15 Tu 0418 0.4 12	30 0513 0.2 6	15 W 0426 0.0 0	30 0507 -0.1 -3	0801 1.2 37	0838 1.2 37	0909 0.9 27	1012 0.9 27	1041 0.8 24	1657 0.0 0
1355 0.3 9	Su 1439 0.0 0	Tu 1453 0.1 3	Tu 1537 -0.1 -3	W 1537 -0.1 -3	W 1657 0.0 0	2043 1.8 55	2132 1.9 58	2138 1.6 49	2254 1.3 40	2203 1.3 40	2258 1.0 30
2043 1.8 55	2132 1.9 58	2138 1.6 49	2138 1.6 49	Tu 1537 -0.1 -3	W 2203 1.3 40	2043 1.8 55	2043 1.8 55	2138 1.6 49	2254 1.3 40	2258 1.0 30	2258 1.0 30
31 M 0452 0.4 12	31 0452 0.4 12	31 M 0934 1.1 34	31 0543 0.1 3	31 Sa 1139 0.8 24	31 0543 0.1 3	1538 0.1 3	1538 0.1 3	1538 0.1 3	1538 0.1 3	1802 0.1 3	2340 0.8 24
1538 0.1 3	1538 0.1 3	1538 0.1 3	1538 0.1 3	1538 0.1 3	1538 0.1 3	2229 1.8 55	2229 1.8 55	2229 1.8 55	2229 1.8 55	1802 0.1 3	2340 0.8 24

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Washington, D.C., 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0508	2.4	73	16 Su 0449	2.2	67	1 Tu 0123	-0.2	-6	1 Tu 0005	0.1	3
1155	-0.3	-9	1110	0.0	0	0637	2.5	76	0526	2.6	79
1728	2.9	88	1656	2.6	79	1329	-0.2	-6	1216	0.0	0
						1859	2.7	82	1751	2.7	82
2 Su 0053	-0.3	-9	17 M 0027	0.0	0	2 W 0211	-0.2	-6	2 W 0055	0.0	0
0603	2.4	73	0540	2.2	67	0725	2.5	76	0617	2.7	82
1252	-0.3	-9	1213	-0.1	-3	1418	-0.2	-6	1308	0.0	0
1822	2.8	85	1749	2.7	82	● 1946	2.7	82	1840	2.8	85
3 M 0145	-0.4	-12	18 Tu 0120	-0.1	-3	3 Th 0254	-0.2	-6	3 Th 0141	0.0	0
0655	2.5	76	0629	2.3	70	0810	2.6	79	0703	2.8	85
1345	-0.3	-9	1313	-0.2	-6	1503	-0.2	-6	1357	0.0	0
1913	2.8	85	1840	2.8	85	2029	2.7	82	1925	2.8	85
4 Tu 0234	-0.4	-12	19 W 0210	-0.2	-6	4 F 0333	-0.2	-6	4 F 0222	0.0	0
0744	2.5	76	0716	2.5	76	0851	2.6	79	0745	2.8	85
1435	-0.3	-9	1409	-0.3	-9	1545	-0.2	-6	1441	0.0	0
● 2001	2.8	85	○ 1930	2.8	85	2110	2.7	82	● 2007	2.8	85
5 W 0320	-0.3	-9	20 Th 0257	-0.3	-9	5 Sa 0409	-0.1	-3	5 Sa 0259	0.0	0
0830	2.5	76	0803	2.6	79	0930	2.6	79	0824	2.9	88
1522	-0.3	-9	1503	-0.4	-12	1625	-0.1	-3	1523	0.0	0
2047	2.7	82	2019	2.9	88	2149	2.6	79	2046	2.8	85
6 Th 0403	-0.3	-9	21 F 0343	-0.4	-12	6 Su 0440	-0.1	-3	6 Su 0332	0.1	3
0915	2.5	76	0849	2.7	82	1006	2.7	82	0859	2.9	88
1606	-0.2	-6	1555	-0.4	-12	1703	-0.1	-3	1602	0.0	0
2131	2.7	82	2108	2.9	88	2226	2.5	76	2123	2.7	82
7 F 0442	-0.2	-6	22 Sa 0428	-0.5	-15	7 M 0507	-0.1	-3	7 M 0402	0.1	3
0957	2.5	76	0936	2.8	85	1039	2.7	82	0931	2.9	88
1649	-0.2	-6	1648	-0.4	-12	1739	0.0	0	1638	0.1	3
2214	2.6	79	2158	2.9	88	2303	2.5	76	2158	2.7	82
8 Sa 0518	-0.2	-6	23 Su 0513	-0.5	-15	8 Tu 0534	-0.1	-3	8 Tu 0429	0.1	3
1039	2.5	76	1025	2.9	88	1112	2.7	82	1000	3.0	91
1729	-0.1	-3	1741	-0.4	-12	1815	0.1	3	1713	0.2	6
2256	2.5	76	2250	2.8	85	2341	2.4	73	2232	2.6	79
9 Su 0551	-0.1	-3	24 M 0559	-0.5	-15	9 W 0606	0.0	0	9 W 0458	0.1	3
1119	2.5	76	1116	2.9	88	1148	2.7	82	1031	3.0	91
1810	0.0	0	1836	-0.4	-12	1855	0.1	3	1748	0.2	6
2338	2.4	73	2345	2.7	82	● 2014	-0.1	-3	2308	2.6	79
10 M 0620	-0.1	-3	25 Tu 0647	-0.4	-12	10 Th 0023	2.3	70	10 Th 0532	0.2	6
1159	2.5	76	1210	2.9	88	0645	0.0	0	0814	0.0	0
1851	0.1	3	1934	-0.3	-9	1229	2.7	82	1346	2.9	88
						1941	0.2	6	2113	0.0	0
11 Tu 0021	2.3	70	26 W 0044	2.6	79	1111	2.3	70	26 Sa 0231	2.5	76
0652	-0.1	-3	0738	-0.3	-9	0731	0.0	0	0915	0.1	3
1241	2.5	76	1307	2.9	88	F 1317	2.6	79	1451	2.8	85
1937	0.1	3	● 2034	-0.2	-6	● 2037	0.2	6	2213	0.1	3
12 W 0109	2.2	67	27 Th 0146	2.5	76	1206	2.3	70	27 Su 0034	2.6	79
0729	-0.1	-3	0834	-0.3	-9	0825	0.1	3	0702	0.3	9
1325	2.5	76	1408	2.8	85	1413	2.6	79	1239	2.9	88
● 2029	0.2	6	2135	-0.2	-6	2142	0.3	9	● 2002	0.4	12
13 Th 0201	2.1	64	28 F 0249	2.4	73	1307	2.3	70	28 M 0307	2.6	79
0814	0.0	0	0935	-0.2	-6	0926	0.1	3	1119	0.1	3
1414	2.5	76	1511	2.8	85	1515	2.6	79	1656	2.7	82
2127	0.2	6	2237	-0.2	-6	2249	0.2	6	2311	0.1	3
14 F 0258	2.1	64	29 Sa 0351	2.4	73	1407	2.3	70	1407	2.6	79
0906	0.0	0	1037	-0.2	-6	1037	0.1	3	1014	0.3	9
1507	2.5	76	1613	2.7	82	1619	2.7	82	1441	2.9	88
2229	0.2	6	2336	-0.2	-6	2351	0.1	3	2211	0.4	12
15 Sa 0354	2.1	64	30 Su 0451	2.4	73	1504	2.4	73	1014	0.3	9
1005	0.0	0	1138	-0.2	-6	1148	0.0	0	1549	2.9	88
1601	2.5	76	1713	2.7	82	1720	2.8	85	2314	0.3	9
2330	0.1	3									
31 M 0032	-0.2	-6									
0546	2.4	73									
1235	-0.2	-6									
1808	2.7	82									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Washington, D.C., 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0104 0.3 9 0635 3.1 94 1332 0.2 6 1859 2.9 88	h m ft cm	16 Sa 0030 0.2 6 0556 3.5 107 1316 0.1 3 1827 3.2 98	h m ft cm	1 Su 0101 0.5 15 0643 3.2 98 1349 0.4 12 1911 2.8 85	h m ft cm	16 M 0055 0.2 6 0625 3.7 113 1355 0.0 0 1902 3.1 94	h m ft cm	1 W 0144 0.5 15 0720 3.3 101 1447 0.3 9 2001 2.8 85	h m ft cm	16 Th 0226 0.2 6 0750 3.6 110 1520 0.0 0 2028 3.0 91	
2 Sa 0144 0.3 9 0716 3.1 94 1416 0.2 6 1941 2.9 88	h m ft cm	17 Su 0123 0.1 3 0647 3.7 113 1413 -0.1 -3 O 1921 3.2 98	h m ft cm	2 M 0140 0.5 15 0719 3.3 101 1432 0.3 9 1951 2.8 85	h m ft cm	17 Tu 0150 0.2 6 0716 3.8 116 1449 0.0 0 O 1955 3.1 94	h m ft cm	2 Th 0228 0.5 15 0756 3.3 101 1529 0.3 9 2039 2.8 85	h m ft cm	17 F 0318 0.2 6 0840 3.5 107 1608 0.0 0 2117 3.0 91	
3 Su 0221 0.3 9 0753 3.1 94 1458 0.2 6 ● 2020 2.8 85	h m ft cm	18 M 0215 0.1 3 0738 3.7 113 1506 -0.1 -3 2013 3.2 98	h m ft cm	3 Tu 0218 0.5 15 0752 3.3 101 1513 0.3 9 ● 2029 2.8 85	h m ft cm	18 W 0244 0.2 6 0807 3.7 113 1540 0.0 0 2046 3.1 94	h m ft cm	3 F 0313 0.5 15 0833 3.3 101 1611 0.3 9 2117 2.9 88	h m ft cm	18 Sa 0409 0.3 9 0929 3.4 104 1653 0.1 3 2206 3.0 91	
4 M 0254 0.3 9 0826 3.2 98 1538 0.2 6 2056 2.8 85	h m ft cm	19 Tu 0305 0.1 3 0827 3.8 116 1559 -0.1 -3 2105 3.2 98	h m ft cm	4 W 0255 0.5 15 0823 3.3 101 1553 0.3 9 2105 2.8 85	h m ft cm	19 Th 0336 0.2 6 0857 3.6 110 1630 0.0 0 2138 3.1 94	h m ft cm	4 Sa 0357 0.5 15 0913 3.4 104 1652 0.3 9 2156 2.9 88	h m ft cm	19 Su 0457 0.3 9 1018 3.2 98 1737 0.2 6 2254 3.0 91	
5 Tu 0326 0.3 9 0856 3.2 98 1615 0.3 9 2131 2.8 85	h m ft cm	20 W 0356 0.1 3 0917 3.7 113 1650 -0.1 -3 2158 3.1 94	h m ft cm	5 Th 0332 0.5 15 0856 3.3 101 1632 0.4 12 2140 2.8 85	h m ft cm	20 F 0428 0.3 9 0948 3.5 107 1719 0.1 3 2230 3.0 91	h m ft cm	5 Su 0444 0.4 12 0957 3.3 101 1733 0.2 6 2240 3.0 91	h m ft cm	20 M 0546 0.4 12 1106 3.1 94 1818 0.3 9 2343 3.0 91	
6 W 0357 0.4 12 0925 3.2 98 1651 0.3 9 2205 2.8 85	h m ft cm	21 Th 0448 0.2 6 1008 3.6 110 1741 0.0 0 2251 3.0 91	h m ft cm	6 F 0411 0.5 15 0932 3.3 101 1711 0.4 12 2217 2.9 88	h m ft cm	21 Sa 0520 0.3 9 1040 3.3 101 1807 0.2 6 2322 3.0 91	h m ft cm	6 M 0534 0.4 12 1046 3.3 101 1816 0.2 6 2328 3.1 94	h m ft cm	21 Tu 0634 0.5 15 1156 2.9 88 1857 0.4 12	
7 Th 0430 0.4 12 0957 3.2 98 1728 0.4 12 2240 2.8 85	h m ft cm	22 F 0540 0.3 9 1101 3.4 104 1833 0.2 6 2347 3.0 91	h m ft cm	7 Sa 0454 0.5 15 1014 3.3 101 1751 0.4 12 2259 2.9 88	h m ft cm	22 Su 0612 0.4 12 1134 3.2 98 1854 0.3 9	h m ft cm	7 Tu 0628 0.5 15 1138 3.2 98 1901 0.2 6	h m ft cm	22 W 0033 3.0 91 0724 0.6 18 1248 2.8 85 1936 0.4 12	
8 F 0509 0.4 12 1036 3.2 98 1806 0.4 12 2320 2.8 85	h m ft cm	23 Sa 0635 0.4 12 1158 3.2 98 1925 0.3 9 2347 3.0 91	h m ft cm	8 Su 0541 0.5 15 1101 3.3 101 1835 0.4 12 2347 3.0 91	h m ft cm	23 M 0017 3.0 91 0705 0.5 15 1230 3.0 91 1941 0.4 12	h m ft cm	8 W 0021 3.2 98 0727 0.5 15 1236 3.1 94 ● 1949 0.2 6	h m ft cm	23 Th 0123 3.0 91 0816 0.6 18 1342 2.7 82 ● 2014 0.5 15	
9 Sa 0553 0.4 12 1121 3.2 98 1850 0.4 12	h m ft cm	24 Su 0045 2.9 88 0731 0.4 12 1259 3.0 91 ● 2018 0.4 12	h m ft cm	9 M 0634 0.5 15 1153 3.2 98 1922 0.4 12	h m ft cm	24 Tu 0112 3.0 91 0759 0.6 18 1328 2.9 88 ● 2027 0.5 15	h m ft cm	9 Th 0118 3.2 98 0831 0.4 12 1339 3.0 91 2041 0.2 6	h m ft cm	24 F 0214 3.0 91 0910 0.7 21 1438 2.6 79 2056 0.5 15	
10 Su 0007 2.8 85 0643 0.5 15 1212 3.2 98 1940 0.5 15	h m ft cm	25 M 0144 2.9 88 0830 0.5 15 1402 2.9 88 ● 2013 0.4 15	h m ft cm	10 Tu 0040 3.0 91 0733 0.5 15 1252 3.2 98 ● 2013 0.4 12	h m ft cm	25 W 0207 3.0 91 0855 0.6 18 1426 2.8 85 2113 0.5 15	h m ft cm	10 F 0217 3.3 101 0937 0.4 12 1445 3.0 91 2137 0.2 6	h m ft cm	25 Sa 0305 3.0 91 1006 0.7 21 1533 2.6 79 2143 0.5 15	
11 M 0101 2.8 85 0740 0.5 15 1311 3.1 94 ● 2037 0.5 15	h m ft cm	26 Tu 0242 2.9 88 0929 0.5 15 1504 2.9 88 2201 0.5 15	h m ft cm	11 W 0139 3.1 94 0839 0.5 15 1357 3.1 94 2108 0.3 9	h m ft cm	26 Th 0301 3.0 91 0952 0.6 18 1522 2.7 82 2159 0.5 15	h m ft cm	11 Sa 0317 3.4 104 1042 0.3 9 1550 2.9 88 2236 0.2 6	h m ft cm	26 Su 0354 3.0 91 1102 0.6 18 1627 2.6 79 2235 0.5 15	
12 Tu 0201 2.9 88 0846 0.5 15 1416 3.1 94 2137 0.4 12	h m ft cm	27 W 0338 3.0 91 1027 0.5 15 1601 2.8 85 2250 0.5 15	h m ft cm	12 Th 0240 3.2 98 0949 0.5 15 1504 3.1 94 2205 0.3 9	h m ft cm	27 F 0352 3.1 94 1047 0.6 18 1616 2.7 82 2244 0.5 15	h m ft cm	12 Sa 0416 3.5 107 1144 0.2 6 1651 2.9 88 2336 0.2 6	h m ft cm	27 M 0441 3.1 94 1155 0.5 15 1718 2.6 79 2329 0.5 15	
13 W 0304 3.0 91 1000 0.4 12 1524 3.1 94 2238 0.3 9	h m ft cm	28 Th 0431 3.1 94 1122 0.5 15 1654 2.8 85 2336 0.5 15	h m ft cm	13 F 0340 3.4 104 1056 0.4 12 1608 3.1 94 2302 0.2 6	h m ft cm	28 Sa 0440 3.1 94 1140 0.6 18 1707 2.7 82 2330 0.5 15	h m ft cm	13 M 0512 3.6 110 1243 0.1 3 1750 2.9 88 2830 0.5 15	h m ft cm	28 Tu 0526 3.1 94 1246 0.5 15 1805 2.6 79 2830 0.5 15	
14 Th 0405 3.1 94 1111 0.3 9 1630 3.1 94 2335 0.3 9	h m ft cm	29 F 0519 3.1 94 1214 0.4 12 1743 2.8 85	h m ft cm	14 Sa 0437 3.5 107 1200 0.2 6 1709 3.1 94 2359 0.2 6	h m ft cm	29 Su 0525 3.2 98 1231 0.5 15 1754 2.7 82	h m ft cm	14 Tu 0035 0.2 6 0607 3.6 110 1338 0.0 0 1845 3.0 91	h m ft cm	29 W 0023 0.5 15 0609 3.2 98 1334 0.4 12 1850 2.7 82	
15 F 0502 3.3 101 1216 0.2 6 1730 3.1 94	h m ft cm	30 Sa 0020 0.5 15 0603 3.2 98 1303 0.4 12 1829 2.8 85	h m ft cm	15 Su 0532 3.7 113 1259 0.1 3 1807 3.1 94	h m ft cm	30 M 0015 0.5 15 0606 3.2 98 1318 0.4 12 1839 2.7 82	h m ft cm	15 W 0132 0.2 6 0659 3.6 110 1431 0.0 0 1937 3.0 91	h m ft cm	30 Th 0116 0.4 12 0651 3.2 98 1420 0.3 9 1932 2.8 85	
31 Tu 0100 0.5 15 0644 3.2 98 1404 0.4 12 1921 2.8 85	h m ft cm	31 Tu 0100 0.5 15 0644 3.2 98 1404 0.4 12 1921 2.8 85	h m ft cm		h m ft cm		h m ft cm		h m ft cm		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Washington, D.C., 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0206	0.4	12	16 0301	0.2	6	1 0329	0.2	6	1 0456	0.1	3
F 0732	3.3	101	Sa 0824	3.4	104	M 0841	3.4	104	Th 1000	3.3	101
1504	0.2	6	1542	0.1	3	1600	0.0	0	1700	0.0	0
● 2012	2.8	85	2055	3.0	91	2111	3.3	101	2222	3.6	110
2 0255	0.4	12	17 0348	0.2	6	2 0420	0.2	6	2 0551	0.2	6
Sa 0814	3.3	101	Su 0910	3.3	101	Tu 0928	3.4	104	F 1052	3.2	98
1546	0.2	6	1624	0.1	3	1643	0.0	0	1749	0.1	3
2053	2.9	88	2140	3.1	94	2157	3.4	104	2313	3.6	110
3 0344	0.3	9	18 0434	0.3	9	3 W 0512	0.2	6	3 Sa 0648	0.2	6
Su 0857	3.4	104	M 0953	3.2	98	W 1017	3.3	101	Sa 1149	3.0	91
1628	0.1	3	1702	0.2	6	W 1726	0.0	0	1843	0.2	6
2135	3.0	91	2223	3.0	91	W 2245	3.4	104	18 0610	0.7	21
4 0434	0.3	9	19 0517	0.4	12	4 Th 0607	0.2	6	Su 1126	2.8	85
M 0943	3.3	101	Tu 1036	3.0	91	Th 1109	3.2	98	M 1751	0.5	15
1710	0.1	3	1736	0.3	9	Th 1813	0.0	0	2331	3.1	94
2219	3.1	94	2305	3.0	91	Th 2337	3.5	107	19 0655	0.7	21
5 0525	0.3	9	20 0601	0.5	15	5 F 0704	0.3	9	Su 1211	2.7	82
Tu 1032	3.3	101	W 1120	2.9	88	F 1205	3.0	91	M 1839	0.5	15
1753	0.1	3	1807	0.3	9	F 1903	0.1	3	● 1942	0.3	9
2308	3.2	98	2347	3.0	91	● 1959	0.2	6	5 0114	3.3	101
6 0620	0.3	9	21 0645	0.6	18	6 Sa 0033	3.4	104	20 0019	3.1	94
W 1124	3.2	98	Th 1205	2.8	85	Sa 0805	0.3	9	Tu 0749	0.7	21
1837	0.1	3	Th 1838	0.4	12	Sa 1308	2.9	88	M 1305	2.7	82
● 1959	0.2	6	● 1911	0.5	15	● 1911	0.5	15	● 1934	0.6	18
7 0000	3.3	101	22 0031	3.0	91	7 Su 0134	3.4	104	6 Tu 0222	3.2	98
Th 0718	0.3	9	F 0732	0.7	21	Su 0907	0.3	9	W 0851	0.7	21
1221	3.1	94	F 1253	2.7	82	M 1414	2.8	85	W 1408	2.7	82
1925	0.1	3	1913	0.4	12	W 2100	0.3	9	● 2038	0.6	18
8 0056	3.3	101	23 0116	3.0	91	8 M 0238	3.3	101	21 0116	3.0	91
F 0820	0.3	9	Sa 0823	0.7	21	M 1010	0.3	9	W 0851	0.7	21
1323	2.9	88	Sa 1347	2.6	79	M 1520	2.8	85	● 1513	2.7	82
● 2018	0.1	3	● 1956	0.5	15	M 2205	0.3	9	22 0222	3.0	91
9 0155	3.4	104	24 0205	3.0	91	9 Tu 0343	3.3	101	Th 0955	0.7	21
Sa 0923	0.3	9	Su 0920	0.7	21	Tu 1110	0.3	9	W 1513	2.7	82
1429	2.8	85	Su 1444	2.5	76	Tu 1623	2.8	85	● 2150	0.6	18
2116	0.2	6	Su 2046	0.5	15	Tu 2308	0.3	9	● 2301	0.5	15
10 0257	3.4	104	25 0258	3.0	91	10 W 0445	3.3	101	9 0528	3.2	98
Su 1027	0.3	9	M 1019	0.7	21	W 1207	0.2	6	W 1614	2.9	88
1534	2.8	85	M 1542	2.5	76	W 1721	2.9	88	● 2352	0.3	9
2218	0.2	6	M 2145	0.5	15	● 1903	3.1	94	● 2301	0.5	15
11 0358	3.4	104	26 0352	3.0	91	11 Th 0008	0.3	9	9 0528	3.2	98
M 1128	0.2	6	Tu 1117	0.6	18	Th 0542	3.3	101	W 1614	2.9	88
1636	2.8	85	Tu 1638	2.6	79	Th 1259	0.2	6	● 1756	3.1	94
2321	0.2	6	Tu 2249	0.5	15	Th 1814	3.0	91	● 1709	3.1	94
12 0457	3.4	104	27 0445	3.1	94	12 F 0104	0.2	6	10 0046	0.3	9
Tu 1226	0.1	3	W 1211	0.5	15	F 0634	3.3	101	W 0531	3.3	101
1735	2.9	88	W 1729	2.6	79	W 1348	0.1	3	Su 1239	0.2	6
● 1935	0.5	15	W 2352	0.5	15	W 1903	3.1	94	● 1848	3.5	107
13 0021	0.2	6	28 0536	3.1	94	13 Th 0155	0.2	6	10 046	0.3	9
W 0553	3.4	104	Th 1302	0.4	12	Sa 0722	3.3	101	W 0618	3.2	98
1320	0.1	3	Th 1816	2.7	82	Sa 1432	0.1	3	Th 1327	0.1	3
1829	2.9	88	● 1949	3.1	94	● 1916	3.3	101	Th 1848	3.5	107
14 0118	0.2	6	29 0050	0.4	12	14 Su 0242	0.2	6	10 0504	3.2	98
Th 0646	3.4	104	F 0624	3.2	98	Su 0806	3.3	101	W 1227	0.4	12
1411	0.0	0	F 1349	0.3	9	Su 1513	0.1	3	Th 1742	2.9	88
1921	3.0	91	F 1901	2.9	88	Su 2032	3.2	98	● 1926	3.2	98
15 0211	0.2	6	30 0145	0.3	9	15 M 0327	0.3	9	11 0135	0.2	6
F 0737	3.4	104	Sa 0710	3.3	101	Sa 0557	3.3	101	W 0703	3.2	98
1458	0.0	0	Sa 1434	0.2	6	Sa 1316	0.3	9	Su 1402	0.2	6
● 2009	3.0	91	● 1944	3.0	91	Sa 1801	3.0	91	● 1926	3.2	98
16 0458	0.5	15	31 0237	0.2	6	16 W 0125	0.3	9	26 0105	0.2	6
1012	2.9	88	Su 0755	3.4	104	Su 0647	3.4	104	W 0623	3.3	101
1637	0.4	12	Su 1518	0.1	3	● 1916	3.3	101	M 1327	0.1	3
2217	3.2	98	Su 2027	3.1	94	● 1935	3.6	110	Th 1848	3.5	107
17 0533	0.6	18	16 0422	0.4	12	17 0221	0.2	6	27 0201	0.1	3
Sa 1047	2.8	85	W 0902	3.1	94	W 0745	3.2	98	Tu 0713	3.4	104
1710	0.4	12	W 1544	0.3	9	W 1440	0.2	6	Th 1414	0.0	0
2251	3.2	98	W 2116	3.3	101	● 2006	3.3	101	● 1935	3.6	110
18 0610	0.7	21	W 0938	3.0	91	W 1544	0.3	9	13 0304	0.3	9
Su 1126	2.8	85	W 1500	0.0	0	W 1500	0.3	9	W 0803	3.4	104
1751	0.5	15	W 2047	3.6	110	W 2042	3.3	101	● 2022	3.7	113
2331	3.1	94	W 2147	3.2	98	W 2042	3.3	101	13 0437	0.0	0
19 0439	0.0	0	W 0910	3.4	104	W 1916	3.3	101	29 0852	3.3	101
0942	3.2	98	W 1614	0.0	0	W 1614	0.4	12	Th 1548	0.0	0
1637	0.0	0	W 2133	3.6	110	W 2133	3.6	110	Th 2110	3.8	116
2159	3.7	113	W 0404	0.1	3	W 0404	0.4	12	30 0439	0.0	0

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Washington, D.C., 2011

Times and Heights of High and Low Waters

October			November			December					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 1035 1729 2252	0.1	3	16 Su 1019 1646 2218	0.5	15	1 Tu 1213 1906	0.1	3	16 W 1117 1805 2329	0.2	6
	3.1	94		2.8	85		2.8	85		2.6	79
	0.1	3		0.4	12		0.2	6		0.2	6
	3.5	107		3.2	98					2.9	88
2 Su 1132 1825 2350	0.2	6	17 M 1056 1728 2300	0.5	15	2 W 0756 1315 0207	3.0	91	17 Th 1208 1900	0.2	6
	3.0	91		2.7	82		2.7	82		2.6	79
	0.2	6		0.4	12					2.6	79
	3.4	104		3.1	94		0.3	9		0.1	3
3 M 1234 1926 ●	0.3	9	18 Tu 1140 1817 2350	0.5	15	3 Th 0850 1417 2107	2.8	85	18 F 0745 1304 0203	2.9	88
	2.9	88		0.5	15		2.7	82		2.7	82
	0.3	9		3.1	94		0.3	9		0.2	6
										2.5	76
4 Tu 1339 2029	3.2	98	19 W 1232 1913	0.5	15	4 F 0943 1516 2206	2.8	85	19 Sa 0838 1405 2112	2.8	85
	0.4	12		2.7	82		2.8	85		2.8	85
	2.8	85		0.5	15		0.3	9		0.2	6
	0.4	12								2.9	88
5 W 0923 1444 2132	3.1	94	20 Th 0816 1332 2017	3.0	91	5 Sa 1034 1611 2303	2.7	82	20 Su 0934 1507 2222	2.7	82
	0.4	12		0.5	15		2.8	85		2.6	79
	2.8	85		2.7	82		2.8	85		2.6	79
	0.4	12		0.5	15		0.2	6		0.1	3
6 Th 1020 1545 2233	3.0	91	21 F 0915 1436 2129	3.0	91	6 Su 1122 1702 2356	2.7	82	21 M 1031 1606 2327	2.7	82
	0.4	12		0.4	12		2.9	88		2.6	79
	2.9	88		2.8	85		0.2	6		0.1	3
	0.4	12								3.0	91
7 F 1113 1642 2331	3.0	91	22 Sa 1013 1539 2240	3.0	91	7 M 1206 1747	2.7	82	22 Tu 1129 1703	2.8	85
	0.3	9		0.3	9		0.2	6		0.1	3
	3.0	91		2.9	88		3.0	91		0.1	3
	0.3	9		0.3	9					3.1	94
8 Sa 1201 1732	3.0	91	23 Su 1109 1636 2346	3.0	91	8 Tu 0611 1248 1829	0.2	6	23 W 0537 1225 1757	-0.1	-3
	0.3	9		0.2	6		0.1	3		2.4	76
	3.1	94		3.1	94		0.1	3		0.0	0
				0.2	6		3.0	91		2.4	79
9 Su 0555 1246 1818	0.3	9	24 M 1202 1730	3.1	94	9 W 0654 1327 1908	0.1	3	24 Th 0632 1321 1849	-0.3	-9
	3.0	91		0.1	3		2.7	82		2.4	79
	0.2	6		3.3	101		0.1	3		0.0	0
	3.1	94								3.1	94
10 M 0640 1327 1900	0.2	6	25 Tu 0559 1254 1821	0.1	3	10 Th 0735 1404 1943	0.1	3	25 F 0725 1416 1941	-0.3	-9
	3.0	91		3.1	94		2.7	82		2.4	79
	0.2	6		0.0	0		0.1	3		0.0	0
	3.2	98		3.5	107		3.0	91		3.4	104
11 Tu 1404 ○ 1938	0.2	6	26 W 0652 1344 ●	-0.1	-3	11 F 0813 1440 2015	0.1	3	26 Sa 0817 1509 2032	-0.4	-12
	3.0	91		3.1	94		0.2	6		2.4	79
	0.2	6		-0.1	-3		0.2	6		0.0	0
	3.2	98		3.6	110		3.0	91		2.8	85
12 W 0800 1438	0.2	6	27 Th 0743 1435 2000	-0.2	-6	12 Sa 0848 1516 2046	0.2	6	27 M 0908 1603 2124	-0.3	-3
	3.0	91		3.1	94		2.6	79		2.4	73
	0.3	9		-0.1	-3		0.2	6		0.1	-3
	3.2	98		3.7	113		3.0	91		2.8	85
13 Th 0837 1509 2044	0.3	9	28 F 0834 1526 2049	-0.2	-6	13 Su 0922 1552 2119	0.2	6	28 M 1000 1656 2217	-0.3	-9
	2.9	88		3.1	94		2.6	79		2.5	76
	0.3	9		-0.1	-3		0.2	6		0.1	-3
	3.2	98		3.6	110		3.0	91		2.8	85
14 F 0912 1538 2113	0.4	12	29 Sa 0925 1618 2140	-0.1	-3	14 M 0956 1632 2156	0.2	6	29 W 1053 1749 2312	-0.2	-6
	2.9	88		3.0	91		2.6	79		2.5	76
	0.3	9		-0.1	-3		0.2	6		0.1	-3
	3.2	98		3.5	107		3.0	91		2.8	85
15 Sa 0945 1609 2143	0.4	12	30 Su 1018 1712 2234	-0.1	-3	15 Tu 1034 1716 2240	0.2	6	30 W 1148 1843 0.0	-0.1	-3
	2.8	85		3.0	91		2.6	79		2.6	76
	0.4	12		0.0	0		0.2	6		0.1	-3
	3.2	98		3.3	101		3.0	91		2.8	85
31 M 1114 1808 2331	0.0	0	31 M 1114 1808 2331	0.0	0				31 Sa 0723 1259 1958	2.4	73
	2.9	88		2.9	88					-0.1	-3
	0.1	3		0.1	3					2.5	76
	3.1	94		3.1	94					0.0	0

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Chesapeake Bay Bridge Tunnel, Virginia, 2011

Times and Heights of High and Low Waters

January				February				March									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height						
h m 1 0543 Sa 1203 1802 2354	ft 2.9 -0.1 2.1 -0.3	cm 88 -3 64 -9	16 0458 Su 1119 1712 2312	ft 2.5 0.1 1.9 -0.2	cm 76 3 58 -6	1 0035 Tu 0711 1322 1926	ft -0.2 2.7 -0.1 2.2	cm -6 82 -3 67	16 0616 W 1229 1835	ft 2.9 -0.2 2.5	cm 88 -6 76	1 0608 Tu 1215 1823	ft 2.6 0.2 2.3	cm 79 6 70	16 0451 W 1106 1715 2325	ft 2.7 0.0 2.6 -0.2	cm 82 0 79 -6
2 0635 Su 1254 1854	ft 2.9 -0.2 2.2	cm 88 -6 67	17 0551 M 1209 1807	ft 2.7 -0.1 2.1	cm 82 -3 64	2 0120 W 0750 ● 2005	ft -0.2 2.7 -0.1 2.3	cm -6 82 -3 70	17 0038 Th 0707 1317 1927	ft -0.5 3.0 -0.4 2.8	cm -15 91 -12 85	2 0021 W 0650 1903	ft 0.0 2.6 2.4	cm 0 79 73	17 0549 Th 1158 1813	ft 2.9 -0.2 2.9	cm 88 -6 88
	ft -0.2 -6	cm -6															
	ft -6	cm 67															
3 0045 M 0723 1341 1941	ft -0.3 2.9 -0.2 2.2	cm -9 88 -6 67	18 0004 Tu 0641 1257 1858	ft -0.3 2.8 -0.2 2.2	cm -9 85 -6 67	3 0201 Th 0826 1436 2041	ft -0.2 2.7 -0.2 2.4	cm -6 82 -6 73	18 0132 F 0755 1404 ○ 2018	ft -0.6 3.1 -0.6 3.0	cm -18 94 -18 91	3 0104 Th 0727 1330 1940	ft -0.1 2.6 2.5	cm -3 79 76	18 0022 F 0643 1248 1906	ft -0.4 3.0 -0.4 3.2	cm -12 91 -12 98
4 0132 Tu 0806 1424 ● 2024	ft -0.3 2.9 -0.2 2.2	cm -9 88 -6 67	19 0055 W 0729 1343 ○ 1948	ft -0.5 3.0 -0.4 2.4	cm -15 91 -12 73	4 0239 F 0900 1508 2116	ft -0.2 2.6 -0.1 2.4	cm -6 79 -3 73	19 0224 Sa 0842 1450 2107	ft -0.7 3.1 -0.7 3.1	cm -21 94 -21 94	4 0142 F 0801 1402 ● 2014	ft -0.1 2.6 0.0	cm -3 79 79	19 0117 Sa 0733 1337 ○ 1957	ft -0.5 3.1 -0.5 3.4	cm -15 94 -15 104
5 0217 W 0847 1504 2104	ft -0.3 2.8 -0.2 2.2	cm -9 85 -6 67	20 0146 Th 0815 1429 2037	ft -0.6 3.0 -0.5 2.6	cm -18 91 -15 79	5 0316 Sa 0932 1539 2150	ft -0.1 2.5 -0.1 2.4	cm -3 76 -3 73	20 0316 Su 0930 1537 2158	ft -0.6 3.0 -0.7 3.2	cm -18 91 -21 98	5 0218 Sa 0832 1432 2047	ft -0.1 2.6 0.0	cm -3 79 82	20 0210 Su 0822 1424 2047	ft -0.6 3.1 -0.6 3.5	cm -18 94 -18 107
6 0259 Th 0924 1541 2143	ft -0.2 2.7 -0.2 2.2	cm -6 82 -6 67	21 0237 F 0901 1515 2126	ft -0.6 3.0 -0.6 2.7	cm -18 91 -18 82	6 0353 Su 1004 1611 2226	ft -0.1 2.4 -0.1 2.4	cm -3 73 -3 73	21 0410 M 1018 1626 2249	ft -0.5 2.8 -0.6 3.1	cm -15 85 -18 94	6 0253 Su 0904 1502 2119	ft 0.0 2.5 2.7	cm 0 76 82	21 0303 M 0911 1513 2137	ft -0.6 3.0 -0.5 3.5	cm -18 91 -15 107
7 0340 F 1000 1617 2221	ft -0.1 2.6 -0.1 2.2	cm -3 79 -3 67	22 0329 Sa 0948 1602 2217	ft -0.6 3.0 -0.6 2.8	cm -18 91 -18 85	7 0431 M 1038 1644 2302	ft 0.0 2.3 0.0 2.4	cm 0 70 0 73	22 0505 Tu 1108 1717 2343	ft -0.4 2.6 -0.4 3.0	cm -12 79 -12 91	7 0327 M 0935 1533 2153	ft 0.0 2.5 2.7	cm 0 76 82	22 0355 Tu 1000 1603 2228	ft -0.4 2.8 -0.4 3.3	cm -12 85 101
8 0421 Sa 1036 1652 2301	ft 0.0 2.4 0.0 2.2	cm 0 73 0 67	23 0423 Su 1036 1650 2309	ft -0.5 2.8 -0.6 2.8	cm -15 85 -18 85	8 0510 Tu 1113 1720 2342	ft 0.2 2.1 0.1 2.3	cm 6 64 3 70	23 0604 W 1201 1812	ft -0.2 2.4 -0.3 2.4	cm -6 73 -9 73	8 0402 Tu 1008 1606 2227	ft 0.1 2.4 2.6	cm 3 73 79	23 0449 W 1051 1655 2322	ft -0.3 2.7 -0.2 3.1	cm -9 82 94
9 0503 Su 1112 1727 2342	ft 0.1 2.3 0.0 2.2	cm 3 70 0 67	24 0520 M 1125 1741	ft -0.4 2.6 -0.5 -0.5	cm -12 79 -15 15	9 0554 W 1152 1800	ft 0.3 2.0 0.1 0.1	cm 9 61 3 3	24 0042 Th 1301 1913	ft 2.8 2.2 -0.1	cm 85 67 -3	9 0439 W 1043 1643 2305	ft 0.2 2.3 0.2	cm 6 70 79	24 0546 Th 1145 1751	ft 0.0 2.5 0.0	cm 0 76 0
10 0548 M 1151 1805	ft 0.2 2.1 0.1	cm 6 64 3	25 0005 Tu 0621 1219 1835	ft 2.8 -0.2 -0.4	cm 85 66 12	10 0026 Th 0642 1236 1847	ft 2.3 0.4 1.9	cm 70 12 6	25 0148 F 0817 1409 2021	ft 2.7 0.2 2.1	cm 82 6 0	10 0520 Th 1121 1723 2348	ft 0.3 2.2 2.5	cm 9 67 76	25 0019 F 0647 1244 1854	ft 2.9 2.3 0.2	cm 88 70 6
11 0026 Tu 0637 1233 1848	ft 2.2 0.3 2.0 0.1	cm 67 9 61 3	26 0105 W 0726 1318 ○ 1935	ft 2.7 0.0 2.1	cm 82 0 64	11 0116 F 0738 1328 ○ 1941	ft 2.3 0.4 1.8	cm 70 12 55	26 0301 Sa 0927 1525 2131	ft 2.5 0.3 2.0	cm 76 9 61	11 0607 F 1204 1811	ft 0.4 2.1 0.3	cm 12 64 9	26 0123 Sa 0753 1350 ○ 2002	ft 2.7 0.3 0.3	cm 82 67 9
12 0114 W 0730 1320 ● 1935	ft 2.2 0.4 1.8 0.1	cm 67 12 55 3	27 0211 Th 0837 1426 2039	ft 2.6 0.1 -0.2	cm 79 3 -6	12 0213 Sa 0840 1428 2042	ft 2.3 0.4 0.1	cm 70 12 3	27 0414 Su 1032 1637 2236	ft 2.5 0.3 0.1	cm 76 9 3	12 0037 Sa 0701 1255 ○ 1907	ft 2.5 2.0 0.3	cm 76 61 9	27 0234 Su 0859 1503 2112	ft 2.5 0.4 0.3	cm 76 67 9
13 0206 Th 0828 1414 2027	ft 2.2 0.4 1.8 0.1	cm 67 12 55 3	28 0322 F 0947 1540 2145	ft 2.6 0.1 -0.1	cm 79 3 -3	13 0317 Su 0943 1533 2145	ft 2.4 0.3 0.0	cm 73 9 0	28 0516 M 1128 1735 2332	ft 2.5 0.2 0.0	cm 76 6 0	13 0134 Su 0802 1356 2011	ft 2.5 0.5 0.3	cm 76 15 9	28 0345 M 1001 1611 2217	ft 2.5 2.2 0.3	cm 76 67 9
14 0303 F 0928 1512 2122	ft 2.2 0.4 1.7 0.1	cm 67 12 52 3	29 0431 Sa 1052 1651 2247	ft 2.6 1.9 -0.1	cm 79 58 -3	14 0421 M 1043 1639 2246	ft 2.5 0.2 -0.1	cm 76 6 -3	14 0239 M 0906 1503 2118	ft 2.5 0.4 0.2	cm 76 12 6	14 0347 M 1054 1707 2312	ft 2.6 2.4 0.2	cm 79 73 6	29 0447 Tu 1054 1707 2312	ft 2.5 2.4 0.3	cm 76 73 9
15 0401 Sa 1025 1613 2217	ft 2.4 0.3 1.8 0.0	cm 73 9 55 0	30 0533 Su 1149 1752 2344	ft 2.6 2.0 -0.2	cm 79 61 -6	15 0521 Tu 1138 1740 2343	ft 2.7 0.0 -0.3	cm 82 0 -9	15 0347 Tu 1009 1611 2223	ft 2.6 0.2 0.0	cm 79 6 0	15 0347 W 1138 1611 2223	ft 2.6 0.2 0.0	cm 79 6 0	30 0537 W 1138 1753 2359	ft 2.5 2.5 0.2	cm 76 76 6
			31 0625 M 1239 1842	ft 2.7 0.0 2.1	cm 82 0 64							31 0619 Th 1216 1833	ft 2.5 0.3 2.6	cm 76 9 79			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Chesapeake Bay Bridge Tunnel, Virginia, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0041 0.1 3 0656 2.5 76 1250 0.2 6 1909 2.8 85	16 Sa 0006 -0.3 -9 0618 2.9 88 1219 -0.3 -9 1845 3.4 104	1 Su 0050 0.2 6 0655 2.4 73 1241 0.2 6 1910 2.9 88	16 M 0048 -0.3 -9 0652 2.7 82 1247 -0.3 -9 1919 3.5 107	1 W 0135 0.1 3 0739 2.3 70 1324 0.1 3 1955 3.0 91	16 Th 0218 -0.2 -6 0823 2.6 79 1414 -0.2 -6 2044 3.2 98						
2 Sa 0119 0.1 3 0730 2.5 76 1323 0.2 6 1943 2.8 85	17 Su 0102 -0.4 -12 0712 2.9 88 1310 -0.4 -12 1937 3.6 110	2 M 0127 0.2 6 0732 2.4 73 1317 0.2 6 1945 3.0 91	17 Tu 0141 -0.3 -9 0746 2.7 82 1339 -0.3 -9 2010 3.5 107	2 O 0214 0.1 3 0819 2.3 70 1406 0.1 3 2035 3.0 91	17 F 0306 -0.2 -6 0911 2.6 79 1504 -0.1 -3 2131 3.1 94						
3 Su 0154 0.1 3 0803 2.5 76 1354 0.1 3 2016 2.9 88	18 M 0156 -0.5 -15 0803 2.9 88 1400 -0.4 -12 2027 3.6 110	3 Tu 0202 0.1 3 0808 2.4 73 1353 0.2 6 2021 3.0 91	18 W 0233 -0.3 -9 0838 2.7 82 1430 -0.3 -9 2100 3.4 104	3 F 0253 0.0 0 0900 2.4 73 1449 0.1 3 2116 3.0 91	18 Sa 0352 -0.1 -3 0958 2.5 76 1554 0.0 0 2215 2.9 88						
4 M 0228 0.1 3 0836 2.5 76 1427 0.1 3 2049 2.9 88	19 Tu 0248 -0.4 -12 0854 2.9 88 1450 -0.4 -12 2118 3.5 107	4 W 0238 0.1 3 0844 2.4 73 1431 0.2 6 2057 3.0 91	19 Th 0324 -0.2 -6 0928 2.7 82 1522 -0.1 -3 2150 3.3 101	4 Sa 0335 0.0 0 0942 2.4 73 1535 0.1 3 2158 3.0 91	19 Su 0436 0.0 0 1043 2.5 76 1643 0.2 6 2258 2.7 82						
5 Tu 0302 0.1 3 0909 2.5 76 1500 0.2 6 2123 2.9 88	20 W 0340 -0.3 -9 0944 2.8 85 1541 -0.2 -6 2208 3.4 104	5 Th 0315 0.1 3 0920 2.4 73 1510 0.2 6 2135 2.9 88	20 F 0414 -0.1 -3 1018 2.6 79 1615 0.0 0 2239 3.1 94	5 Su 0418 0.0 0 1027 2.5 76 1624 0.1 3 2243 2.9 88	20 M 0519 0.1 3 1128 2.5 76 1733 0.3 9 2340 2.5 76						
6 W 0337 0.2 6 0943 2.4 73 1535 0.2 6 2158 2.8 85	21 Th 0432 -0.2 -6 1035 2.7 82 1634 -0.1 -3 2301 3.2 98	6 F 0354 0.2 6 0959 2.4 73 1552 0.2 6 2216 2.9 88	21 Sa 0504 0.0 0 1108 2.5 76 1709 0.2 6 2329 2.8 85	6 M 0504 0.0 0 1115 2.5 76 1717 0.2 6 2332 2.8 85	21 Tu 0600 0.2 6 1214 2.5 76 1825 0.4 12 2332 2.8 85						
7 Th 0414 0.2 6 1018 2.3 70 1613 0.3 9 2237 2.8 85	22 F 0527 0.0 0 1128 2.5 76 1731 0.1 3 2355 2.9 88	7 Sa 0436 0.2 6 1041 2.4 73 1638 0.3 9 2300 2.8 85	22 Su 0554 0.2 6 1159 2.4 73 1805 0.3 9	7 Tu 0554 0.0 0 1208 2.6 79 1816 0.2 6	22 W 0024 2.3 70 0642 0.3 9 1301 2.5 76 1919 0.5 15						
8 F 0455 0.3 9 1058 2.3 70 1656 0.3 9 2320 2.7 82	23 Sa 0623 0.2 6 1224 2.4 73 1832 0.3 9	8 Su 0523 0.2 6 1128 2.4 73 1730 0.3 9 2349 2.8 85	23 M 0019 2.6 79 0644 0.3 9 1252 2.4 73 1904 0.4 12	8 W 0024 2.7 82 0646 0.0 0 1305 2.7 82 1920 0.2 6	23 Th 0109 2.2 67 0725 0.4 12 1350 2.5 76 2015 0.6 18						
9 Sa 0541 0.4 12 1142 2.2 67 1746 0.4 12	24 Su 0054 2.7 82 0722 0.4 12 1325 2.3 70 1937 0.4 12	9 M 0614 0.2 6 1221 2.4 73 1828 0.3 9	24 Tu 0111 2.4 73 0734 0.4 12 1348 2.4 73 2005 0.5 15	9 W 0121 2.6 79 0742 0.0 0 1406 2.8 85 2027 0.2 6	24 Th 0159 2.1 64 0810 0.4 12 1442 2.5 76 2111 0.6 18						
10 Su 0009 2.7 82 0634 0.4 12 1234 2.2 67 1844 0.4 12	25 M 0156 2.5 76 0821 0.5 15 1430 2.3 70 2044 0.5 15	10 Tu 0043 2.7 82 0709 0.2 6 1320 2.5 76 1933 0.3 9	25 W 0204 2.3 70 0822 0.4 12 1443 2.4 73 2105 0.5 15	10 F 0223 2.4 73 0839 -0.1 -3 1510 3.0 91 2135 0.1 3	25 Sa 0252 2.0 61 0857 0.4 12 1534 2.6 79 2204 0.5 15						
11 M 0106 2.6 79 0733 0.4 12 1335 2.3 70 1949 0.3 9	26 Tu 0300 2.4 73 0917 0.5 15 1532 2.4 73 2146 0.5 15	11 W 0143 2.6 79 0807 0.2 6 1423 2.6 79 2041 0.2 6	26 Th 0259 2.2 67 0909 0.4 12 1536 2.5 76 2201 0.5 15	11 Sa 0328 2.4 73 0938 -0.1 -3 1613 3.1 94 2239 0.0 0	26 Su 0348 2.0 61 0946 0.4 12 1625 2.6 79 2254 0.4 12						
12 Tu 0209 2.6 79 0835 0.3 9 1441 2.4 73 2058 0.3 9	27 W 0400 2.3 70 1006 0.5 15 1627 2.5 76 2241 0.4 12	12 Th 0247 2.6 79 0906 0.1 3 1528 2.8 85 2149 0.1 3	27 F 0353 2.1 64 0953 0.4 12 1626 2.6 79 2251 0.4 12	12 Su 0435 2.4 73 1036 -0.2 -6 1713 3.2 98 2339 -0.1 -3	27 M 0444 2.0 61 1035 0.3 9 1714 2.7 82 2340 0.3 9						
13 W 0315 2.7 82 0936 0.2 6 1549 2.6 79 2205 0.1 3	28 Th 0452 2.3 70 1050 0.4 12 1714 2.6 79 2329 0.4 12	13 F 0352 2.6 79 1004 -0.1 -3 1631 3.1 94 2252 0.0 0	28 Sa 0444 2.1 64 1037 0.4 12 1712 2.7 82 2336 0.4 12	13 M 0539 2.4 73 1133 -0.2 -6 1811 3.3 101 2336 0.4 12	28 Tu 0536 2.1 64 1124 0.2 6 1801 2.8 85 2336 0.4 12						
14 Th 0420 2.7 82 1034 0.0 0 1652 2.9 88 2308 -0.1 -3	29 F 0537 2.3 70 1129 0.4 12 1755 2.7 82 1833 0.4 12	14 Sa 0456 2.6 79 1059 -0.2 -6 1730 3.3 101 2352 -0.2 -6	29 Su 0532 2.1 64 1119 0.3 9 1754 2.8 85 1835 0.2 6	14 Tu 0035 -0.2 -6 0638 2.5 76 1229 -0.2 -6 1905 3.3 101	29 W 0023 0.2 6 0624 2.2 67 1211 0.2 6 1846 2.9 88						
15 F 0521 2.8 85 1128 -0.2 -6 1750 3.2 98	30 Sa 0012 0.3 9 0617 2.3 70 1205 0.3 9 1833 2.8 85	15 Su 0556 2.6 79 1154 -0.3 -9 1826 3.4									

Chesapeake Bay Bridge Tunnel, Virginia, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0148 0.0 0 0754 2.4 73 1344 0.0 0 ● 2013 3.1 94	0 0 0 16 Sa 0244 0.0 0 0851 2.6 79 1446 0.0 0 2108 3.0 91	0 0 0 1 M 0247 -0.2 -6 0903 3.0 91 1505 -0.1 -3 2121 3.2 98	0 0 0 16 Tu 0323 0.2 6 0939 2.9 88 1545 0.3 9 2150 2.7 82	0 0 0 1 Th 0353 -0.2 -6 1020 3.6 110 1638 0.0 0 2238 3.0 91	0 0 0 16 F 0349 0.5 15 1015 3.0 91 1630 0.6 18 2228 2.5 76						
2 Sa 0230 -0.1 -3 0838 2.5 76 1431 0.0 0 2056 3.1 94	-3 17 Su 0324 0.0 0 0933 2.6 79 1531 0.1 3 2147 2.9 88	-3 2 Tu 0332 -0.3 -9 0951 3.2 98 1557 -0.1 -3 2207 3.1 94	-9 17 W 0355 0.3 9 1015 2.9 88 1624 0.4 12 2225 2.6 79	-3 2 F 0444 -0.1 -3 1113 3.5 107 1736 0.2 6 2332 2.8 85	-3 17 Sa 0425 0.6 18 1052 3.0 91 1710 0.7 21 2307 2.4 73						
3 Su 0313 -0.1 -3 0924 2.6 79 1520 -0.1 -3 2140 3.0 91	18 M 0402 0.1 3 1013 2.6 79 1615 0.2 6 2224 2.7 82	3 W 0419 -0.3 -9 1041 3.2 98 1652 0.0 0 2256 2.9 88	9 18 Th 0428 0.3 9 1052 2.9 88 1704 0.6 18 2302 2.5 76	3 3 Sa 0539 0.1 3 1211 3.4 104 1839 0.4 12	3 18 Su 0505 0.7 21 1134 2.9 88 1756 0.8 24 2351 2.3 70						
4 M 0357 -0.2 -6 1011 2.7 82 1611 0.0 0 2226 3.0 91	19 Tu 0438 0.1 3 1052 2.6 79 1658 0.3 9 2302 2.5 76	4 Th 0508 -0.2 -6 1134 3.2 98 1751 0.1 3 2348 2.7 82	-6 19 F 0504 0.4 12 1131 2.8 85 1747 0.7 21 2341 2.3 70	26 4 Su 0031 2.6 79 0639 0.2 6 1314 3.2 98 ● 1947 0.5 15	26 19 M 0552 0.7 21 1221 2.8 85 1849 0.8 24						
5 Tu 0443 -0.2 -6 1100 2.8 85 1706 0.0 0 2314 2.8 85	20 W 0513 0.2 6 1132 2.6 79 1744 0.5 15 2340 2.4 73	5 F 0600 -0.1 -3 1230 3.2 98 1854 0.2 6	-3 20 Sa 0544 0.5 15 1213 2.7 82 1835 0.7 21	5 M 0139 2.5 76 0746 0.4 12 1424 3.1 94 2057 0.5 15	5 20 Tu 0042 2.3 70 0646 0.8 24 1316 2.8 85 ● 1947 0.8 24						
6 W 0531 -0.2 -6 1153 2.9 88 1804 0.1 3	21 Th 0550 0.3 9 1214 2.6 79 1831 0.6 18	6 Sa 0045 2.5 76 0657 0.0 0 1331 3.1 94 ● 2002 0.3 9	76 21 Su 0026 2.2 67 0630 0.6 18 1301 2.7 82 ● 1929 0.8 24	6 Tu 0255 2.4 73 0857 0.5 15 1536 3.0 91 2202 0.5 15	6 21 W 0141 2.3 70 0748 0.8 24 1416 2.8 85 2048 0.8 24						
7 Th 0006 2.7 82 0623 -0.2 -6 1249 2.9 88 1908 0.2 6	22 F 0022 2.2 67 0631 0.4 12 1300 2.6 79 1923 0.6 18	7 Su 0150 2.4 73 0800 0.1 3 1438 3.1 94 2111 0.4 12	67 22 M 0117 2.2 67 0722 0.7 21 1356 2.7 82 2027 0.8 24	76 7 W 0409 2.5 76 1005 0.5 15 1642 3.0 91 2259 0.5 15	76 22 Th 0246 2.4 73 0854 0.7 21 1519 2.9 88 2146 0.6 18						
8 F 0102 2.5 76 0718 -0.1 -3 1349 3.0 91 ● 2014 0.2 6	23 Sa 0108 2.1 64 0716 0.5 15 1349 2.6 79 ● 2018 0.7 21	8 M 0302 2.3 70 0906 0.2 6 1548 3.0 91 2217 0.4 12	64 23 Tu 0215 2.1 64 0821 0.6 18 1455 2.7 82 2127 0.7 21	79 8 Th 0511 2.6 79 1105 0.4 12 1737 3.0 91 2348 0.4 12	79 23 F 0351 2.6 79 0957 0.5 15 1620 3.0 91 2239 0.4 12						
9 Sa 0204 2.4 73 0817 -0.1 -3 1453 3.0 91 2122 0.2 6	24 Su 0200 2.0 61 0806 0.5 15 1442 2.6 79 2114 0.7 21	9 Tu 0416 2.3 70 1012 0.2 6 1654 3.0 91 2317 0.3 9	67 24 W 0318 2.2 67 0923 0.6 18 1556 2.8 85 2223 0.6 18	82 9 F 0602 2.7 82 1158 0.4 12 1823 3.0 91	82 24 Sa 0451 2.9 88 1057 0.3 9 1716 3.1 94 2330 0.2 6						
10 Su 0312 2.3 70 0919 0.0 0 1559 3.1 94 2228 0.2 6	25 M 0257 2.0 61 0901 0.5 15 1539 2.6 79 2209 0.6 18	10 W 0522 2.4 73 1113 0.2 6 1752 3.1 94	73 25 Th 0421 2.4 73 1022 0.4 12 1654 3.0 91 2314 0.4 12	91 10 Sa 0030 0.4 12 0646 2.9 88 1244 0.4 12 1903 3.0 91	91 25 Su 0547 3.2 98 1154 0.1 3 1809 3.2 98						
11 M 0422 2.3 70 1021 0.0 0 1702 3.1 94 2329 0.1 3	26 Tu 0358 2.0 61 0956 0.4 12 1635 2.7 82 2301 0.5 15	11 Th 0010 0.2 6 0618 2.5 76 1209 0.2 6 1842 3.1 94	61 26 F 0519 2.6 79 1119 0.3 9 1747 3.1 94	9 11 Su 0108 0.3 9 0724 3.0 91 1325 0.3 9 1939 3.0 91	9 26 M 0018 0.0 0 0639 3.4 104 1248 0.0 0 1900 3.3 101						
12 Tu 0529 2.3 70 1121 0.0 0 1801 3.1 94	27 W 0456 2.1 64 1051 0.3 9 1728 2.9 88 2349 0.3 9	12 F 0056 0.2 6 0706 2.7 82 1259 0.2 6 1926 3.1 94	6 27 Sa 0003 0.2 6 0613 2.8 85 1213 0.1 3 1837 3.2 98	9 12 M 0141 0.3 9 0759 3.1 94 1404 0.3 9 ● 2012 2.9 88	9 27 Tu 0105 -0.2 -6 0729 3.7 113 1341 -0.1 -3 ● 1949 3.3 101						
13 W 0024 0.0 0 0628 2.4 73 1217 0.0 0 1854 3.2 98	28 Th 0550 2.3 70 1143 0.2 6 1817 3.0 91	13 Sa 0138 0.1 3 0748 2.8 85 1344 0.2 6 ● 2005 3.0 91	3 28 Su 0049 0.0 0 0703 3.1 94 1306 0.0 0 ● 1925 3.3 101	9 13 Tu 0213 0.3 9 0833 3.1 94 1440 0.4 12 2045 2.8 85	9 28 W 0152 -0.3 -9 0818 3.8 116 1434 -0.2 -6 2038 3.2 98						
14 Th 0115 0.0 0 0720 2.5 76 1310 -0.1 -3 1943 3.2 98	29 F 0035 0.2 6 0641 2.5 76 1234 0.1 3 1905 3.1 94	14 Su 0215 0.1 3 0827 2.8 85 1426 0.2 6 2042 3.0 91	3 29 M 0134 -0.1 -3 0752 3.3 101 1357 -0.1 -3 2012 3.3 101	9 14 W 0244 0.3 9 0906 3.1 94 1516 0.4 12 2118 2.7 82	9 29 Th 0240 -0.3 -9 0908 3.9 119 1527 -0.1 -3 2129 3.1 94						
15 F 0201 -0.1 -3 0808 2.6 79 1359 0.0 0 ● 2027 3.1 94	30 Sa 0120 0.0 0 0729 2.7 82 1324 -0.1 -3 ● 1950 3.2 98	15 M 0250 0.2 6 0904 2.9 88 1506 0.3 9 2116 2.9 88	6 30 Tu 0219 -0.3 -9 0841 3.5 107 1449 -0.2 -6 2059 3.3 101	12 15 Th 0315 0.4 12 0939 3.1 94 1552 0.5 15 2152 2.6 79	12 30 F 0330 -0.2 -6 1000 3.8 116 1622 0.0 0 2221 3.0 91						
		31 Su 0203 -0.1 -3 0816 2.9 88 1414 -0.1 -3 2035 3.2 98	9 31 W 0306 -0.3 -9 0930 3.6 110 1542 -0.1 -3 2148 3.1 94								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Chesapeake Bay Bridge Tunnel, Virginia, 2011

Times and Heights of High and Low Waters

October					November					December					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0422	0.0	0	16 Su	0353	0.5	15	1 Tu	0000	2.5	76	16 W	0501	0.4	12
	1054	3.6	110	16 Su	1022	3.0	91	1 Tu	0603	0.3	9	16 W	1125	2.8	85
	1720	0.2	6	1641	0.6	18	1230	3.0	91	1751	0.3	9	1251	2.5	76
	2316	2.8	85	2240	2.4	73	1902	0.4	12	2355	2.3	70	1919	0.2	6
2 Su	0519	0.2	6	17 M	0435	0.6	18	2 W	0105	2.5	76	17 Th	0557	0.4	12
	1151	3.4	104	1103	2.9	88	2 W	0710	0.5	15	17 Th	1215	2.7	82	
	1822	0.4	12	1726	0.7	21	1333	2.8	85	1843	0.3	9	1345	2.3	70
				2325	2.3	70	2004	0.5	15	2010	0.3	9	1909	-0.2	-6
3 M	0017	2.6	79	18 Tu	0522	0.7	21	3 Th	0214	2.5	76	18 F	0052	2.4	73
	0622	0.4	12	1150	2.9	88	3 Th	0820	0.6	18	18 F	0659	0.4	12	
	1255	3.2	98	1817	0.7	21	1437	2.6	79	1311	2.6	79	1441	2.1	64
	○	1929	0.5	15			2101	0.5	15	○	1939	0.2	6	2059	0.3	9
4 Tu	0127	2.5	76	19 W	0016	2.3	70	4 F	0320	2.5	76	19 Sa	0154	2.5	76
	0732	0.5	15	0618	0.7	21	4 F	0926	0.6	18	4 Sa	0807	0.4	12	
	1404	3.0	91	1243	2.8	85	4 F	1538	2.5	76	4 Su	1411	2.6	79	
	2036	0.6	18	○	1913	0.7	21	2152	0.4	12	4 Su	2036	0.1	3	
5 W	0242	2.5	76	20 Th	0114	2.4	73	5 Sa	0416	2.6	79	20 Su	0258	2.7	82
	0844	0.6	18	0721	0.7	21	5 Sa	1024	0.6	18	5 M	0420	2.5	76	
	1514	2.9	88	1341	2.8	85	5 Sa	1631	2.5	76	20 Tu	1003	0.0	0	
	2138	0.6	18	2012	0.6	18	5 Sa	2236	0.4	12	20 Tu	1555	2.2	67	
6 Th	0352	2.6	79	21 F	0219	2.5	76	6 Su	0504	2.7	82	21 W	0443	3.0	91
	0951	0.6	18	0828	0.6	18	6 Su	1115	0.5	15	21 W	1107	-0.1	-3	
	1617	2.8	85	1444	2.8	85	6 Su	1717	2.4	73	21 W	1701	2.2	67	
	2232	0.5	15	2110	0.4	12	6 Su	2315	0.3	9	21 W	2304	-0.4	-12	
7 F	0450	2.7	82	22 Sa	0324	2.7	82	7 M	0546	2.9	88	22 W	0543	3.1	94
	1050	0.6	18	0935	0.5	15	7 M	1159	0.4	12	22 W	1206	-0.3	-9	
	1710	2.8	85	1546	2.9	88	7 M	1758	2.4	73	22 W	1803	2.3	70	
	2317	0.5	15	2205	0.2	6	7 M	2352	0.3	9	22 W	2351	0.1	3	
8 Sa	0538	2.8	85	23 Su	0425	3.0	91	8 Tu	0623	3.0	91	23 F	0001	-0.5	-15
	1140	0.5	15	1038	0.3	9	8 Tu	1238	0.4	12	23 F	0640	3.2	98	
	1755	2.8	85	1646	2.9	88	8 Tu	1836	2.4	73	23 F	1301	-0.4	-12	
	2356	0.4	12	2257	0.0	0	8 Tu	1912	2.4	73	23 F	1900	2.4	73	
9 Su	0619	3.0	91	24 M	0522	3.3	101	9 W	0027	0.2	6	24 Sa	0016	-0.4	-12
	1224	0.5	15	1136	0.1	3	9 W	0659	3.0	91	24 Sa	0708	2.8	85	
	1833	2.8	85	1742	3.0	91	9 W	1315	0.3	9	24 Sa	1325	0.1	3	
				2348	-0.2	-6	9 W	1912	2.4	73	24 Sa	1923	2.2	67	
10 M	0031	0.4	12	25 Tu	0616	3.6	110	10 Th	0101	0.2	6	25 Su	0110	0.0	0
	0655	3.1	94	1232	-0.1	-3	10 Th	0734	3.1	94	25 Su	0745	2.8	85	
	1304	0.4	12	1836	3.0	91	10 Th	1350	0.3	9	25 Su	1401	0.1	3	
	1908	2.8	85	○	1948	2.4	73	10 Th	2005	2.7	82	25 O	2001	2.2	67
11 Tu	0104	0.3	9	26 W	0038	-0.3	-9	11 F	0137	0.2	6	26 M	0150	0.0	0
	0729	3.2	98	0708	3.8	116	11 F	0808	3.1	94	26 M	0823	2.9	88	
	1340	0.4	12	1326	-0.2	-6	11 F	1425	0.3	9	26 M	1439	0.0	0	
	○	1942	2.7	1928	3.0	91	11 F	2024	2.4	73	26 M	2040	2.2	67	
12 W	0136	0.3	9	27 Th	0128	-0.4	-12	12 Sa	0213	0.2	6	27 Tu	0230	0.0	0
	0802	3.2	98	0759	3.8	116	12 Sa	0844	3.0	91	27 Tu	0926	3.4	104	
	1415	0.4	12	1419	-0.2	-6	12 Sa	1501	0.3	9	27 Tu	1549	-0.2	-6	
	2016	2.7	82	2020	3.0	91	12 Sa	2101	2.4	73	27 Tu	2149	2.6	79	
13 Th	0208	0.3	9	28 F	0218	-0.3	-9	13 Su	0250	0.3	9	28 W	0346	-0.2	-6
	0835	3.2	98	0850	3.8	116	13 Su	0920	3.0	91	28 W	0939	2.8	85	
	1449	0.4	12	1512	-0.2	-6	13 Su	1538	0.3	9	28 W	1641	-0.1	-3	
	2049	2.6	79	2112	2.9	88	13 Su	2139	2.3	70	28 W	2242	2.5	76	
14 F	0241	0.4	12	29 Sa	0310	-0.2	-6	14 M	0330	0.3	9	29 W	0441	0.0	0
	0909	3.2	98	0941	3.7	113	14 M	0958	2.9	88	29 W	1107	3.0	91	
	1524	0.5	15	1606	-0.1	-3	14 M	1619	0.3	9	29 W	1734	0.0	0	
	2124	2.6	79	2205	2.8	85	14 M	2220	2.3	70	29 W	2336	2.4	73	
15 Sa	0316	0.5	15	30 Su	0403	-0.1	-3	15 Tu	0413	0.3	9	30 W	0538	0.1	3
	0944	3.1	94	1035	3.5	107	15 Tu	1039	2.9	88	30 W	1158	2.7	82	
	1601	0.5	15	1702	0.1	3	15 Tu	1702	0.3	9	30 W	1826	0.1	3	
	2201	2.5	76	2300	2.7	82	15 Tu	2305	2.3	70	30 W	2337	2.3	70	
31 M	0501	0.1	3	31 M	0501	0.1	3					31 Sa	0043	2.2	67
	1130	3.2	98	1130	3.2	98						31 Sa	0656	0.3	9
	1801	0.3	9	1801	0.3	9						31 Sa	1251	2.1	64
												31 Sa	1912	0.1	3

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hampton Roads (Sewells Pt.), Virginia, 2011

Times and Heights of High and Low Waters

January				February				March									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height						
h m 0630 Sa 1253 1847	ft 2.7 -0.1 2.1	cm 82 -3 64	h m 16 0553 Su 1226 1813	ft 2.4 0.1 1.9	cm 73 3 58	h m 1 0129 Tu 0757 1411 2009	ft -0.2 2.6 -0.1 2.2	cm -6 79 -3 67	h m 16 0047 W 0712 1334 1933	ft -0.3 2.7 -0.2 2.5	cm -9 82 -6 76	h m 1 0023 Tu 0651 1301 1904	ft 0.0 2.5 0.1 2.2	cm 0 76 3 67	h m 16 0547 W 1209 1813	ft 2.6 0.0 2.5	cm 79 0 76
2 0050 Su 0723 1344 1939	-0.3 2.8 -0.2 2.1	-9 85 -6 64	17 0015 M 0646 1316 1906	-0.1 2.6 -0.1 2.0	-3 79 -3 61	2 0215 W 0839 1450 ● 2050	-0.2 2.6 -0.2 2.3	-6 79 -6 70	17 0142 Th 0802 1421 2024	-0.4 2.9 -0.4 2.7	-12 88 -12 82	2 0113 W 0736 1342 1947	0.0 2.5 0.0 2.4	0 76 0 73	17 0027 Th 0645 1301 1909	-0.2 2.8 -0.2 2.8	-6 85 -6 85
3 0141 M 0812 1431 2026	-0.3 2.8 -0.2 2.2	-9 85 -6 67	18 0108 Tu 0736 1403 1957	-0.3 2.7 -0.2 2.2	-9 82 -6 67	3 Th 0257 0917 1527 2128	-0.2 2.6 -0.2 2.3	-6 79 -6 70	18 F 0235 0851 1507 ○ 2114	-0.6 2.9 -0.5 2.9	-18 88 -15 88	3 Th 0157 0815 1420 2026	-0.1 2.6 0.0 2.5	-3 79 0 76	18 0124 F 0738 1350 2001	-0.3 2.9 -0.3 3.1	-9 88 -9 94
4 0229 Tu 0857 1514 ● 2110	-0.3 2.8 -0.2 2.2	-9 85 -6 67	19 0200 W 0824 1449 ○ 2046	-0.4 2.8 -0.4 2.4	-12 85 -12 73	4 F 0337 0953 1602 2205	-0.2 2.5 -0.2 2.3	-6 76 -6 70	19 Sa 0327 0939 1552 2203	-0.6 2.9 -0.6 3.0	-18 88 -18 91	4 F 0238 0852 1455 ● 2102	-0.1 2.5 -0.1 2.5	-3 76 -3 76	19 0219 Sa 0829 1438 ○ 2052	-0.5 2.9 -0.5 3.2	-15 88 -15 98
5 0314 W 0939 1555 2152	-0.3 2.7 -0.2 2.2	-9 82 -6 67	20 Th 0251 0912 1534 2134	-0.5 2.9 -0.5 2.5	-15 88 -15 76	5 Sa 0416 1027 1636 2240	-0.2 2.4 -0.2 2.4	-6 73 -6 73	20 Su 0419 1027 1638 2253	-0.6 2.8 -0.6 3.0	-18 85 -18 91	5 Sa 0316 0926 1529 2136	-0.1 2.5 -0.1 2.6	-3 76 -3 79	20 0311 Su 0918 1526 2142	-0.5 2.9 -0.5 3.3	-15 88 -15 101
6 0357 Th 1018 1633 2232	-0.2 2.6 -0.2 2.2	-6 79 -6 67	21 F 0341 0958 1618 2223	-0.6 2.9 -0.6 2.7	-18 88 -18 82	6 Su 0454 1100 1709 2315	-0.1 2.3 -0.1 2.3	-3 70 -3 70	21 M 0511 1115 1726 2345	-0.5 2.7 -0.5 3.0	-15 82 -15 91	6 Su 0353 0959 1602 2210	0.0 2.5 0.0 2.6	0 76 0 79	21 0403 M 1007 1614 2233	-0.5 2.9 -0.5 3.3	-15 88 -15 101
7 F 0439 1056 1710 2311	-0.1 2.5 -0.1 2.2	-3 76 -3 67	22 Sa 0433 1046 1704 2313	-0.6 2.8 -0.6 2.7	-18 85 -18 82	7 M 0532 1134 1743 2351	0.0 2.2 0.0 2.3	0 67 0 70	22 Tu 0605 1206 1816	-0.3 2.5 -0.4	-9 76 -12	7 M 0429 1031 1635 2243	0.0 2.4 0.0 2.6	0 73 0 79	22 0455 Tu 1056 1703 2325	-0.4 2.7 -0.4 3.2	-12 82 -12 98
8 Sa 0521 1133 1747 2350	0.0 2.3 -0.1 2.2	0 70 -3 67	23 Su 0526 1134 1751	-0.5 2.7 -0.5 15	-15 82 -15 15	8 Tu 0611 1209 1819	0.2 2.1 0.0	6 64 0	23 W 0040 0702 1300 1910	2.9 -0.1 2.3 -0.2	88 -3 70 -6	8 Tu 0505 1103 1708 2318	0.1 2.3 0.1 2.5	3 70 3 76	23 0548 W 1147 1754	-0.2 2.6 -0.2 -6	-6 79 -6 76
9 Su 0603 1210 1824	0.1 2.2 0.0	3 67 0	24 M 0005 0621 1225 1840	2.7 -0.4 2.5 -0.5	82 -12 76 -15	9 W 0031 0654 1248 1859	2.3 0.3 2.0 0.1	79 9 61 3	24 Th 0139 0803 1359 ○ 2010	2.7 0.0 2.2 -0.1	82 0 67 -3	9 W 0542 1138 1743 2356	0.2 2.2 0.1 2.5	6 67 3 76	24 0019 Th 0643 1240 1849	3.0 0.0 2.4 0.0	91 0 73 0
10 M 0031 0648 1249 1904	2.1 0.2 2.0 0.0	64 6 61 0	25 Tu 0101 0720 1320 1934	2.7 -0.2 2.3 -0.3	82 -6 70 -9	10 Th 0115 0743 1333 1946	2.2 0.4 1.9 0.1	67 12 58 3	25 F 0244 0908 1503 2114	2.6 0.2 2.0 0.0	79 6 61 0	10 Th 0623 1216 1823	0.3 2.1 0.2	9 64 6	25 0117 F 0741 1339 1948	2.8 0.2 2.3 0.1	85 6 70 3
11 Tu 0115 0736 1332 1947	2.1 0.3 1.9 0.1	64 9 58 3	26 W 0200 0823 1419 ○ 2032	2.6 -0.1 2.1 -0.2	79 -3 64 -6	11 F 0207 0841 1427 ○ 2040	2.2 0.4 1.8 0.2	67 12 55 6	26 Sa 0353 1015 1612 2221	2.5 0.3 2.0 0.1	76 9 61 3	11 F 0039 0710 1300 1909	2.4 0.4 2.0 0.2	73 12 61 6	26 0220 Sa 0842 1442 ○ 2053	2.6 0.3 2.2 0.3	79 9 67 9
12 W 0204 0830 1421 ● 2034	2.1 0.4 1.8 0.1	64 12 55 3	27 Th 0305 0930 1524 2134	2.5 0.0 2.0 -0.2	76 0 61 -6	12 Sa 0308 0945 1530 2141	2.2 0.4 1.8 0.1	67 12 55 3	27 Su 0500 1118 1717 2326	2.4 0.3 2.0 0.1	73 9 61 3	12 Su 0130 0805 1354 ○ 2004	2.4 0.5 2.0 0.3	73 15 61 9	27 0327 Su 0945 1548 2200	2.5 0.4 2.1	76 12 64 9
13 Th 0258 0930 1516 2127	2.1 0.4 1.7 0.1	64 12 52 3	28 F 0412 1037 1631 2238	2.5 0.1 1.9 -0.1	76 3 58 -3	13 Su 0413 1050 1637 2245	2.3 0.3 1.9 0.1	70 9 58 3	28 M 0600 1213 1815	2.5 0.2 2.1	76 6 64	13 M 0230 0907 1457 2109	2.4 0.5 2.0 0.3	73 15 61 9	28 0432 M 1045 1652 2304	2.4 0.4 2.2 0.3	73 12 67 9
14 F 0356 1031 1616 2223	2.2 0.4 1.7 0.1	67 12 52 3	29 Sa 0518 1140 1735 2341	2.5 0.1 1.9 -0.1	76 3 58 -3	14 M 0518 1150 1741 2348	2.4 0.2 2.0 -0.1	73 6 61 -3	14 Th 0337 1012 1606 2218	2.4 0.4 2.1 0.2	73 12 64 6	14 M 0337 1012 1606 2218	2.4 0.4 2.1 0.2	73 12 64 6	29 0530 Tu 1138 1748	2.4 2.3	73 70
15 Sa 0456 1131 1716 2320	2.3 0.3 1.8 0.0	70 9 55 0	30 Su 0618 1237 1833	2.5 0.0 2.0	76 0 61	15 Tu 0617 1244 1839	2.6 0.0 2.2	79 0 67	15 Tu 0445 1113 1712 2324	2.5 0.2 2.3 0.0	76 6 70 0	15 Tu 0445 1113 1712 2324	2.5 0.2 2.3 0.0	76 6 70 0	30 0001 W 0621 1224 1836	0.3 2.4 0.3 2.4	9 73 9 73
31 M 0037 0711 1327 1924	0.2 2.6 -0.1 2.1	-6 79 -3 64													31 Th 0705 1305 1918	0.2 2.5 2.5	6 76 76

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hampton Roads (Sewells Pt.), Virginia, 2011

Times and Heights of High and Low Waters

April				May				June							
	Time	Height			Time	Height			Time	Height					
	h m	ft cm		h m	ft cm			h m	ft cm						
1 <i>F</i>	0134	0.1	3	16	0107	-0.2	-6	1	0147	0.2	6	16	0241	0.1	3
	0745	2.5	76	Sa	0713	2.8	85	Su	0747	2.3	70	W	0834	2.2	67
	1344	0.1	3		1320	-0.3	-9	M	1342	0.2	6		1429	0.1	3
	1956	2.6	79		1939	3.3	101		2001	2.8	85		2050	2.8	85
2 <i>Sa</i>	0215	0.1	3	17	0202	-0.3	-9	2	0227	0.2	6	2	0322	0.1	3
	0821	2.5	76	Su	0806	2.8	85	M	0825	2.4	73	Th	0915	2.3	70
	1420	0.1	3		1411	-0.4	-12		1420	0.2	6		1511	0.1	3
	2032	2.7	82	O	2031	3.4	104		2038	2.8	85		2131	2.9	88
3 <i>Su</i>	0253	0.1	3	18	0255	-0.4	-12	3	0306	0.1	3	3	0403	0.1	3
	0857	2.5	76	M	0857	2.8	85	Tu	0902	2.4	73	F	0957	2.3	70
	1455	0.1	3		1500	-0.4	-12		1458	0.1	3		1554	0.1	3
	2107	2.8	85		2123	3.4	104	O	2115	2.8	85		2213	2.9	88
4 <i>M</i>	0330	0.1	3	19	0347	-0.4	-12	4	0344	0.1	3	4	0444	0.0	0
	0930	2.5	76	Tu	0947	2.8	85	W	0939	2.3	70	Sa	1039	2.4	73
	1529	0.1	3		1550	-0.3	-9		1553	0.2	6		1639	0.1	3
	2141	2.8	85		2214	3.4	104		2152	2.8	85		2256	2.8	85
5 <i>Tu</i>	0406	0.1	3	20	0438	-0.3	-9	5	0423	0.2	6	5	0526	0.0	0
	1004	2.4	73	W	1037	2.7	82	Th	1016	2.3	70	Su	1125	2.4	73
	1603	0.1	3		1641	-0.2	-6		1614	0.2	6		1727	0.1	3
	2215	2.7	82		2305	3.2	98		2230	2.8	85		2342	2.8	85
6 <i>W</i>	0442	0.2	6	21	0529	-0.1	-3	6	0502	0.2	6	6	0610	0.0	0
	1038	2.3	70	Th	1128	2.6	79	F	1056	2.3	70	Sa	1159	2.4	73
	1638	0.2	6		1733	-0.1	-3		1654	0.2	6		1805	0.1	3
	2251	2.7	82		2359	3.0	91		2311	2.8	85				
7 <i>Th</i>	0520	0.2	6	22	0622	0.0	0	7	0544	0.2	6	7	0031	2.7	82
	1114	2.3	70	F	1221	2.4	73	Sa	1138	2.3	70	Tu	0646	0.1	3
	1715	0.2	6		1828	0.1	3		1739	0.2	6		1250	2.4	73
	2330	2.7	82						2356	2.7	82		1859	0.3	9
8 <i>F</i>	0601	0.3	9	23	0054	2.8	85	8	0629	0.2	6	8	0124	2.6	79
	1153	2.2	67	Sa	0716	0.2	6	Su	1226	2.3	70	M	0735	0.2	6
	1756	0.3	9		1317	2.3	70		1830	0.3	9		1343	2.3	70
					1926	0.3	9					1956	0.4	12	
9 <i>Sa</i>	0014	2.6	79	24	0152	2.6	79	9	0046	2.7	82	9	0222	2.5	76
	0647	0.4	12	Su	0811	0.3	9	M	0719	0.2	6	Tu	0823	0.3	9
	1239	2.2	67		1416	2.3	70		1320	2.4	73		1437	2.3	70
	1845	0.3	9	O	2028	0.4	12		1928	0.3	9	O	2054	0.5	15
10 <i>Su</i>	0104	2.6	79	25	0252	2.4	73	10	0142	2.6	79	10	0324	2.4	73
	0739	0.4	12	M	0907	0.4	12	Tu	0812	0.2	6	W	0912	0.4	12
	1334	2.2	67		1517	2.3	70		1419	2.5	76		1531	2.3	70
	1942	0.3	9		2131	0.4	12	O	2033	0.3	9		2153	0.5	15
11 <i>M</i>	0203	2.5	76	26	0352	2.3	70	11	0243	2.5	76	11	0427	2.3	70
	0837	0.4	12	Tu	1001	0.4	12	W	0908	0.2	6	Th	1000	0.4	12
	1436	2.2	67		1616	2.3	70		1522	2.6	79		1624	2.4	73
	2047	0.3	9		2233	0.5	15		2140	0.2	6		2249	0.5	15
12 <i>Tu</i>	0308	2.5	76	27	0448	2.3	70	12	0347	2.5	76	12	0529	2.3	70
	0938	0.3	9	W	1052	0.4	12	F	1005	0.1	3	Th	1048	0.3	9
	1542	2.4	73		1710	2.4	73		1624	2.8	85		1714	2.5	76
	2157	0.2	6		2329	0.4	12		2247	0.1	3		2342	0.4	12
13 <i>W</i>	0414	2.6	79	28	0539	2.3	70	13	0451	2.5	76	13	0034	0.0	0
	1038	0.2	6	Th	1138	0.4	12	F	1102	0.0	0	Sa	1135	0.3	9
	1647	2.6	79		1758	2.5	76		1725	3.0	91		1801	2.6	79
	2304	0.1	3						2350	0.0	0				
14 <i>Th</i>	0518	2.6	79	29	0020	0.3	9	14	0552	2.5	76	14	0131	-0.1	-3
	1134	0.0	0	F	0625	2.3	70	Sa	1158	-0.1	-3	Su	0625	2.1	64
	1748	2.8	85		1222	0.3	9		1823	3.2	98		1220	0.3	9
					1842	2.6	79					1846	2.6	79	
15 <i>F</i>	0008	-0.1	-3	30	0105	0.3	9	15	0050	-0.1	-3	15	0223	-0.2	-6
	0617	2.7	82	Sa	0708	2.3	70	Su	0649	2.6	79	W	0820	2.5	76
	1228	-0.1	-3		1303	0.2	6		1253	-0.2	-6		1421	-0.2	-6
	1845	3.1	94		1922	2.7	82		1919	3.3	101	O	2049	3.2	98

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hampton Roads (Sewells Pt.), Virginia, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0257 0.0 0 0851 2.3 70 1449 0.0 0 ● 2110 2.9 88	16 Sa 0336 -0.1 -3 0938 2.5 76 1543 0.0 0 2202 2.9 88	1 M 0353 -0.2 -6 0959 2.9 88 1609 -0.1 -3 2219 3.0 91	16 Tu 0419 0.1 3 1028 2.8 85 1643 0.3 9 2247 2.6 79	1 Th 0456 -0.2 -6 1117 3.4 104 1738 0.0 0 2337 2.8 85	16 F 0451 0.4 12 1106 2.8 85 1731 0.6 18 2323 2.4 73						
2 Sa 0339 -0.1 -3 0936 2.5 76 1536 0.0 0 2154 2.9 88	17 Su 0417 0.0 0 1020 2.6 79 1628 0.1 3 2242 2.7 82	2 Tu 0437 -0.2 -6 1048 3.0 91 1701 -0.1 -3 2306 2.9 88	17 W 0454 0.2 6 1105 2.7 82 1723 0.4 12 2322 2.5 76	2 F 0546 -0.1 -3 1211 3.3 101 1835 0.2 6	17 Sa 0527 0.5 15 1144 2.8 85 1813 0.7 21						
3 Su 0421 -0.1 -3 1021 2.6 79 1624 -0.1 -3 2239 2.9 88	18 M 0455 0.0 0 1102 2.6 79 1712 0.2 6 2321 2.6 79	3 W 0522 -0.2 -6 1138 3.1 94 1755 0.0 0 2356 2.8 85	18 Th 0529 0.3 9 1142 2.7 82 1804 0.5 15 2358 2.4 73	3 Sa 0031 2.7 82 0640 0.1 3 1310 3.2 98 1936 0.3 9	18 Su 0002 2.3 70 0607 0.5 15 1226 2.7 82 1900 0.8 24						
4 M 0503 -0.2 -6 1108 2.7 82 1715 0.0 0 2325 2.8 85	19 Tu 0533 0.1 3 1142 2.5 76 1756 0.3 9	4 Th 0610 -0.2 -6 1231 3.1 94 1851 0.1 3	19 F 0606 0.4 12 1222 2.6 79 1847 0.6 18	4 Su 0130 2.5 76 0739 0.2 6 1413 3.0 91 ● 2041 0.4 12	19 M 0046 2.3 70 0652 0.6 18 1316 2.7 82 1953 0.8 24						
5 Tu 0548 -0.2 -6 1157 2.7 82 1809 0.0 0	20 W 0000 2.4 73 0611 0.2 6 1223 2.5 76 1841 0.4 12	5 F 0049 2.6 79 0701 -0.1 -3 1328 3.0 91 1952 0.2 6	20 Sa 0038 2.3 70 0646 0.4 12 1305 2.6 79 1936 0.7 21	5 M 0235 2.4 73 0843 0.3 9 1521 2.9 88 2146 0.5 15	20 Tu 0139 2.2 67 0746 0.7 21 1412 2.6 79 ● 2052 0.8 24						
6 W 0014 2.7 82 0634 -0.2 -6 1250 2.8 85 1906 0.1 3	21 Th 0039 2.3 70 0650 0.2 6 1306 2.5 76 1928 0.5 15	6 Sa 0146 2.5 76 0757 0.0 0 1430 3.0 91 ● 2057 0.3 9	21 Su 0123 2.2 67 0731 0.5 15 1355 2.5 76 ● 2031 0.8 24	6 Tu 0343 2.4 73 0951 0.4 12 1628 2.9 88 2249 0.5 15	21 W 0241 2.2 67 0848 0.6 18 1515 2.7 82 2153 0.7 21						
7 Th 0107 2.6 79 0724 -0.1 -3 1346 2.8 85 2007 0.1 3	22 F 0122 2.2 67 0731 0.3 9 1352 2.4 73 2020 0.6 18	7 Su 0249 2.3 70 0858 0.1 3 1535 2.9 88 2203 0.3 9	22 M 0215 2.1 64 0823 0.6 18 1452 2.5 76 2131 0.8 24	7 W 0450 2.4 73 1056 0.4 12 1729 2.9 88 2345 0.4 12	22 Th 0346 2.3 70 0954 0.6 18 1619 2.8 85 2250 0.6 18						
8 F 0203 2.4 73 0818 -0.1 -3 1446 2.9 88 ● 2111 0.2 6	23 Sa 0208 2.1 64 0817 0.4 12 1442 2.4 73 ● 2116 0.6 18	8 M 0355 2.3 70 1002 0.2 6 1641 2.9 88 2307 0.3 9	23 Tu 0315 2.1 64 0921 0.6 18 1553 2.6 79 2232 0.7 21	8 Th 0550 2.5 76 1156 0.4 12 1822 2.9 88	23 F 0449 2.5 76 1058 0.4 12 1718 2.9 88 2343 0.4 12						
9 Sa 0304 2.3 70 0915 0.0 0 1549 2.9 88 2217 0.2 6	24 Su 0301 2.0 61 0907 0.4 12 1538 2.4 73 2214 0.6 18	9 Tu 0501 2.3 70 1106 0.2 6 1743 2.9 88	24 W 0418 2.2 67 1023 0.5 15 1654 2.7 82 2328 0.6 18	9 F 0035 0.4 12 0641 2.6 79 1249 0.3 9 1909 2.9 88	24 Sa 0547 2.8 85 1159 0.3 9 1814 3.0 91						
10 Su 0409 2.2 67 1016 0.0 0 1652 2.9 88 2321 0.2 6	25 M 0358 2.0 61 1002 0.4 12 1635 2.5 76 2312 0.6 18	10 W 0006 0.3 9 0603 2.4 73 1207 0.2 6 1840 3.0 91	25 Th 0520 2.3 70 1124 0.4 12 1751 2.8 85	10 Sa 0118 0.3 9 0726 2.7 82 1336 0.3 9 1951 2.9 88	25 Su 0032 0.2 6 0641 3.0 91 1256 0.1 3 1906 3.1 94						
11 M 0513 2.2 67 1117 0.0 0 1754 3.0 91	26 Tu 0457 2.0 61 1058 0.4 12 1731 2.6 79	11 Th 0059 0.2 6 0658 2.5 76 1302 0.1 3 1930 3.0 91	26 F 0020 0.4 12 0616 2.5 76 1221 0.2 6 1844 3.0 91	11 Su 0157 0.3 9 0807 2.8 85 1419 0.3 9 2030 2.9 88	26 M 0120 0.0 0 0733 3.3 101 1350 -0.1 -3 1957 3.1 94						
12 Tu 0021 0.1 3 0615 2.3 70 1217 0.0 0 1851 3.0 91	27 W 0006 0.5 15 0554 2.1 64 1153 0.3 9 1824 2.7 82	12 F 0145 0.2 6 0747 2.6 79 1352 0.1 3 2015 3.0 91	27 Sa 0108 0.2 6 0708 2.7 82 1316 0.1 3 1934 3.1 94	12 M 0234 0.2 6 0845 2.9 88 1459 0.3 9 ● 2105 2.8 85	27 Tu 0207 -0.1 -3 0823 3.5 107 1442 -0.1 -3 ● 2046 3.1 94						
13 W 0116 0.0 0 0712 2.4 73 1313 -0.1 -3 1945 3.0 91	28 Th 0056 0.3 9 0647 2.2 67 1247 0.2 6 1913 2.9 88	13 Sa 0228 0.1 3 0832 2.7 82 1439 0.1 3 ● 2056 2.9 88	28 Su 0154 0.0 0 0758 3.0 91 1409 -0.1 -3 ● 2022 3.2 98	13 Tu 0309 0.2 6 0920 2.9 88 1537 0.3 9 2140 2.7 82	28 W 0254 -0.2 -6 0913 3.6 110 1535 -0.2 -6 2135 3.1 94						
14 Th 0206 0.0 0 0804 2.4 73 1406 -0.1 -3 2034 3.0 91	29 F 0142 0.2 6 0737 2.4 73 1338 0.1 3 2001 3.0 91	14 Su 0307 0.1 3 0913 2.7 82 1522 0.1 3 2135 2.8 85	29 M 0238 -0.1 -3 0847 3.2 98 1500 -0.1 -3 2109 3.2 98	14 W 0343 0.3 9 0955 2.9 88 1615 0.4 12 2214 2.6 79	29 Th 0342 -0.2 -6 1004 3.6 110 1627 -0.1 -3 2225 3.0 91						
15 F 0253 0.0 0 0852 2.5 76 1456 -0.1 -3 ● 2119 3.0 91	30 Sa 0227 0.0 0 0825 2.6 79 1428 0.0 0 ● 2047 3.0 91	15 M 0344 0.1 3 0951 2.8 85 1603 0.2 6 2211 2.7 82	30 Tu 0323 -0.2 -6 0936 3.3 101 1552 -0.2 -6 2157 3.1 94	15 Th 0417 0.3 9 1030 2.9 88 1653 0.5 15 2248 2.5 76	30 F 0432 -0.2 -6 1057 3.5 107 1721 0.0 0 2317 2.8 85						
	31 Su 0310 -0.1 -3 0912 2.8 85 1518 -0.1 -3 2133 3.1 94		31 W 0409 -0.2 -6 1025 3.4 104 1644 -0.1 -3 2246 3.0 91								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Hampton Roads (Sewells Pt.), Virginia, 2011

Times and Heights of High and Low Waters

October			November			December					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0524	0.0	0	16 Su 0456	0.4	12	1 Tu 0053	2.5	76	16 W 0001	2.2	67
1152	3.4	104	1114	2.8	85	0701	0.3	9	0603	0.3	9
1818	0.2	6	1747	0.6	18	1329	2.8	85	1221	2.6	79
			2335	2.3	70	1951	0.3	9	1855	0.3	9
2 Su 0013	2.7	82	17 M 0537	0.5	15	2 W 0155	2.4	73	17 Th 0053	2.3	70
0620	0.1	3	1156	2.8	85	0805	0.4	12	0658	0.4	12
1251	3.2	98	1832	0.6	18	1430	2.7	82	1313	2.6	79
1917	0.3	9				2049	0.4	12	1946	0.3	9
3 M 0113	2.5	76	18 Tu 0020	2.3	70	3 Th 0259	2.4	73	18 F 0150	2.3	70
0721	0.3	9	0623	0.6	18	0910	0.5	15	0801	0.4	12
1354	3.0	91	1245	2.7	82	1531	2.5	76	1411	2.5	76
● O 2020	0.5	15	1922	0.7	21	2144	0.4	12	2040	0.2	6
4 Tu 0219	2.5	76	19 W 0113	2.3	70	4 F 0401	2.4	73	19 Sa 0252	2.5	76
0827	0.4	12	0718	0.6	18	1014	0.5	15	0907	0.3	9
1501	2.9	88	1340	2.7	82	1628	2.5	76	1514	2.5	76
2123	0.5	15				2236	0.4	12	2136	0.1	3
5 W 0327	2.4	73	20 Th 0214	2.3	70	5 Sa 0456	2.5	76	20 Su 0354	2.7	82
0935	0.5	15	0822	0.6	18	1112	0.5	15	1015	0.2	6
1606	2.8	85	1441	2.6	79	1720	2.4	73	1616	2.5	76
2222	0.5	15	2115	0.5	15	2322	0.3	9	2232	0.0	0
6 Th 0431	2.5	76	21 F 0318	2.4	73	6 Su 0545	2.6	79	21 M 0456	2.9	88
1040	0.5	15	0929	0.5	15	1203	0.4	12	1119	0.1	3
1705	2.7	82	1545	2.7	82	1807	2.4	73	1718	2.5	76
2316	0.5	15				2328	-0.2	-6			
7 F 0528	2.6	79	22 Sa 0421	2.7	82	7 M 0006	0.3	9	22 Tu 0554	3.1	94
1139	0.5	15	1036	0.4	12	0629	2.7	82	1219	-0.1	-3
1756	2.7	82	1646	2.7	82	1249	0.4	12	1816	2.5	76
			2306	0.2	6	1849	2.4	73			
8 Sa 0003	0.4	12	23 Su 0520	2.9	88	8 Tu 0046	0.2	6	23 W 0023	-0.3	-9
0617	2.7	82	1138	0.2	6	0709	2.8	85	0650	3.2	98
1230	0.4	12	1745	2.8	85	1331	0.3	9	1316	-0.2	-6
1842	2.7	82	2358	0.0	0	1928	2.4	73	1912	2.6	79
9 Su 0044	0.4	12	24 M 0616	3.2	98	9 W 0125	0.2	6	24 Th 0116	-0.4	-12
0700	2.8	85	1237	0.0	0	0747	2.8	85	0745	3.3	101
1315	0.4	12	1840	2.9	88	1411	0.3	9	1410	-0.3	-9
1922	2.7	82				2006	2.4	73	2005	2.6	79
10 M 0123	0.3	9	25 Tu 0049	-0.1	-3	10 F 0203	0.2	6	25 Th 0209	-0.4	-12
0739	2.9	88	0710	3.4	104	0824	2.9	88	0838	3.4	104
1356	0.3	9	1332	-0.1	-3	1450	0.2	6	1503	-0.3	-9
2000	2.7	82	1933	2.9	88				2058	2.6	79
11 Tu 0159	0.3	9	26 O 0139	-0.2	-6	11 F 0240	0.1	3	26 Sa 0301	-0.4	-12
0816	3.0	91	0802	3.5	107	0901	2.9	88	0930	3.3	101
1435	0.3	9	1425	-0.2	-6	1528	0.2	6	1554	-0.3	-9
2036	2.7	82				2120	2.4	73	2149	2.6	79
12 W 0235	0.2	6	27 Th 0229	-0.3	-9	12 Sa 0317	0.2	6	27 M 0354	-0.3	-9
0851	3.0	91	0853	3.6	110	0937	2.9	88	1021	3.2	98
1513	0.3	9	1518	-0.2	-6	1606	0.3	9	1644	-0.2	-6
2110	2.6	79	2115	2.9	88	2156	2.3	70	2241	2.5	76
13 Th 0309	0.3	9	28 F 0320	-0.3	-9	13 Su 0354	0.2	6	28 M 0446	-0.2	-6
0926	3.0	91	0945	3.6	110	1014	2.8	85	1113	3.0	91
1550	0.4	12	1610	-0.2	-6	1645	0.3	9	1735	-0.1	-3
2145	2.6	79	2206	2.8	85	2235	2.3	70	2333	2.4	73
14 F 0344	0.3	9	29 Sa 0411	-0.2	-6	14 M 0433	0.2	6	29 Tu 0540	-0.1	-3
1000	2.9	88	1038	3.4	104	1052	2.8	85	1204	2.8	85
1627	0.4	12	1703	0.0	0	1725	0.3	9	1825	0.0	0
2219	2.5	76	2259	2.7	82	2316	2.2	67			
15 Sa 0419	0.4	12	30 Su 0504	-0.1	-3	15 Tu 0516	0.3	9	30 W 0027	2.3	70
1036	2.9	88	1133	3.3	101	1134	2.7	82	0636	0.1	3
1706	0.5	15	1758	0.1	3	1808	0.3	9	1257	2.6	79
2256	2.4	73	2354	2.6	79				1915	0.1	3
31 M 0601	0.1	3	31 M 1229	3.0	91						
			1854	0.2	6						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Duck Pier, North Carolina, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa 0445	3.8	116		16 Su 0407	3.4	104		1 Tu 0613	3.6	110	
1119 -0.1	-3			1041 0.2	6			16 W 0522	3.8	116	
1704 2.7	82			1625 2.5	76			1147 -0.3	-9		
2305 -0.3	-9			2224 -0.1	-3			1745 3.3	101		
2 Su 0538	3.9	119		17 M 0458	3.6	110		2352 -0.6	-18		
1210 -0.2	-6			1130 0.0	0			2339 0.0	0		
1756 2.8	85			1718 2.7	82			1731 2.9	88		
2357 -0.3	-9			2317 -0.3	-9			2339 0.0	0		
3 M 0625	3.9	119		18 Tu 0547	3.8	116		16 Tu 0512	3.3	101	
1256 -0.2	-6			1217 -0.3	-9			1132 0.1	3		
1844 2.9	88			1809 3.0	91			1731 2.9	88		
4 Tu 0045	-0.3	-9		19 Sa 0009	-0.5	-15		16 W 0522	3.8	116	
0709 3.8	116			0634 4.0	122			1147 -0.3	-9		
1338 -0.2	-6			1302 -0.5	-16			1745 3.3	101		
● 1928 2.9	88			1857 3.2	98			2352 -0.6	-18		
5 W 0129	-0.2	-6		20 Th 0100	-0.7	-21		17 W 0021	0.0	0	
0749 3.7	113			0721 4.1	125			0631 3.3	101		
1417 -0.2	-6			1346 -0.7	-21			1245 0.0	0		
2009 2.9	88			1946 3.4	104			1847 3.2	98		
6 Th 0211	-0.1	-3		21 F 0151	-0.7	-21		18 F 0059	-0.1	-3	
0828 3.6	110			0807 4.1	125			0705 3.3	101		
1453 -0.2	-6			1431 -0.8	-24			1315 -0.1	-3		
2049 2.9	88			2035 3.6	110			● 1920 3.3	101		
7 F 0252	0.0	0		22 Sa 0243	-0.7	-21		19 F 0134	-0.1	-3	
0905 3.4	104			0854 3.9	119			0737 3.3	101		
1528 -0.1	-3			1517 -0.8	-24			1344 -0.1	-3		
2129 2.9	88			2125 3.7	113			1953 3.4	104		
8 Sa 0333	0.1	3		23 Su 0336	-0.6	-18		20 Sa 0230	-0.9	-27	
0942 3.2	98			0943 3.7	113			0836 3.9	119		
1602 0.0	0			1604 -0.7	-21			1451 -0.9	-27		
2210 2.9	88			2218 3.7	113			2105 4.1	125		
9 Su 0415	0.3	9		24 M 0432	-0.4	-12		21 M 0323	-0.7	-21	
1019 3.0	91			1033 3.4	104			0809 3.2	98		
1638 0.0	0			1653 -0.6	-18			1414 -0.1	-3		
2252 2.9	88			2313 3.7	113			2026 3.4	104		
10 M 0459	0.5	15		25 Tu 0532	-0.2	-6		21 M 0208	0.0	0	
1100 2.8	85			1127 3.1	94			0816 3.8	116		
1716 0.1	3			1747 -0.4	-12			1426 -0.8	-24		
2337 2.8	85			● 1845 -0.3	-9			2044 4.4	134		
11 Tu 0549	0.6	18		26 W 0013	3.6	110		21 M 0242	0.0	0	
1144 2.6	79			0638 0.0	0			0906 3.6	110		
1758 0.2	6			1226 2.8	85			1514 -0.6	-18		
● 1845 0.2	6			● 1845 -0.3	-9			2135 4.3	131		
12 W 0026	2.8	85		27 Th 0118	3.5	107		22 M 0417	-0.5	-15	
0643 0.7	21			0750 0.1	3			1014 3.4	104		
1233 2.4	73			1332 2.6	79			1628 -0.6	-18		
● 1845 0.2	6			1949 -0.1	-3			2250 3.9	119		
13 Th 0119	2.9	88		28 F 0227	3.4	104		23 W 0317	0.1	3	
0744 0.7	21			0903 0.2	6			0916 3.0	91		
1328 2.3	70			1445 2.5	76			1519 0.1	3		
1937 0.2	6			2056 -0.1	-3			2136 3.3	101		
14 F 0215	3.0	91		29 Sa 0335	3.4	104		24 M 0355	0.2	6	
0846 0.6	18			1010 0.1	3			1103 2.8	85		
1428 2.3	70			1556 2.5	76			1712 0.2	-3		
2032 0.2	6			2201 -0.1	-3			2337 3.0	91		
15 Sa 0312	3.1	94		30 Su 0436	3.5	107		25 W 0619	0.0	0	
0946 0.4	12			1107 0.0	0			1207 2.8	85		
1528 2.4	73			1657 2.6	79			1823 -0.1	-3		
2129 0.1	3			2259 -0.1	-3			● 2215 3.3	101		
31 M 0528	3.5	107									
1156 0.0	0										
1747 2.7	82										
2350 -0.2	-6										

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Duck Pier, North Carolina, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0001	0.2	6	16	0523	3.6	110	1	0012	0.2	6	16	0003	-0.5	-15
	0601	3.1	94	Sa	1133	-0.5	-15	Su	0601	2.9	88	M	0556	3.3	101
	1205	0.2	6		1752	4.4	134		1154	0.2	6		1158	-0.5	-15
	1817	3.4	104						1818	3.6	110		1824	4.5	137
2 Sa	0038	0.1	3	17	0016	-0.6	-18	2	0048	0.1	3	17	0057	-0.6	-18
	0635	3.1	94	Su	0616	3.7	113	M	0639	2.9	88	Tu	0649	3.3	101
	1236	0.1	3		1223	-0.6	-18		1229	0.2	6		1250	-0.5	-15
	1850	3.5	107	O	1843	4.6	140		1853	3.7	113	O	1915	4.5	137
3 Su	0112	0.1	3	18	0110	-0.7	-21	3	0123	0.1	3	18	0148	-0.6	-18
	0709	3.1	94	M	0707	3.6	110	Tu	0716	2.9	88	W	0741	3.3	101
	1307	0.1	3		1312	-0.7	-21		1306	0.1	3		1342	-0.4	-12
	● 1923	3.6	110		1933	4.6	140	●	1928	3.8	116		2005	4.4	134
4 M	0146	0.0	0	19	0202	-0.7	-21	4	0159	0.0	0	19	0238	-0.5	-15
	0742	3.1	94	Tu	0758	3.6	110	W	0753	2.9	88	Th	0833	3.3	101
	1339	0.1	3		1402	-0.6	-18		1344	0.2	6		1434	-0.3	-18
	1956	3.6	110		2023	4.5	137		2005	3.8	116		2055	4.2	128
5 Tu	0219	0.1	3	20	0253	-0.6	-18	5	0236	0.0	0	20	0328	-0.3	-9
	0817	3.0	91	W	0849	3.4	104	Th	0831	2.9	88	F	0924	3.2	98
	1413	0.1	3		1453	-0.4	-12		1423	0.2	6		1525	-0.1	-3
	2031	3.6	110		2114	4.3	131		2044	3.7	113		2144	3.9	119
6 W	0255	0.1	3	21	0345	-0.4	-12	6	0315	0.1	3	21	0417	-0.2	-6
	0852	2.9	88	Th	0940	3.3	101	F	0912	2.9	88	Sa	1015	3.1	94
	1448	0.2	6		1545	-0.2	-6		1505	0.2	6		1619	0.2	6
	2107	3.6	110		2206	4.0	122		2125	3.7	113		2233	3.6	110
7 Th	0333	0.2	6	22	0439	-0.2	-6	7	0357	0.1	3	22	0505	0.0	0
	0930	2.8	85	F	1034	3.1	94	Sa	0955	2.9	88	Su	1108	3.0	91
	1527	0.2	6		1640	0.1	3		1551	0.3	9		1714	0.4	12
	2146	3.5	107		2300	3.7	113		2210	3.6	110		2323	3.3	101
8 F	0414	0.3	9	23	0534	0.1	3	8	0442	0.1	3	23	0554	0.2	6
	1011	2.8	85	Sa	1132	2.9	88	Su	1043	2.9	88	M	1204	2.9	88
	1610	0.3	9		1740	0.3	9		1643	0.3	9		1813	0.6	18
	2230	3.4	104		2358	3.4	104		2259	3.5	107		● 1917	0.7	21
9 Sa	0500	0.4	12	24	0632	0.3	9	9	0532	0.1	3	24	0015	3.0	91
	1058	2.7	82	Su	1235	2.8	85	M	1137	2.9	88	Th	0642	0.3	9
	1659	0.4	12		1847	0.5	15		1740	0.3	9		1301	2.9	88
	2320	3.4	104	●					2353	3.4	104		● 1917	0.7	21
10 Su	0552	0.4	12	25	0100	3.1	94	10	0625	0.1	3	25	0108	2.8	85
	1152	2.7	82	M	0732	0.4	12	Tu	1235	3.1	94	W	0730	0.4	12
	1756	0.4	12		1342	2.8	85		1844	0.3	9		1357	3.0	91
					1958	0.6	18	●					2021	0.7	21
11 M	0017	3.3	101	26	0203	3.0	91	11	0052	3.3	101	26	0203	2.7	88
	0650	0.4	12	Tu	0829	0.5	15	W	0721	0.1	3	Sa	0847	-0.2	-6
	1252	2.8	85		1446	2.9	88		1337	3.3	101		1520	4.0	122
	● 1900	0.4	12		2105	0.6	18		1952	0.2	6		2153	0.0	0
12 Tu	0119	3.3	101	27	0303	2.9	88	12	0155	3.2	98	27	0338	2.9	88
	0751	0.3	9	W	0919	0.5	15	F	0818	-0.1	-3	Su	0946	-0.3	-9
	1357	3.0	91		1540	3.0	91		1440	3.6	110		1619	4.1	125
	2009	0.3	9		2203	0.6	18		2100	0.1	3		2255	-0.1	-3
13 W	0224	3.3	101	28	0356	2.8	85	13	0258	3.2	98	28	0440	3.0	91
	0851	0.1	3	Th	1003	0.4	12	F	0915	-0.2	-6	Sa	0946	0.4	12
	1502	3.3	101		1626	3.2	98		1540	3.9	119		1622	3.4	104
	2117	0.0	0		2252	0.5	15		2206	-0.1	-3		2259	0.5	15
14 Th	0327	3.4	104	29	0442	2.8	85	14	0400	3.2	98	29	0438	2.6	79
	0948	-0.1	-3	F	1042	0.3	9	Sa	1011	-0.3	-9	W	1029	0.3	9
	1602	3.7	113		1706	3.4	104		1637	4.2	128		1704	3.5	107
	2221	-0.2	-6		2334	0.3	9		2306	-0.3	-9		2341	0.3	9
15 F	0427	3.5	107	30	0523	2.9	88	15	0459	3.3	101	30	0523	2.6	79
	1041	-0.3	-9	Sa	1118	0.3	9	Su	1105	-0.4	-12	M	1112	0.2	6
	1659	4.0	122		1742	3.5	107		1732	4.4	134		1744	3.6	110
	2321	-0.5	-15									31	0020	0.2	6
												Tu	0607	2.7	82
													1154	0.2	6
													1823	3.8	116

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Duck Pier, North Carolina, 2011

Times and Heights of High and Low Waters

July			August			September									
Time	Height		Time	Height		Time	Height		Time	Height					
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm				
1 F 0111 3.0 91 0705 0.0 0 ● 1921 4.0 122	-0.1	-3	16 Sa 0757 3.2 98 1359 0.0 0 2012 3.9 119	-0.2	-6	1 M 0813 3.8 116 1419 -0.3 -9 2028 4.1 125	-0.4	-12	16 Tu 0847 3.6 110 1458 0.4 12	0.1	3	1 Th 0309 0.4 -12 1551 -0.1 -3 2146 3.8 116	-0.4	-12	16 F 0303 0.5 15 0924 3.8 116 1545 0.7 21 2138 3.1 94
2 Sa 0153 3.1 94 0750 -0.1 -3 1345 4.0 122	-0.2	-6	17 Su 0840 3.3 101 1443 0.1 3 2052 3.7 113	-0.1	-3	2 Tu 0902 4.0 122 1511 -0.2 -6 2115 3.9 119	-0.5	-15	17 W 0924 3.6 110 1537 0.5 15 2132 3.3 101	0.2	6	2 F 0359 0.3 -9 1023 4.4 134 1649 0.1 3 2239 3.5 107	-0.3	-9	17 Sa 0339 0.6 18 1003 3.7 113 1627 0.9 27 2219 3.0 91
3 Su 0234 3.3 101 0836 -0.1 -3 1434 4.0 122	-0.3	-9	18 M 0921 3.3 101 1527 0.3 9 2130 3.5 107	-0.1	-3	3 W 0952 4.1 125 1606 -0.1 -3 2204 3.7 113	-0.5	-15	18 Th 1002 3.5 107 1617 0.7 21 2210 3.1 94	0.3	9	3 Sa 0452 0.0 0 1120 4.3 131 1751 0.3 9 2338 3.2 98	0.0	0	18 Su 0420 0.7 21 1046 3.6 110 1713 0.9 27 2305 2.9 88
4 M 0317 3.4 104 0923 -0.1 -3 1525 3.8 116	-0.4	-12	19 Tu 1002 3.3 101 1610 0.5 15 2208 3.2 98	0.0	0	4 Th 1044 4.1 125 1703 0.0 0 2256 3.4 104	-0.4	-12	19 F 1042 3.5 107 1701 0.8 24 2251 2.9 88	0.4	12	4 Su 0550 0.2 6 1223 4.1 125 1859 0.5 15	0.2	6	19 M 0506 0.8 24 1135 3.5 107 1806 1.0 30 2358 2.8 85
5 Tu 0401 3.5 107 1012 0.0 0 1619 3.6 110	-0.4	-12	20 W 1043 3.3 101 1654 0.6 18 2247 3.0 91	0.1	3	5 F 1140 4.1 125 1805 0.2 6 2353 3.2 98	-0.2	-6	20 Sa 1126 3.4 104 1749 0.9 27 2337 2.7 82	0.5	15	5 M 0044 3.1 94 0656 0.4 12 1331 3.9 119 2010 0.6 18	0.4	12	20 Tu 0600 0.9 27 1229 3.5 107 1904 1.0 30
6 W 0447 3.7 113 1105 0.1 3 1716 3.4 104	-0.4	-12	21 Th 1126 3.2 98 1742 0.8 24 2330 2.8 85	0.2	6	6 Sa 1241 4.0 122 1912 0.3 9	-0.1	-3	21 Su 1215 3.4 104 1843 1.0 30	0.6	18	6 Tu 0159 3.0 91 0807 0.5 15 1441 3.8 116 2117 0.6 18	0.58	2.8	21 W 0700 0.8 24 1329 3.6 110 2005 0.9 27
7 Th 0537 3.7 113 1200 0.2 6	-0.3	-9	22 F 1212 3.2 98 1833 0.9 27	0.4	12	7 Su 1346 3.9 119 2023 0.4 12	0.055 3.0 91 0709 0.1 3 1346 3.9 119 2023 0.4 12	2.6 79	22 M 0029 2.6 79 0633 0.7 21 1309 3.4 104 1943 1.0 30	0.5 15	15	7 W 0312 3.0 91 0917 0.5 15 1545 3.8 116 2215 0.5 15	0.201 2.9 88 0804 0.7 21 1430 3.7 113 2103 0.7 21		
8 F 0009 3.8 116 0629 -0.2 -6 1259 0.2 6	3.2 98	23 Sa 0625 0.4 12 1302 3.2 98 1930 0.9 27	0.017 2.6 79 0814 0.2 6 1454 3.9 119 2132 0.4 12	0.4 12	8 M 0204 2.8 85 0731 0.7 21 1407 3.5 107 2045 0.9 27	0.2 85	23 Tu 0128 2.6 79 0731 0.7 21 1407 3.5 107 2045 0.9 27	0.6 18	8 Th 0415 3.2 98 1019 0.5 15 1640 3.8 116 2304 0.4 12	0.58 2.8 85 0908 0.5 15 1528 3.8 116 2156 0.4 12					
9 Sa 0110 3.9 119 0726 -0.2 -6 1402 0.2 6	3.0 91	24 Su 0714 0.5 15 1355 3.3 101 2030 0.9 27	0.109 2.5 76 0714 0.5 15 1558 3.9 119 2234 0.3 9	2.5 76	9 Tu 0316 2.8 85 0921 0.2 6 1558 3.9 119 2234 0.3 9	2.8 85	24 W 0231 2.7 82 0831 0.6 18 1506 3.6 110 2142 0.7 21	2.7 82	9 F 0507 3.3 101 1113 0.4 12 1726 3.8 116 2346 0.4 12	0.401 3.6 110 1009 0.3 9 1624 4.0 122 2245 0.1 3					
10 Su 0215 3.9 119 0827 -0.1 -3 1505 0.2 6	2.8 85	25 M 0808 0.5 15 1450 3.4 104 2129 0.8 24	0.207 2.5 76 0808 0.5 15 1655 3.9 119 2327 0.2 6	2.5 76	10 W 0423 2.9 88 1025 0.2 6 1655 3.9 119 2327 0.2 6	2.9 88	25 Th 0333 2.9 88 0932 0.5 15 1602 3.8 116 2234 0.4 12	2.9 88	10 Sa 0551 3.5 107 1159 0.4 12 1807 3.8 116	0.455 3.9 119 1106 0.0 0 1716 4.1 125 2333 0.1 -3					
11 M 0323 4.0 122 0929 -0.1 -3 1607 0.1 3	2.8 85	26 Tu 0904 0.5 15 1544 3.5 107 2223 0.6 18	0.308 2.5 76 0904 0.5 15 1544 3.5 107 2223 0.6 18	2.5 76	11 Th 0521 3.1 94 1121 0.2 6 1745 3.9 119	3.1 94	26 F 0430 3.2 98 1030 0.3 9 1654 4.0 122 2322 0.2 6	3.2 98	11 Su 0023 0.3 9 0629 3.6 110 1241 0.4 12 1843 3.7 113	0.546 4.3 131 1201 -0.2 -6 1806 4.2 128					
12 Tu 0429 4.1 125 1030 0.0 0	2.8 85	27 W 1000 0.3 9 1636 3.7 113 2312 0.4 12	0.406 2.6 79 1054 0.2 6 1725 3.9 119 2357 0.1 3	2.6 79	12 F 0013 0.1 3 0610 3.2 98 1212 0.2 6 1829 3.9 119	0.1 3	27 Sa 0522 3.5 107 1125 0.0 0 1744 4.2 128	3.5 107	12 M 0055 0.3 9 0705 3.8 116 1319 0.4 12 1917 3.6 110	0.020 -0.3 -9 0636 4.6 140 1254 -0.3 -9 1855 4.2 128					
13 W 0529 4.1 125 1128 -0.1 -3 1758 0.2 6	2.9 88	28 Th 1054 0.2 6 1725 3.9 119 2357 0.1 3	0.500 2.8 85 0819 0.1 3 1909 3.9 119	2.8 85	13 Sa 0054 0.1 3 0653 3.4 104 1258 0.2 6 1909 3.9 119	0.1 3	28 W 0007 -0.1 -3 0612 3.8 116 1219 -0.2 -6 1832 4.3 131	-0.1 -3	13 Tu 0126 0.3 9 0739 3.8 116 1355 0.4 12 1951 3.5 107	0.107 -0.4 -12 0726 4.8 146 1347 -0.3 -9 1945 4.1 125					
14 Th 0032 4.1 125 0623 3.0 91 1222 -0.1 -3	-0.1 -3	29 F 1146 0.0 0 1811 4.0 122	0.551 3.1 94 0733 3.5 107	3.1 94	14 Su 0131 0.1 3 0811 3.5 107 1340 0.2 6 1946 3.8 116	0.1 3	29 M 0052 -0.3 -9 0701 4.1 125 1311 -0.3 -9 1919 4.3 131	-0.3 -9	14 W 0157 0.3 9 0813 3.8 116 1431 0.5 15 2025 3.4 104	0.155 -0.4 -12 0816 4.9 149 1440 -0.3 -9 2035 3.9 119					
15 F 0118 4.1 125 0712 3.2 98 1312 -0.1 -3	-0.2 -6	30 O 0041 0.0 0 0639 3.3 101 1237 -0.1 -3 1846 4.1 125	-0.1 -3	0.041 0.0 0 0811 3.5 107 1420 0.3 9 1857 4.1 125	0.1 3	30 M 0204 0.1 3 0749 4.4 134 1403 -0.3 -9 2021 3.6 110	-0.4 -12	30 Th 0229 0.4 12 0848 3.8 116 1507 0.6 18 2101 3.3 101	0.244 -0.3 -9 0908 4.8 146 1535 -0.1 -3 2128 3.7 113						
31 O 0124 4.1 125 0726 3.6 110 1328 -0.2 -6 1943 4.2 128	-0.3 -9	31 Su 0124 0.0 0 0726 3.6 110 1328 -0.2 -6 1943 4.2 128	-0.3 -9	0.124 -0.3 -9	31 W 0222 0.5 15 0839 4.5 137 1456 -0.3 -9 2055 4.0 122	-0.5 -15									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Duck Pier, North Carolina, 2011

Times and Heights of High and Low Waters

October				November				December									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height						
h m 1 0336 Sa 1002 1632 2223	ft -0.1 4.6 0.1 3.5	cm -3 140 3 107	16 0308 Su 0932 1600 2154	0.6 3.8 0.7 3.0	18 116 21 116 116 91	1 Tu 0515 1136 1813	0.4 3.9 0.4	12 119 119 12	16 W 0417 1036 1710 2312	0.5 3.6 0.4 2.9	15 115 110 110 88	1 Th 0552 1157 1828	0.5 3.3 0.3	15 101 9 9	16 0455 1103 1731 2346	0.2 3.4 -0.1 3.2	6 104 -3 98
2 0432 Su 1059 1734 2324	0.1 4.3 0.3 3.3	3 131 9 101	17 M 0350 1014 1646 2240	0.7 3.7 0.8 2.9	21 21 88	2 W 0014 0622 1239 1914	3.1 0.6 3.6 0.5	94 18 15	17 Th 0512 1127 1801	0.6 3.5 0.4	18 107 107 107 12	2 F 0044 0657 1253 1919	3.0 0.7 3.0 0.4	91 17 12	17 0555 1156 1823	0.2 3.2 -0.1	6 98 -3
3 0534 M 1202 1840	0.4 4.1 0.5	12 15	18 Tu 0438 1102 1736 2333	0.8 3.6 0.8 2.9	24 88	3 Th 0124 0734 1343 2012	3.1 0.7 3.4 0.5	94 18 15	18 F 0009 0613 1223 1854	3.1 0.6 3.4 0.3	94 3 9	18 Sa 0145 0804 1349 2008	3.0 0.7 2.8 0.4	91 18 12	18 0044 0700 1255 1918	3.4 0.2 3.0 -0.2	104 6 91 -6
4 0033 Tu 0642 1311 1948	3.1 0.6 3.8	94 18	19 W 0533 1156 1831	0.8 3.6 0.8	24 24	4 F 0230 0843 1443 2104	3.2 0.8 3.2 0.5	98 19 15	19 Sa 0109 0719 1323 1949	3.3 0.5 3.4 0.1	101 4 3	19 Su 0241 0907 1444 2055	3.1 0.7 2.7 0.4	94 19 12	19 0146 0809 1358 2016	3.6 0.2 2.9 -0.2	110 6 88 -6
5 0148 W 0756 1419 2051	3.1 0.7 3.7	94 21	20 Th 0032 0634	3.0 0.8	91 24	5 Sa 0326 0943	3.3 0.7	101 20 21	20 Su 0211 0827	3.6 0.3	110 5 9	5 M 0331 1002	3.2 0.7	98 20 21	20 0248 0917 1502 2115	3.8 0.1 2.9 -0.3	116 3 88 -9
6 0259 Th 0906 1522 2146	3.2 0.7 3.6	98 21	21 F 0135 0740 1355	3.1 0.7 3.6	21 15	6 Su 0413 1034 1622	3.5 0.7 3.1	107 21 21	21 M 0310 0932 1526	3.9 0.1 3.3	119 6 101	6 Tu 0416 1049 1624	3.4 0.5 2.6	104 21 9	21 0350 1021 1606 2214	4.0 -0.1 2.9 -0.5	122 -3 88 -15
7 0357 F 1006 1614 2232	3.3 0.7 3.5	101 22	22 Sa 0236 0846 1456	3.4 0.5 3.7	104 15	7 M 0453 1118 1703	3.6 0.6 3.1	110 22 23	22 Tu 0408 1033 1625	4.2 -0.1 3.4	128 7 101	22 W 0457 1131 1708	3.5 0.4 2.7	107 22 6	22 0448 1120 1706 2312	4.2 -0.3 3.0 -0.6	128 -9 91 -18
8 0445 Sa 1057 1659 2311	3.5 0.6 3.5	107 23	23 Su 0335 0949 1553	3.8 0.3 3.8	116 9	8 Tu 0530 1157 1741	3.7 0.5 3.1	113 23 23	23 W 0503 1131 1721	4.5 -0.3 3.4	137 8 9	23 Th 0535 1209 1750	3.6 0.3 2.7	110 23 3	23 0543 1215 1803	4.3 -0.4 3.1	131 -12 94
9 0525 Su 1142 1737 2345	3.7 0.5 3.5	113 24	24 M 0430 1049 1649	4.2 0.0 3.8	128 0	9 W 0605 1234 1818	3.8 0.4 3.1	116 24 23	24 Th 0556 1226 1816	4.7 -0.4 3.5	143 9 107	9 F 0613 1246 1831	3.7 0.2 2.8	113 24 3	24 0007 0636 1306 1856	-0.6 4.3 -0.5 3.2	-18 131 -15 98
10 0601 M 1221 1813	3.8 0.5 3.5	116 25	25 Tu 0522 1145 1742	4.6 -0.2 3.9	140 15	10 Th 0013 0639 1309	0.3 3.9 0.4	9 25 25	25 F 0020 0648 1319	-0.6 4.7 -0.5	-18 10 107	10 Sa 0022 0651 1322	0.1 3.8 0.1	3 25 9	25 0100 0725 1355 1947	-0.6 4.3 -0.5 3.2	-18 131 -15 98
11 0016 Tu 0635 1257 O 1847	0.4 3.9 0.5	12 26	26 W 0614 1239 1834	4.8 -0.4 3.9	146 12	11 F 0048 0714 1344	0.3 3.9 0.4	9 26 26	11 Sa 0113 0739 1410	-0.5 4.7 -0.4	-15 11 2001	11 O 0102 0728 1410	0.1 3.8 0.4	3 26 88	26 0151 0813 1442 2037	-0.5 4.1 -0.5 3.2	-15 125 -15 98
12 0048 W 0708 1331 1922	0.4 4.0 0.5	12 27	27 Th 0041 0705 1332	-0.5 4.9 -0.4	-15 12	12 Sa 0125 0750 1420	0.3 3.9 0.4	9 27 27	12 Su 0205 0830 1502	-0.4 4.5 -0.3	-12 12 2054	12 M 0143 0807 1437	0.0 3.8 0.0	0 27 88	27 0242 0859 1527	-0.4 3.9 -0.4	-12 119 -12
13 0120 Th 0741 1406 1957	0.4 4.0 0.5	12 28	28 F 0131 0756 1425	-0.5 4.9 -0.3	-15 13	13 Su 0204 0828 1458	0.4 3.9 0.4	12 28 28	13 M 0258 0921 1553	-0.2 4.2 -0.2	-6 13 2148	13 Tu 0226 0847 1517	0.1 3.7 0.0	3 28 88	28 0331 0944 1610	-0.1 3.6 -0.2	-3 110 -6
14 0154 F 0816 1441 2034	0.4 3.9 0.6	12 29	29 Sa 0223 0848 1519	-0.3 4.8 -0.2	-9 14	14 M 0244 0907 1539	0.4 3.8 0.4	12 29 29	14 Tu 0353 1012 1644	0.0 3.9 0.0	0 14 2244	14 W 0311 0929 1559	0.1 3.7 0.0	3 29 94	29 0421 1028 1653	0.1 3.3 -0.1	3
15 0230 Sa 0853 1519 2112	0.5 3.9 0.6	12 30	30 Su 0316 0941 1614	-0.1 4.5 0.0	-3 15	15 Tu 0328 0950 1622	0.5 3.7 0.4	15 30 30	15 W 0450 1104 1736	0.3 3.6 0.1	9 15 2343	15 Th 0401 1014 1643	0.1 3.5 -0.1	3 30 94	30 0513 1112 1735	0.3 3.0 0.1	9
						31 M 1037 1712 2308	0.1 0.2 3.2	3 31	31 M 0413 1037 1712 2308	0.1 4.2 0.2 3.2	3 31	31 W 0609 1159 1819	0.5 2.7 0.2	15 31	31 0609 1159 1819	0.5 2.7 0.2	15 6

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Oregon Inlet, North Carolina, 2011

Times and Heights of High and Low Waters

January				February				March										
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height							
h m 0515 Sa 1225 1739	ft 1.1 0.0 0.8	cm 34 0 24	16 Su 1149 1704 2307	ft 1.0 0.0 0.6 0.0	cm 30 0 18 0	1 Tu 0046 1342 1906	ft 0.0 -0.1 0.8	cm 0 -3 24	16 W 0547 1257 1823	ft 1.2 -0.1 1.0	cm 37 -3 30	1 Tu 0527 1230 1806	ft 1.0 0.0 0.9	cm 30 0 27	16 W 0422 1132 1710 2331	ft 1.1 0.0 1.0 0.1	cm 34 0 30 3	
2 Su 0009 0606 1317 1830	-0.1 1.1 0.0 0.8	-3 34 0 24	17 M 0528 1241 1755	1.0 -0.1 0.7	30 21	2 W 0132 0715 ● 1949	0.0 1.0 0.8	0 30 24	17 Th 0045 0637 1342 1912	0.0 1.2 -0.1 1.1	0 37 -3 34	2 W 0030 0611 1310 1849	0.1 1.0 0.0 0.9	3 Th 0116 0650 1346 1928	0.1 0.9 -0.1 0.9	3 F 0037 0613 1305 1852	1.2 1.2 0.0 1.3	37 0 37 40
3 M 0059 0652 1405 1919	-0.1 1.1 -0.1 0.8	-3 34 -3 24	18 Tu 0000 0615 1330 1843	-0.1 1.1 -0.1 0.8	30 34 -3 24	3 Th 0214 0753 1457 2029	0.0 1.0 -0.1 0.8	0 30 -3 24	18 F 0144 0726 1426 ○ 2000	-0.1 1.2 -0.1 1.2	-3 37 -3 37	3 Th 0116 0650 1346 1928	0.1 0.9 -0.1 0.9	3 F 0037 0613 1305 1852	0.0 1.2 0.0 1.3	0 37 0 40		
4 Tu 0146 0736 1449 ● 2005	-0.1 1.1 -0.1 0.8	-3 34 -3 24	19 W 0054 0701 1415 ○ 1931	-0.1 1.2 -0.1 0.9	30 37 -3 27	4 F 0254 0828 1530 2106	0.0 0.9 -0.1 0.8	0 27 -3 24	19 Sa 0242 0815 1509 2049	-0.1 1.2 -0.1 1.3	-3 37 -3 40	4 F 0157 0727 1419 ● 2003	0.0 0.9 -0.1 1.0	4 Sa 0137 0705 1351 ○ 1940	0.0 1.2 0.0 1.4	0 37 0 43		
5 W 0230 0816 1530 2050	-0.1 1.0 -0.1 0.8	-3 30 -3 24	20 Th 0149 0747 1459 2019	-0.1 1.2 -0.1 1.0	30 37 -3 30	5 Sa 0331 0902 1559 2140	0.0 0.9 -0.1 0.8	0 27 -3 24	20 Su 0340 0904 1554 2138	-0.1 1.1 -0.1 1.3	-3 34 -3 40	5 Sa 0236 0802 1448 2035	0.0 0.9 0.0 1.0	5 Su 0235 0756 1437 2028	0.0 1.2 0.0 1.4	0 37 0 43		
6 Th 0311 0854 1608 2134	0.0 1.0 -0.1 0.8	0 30 -3 24	21 F 0246 0833 1542 2108	-0.1 1.2 -0.1 1.0	30 37 -3 30	6 Su 0406 0935 1624 2213	0.0 0.8 -0.1 0.8	0 24 -3 24	21 M 0437 0954 1642 2228	-0.1 1.1 0.0 1.3	-3 34 0 40	6 Su 0311 0835 1513 2104	0.0 0.8 0.0 1.0	6 M 0331 0846 1525 2117	0.0 1.1 0.0 1.4	0 34 0 43		
7 F 0352 0930 1643 2216	0.0 0.9 -0.1 0.8	0 27 -3 24	22 Sa 0344 0920 1626 2158	-0.1 1.1 -0.1 1.1	30 34 -3 34	7 M 0441 1010 1649 2246	0.0 0.7 0.0 0.8	0 21 0 24	22 Tu 0536 1046 1734 2323	0.0 1.0 0.0 1.2	0 30 0 37	7 M 0344 0907 1535 2134	0.0 0.8 0.0 1.0	7 Tu 0426 0937 1616 2208	0.0 1.0 0.0 1.4	0 0 0 43		
8 Sa 0432 1006 1715 2257	0.0 0.8 -0.1 0.7	0 24 -3 21	23 Su 0444 1009 1711 2249	-0.1 1.1 -0.1 1.1	30 34 -3 34	8 Tu 0518 1048 1719 2324	0.0 0.7 0.0 0.8	0 21 0 24	23 W 0637 1143 1832 2324	0.0 0.9 0.0 0.8	0 27 0 30	8 Tu 0417 0941 1600 2207	0.0 0.8 0.0 1.0	8 W 0523 1030 1710 2301	0.0 1.0 0.1 1.3	0 30 3 40		
9 Su 0513 1043 1746 2338	0.0 0.8 -0.1 0.7	0 24 -3 21	24 M 0546 1101 1800 2345	0.0 1.0 0.0 1.1	30 30 0 34	9 W 0601 1130 1757 ● 1934	0.0 0.7 0.0 0.1	0 21 0 3	24 Th 0022 0741 1248 ● 1934	1.2 0.1 0.8 0.1	37 3 24 3	9 W 0453 1018 1632 2245	0.1 0.7 0.1 1.0	9 Th 0622 1127 1807 2358	0.1 0.9 0.1 1.2	3 27 27 37		
10 M 0558 1123 1817	0.0 0.7 0.0	0 21 0	25 Tu 0651 1158 1854	0.0 0.9 0.0	30 27 0	10 Th 0007 0653 1218 1842	0.8 0.1 0.6 0.1	24 3 18 3	25 F 0128 0847 1403 2040	1.1 0.1 0.8 0.1	34 3 24 3	10 Th 0535 1059 1711 2328	0.1 0.7 0.1 1.0	10 F 0723 1234 1909	0.1 0.8 0.2	3 3 6		
11 Tu 0019 0646 1208 1854	0.7 0.1 0.6 0.0	21 3 18 0	26 W 0045 0757 1302 ● 1955	1.1 0.1 0.8 0.0	34 3 24 0	11 F 0058 0755 1315 ● 1934	0.8 0.1 0.6 0.1	24 3 18 3	26 Sa 0236 0952 1517 ● 1934	1.0 0.1 0.8 0.1	30 3 24 3	11 F 0626 1147 1757 ● 2014	0.1 0.7 0.1 0.2	26 Sa 0101 0825 1350 ● 2014	1.1 0.1 0.8 0.2	34 3 24 6		
12 W 0105 0741 1300 ● 1938	0.7 0.1 0.6 0.0	21 3 18 0	27 Th 0151 0905 1414 2059	1.1 0.1 0.7 0.0	34 3 21 0	12 Sa 0156 0907 1420 2032	0.9 0.1 0.6 0.1	27 3 18 3	27 Su 0341 1051 1622 2244	1.0 0.1 0.8 0.1	30 3 24 3	12 Su 0018 0729 1243 ● 1851	1.0 0.1 0.7 0.2	27 Su 0206 0925 1503 2119	1.1 0.1 0.8 0.2	34 3 24 6		
13 Th 0156 0843 1401 2027	0.8 0.1 0.6 0.0	24 3 18 0	28 F 0259 1012 1527 2202	1.0 0.1 0.7 0.0	30 33 21 0	13 Su 0258 1017 1531 2134	0.9 0.1 0.7 0.0	28 M 0438 1144 1717 2340	1.0 0.0 0.8 0.1	30 3 24 3	13 Su 0115 0838 1350 1953	1.0 0.1 0.7 0.2	13 M 0309 1020 1606 2221	1.0 0.1 0.8 0.2	30 3 24 6			
14 F 0251 0948 1507 2120	0.8 0.0 0.6 0.0	24 30 18 0	29 Sa 0403 1113 1632 2302	1.0 0.0 0.7 0.0	30 30 21 0	14 M 0359 1117 1635 2238	1.0 0.0 0.7 0.0	14 F 0217 0944 1504 2104	1.1 0.1 0.8 0.2	34 3 24 6	14 M 0406 1109 1659 2318	1.0 0.1 0.9 0.2	14 Tu 0406 1109 1659 2318	1.0 0.1 0.9 0.2	30 3 27 6			
15 Sa 0347 1051 1609 2213	0.9 0.0 0.6 0.0	27 30 18 0	30 Su 0459 1209 1729 2356	1.0 0.0 0.7 0.0	30 30 21 0	15 Tu 0455 1210 1732 2342	1.1 0.0 0.8 0.0	15 Tu 0321 1041 1612 2219	1.1 0.1 0.9 0.1	34 3 27 3	15 W 0456 1152 1745 ● 1825	0.9 0.0 0.9 0.2	15 W 0456 1152 1745 1825	0.9 0.0 0.9 1.0	27 0 27 30			
31 M 0550 1258 1819	1.0 0.0 0.8	30 30 24	31 M 0550 1258 1819	1.0 0.0 0.8	30 30 24							31 Th 0541 1230 1825	0.2 0.0 0.0	31 Th 0541 1230 1825	0.2 0.0 0.0	6 0 30		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Oregon Inlet, North Carolina, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0055 0.1 3 0622 0.9 27 1305 0.0 0 1901 1.0 30	16 Sa 0028 0.1 3 0550 1.1 34 1230 0.0 0 1831 1.4 43		1 Su 0109 0.1 3 0629 0.8 24 1253 0.0 0 1902 1.1 34		16 M 0117 0.1 3 0624 1.0 30 1256 0.0 0 1903 1.5 46		1 W 0209 0.1 3 0708 0.7 21 1316 0.0 0 ● 1938 1.2 37		16 Th 0252 0.1 3 0751 0.9 27 1420 0.0 0 2023 1.4 43		
			2 Sa 0136 0.1 3 0700 0.8 24 1336 0.0 0 1933 1.0 30	17 Su 0128 0.0 0 0644 1.1 34 1319 0.0 0 ○ 1920 1.5 46		2 M 0150 0.1 3 0705 0.8 24 1323 0.0 0 1932 1.1 34		17 Tu 0213 0.0 0 0717 1.0 30 1347 0.0 0 ○ 1953 1.5 46		2 Th 0254 0.1 3 0746 0.8 24 1350 0.0 0 2015 1.2 37	
3 Su 0214 0.1 3 0735 0.8 24 1404 0.0 0 ● 2003 1.1 34	18 M 0224 0.0 0 0736 1.1 34 1409 0.0 0 2009 1.5 46		3 Tu 0230 0.1 3 0738 0.8 24 1350 0.0 0 ● 2003 1.1 34		18 W 0307 0.0 0 0808 1.0 30 1438 0.0 0 2041 1.4 43		3 F 0339 0.1 3 0828 0.8 24 1427 0.0 0 2053 1.3 40		18 Sa 0429 0.0 0 0934 0.9 27 1554 0.1 3 2150 1.2 37		
			4 M 0250 0.1 3 0808 0.8 24 1429 0.0 0 2032 1.1 34	19 Tu 0319 0.0 0 0827 1.1 34 1500 0.0 0 2059 1.5 46		4 W 0311 0.1 3 0812 0.8 24 1418 0.0 0 2037 1.2 37		19 Th 0400 0.0 0 0900 0.9 27 1528 0.0 0 2129 1.4 43		4 Sa 0424 0.1 3 0912 0.8 24 1509 0.1 3 2134 1.3 40	
5 Tu 0326 0.1 3 0840 0.8 24 1453 0.1 3 2102 1.1 34	20 W 0414 0.0 0 0919 1.0 30		5 Th 0353 0.1 3 0849 0.8 24 1449 0.1 3 2113 1.2 37		20 F 0452 0.0 0 0953 0.9 27 1618 0.0 0 2216 1.3 40		5 Su 0508 0.1 3 1001 0.8 24 1558 0.1 3 2218 1.3 40		20 M 0557 0.0 0 1121 0.8 24 1728 0.2 6 2314 1.0 30		
			6 W 0402 0.1 3 0914 0.8 24 1521 0.1 3 2137 1.1 34	21 Th 0509 0.0 0 1012 0.9 27 1644 0.1 3 2240 1.3 40		6 F 0437 0.1 3 0930 0.7 21 1526 0.1 3 2154 1.2 37		21 Sa 0543 0.0 0 1051 0.8 24 1710 0.1 3 2303 1.2 37		6 M 0551 0.1 3 1054 0.9 27 1655 0.2 6 2306 1.2 37	
7 Th 0442 0.1 3 0952 0.8 24 1554 0.1 3 2216 1.1 34	22 F 0605 0.1 3 1110 0.9 27 1740 0.1 3 2333 1.2 37		7 Sa 0523 0.1 3 1016 0.8 24 1609 0.1 3 2237 1.2 37		22 Su 0633 0.0 0 1153 0.8 24 1805 0.2 6 2351 1.1 34		7 Tu 0634 0.1 3 1151 0.9 27 1800 0.2 6 2357 1.2 37		22 W 0721 0.0 0 1314 0.8 24 1913 0.3 9		
			8 F 0527 0.1 3 1034 0.7 21 1634 0.1 3 2300 1.1 34	23 Sa 0701 0.1 3 1217 0.8 24 1839 0.2 6		8 Su 0611 0.1 3 1108 0.8 24 1701 0.2 6 2325 1.2 37		23 M 0721 0.0 0 1300 0.8 24 1903 0.2 6		23 W 0720 0.1 3 1254 1.0 30 1915 0.2 6	
9 Sa 0619 0.1 3 1124 0.7 21 1722 0.2 6 2349 1.1 34	24 Su 0028 1.1 34 0757 0.1 3 1331 0.8 24 ● 1942 0.2 6		9 M 0659 0.1 3 1207 0.8 24 1803 0.2 6 ● 2005 0.3 9		24 Tu 0041 1.0 30 0808 0.0 0 1405 0.8 24 ● 2005 0.3 9		9 Th 0054 1.1 34 0808 0.1 3 1359 1.1 34 2036 0.3 9		24 F 0137 0.8 24 0844 0.1 3 1504 0.8 24 2110 0.3 9		
			10 Su 0716 0.1 3 1222 0.7 21 1820 0.2 6	25 M 0127 1.0 30 0850 0.1 3 1441 0.8 24 2047 0.3 9		10 Tu 0018 1.2 37 0747 0.1 3 1313 0.9 27 ● 1916 0.2 6		25 W 0136 0.9 27 0853 0.0 0 1503 0.8 24 2107 0.3 9		10 F 0157 1.0 30 0900 0.1 3 1504 1.2 37 2153 0.2 6	
11 M 0043 1.1 34 0814 0.1 3 1330 0.8 24 ● 1928 0.2 6	26 Tu 0227 0.9 27 0940 0.0 0 1541 0.8 24 2149 0.3 9		11 W 0116 1.1 34 0837 0.1 3 1422 1.0 30 2039 0.2 6		26 Th 0234 0.8 24 0936 0.0 0 1554 0.9 27 2206 0.2 6		11 Sa 0303 1.0 30 0955 0.0 0 1606 1.2 37 2303 0.2 6		26 Su 0335 0.7 21 1010 0.1 3 1637 0.9 27 2309 0.2 6		
			12 Tu 0143 1.1 34 0910 0.1 3 1443 0.9 27 2046 0.2 6	27 W 0325 0.9 27 1025 0.0 0 1632 0.9 27 2248 0.2 6		12 Th 0219 1.1 34 0927 0.1 3 1527 1.1 34 2201 0.2 6		27 F 0333 0.8 24 1018 0.0 0 1639 0.9 27 2300 0.2 6		12 Su 0409 1.0 30 1052 0.0 0 1504 1.2 37 2153 0.2 6	
13 W 0247 1.1 34 1002 0.1 3 1550 1.0 30 2209 0.2 6	28 Th 0418 0.8 24 1107 0.0 0 1716 0.9 27 2340 0.2 6		13 F 0325 1.1 34 1018 0.0 0 1626 1.2 37 2313 0.2 6		28 Sa 0426 0.7 21 1058 0.0 0 1719 1.0 30 2350 0.2 6		13 M 0007 0.2 6 0510 1.0 30 1147 0.0 0 1758 1.4 43		28 Tu 0004 0.2 6 0514 0.8 24 1131 0.0 0 1757 1.1 34		
			14 Th 0351 1.1 34 1052 0.0 0 1648 1.2 37 2323 0.1 3	29 F 0507 0.8 24 1145 0.0 0 1755 1.0 30		14 Sa 0429 1.0 30 1111 0.0 0 1720 1.3 40		29 Tu 0512 0.7 21 1136 0.0 0 1756 1.0 30		14 W 0105 0.1 3 0606 1.0 30 1241 0.0 0 1849 1.4 43	
15 F 0453 1.1 34 1141 0.0 0 1741 1.3 40	30 Sa 0026 0.2 6 0550 0.8 24 1221 0.0 0 1830 1.0 30		15 Su 0018 0.1 3 0528 1.0 30 1203 0.0 0 1813 1.4 43		30 M 0038 0.1 3 0553 0.7 21 1211 0.0 0 1830 1.1 34		15 W 0200 0.1 3 0659 1.0 30 1332 0.0 0 ○ 1937 1.4 43		30 Th 0145 0.1 3 0640 0.8 24 1249 0.0 0 1913 1.3 40		
			31 Tu 0124 0.1 3 0631 0.7 21 1244 0.0 0 1904 1.1 34								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Oregon Inlet, North Carolina, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0231 0.1 3 0724 0.9 27 1331 0.0 0 ● 1953 1.3 40	16 Sa 0316 0.1 3 0824 1.0 30 1450 0.1 3 2044 1.3 40		1 M 0323 0.2 6 0837 1.2 37 1506 0.1 3 2058 1.4 43	16 Tu 0355 0.2 6 0920 1.1 34 1546 0.3 9 2131 1.2 37		1 Th 0419 0.3 9 0955 1.6 49 1656 0.3 9 2220 1.4 43			16 F 0405 0.4 12 0949 1.2 37 1625 0.3 9 2211 1.1 34		
2 Sa 0315 0.1 3 0809 0.9 27 1416 0.1 3 2033 1.4 43	17 Su 0358 0.1 3 0910 1.0 30 1532 0.1 3 2123 1.2 37		2 Tu 0406 0.2 6 0925 1.3 40 1602 0.2 6 2145 1.4 43	17 W 0427 0.3 9 0956 1.1 34 1619 0.3 9 2206 1.1 34		2 F 0512 0.3 9 1049 1.5 46 1757 0.4 12 2313 1.3 40			17 Sa 0437 0.4 12 1027 1.2 37 1704 0.4 12 2248 1.1 34		
3 Su 0358 0.1 3 0856 1.0 30 1505 0.1 3 2116 1.4 43	18 M 0437 0.1 3 0955 1.0 30 1612 0.2 6 2201 1.1 34		3 W 0450 0.2 6 1016 1.3 40 1701 0.2 6 2234 1.3 40	18 Th 0459 0.3 9 1032 1.1 34 1653 0.3 9 2242 1.1 34		3 Sa 0610 0.4 12 1148 1.5 46 1901 0.4 12			18 Su 0515 0.4 12 1110 1.2 37 1753 0.4 12 2332 1.0 30		
4 M 0440 0.1 3 0945 1.0 30 1559 0.1 3 2201 1.3 40	19 Tu 0515 0.1 3 1040 1.0 30 1652 0.2 6 2238 1.1 34		4 Th 0538 0.2 6 1110 1.3 40 1803 0.3 9 2327 1.3 40	19 F 0532 0.3 9 1110 1.1 34 1733 0.3 9 2321 1.0 30		4 Su 0013 1.2 37 0713 0.4 12 1254 1.4 43 ● 2009 0.5 15			19 M 0559 0.4 12 1159 1.2 37 1853 0.4 12		
5 Tu 0522 0.1 3 1036 1.1 34 1659 0.2 6 2249 1.3 40	20 W 0552 0.1 3 1124 0.9 27 1732 0.3 9 2318 1.0 30		5 F 0631 0.3 9 1209 1.3 40 1910 0.4 12	20 Sa 0610 0.3 9 1154 1.1 34 1820 0.4 12		5 M 0121 1.2 37 0817 0.4 12 1407 1.4 43 2116 0.5 15			20 Tu 0024 1.0 30 0651 0.4 12 1255 1.2 37 ● 2001 0.5 15		
6 W 0606 0.1 3 1132 1.1 34 1804 0.2 6 2341 1.2 37	21 Th 0629 0.2 6 1209 0.9 27 1817 0.3 9		6 Sa 0024 1.2 37 0730 0.3 9 1315 1.3 40	21 Su 0005 1.0 30 0653 0.4 12 1245 1.1 34		6 Tu 0235 1.2 37 0920 0.4 12 1516 1.3 40 2219 0.5 15			21 W 0125 1.0 30 0750 0.4 12 1357 1.2 37 2109 0.5 15		
7 Th 0654 0.1 3 1231 1.2 37 1916 0.3 9	22 F 0000 0.9 27 0707 0.2 6 1258 0.9 27 1907 0.3 9		7 Su 0129 1.1 34 0831 0.3 9 1426 1.3 40 2131 0.4 12	22 M 0056 1.0 30 0741 0.4 12 1344 1.1 34 2032 0.4 12		7 W 0343 1.2 37 1021 0.4 12 1617 1.3 40 2315 0.4 12			22 Th 0234 1.1 34 0855 0.4 12 1501 1.3 40 2208 0.4 12		
8 F 0038 1.1 34 0746 0.1 3 1336 1.2 37 ● 2030 0.3 9	23 Sa 0047 0.9 27 0749 0.2 6 1353 0.9 27 ● 2007 0.3 9		8 M 0239 1.1 34 0934 0.3 9 1535 1.3 40 2238 0.4 12	23 Tu 0156 1.0 30 0833 0.3 9 1447 1.1 34 2147 0.4 12		8 Th 0442 1.2 37 1117 0.3 9 1709 1.3 40			23 F 0339 1.2 37 1001 0.4 12 1602 1.3 40 2300 0.4 12		
9 Sa 0140 1.1 34 0844 0.1 3 1444 1.2 37 2143 0.3 9	24 Su 0140 0.9 27 0834 0.2 6 1451 1.0 30 2116 0.4 12		9 Tu 0348 1.1 34 1033 0.2 6 1637 1.3 40 2339 0.4 12	24 W 0302 1.0 30 0928 0.3 9 1547 1.2 37 2251 0.4 12		9 F 0005 0.4 12 0533 1.2 37 1209 0.3 9 1756 1.3 40			24 Sa 0437 1.3 40 1106 0.3 9 1659 1.4 43 2348 0.4 12		
10 Su 0248 1.0 30 0943 0.1 3 1550 1.3 40 2252 0.3 9	25 M 0240 0.8 24 0921 0.2 6 1546 1.0 30 2226 0.3 9		10 W 0450 1.1 34 1129 0.2 6 1730 1.4 43	25 Th 0406 1.0 30 1024 0.3 9 1641 1.3 40 2345 0.4 12		10 Sa 0049 0.4 12 0619 1.3 40 1256 0.3 9 1838 1.3 40			25 Su 0529 1.4 43 1207 0.3 9 1752 1.4 43		
11 M 0355 1.0 30 1042 0.1 3 1650 1.3 40 2355 0.3 9	26 Tu 0340 0.8 24 1008 0.2 6 1636 1.1 34 2329 0.3 9		11 Th 0033 0.3 9 0545 1.1 34 1221 0.2 6 1818 1.4 43	26 F 0502 1.1 34 1121 0.3 9 1731 1.4 43		11 Su 0128 0.3 9 0700 1.3 40 1338 0.3 9 1918 1.2 37			26 M 0034 0.3 9 0618 1.5 46 1304 0.2 6 1843 1.4 43		
12 Tu 0457 1.0 30 1138 0.1 3 1745 1.3 40	27 W 0436 0.9 27 1054 0.2 6 1721 1.2 37		12 F 0120 0.3 9 0634 1.1 34 1309 0.2 6 1901 1.3 40	27 Sa 0033 0.3 9 0552 1.2 37 1217 0.2 6 1819 1.5 46		12 M 0204 0.3 9 0738 1.3 40 1416 0.3 9 ● 1955 1.2 37			27 Tu 0120 0.3 9 0706 1.6 49 1400 0.2 6 ● 1933 1.4 43		
13 W 0052 0.2 6 0553 1.0 30 1230 0.1 3 1835 1.4 43	28 Th 0023 0.3 9 0527 0.9 27 1142 0.1 3 1804 1.3 40		13 Sa 0204 0.3 9 0720 1.1 34 1353 0.2 6 ● 1941 1.3 40	28 Tu 0117 0.3 9 0641 1.3 40 1313 0.2 6 ● 1906 1.5 46		13 M 0238 0.3 9 0812 1.3 40 1451 0.3 9 2030 1.2 37			28 W 0208 0.3 9 0755 1.7 52 1454 0.2 6 2022 1.4 43		
14 Th 0144 0.2 6 0646 1.0 30 1320 0.1 3 1921 1.4 43	29 F 0113 0.2 6 0616 1.0 30 1230 0.1 3 1847 1.4 43		14 Su 0243 0.2 6 0803 1.2 37 1434 0.2 6 2019 1.3 40	29 M 0201 0.3 9 0728 1.4 43 1408 0.2 6 1953 1.5 46		14 W 0309 0.3 9 0844 1.3 40 1522 0.3 9 2103 1.2 37			29 Th 0258 0.3 9 0844 1.7 52 1550 0.2 6 2112 1.4 43		
15 F 0232 0.2 6 0736 1.0 30 1406 0.1 3 ● 2004 1.3 40	30 Sa 0158 0.2 6 0703 1.1 34 1320 0.1 3 ● 1929 1.4 43		15 M 0320 0.2 6 0843 1.2 37 1512 0.2 6 2056 1.2 37	30 Tu 0244 0.3 9 0816 1.5 46 1503 0.2 6 2041 1.5 46		15 Th 0337 0.4 12 0916 1.2 37 1552 0.3 9 2136 1.1 34			30 F 0351 0.3 9 0935 1.6 49 1647 0.3 9 2204 1.3 40		
			31 Su 0241 0.2 6 0750 1.2 37 1412 0.1 3 2013 1.4 43	31 W 0330 0.3 9 0904 1.6 49 1558 0.2 6 2129 1.4 43							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Oregon Inlet, North Carolina, 2011

Times and Heights of High and Low Waters

October			November			December					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0448 0.3 9 1029 1.6 49 1746 0.3 9 2259 1.3 40	16 Su 0351 0.4 12 0955 1.2 37 1654 0.3 9 2221 1.0 30		1 Tu 0627 0.3 9 1202 1.3 40 1925 0.2 6	16 W 0450 0.3 9 1058 1.2 37 1815 0.2 6 2340 0.9 27		1 Th 0029 0.9 27 0700 0.2 6 1222 0.9 27 1939 0.0 0		16 F 0542 0.1 3 1126 1.0 30 1826 0.0 0			
	2 Su 0549 0.4 12 1127 1.5 46 1848 0.4 12	17 M 0430 0.4 12 1037 1.2 37 1742 0.3 9 2307 1.0 30	2 W 0057 1.0 30 0731 0.3 9 1304 1.1 34 2020 0.2 6	17 Th 0550 0.3 9 1149 1.1 34 1901 0.2 6		2 O 0133 0.9 27 0802 0.2 6 1322 0.8 24 2027 0.1 3		17 O 0016 1.0 30 0651 0.1 3 1221 0.9 27 1913 0.0 0			
	3 M 0001 1.2 37 0652 0.4 12 1231 1.4 43 O 1951 0.4 12	18 Tu 0517 0.4 12 1125 1.2 37 1836 0.4 12	3 Th 0206 1.0 30 0836 0.3 9 1409 1.0 30 2113 0.2 6	18 F 0039 1.0 30 0700 0.3 9 1245 1.1 34 1949 0.2 6		3 Sa 0232 0.9 27 0902 0.2 6 1428 0.7 21 2113 0.1 3		18 Su 0116 1.0 30 0806 0.1 3 1324 0.9 27 2006 0.0 0			
	4 Tu 0112 1.2 37 0757 0.4 12 1340 1.3 40 O 2053 0.4 12	19 W 0000 1.0 30 0613 0.4 12 1218 1.2 37 1933 0.4 12	4 F 0309 1.1 34 0938 0.3 9 1513 1.0 30 2201 0.2 6	19 Sa 0142 1.0 30 0817 0.3 9 1349 1.0 30 2040 0.2 6		4 Su 0325 0.9 27 0959 0.2 6 1532 0.7 21 2159 0.1 3		19 M 0219 1.1 34 0920 0.1 3 1432 0.8 24 2105 0.0 0			
5 W 0226 1.1 34 0901 0.4 12 1448 1.2 37 2150 0.4 12	20 Th 0101 1.0 30 0719 0.4 12	5 Sa 0402 1.1 34 1035 0.3 9 1610 0.9 27 2246 0.2 6	20 Su 0246 1.2 37 0932 0.2 6 1456 1.0 30 2134 0.1 3	5 M 0413 0.9 27 1052 0.1 3 1628 0.7 21 2244 0.1 3		20 Tu 0323 1.2 37 1030 0.1 3 1542 0.8 24 2209 0.0 0		20 W 0424 1.2 37 1134 0.0 0 1646 0.9 27			
	6 Th 0332 1.2 37 1003 0.4 12 1549 1.2 37 2242 0.4 12	21 F 0208 1.1 34 0832 0.4 12 1421 1.2 37 2122 0.3 9	6 Su 0448 1.1 34 1126 0.2 6 1701 0.9 27 2328 0.2 6	21 M 0346 1.3 40 1042 0.2 6 1603 1.0 30 2230 0.1 3		6 Tu 0456 0.9 27 1140 0.1 3 1716 0.7 21 2326 0.0 0		21 W 0424 1.2 37 1134 0.0 0 1646 0.9 27			
	7 F 0427 1.2 37 1100 0.4 12 1642 1.2 37 2329 0.3 9	22 Sa 0313 1.2 37 0945 0.3 9 1526 1.2 37 2214 0.3 9	7 M 0529 1.1 34 1212 0.2 6 1747 0.9 27	22 Tu 0443 1.4 43 1145 0.1 3 1705 1.0 30 2327 0.1 3		7 W 0536 1.0 30 1225 0.0 0 1759 0.7 21		22 Th 0521 1.3 40 1234 0.0 0 1745 0.9 27			
	8 Sa 0515 1.2 37 1151 0.3 9 1730 1.1 34	23 Su 0411 1.3 40 1054 0.3 9 1629 1.2 37 2304 0.3 9	8 Tu 0007 0.2 6 0607 1.1 34 1254 0.2 6 1828 0.9 27	23 W 0537 1.4 43 1243 0.1 3 1801 1.1 34		8 Th 0004 0.0 0 0612 1.0 30 1308 0.0 0 1837 0.7 21		23 F 0011 -0.1 -3 0615 1.3 40 1329 0.0 0 1840 0.9 27			
9 Su 0010 0.3 9 0557 1.3 40 1237 0.3 9 1813 1.1 34	24 M 0505 1.5 46 1156 0.2 6 1727 1.3 40 2355 0.2 6	9 W 0043 0.2 6 0641 1.1 34 1333 0.1 3 1905 0.9 27	24 Th 0024 0.1 3 0629 1.5 46 1340 0.0 0 1855 1.1 34	9 F 0040 0.0 0 0646 1.0 30 1350 0.0 0 1911 0.7 21		9 Sa 0040 0.0 0 0646 1.0 30 1350 0.0 0 1932 0.9 27		24 M 0108 -0.1 -3 0706 1.3 40 1421 -0.1 -3 1932 0.9 27			
	10 M 0048 0.3 9 0635 1.3 40 1318 0.3 9 1853 1.1 34	25 Tu 0556 1.6 49 1254 0.2 6 1821 1.3 40	10 Th 0116 0.2 6 0713 1.2 37 1410 0.1 3 1938 0.9 27	25 F 0120 0.0 0 0720 1.5 46 1434 0.0 0 1947 1.1 34		10 Sa 0113 0.0 0 0720 1.0 30 1432 0.0 0 1945 0.7 21		25 Su 0202 -0.1 -3 0754 1.3 40 1511 -0.1 -3 2024 0.9 27			
	11 Tu 0123 0.3 9 0710 1.3 40 1356 0.2 6 O 1930 1.1 34	26 W 0047 0.2 6 0646 1.6 49 1350 0.1 3 ● 1913 1.3 40	11 F 0146 0.2 6 0745 1.2 37 1448 0.1 3 2010 0.9 27	26 Sa 0215 0.0 0 0811 1.5 46 1527 0.0 0 2038 1.0 30		11 Su 0146 0.0 0 0754 1.1 34 1513 0.0 0 2021 0.7 21		26 M 0254 -0.1 -3 0841 1.2 37 1558 -0.1 -3 2115 0.9 27			
	12 W 0155 0.3 9 0742 1.3 40 1430 0.2 6 2004 1.1 34	27 Th 0139 0.2 6 0736 1.6 49 1444 0.1 3 2004 1.3 40	12 Sa 0214 0.2 6 0817 1.2 37 1527 0.1 3 2043 0.9 27	27 Su 0309 0.0 0 0900 1.4 43 1620 0.0 0 2131 1.0 30		12 M 0221 0.0 0 0830 1.1 34 1553 0.0 0 2100 0.8 24		27 Tu 0346 0.0 0 0926 1.1 34 1643 -0.1 -3 2206 0.9 27			
13 Th 0224 0.3 9 0812 1.3 40 1503 0.2 6 2036 1.0 30	28 F 0233 0.2 6 0826 1.6 49 1539 0.1 3 2055 1.2 37	13 Su 0244 0.2 6 0852 1.2 37 1607 0.1 3 2119 0.8 24	28 M 0404 0.1 3 0949 1.3 40 1711 0.0 0 2227 1.0 30	13 Tu 0301 0.0 0 0909 1.1 34 1631 0.0 0 2143 0.8 24		13 W 0437 0.0 0 1010 1.0 30 1726 -0.1 -3 2258 0.9 27		28 F 0437 0.0 0 1010 1.0 30 1726 -0.1 -3 2258 0.9 27			
	14 F 0251 0.3 9 0843 1.2 37 1536 0.3 9 2108 1.0 30	29 Sa 0328 0.2 6 0918 1.6 49 1635 0.2 6 2147 1.2 37	14 M 0319 0.2 6 0930 1.2 37 1649 0.1 3 2200 0.8 24	29 Tu 0501 0.1 3 1038 1.2 37 1801 0.0 0 2326 0.9 27		14 W 0347 0.1 3 0951 1.1 34 1709 0.0 0 2230 0.8 24		29 Th 0530 0.0 0 1054 0.9 27 1808 -0.1 -3 2351 0.8 24			
	15 Sa 0319 0.3 9 0917 1.2 37 1612 0.3 9 2142 1.0 30	30 Su 0425 0.2 6 1010 1.5 46 1732 0.2 6 2244 1.1 34	15 Tu 0400 0.2 6 1012 1.2 37 1731 0.2 6 2247 0.9 27	30 W 0559 0.2 6 1128 1.1 34 1851 0.0 0 2320 0.9 27		15 Th 0440 0.1 3 1036 1.1 34 1746 0.0 0 2320 0.9 27		30 F 0623 0.1 3 1141 0.8 24 1850 -0.1 -3			
		31 M 0525 0.3 9 1104 1.4 43 1829 0.2 6 2347 1.1 34						31 Sa 0045 0.8 24 0718 0.1 3 1233 0.7 21 1933 0.0 0			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cape Hatteras, North Carolina, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm		h m	ft	cm		h m	ft	cm					
1 Sa	0439	3.6	110	16 Su	0408	3.2	98	1 Tu	0606	3.3	101	16 W			
1112	-0.1	-3		1042	0.2	6		1144	-0.3	-9	0520	3.5	107		
1656	2.5	76		1618	2.2	67	Tu	1231	-0.2	-6	1124	0.0	0		
2251	-0.3	-9		2214	-0.2	-6		1823	2.5	76	1722	2.5	76		
2 Su	0531	3.7	113	17 M	0458	3.4	104		1737	2.8	85	2322	-0.1	-3	
1203	-0.2	-6		1130	0.0	0		2341	-0.7	-21					
1749	2.5	76		1710	2.3	70					0356	3.3	101		
2343	-0.4	-12		2307	-0.4	-12					1020	-0.1	-3		
3 M	0619	3.7	113	18 Tu	0546	3.6	110	2 W	0020	-0.3	-9	1620	2.8	85	
1249	-0.2	-6		1215	-0.2	-6		0647	3.3	101	2227	-0.4	-12		
1837	2.6	79		1800	2.6	79		1310	-0.2	-6					
				2358	-0.6	-18		● 1904	2.6	79					
4 Tu	0031	-0.4	-12	19 W	0632	3.8	116	3 Th	0102	-0.3	-9	17 Th	0451	3.5	107
0704	3.7	113		1259	-0.4	-12		0725	3.3	101	18 W	1109	-0.3	-9	
1332	-0.2	-6		1849	2.8	85		1345	-0.2	-6	1715	3.2	98		
● 1922	2.6	79						1942	2.7	82	2326	-0.6	-18		
5 W	0116	-0.3	-9	20 Th	0049	-0.7	-21	4 F	0142	-0.3	-9	18 F	0543	3.6	110
0746	3.6	110		0718	3.8	116		0801	3.1	94	19 F	1156	-0.6	-18	
1413	-0.2	-6		1342	-0.6	-18		1418	-0.2	-6	1918	3.4	104		
2005	2.6	79		1938	3.0	91		2019	2.7	82					
6 Th	0159	-0.2	-6	21 F	0140	-0.8	-24	5 Sa	0221	-0.2	-6	20 O	0116	-0.8	-24
0826	3.4	104		0805	3.8	116		0835	3.0	91	20 Su	0722	3.5	107	
1451	-0.2	-6		1426	-0.7	-21		1449	-0.2	-6	20 M	1328	-0.9	-27	
2046	2.6	79		2027	3.1	94		2055	2.7	82	2059	3.7	113		
7 F	0241	-0.1	-3	22 Sa	0232	-0.8	-24	6 Su	0221	-0.9	-27	20 Sa	0733	3.0	91
0904	3.2	98		0851	3.7	113		0832	3.5	107	20 Su	1341	-0.2	-6	
1528	-0.1	-3		1510	-0.7	-21		1442	-0.9	-27	20 M	1948	4.1	125	
2127	2.6	79		2119	3.3	101		2059	3.7	113					
8 Sa	0324	0.0	0	23 Su	0326	-0.6	-18	6 Su	0259	-0.1	-3	21 O	0209	-0.8	-24
0941	3.0	91		0939	3.4	104		0908	2.8	85	21 M	0811	3.4	104	
1603	0.0	0		1556	-0.7	-21		1520	-0.1	-3	21 M	1414	-0.8	-24	
2209	2.6	79		2212	3.3	101		2131	2.7	82	2024	3.1	94		
9 Su	0407	0.2	6	24 M	0424	-0.4	-12	7 M	0338	0.0	0	22 O	0237	-0.1	-3
1019	2.8	85		1030	3.1	94		0942	2.6	79	22 Tu	0901	3.2	98	
1638	0.1	3		1644	-0.6	-18		1551	-0.1	-3	22 M	1502	-0.7	-21	
2252	2.5	76		2309	3.3	101		2209	2.7	82	2131	4.0	122		
10 M	0454	0.3	9	25 Tu	0525	-0.2	-6	8 Tu	0420	0.2	6	23 O	0358	-0.5	-15
1058	2.5	76		1124	2.8	85		1017	2.4	73	23 M	0953	2.9	88	
1715	0.1	3		1737	-0.5	-15		1625	0.0	0	23 W	1552	-0.5	-15	
2338	2.5	76						2250	2.7	82	2133	3.0	91		
11 Tu	0546	0.5	15	26 W	0011	3.3	101	9 W	0505	0.3	9	24 O	0456	-0.2	-6
1140	2.3	70		0633	0.0	0		1056	2.2	67	24 Th	1049	2.7	82	
1755	0.2	6		1224	2.5	76		1702	0.1	3	24 M	1647	-0.2	-6	
				● 1834	-0.4	-12		2335	2.7	82	2325	3.6	110		
12 W	0028	2.6	79	27 Th	0116	3.2	98	9 O	0617	0.0	0	25 O	0559	0.0	0
0644	0.6	18		0745	0.1	3		1056	2.2	67	25 M	1150	2.5	76	
1229	2.1	64		1331	2.3	70		1702	0.1	3	25 F	1748	0.0	0	
● 1840	0.2	6		1936	-0.3	-9		1810	-0.2	-6					
13 Th	0122	2.6	79	28 F	0223	3.2	98	10 F	0556	0.4	12	26 O	0028	3.3	101
0747	0.6	18		0858	0.1	3		1141	2.1	64	26 M	0705	0.2	6	
1323	2.0	61		1441	2.2	67		1746	0.2	6	26 Sa	1259	2.3	70	
1930	0.2	6		2041	-0.2	-6					● 1836	0.2	6		
14 F	0219	2.8	85	29 M	0328	3.2	98	11 F	0028	3.1	94	27 O	0136	3.1	94
0851	0.5	15		1003	0.1	3		0656	0.5	15	27 M	0812	0.3	9	
1423	2.0	61		1547	2.2	67		1234	2.0	61	27 Su	1410	2.3	70	
2024	0.1	3		2145	-0.2	-6		● 1839	0.2	6	2009	0.3	9		
15 Sa	0315	2.9	88	30 Su	0427	3.3	101	12 F	0128	2.8	85	28 O	0242	3.0	91
0950	0.4	12		1100	0.0	0		0802	0.5	15	28 M	0913	0.3	9	
1522	2.0	61		1646	2.3	70		1337	1.9	58	28 Su	1515	2.4	73	
2120	0.0	0		2242	-0.2	-6		1443	2.0	61	2116	0.3	9		
				● 2334	-0.3	-9		2044	0.0	0	31 O	0515	2.9	88	
31 M	0519	3.3	101					2232	0.0	0	31 Th	1126	0.1	3	
1148	-0.1	-3								1737	2.9	88	2348	0.1	3
1738	2.4	73													
2334	-0.3	-9													

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cape Hatteras, North Carolina, 2011

Times and Heights of High and Low Waters

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Cape Hatteras, North Carolina, 2011

Times and Heights of High and Low Waters

July			August			September											
Time	Height		Time	Height		Time	Height		Time	Height							
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm						
1 F 1244 ● 1921	0.1 2.6 -0.2 3.9	3 79 -6 119	16 Sa 0748 1342 2011	-0.1 2.8 -0.2 3.7	-3 85 -6 113	1 M 0803 1406 2026	-0.3 3.3 -0.4 3.9	-9 101 -12 119	16 Tu 0842 1447 2056	0.1 0.3 3.2	3 98 9 98	1 Th 0923 1542 2142	-0.4 -0.1 3.5	-12 125 107	16 F 0920 1540 2132	0.5 0.6 2.8	15 104 85
2 Sa 0738 1331 2004	0.1 -0.2 3.9	-3 82 -6 119	17 Su 0833 1428 2051	-0.1 0.0 3.5	-3 88 0 107	2 Tu 0853 1459 2112	-0.4 -0.3 3.7	-12 98 -9 113	17 W 0920 1527 2131	0.2 0.4 3.0	6 12 91	2 F 1018 1641 2235	-0.3 0.1 3.2	-9 3 98	17 Sa 1000 1622 2210	0.6 0.8 2.7	18 104 82
3 Su 0824 1419 2047	0.2 -0.2 3.8	-6 85 -6 116	18 M 0916 1512 2130	0.0 0.1 3.3	0 3 101	3 W 0945 1554 2201	-0.4 -0.1 3.5	-12 110 -3 107	18 Th 0959 1609 2207	0.3 0.6 2.8	9 18 85	3 Sa 1118 1745 2334	-0.1 0.3 3.0	-3 9 91	18 Su 1044 1710 2254	0.6 0.9 2.6	18 101 79
4 M 0913 1510 2132	0.2 -0.2 3.7	-6 88 -6 113	19 Tu 0959 1557 2208	0.1 0.3 3.1	3 9 94	4 Th 1039 1653 2252	-0.4 0.0 3.2	-12 113 0 98	19 F 1041 1655 2245	0.4 0.7 2.6	12 21 79	4 Su 1222 1854 ●	0.1 0.5 3	-3 15 76	19 M 1134 1804 2345	0.7 1.0 2.5	21 101 76
5 Tu 1004 1604 2220	0.3 -0.1 3.5	-9 94 -3 107	20 W 1043 1644 2247	0.2 0.5 2.8	6 15 85	5 F 1138 1757 2348	-0.3 0.2 2.9	-9 113 6 88	20 Sa 1126 1745 2329	0.5 0.9 2.5	15 27 76	5 M 0645 1331 2005	0.2 3.7 0.6	85 113 18	20 Tu 1231 1905 ●	0.8 1.0 30	24 101 27
6 W 1059 1703 2310	0.3 0.1 3.3	-9 98 -3 101	21 Th 1129 1734 2328	0.3 0.7 2.6	9 21 79	6 Sa 1241 1906 ●	-0.2 0.4 0.4	-6 110 12 88	21 Su 1218 1843 ●	0.6 1.0 3.0	18 30 85	6 Tu 0152 0755 2111	2.7 0.3 0.6	82 110 18	21 W 0046 0648 2007	2.5 0.7 0.9	76 101 27
7 Th 1157 1807	0.3 0.2	-9 101 6	22 F 1217 1830	0.3 0.8	9 24	7 Su 0051 0700 1347 2018	2.7 -0.1 3.6 0.4	82 -3 110 12 88	22 M 0019 0626 1315 1947	2.4 0.6 3.1 1.0	73 18 110 30	7 W 0301 0903 1541 2208	2.8 0.4 3.6 0.5	85 12 110 15	22 Th 0151 0754 1435 2103	2.6 0.6 3.5 0.7	79 101 21
8 F 1259 ● 1916	3.0 -0.3 0.3	91 -9 9	23 Sa 0013 0626 1931	2.4 0.4 0.9	73 12 27	8 M 0159 0804 1453 2126	2.6 0.0 3.6 0.4	79 0 110 12 88	23 Tu 0118 0723 1415 2049	2.3 0.6 3.2 0.9	70 18 98 27	8 Th 0402 1004 1635 2258	2.9 0.3 3.6 0.5	88 9 110 15	23 F 0255 0859 1532 2154	2.9 0.4 3.6 0.5	88 12 110 15
9 Sa 0719 1402 2028	2.8 3.6 0.3	85 110 9	24 Su 0104 0714 1405 2034	2.3 0.4 3.0 0.8	70 12 91 24	9 Tu 0307 0909 1555 2227	2.6 0.0 3.7 0.4	79 0 113 12 88	24 W 0221 0824 1514 2145	2.4 0.5 3.4 0.7	73 15 104 21	9 F 0454 1057 1722 2340	3.0 0.3 3.6 0.4	91 9 110 12	24 Sa 0353 1000 1625 2241	3.2 0.2 3.8 0.2	98 6 116 6
10 Su 0818 1505 2136	2.6 3.7 0.3	79 113 9	25 M 0201 0806 1500 2133	2.2 0.4 3.1 0.8	67 12 94 24	10 W 0411 1010 1651 2320	2.6 0.0 3.7 0.3	79 0 113 9 24	25 Th 0323 0924 1607 2235	2.5 0.3 3.6 0.5	76 9 110 15	10 Sa 0540 1144 1803 ●	3.2 0.2 3.6	98 6 110	25 Su 0446 1058 1715 2327	3.6 0.0 3.9 0.0	110 0 119 0
11 M 0918 1606 2239	2.6 3.8 0.2	79 116 6	26 Tu 0259 0900 1552 2226	2.2 0.3 3.3 0.6	67 9 101 18	11 Th 0507 1106 1741	2.7 0.0 3.8	82 0 116 11 88	26 F 0419 1021 1657 2320	2.8 0.1 3.8 0.3	85 3 116 9	11 Su 0017 0620 1227 1841	0.3 3.3 0.2 3.5	9 101 6 107	26 M 0538 1152 1804 ●	3.9 -0.2 3.9 119	119 -6 119 119
12 Tu 1702 2335	2.6 3.9 0.1	79 119 3	27 W 0356 0953 1641 2313	2.3 0.2 3.5 0.4	70 6 107 12	12 F 0007 0557 1156 1826	0.2 2.9 0.0 3.7	6 88 0 113	27 Sa 0512 1116 1744 1826	3.1 -0.1 3.9 3.7	94 -3 119 88	12 M 0051 0658 1307 1916	0.3 3.4 0.3 3.4	9 104 9 104	27 Tu 0012 0628 1246 ● 1852	-0.2 4.3 -0.3 3.9	-6 131 -9 119
13 W 1113 1754	2.6 3.9	79 119	28 Th 0449 1045 1728 2358	2.5 0.0 3.7 0.2	76 0 113 6	13 Sa 0049 0643 1242 ● 1907	0.1 3.0 0.0 3.7	3 91 0 113	28 Tu 0004 0602 1208 ● 1831	0.0 3.4 -0.3 4.0	0 104 -9 122	13 Su 0123 0734 1345 1950	0.3 3.5 0.3 3.3	9 107 9 101	28 W 0058 0718 1339 1941	-0.4 4.5 -0.3 3.8	-12 137 -9 116
14 Th 1206 1843	0.0 -0.3 3.9	0 -9 119	29 F 0539 1136 1813	2.7 -0.2 3.9	82 -6 119	14 Su 0127 0724 1325 1945	0.1 3.1 0.0 3.6	3 94 0 110	29 M 0047 0651 1300 1917	-0.2 3.7 -0.4 4.0	-6 113 -12 122	14 W 0154 0808 1422 2023	0.3 3.5 0.4 3.2	9 107 12 98	29 Th 0144 0809 1433 2031	-0.4 4.6 -0.2 3.6	-12 140 -6 110
15 F 1255 ● 1928	-0.1 -0.2 3.9	-3 -6 119	30 Sa 0040 0627 1226 ● 1857	0.0 2.9 -0.3 4.0	0 88 -9 122	15 M 0202 0804 1406 2021	0.1 3.1 0.1 3.4	3 94 0 104	30 Tu 0130 0740 1353 2004	-0.3 3.9 -0.4 3.9	-9 119 -12 119	15 Th 0225 0844 1500 2057	0.4 3.5 0.5 3.0	12 107 15 91	30 F 0233 0902 1528 2123	-0.3 4.5 -0.1 3.4	-9 137 -3 104
			31 Su 0121 0715 1315 1941	-0.1 3.1 -0.4 4.0	-3 94 -12 122				31 W 0214 0831 1446 2051	-0.4 4.1 -0.3 3.7	-12 125 -9 113						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cape Hatteras, North Carolina, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0324	-0.2	-6	16 Su	0257	0.6	18	1 Tu	0502	0.3	9
	0958	4.3	131		0928	3.6	110		1136	3.7	113
	1627	0.2	6		1557	0.7	21		1810	0.4	12
	2219	3.2	98		2143	2.7	82				
2 Su	0420	0.1	3	17 M	0336	0.7	21	2 W	0010	2.9	88
	1057	4.1	125		1011	3.5	107		0609	0.5	15
	1729	0.4	12		1643	0.8	24		1239	3.5	107
	2321	3.0	91		2228	2.6	79		● 1911	0.5	15
3 M	0522	0.3	9	18 Tu	0422	0.7	21	3 Th	0118	2.9	88
	1202	3.8	116		1100	3.4	104		0720	0.7	18
	1836	0.6	18		1734	0.9	27		1342	3.2	98
	●				2320	2.6	79		2009	0.6	18
4 Tu	0029	2.9	88	19 W	0517	0.8	24	4 F	0222	3.0	91
	0630	0.5	15		1155	3.4	104		0828	0.7	21
	1310	3.6	110		1829	0.9	27		1441	3.1	94
	1943	0.6	18		●				2100	0.6	18
5 W	0141	2.9	88	20 Th	0021	2.7	82	5 Sa	0317	3.1	94
	0743	0.6	18		0620	0.7	21		0929	0.7	21
	1417	3.5	107		1255	3.4	104		1533	3.0	91
	2046	0.7	21		1927	0.7	21		2144	0.5	15
6 Th	0247	2.9	88	21 F	0126	2.8	85	6 Su	0405	3.3	101
	0851	0.6	18		0729	0.6	18		1021	0.6	18
	1517	3.4	104		1357	3.4	104		1619	2.9	88
	2140	0.6	18		2022	0.6	18		2224	0.5	15
7 F	0345	3.1	94	22 Sa	0229	3.1	94	21 M	0305	3.6	110
	0951	0.6	18		0837	0.5	15		0925	0.2	6
	1609	3.4	104		1456	3.5	107		1523	3.1	94
	2226	0.5	15		2114	0.3	9		2130	-0.2	-6
8 Sa	0434	3.2	98	23 Su	0328	3.5	107	6 Tu	0413	3.2	98
	1043	0.5	15		0942	0.2	6		1040	0.5	15
	1654	3.4	104		1552	3.6	110		1623	2.4	73
	2305	0.5	15		2204	0.1	3		2218	0.3	9
9 Su	0516	3.4	104	24 M	0423	3.9	119	7 W	0447	3.4	104
	1128	0.5	15		1041	0.0	0		1027	0.0	0
	1734	3.3	101		1646	3.6	110		1701	2.9	88
	2340	0.4	12		2253	-0.2	-6		2300	0.4	12
10 M	0554	3.5	107	25 Tu	0516	4.3	131	22 Th	0402	4.0	122
	1209	0.4	12		1138	-0.2	-6		1027	0.0	0
	1811	3.3	101		1738	3.6	110		1621	3.2	98
	●				2341	-0.3	-9		2223	-0.3	-9
11 Tu	0013	0.4	12	26 W	0607	4.5	137	7 W	0455	3.3	101
	0630	3.6	110		1232	-0.3	-9		1124	0.4	12
	1247	0.4	12		1829	3.6	110		1706	2.4	73
	●	1846	3.2		●				2257	0.2	6
12 W	0044	0.4	12	27 Th	0029	-0.4	-12	22 Th	0443	4.0	122
	0704	3.7	113		0659	4.7	143		1115	-0.2	-6
	1324	0.4	12		1326	-0.3	-9		1115	-0.2	-6
	1920	3.1	94		1920	3.5	107		1700	2.7	82
13 Th	0115	0.4	12	28 F	0119	-0.4	-12	22 W	0443	4.0	122
	0738	3.7	113		0750	4.7	143		1608	-0.2	-6
	1401	0.4	12		1419	-0.2	-6		1608	-0.2	-6
	1953	3.0	91		2012	3.4	104		2212	2.8	85
14 F	0147	0.4	12	29 Sa	0210	-0.3	-9	13 M	0117	0.3	9
	0813	3.7	113		0843	4.6	140		0748	3.7	113
	1438	0.5	15		1514	-0.1	-3		1418	0.4	12
	2028	2.9	88		2106	3.3	101		2004	2.7	82
15 Sa	0221	0.5	15	30 Su	0303	-0.1	-3	14 M	0231	0.4	12
	0849	3.7	113		0938	4.3	131		0904	3.6	110
	1516	0.6	18		1610	0.1	3		1537	0.5	15
	2104	2.8	85		2203	3.1	94		2123	2.6	79
31 M	0400	0.1	3	31 M	1035	4.0	122	29 Th	0231	0.0	0
	1709	0.3	9		1709	0.3	9		1011	3.8	116
	2304	3.0	91		2304	3.0	91		1642	0.1	3
	●								2241	2.9	88

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Wilmington, North Carolina, 2011

Times and Heights of High and Low Waters

January				February				March							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm				
1 Sa	0058	-0.3	-9	16 Su	0017	0.1	3	1 Tu	0222	-0.1	-3	16 W	0148	-0.1	-3
0657	4.8	146		0624	4.3	131	0819	4.7	143	0738	4.8	146			
1342	-0.1	-3		1320	0.4	12	1459	0.0	0	1435	0.1	3			
1908	4.1	125		1846	3.9	119	2031	4.3	131	2002	4.6	140			
2 Su	0151	-0.3	-9	17 M	0114	0.0	0	2 W	0310	-0.1	-3	17 Th	0245	-0.2	-6
0750	4.8	146		0716	4.5	137	0904	4.7	143	0829	5.0	152			
1435	-0.1	-3		1412	0.2	6	1544	0.0	0	1525	0.0	0			
2000	4.1	125		1937	4.0	122	● 2117	4.3	131	2053	4.8	146			
3 M	0243	-0.3	-9	18 Tu	0209	-0.2	-6	3 Th	0355	-0.1	-3	18 F	0340	-0.4	-12
0839	4.8	146		0805	4.7	143	0946	4.7	143	0918	5.1	155			
1524	-0.1	-3		1503	0.1	3	1626	0.0	0	1614	-0.2	-6			
2050	4.2	128		2025	4.2	128	2200	4.3	131	○ 2143	5.0	152			
4 Tu	0331	-0.3	-9	19 W	0303	-0.3	-9	4 F	0437	0.0	0	19 Sa	0433	-0.4	-12
0926	4.8	146		0852	4.9	149	1026	4.6	140	1006	5.1	155			
1611	-0.1	-3		1552	0.0	0	1704	0.1	3	1701	-0.3	-9			
● 2137	4.2	128		○ 2111	4.4	134	2241	4.3	131	2234	5.2	158			
5 W	0417	-0.2	-6	20 Th	0355	-0.4	-12	5 Sa	0517	0.1	3	20 Su	0525	-0.4	-12
1010	4.7	143		0937	5.0	152	1104	4.4	134	1056	5.0	152			
1655	0.0	0		1639	-0.2	-6	1738	0.2	6	1747	-0.3	-9			
2222	4.1	125		2159	4.5	137	2320	4.2	128	2328	5.2	158			
6 Th	0500	-0.1	-3	21 F	0447	-0.5	-15	6 Su	0555	0.2	6	21 M	0617	-0.3	-9
1052	4.6	140		1023	5.0	152	1142	4.3	131	1148	4.8	146			
1735	0.0	0		1725	-0.3	-9	1809	0.3	9	1835	-0.2	-6			
2307	4.0	122		2249	4.6	140	2355	4.2	128	2248	4.6	140			
7 F	0541	0.1	3	22 Sa	0538	-0.4	-12	7 M	0631	0.3	9	22 Tu	0024	5.1	155
1134	4.4	134		1112	4.9	149	1218	4.1	125	0710	-0.1	-3			
1814	0.1	3		1811	-0.3	-9	1837	0.3	9	1244	4.6	140			
2352	4.0	122		2344	4.7	143	1925	-0.1	-3	1925	0.1	3			
8 Sa	0621	0.2	6	23 Su	0630	-0.3	-9	8 Tu	0026	4.1	125	23 W	0122	5.0	152
1216	4.2	128		1205	4.7	143	0708	0.5	15	0806	0.1	3			
1849	0.2	6		1859	-0.3	-9	1253	4.0	122	1342	4.4	134			
9 Su	0037	3.9	119	24 M	0042	4.7	143	9 W	0051	4.1	125	24 Th	0221	4.9	149
0700	0.3	9		0725	-0.2	-6	0748	0.6	18	0905	0.3	9			
1259	4.1	125		1301	4.6	140	1329	3.9	119	1440	4.3	131			
1923	0.3	9		1949	-0.2	-6	1938	0.3	9	○ 2117	0.2	6			
10 M	0122	3.9	119	25 Tu	0142	4.7	143	10 Th	0125	4.1	125	25 F	0320	4.7	143
0741	0.4	12		0823	0.0	0	0838	0.7	21	1005	0.4	12			
1342	3.9	119		1359	4.4	134	1412	3.8	116	1538	4.2	128			
1957	0.3	9		2043	-0.1	-3	2022	0.3	9	2217	0.3	9			
11 Tu	0207	3.8	116	26 W	0242	4.7	143	11 F	0214	4.1	125	26 Sa	0419	4.6	140
0829	0.5	15		0925	0.1	3	0940	0.7	21	1105	0.4	12			
1428	3.8	116		1458	4.2	128	1506	3.8	116	1637	4.1	125			
2035	0.3	9		○ 2141	-0.1	-3	○ 2120	0.4	12	2318	0.3	9			
12 W	0253	3.8	116	27 Th	0341	4.6	140	12 Sa	0315	4.2	128	27 Su	0517	4.5	137
0925	0.6	18		1027	0.2	6	1047	0.8	24	1201	0.3	9			
1515	3.7	113		1557	4.1	125	1606	3.8	116	1734	4.2	128			
● 2122	0.3	9		2241	-0.1	-3	2231	0.4	12						
13 Th	0342	3.9	119	28 F	0441	4.6	140	13 Su	0428	4.2	128	28 M	0015	0.2	6
1026	0.6	18		1128	0.2	6	1149	0.7	21	0613	4.5	137			
1606	3.6	110		1656	4.0	122	1709	3.9	119	1254	0.3	9			
2218	0.3	9		2341	-0.1	-3	2342	0.3	9	1830	4.3	131			
14 F	0434	4.0	122	29 Sa	0541	4.6	140	14 M	0539	4.4	134	14 Tu	0336	4.5	137
1127	0.6	18		1226	0.1	3	1248	0.5	15	1811	4.1	125			
1659	3.7	113		1754	4.0	122	1811	4.1	125	2315	0.4	12			
2318	0.2	6													
15 Sa	0529	4.1	125	30 Su	0037	-0.1	-3	15 Tu	0047	0.1	3	15 Tu	0456	4.6	140
1225	0.5	15		0638	4.6	140	0642	4.6	140	1216	0.6	18			
1753	3.7	113		1320	0.1	3	1343	0.3	9	1741	4.4	134			
				1850	4.1	125	1908	4.3	131						
				31 M	0131	-0.1	-3								
				0731	4.7	143									
				1411	0.0	0									
				1943	4.2	128									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Wilmington, North Carolina, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0221 0.3 9 0807 4.5 137 1438 0.2 6 2029 4.8 146	16 Sa 0209 0.0 0 0737 4.8 146 1428 -0.1 -3 2013 5.5 168	1 Su 0238 0.3 9 0817 4.2 128 1439 0.2 6 2041 4.9 149	16 M 0248 -0.1 -3 0808 4.5 137 1456 -0.3 -9 2047 5.5 168	1 W 0340 0.2 6 0906 3.9 119 1526 0.1 3 2123 4.8 146	16 Th 0414 -0.2 -6 0935 4.1 125 1617 -0.2 -6 2210 5.0 152						
	2 Sa 0306 0.3 9 0849 4.5 137 1517 0.3 9 2110 4.9 149	17 Su 0306 -0.1 -3 0831 4.8 146 1520 -0.2 -6 O 2106 5.6 171	2 M 0323 0.3 9 0858 4.2 128 1518 0.3 9 O 2139 5.5 168	17 Tu 0343 -0.2 -6 0902 4.4 134 1547 -0.2 -6 2151 4.8 146	2 Th 0424 0.2 6 0944 3.9 119 1608 0.1 3 2259 4.9 149						
	3 Su 0349 0.3 9 0929 4.5 137 1554 0.3 9 ● 2146 4.9 149	18 M 0400 -0.2 -6 0923 4.8 146 1610 -0.2 -6 ● 2157 5.7 174	3 Tu 0406 0.3 9 0937 4.1 125 1555 0.3 9 ● 2149 4.8 146	18 W 0435 -0.2 -6 0955 4.4 134 1638 -0.2 -6 2230 5.3 162	3 F 0507 0.2 6 1018 3.9 119 1651 0.1 3 2218 4.8 146						
	4 M 0430 0.3 9 1006 4.4 134 1628 0.4 12 2217 4.8 146	19 Tu 0453 -0.2 -6 1015 4.7 143 1700 -0.1 -3 2249 5.6 171	4 W 0447 0.3 9 1011 4.1 125 1631 0.3 9 2210 4.8 146	19 Th 0525 -0.1 -3 1048 4.3 131 1727 0.0 0 2322 5.1 155	4 Sa 0549 0.1 3 1054 3.9 119 1734 0.1 3 2253 4.8 146						
5 Tu 0509 0.4 12 1040 4.2 128 1659 0.4 12 2237 4.8 146	20 W 0544 -0.1 -3 1109 4.6 140 1749 0.0 0 2343 5.4 165	5 Th 0527 0.4 12 1040 4.0 122 1707 0.3 9 2227 4.8 146	20 F 0613 -0.1 -3 1143 4.2 128 1816 0.1 3	5 Su 0631 0.1 3 1137 4.0 122 1821 0.1 3 2339 4.8 146	20 M 0034 4.5 137 0715 0.0 0 1303 3.9 119 1924 0.4 12						
6 W 0547 0.5 15 1107 4.1 125 1728 0.5 15 2249 4.8 146	21 Th 0634 0.0 0 1205 4.4 134 1838 0.2 6	6 F 0607 0.4 12 1107 4.0 122 1744 0.3 9 2300 4.9 149	21 Sa 0014 4.9 149 0701 0.0 0 1239 4.1 125 1904 0.3 9	6 M 0716 0.1 3 1233 4.1 125 1913 0.2 6	21 Tu 0121 4.3 131 0758 0.1 3 1354 3.9 119 2012 0.5 15						
7 Th 0624 0.5 15 1129 4.1 125 1800 0.5 15 2319 4.8 146	22 F 0039 5.1 155 0725 0.2 6 1302 4.3 131 1930 0.4 12	7 Sa 0648 0.4 12 1143 4.0 122 1827 0.3 9 2345 4.8 146	22 Su 0106 4.7 143 0748 0.1 3 1334 4.0 122 1955 0.5 15	7 Tu 0034 4.7 143 0803 0.0 0 1336 4.2 128 2012 0.2 6	22 W 0208 4.1 125 0840 0.1 3 1444 3.9 119 2104 0.6 18						
8 F 0703 0.6 18 1201 4.1 125 1838 0.5 15	23 Sa 0134 4.9 149 0817 0.3 9 1359 4.2 128 2024 0.5 15	8 Su 0733 0.4 12 1235 4.0 122 1916 0.4 12	23 M 0157 4.5 137 0836 0.2 6 1427 4.0 122 2048 0.6 18	8 W 0136 4.6 140 0856 0.0 0 1439 4.3 131 ● 2119 0.3 9	23 Th 0256 4.0 122 0923 0.1 3 1533 4.0 122 ● 2159 0.6 18						
9 Sa 0003 4.8 146 0747 0.7 21 1248 4.1 125 1924 0.5 15	24 Su 0228 4.7 143 0910 0.4 12 1455 4.2 128 ● 2122 0.6 18	9 M 0040 4.8 146 0822 0.4 12 1340 4.1 125 2016 0.4 12	24 Tu 0246 4.3 131 0925 0.2 6 1519 4.1 125 ● 2144 0.7 21	9 Th 0241 4.4 134 0952 -0.1 -3 1541 4.5 137 2227 0.3 9	24 F 0344 3.8 116 1009 0.1 3 1622 4.1 125 2255 0.6 18						
10 Su 0056 4.8 146 0840 0.7 21 1349 4.1 125 2023 0.5 15	25 M 0321 4.5 137 1004 0.4 12 1550 4.2 128 2220 0.7 21	10 Tu 0143 4.7 143 0918 0.4 12 1448 4.3 131 ● 2127 0.5 15	25 W 0336 4.2 128 1013 0.2 6 1611 4.1 125 2241 0.6 18	10 F 0346 4.3 131 1050 -0.2 -6 1642 4.7 143 2333 0.2 6	25 Sa 0434 3.7 113 1056 0.1 3 1712 4.1 125 2350 0.5 15						
11 M 0157 4.7 143 0942 0.7 21 1459 4.2 128 ● 2138 0.6 18	26 Tu 0414 4.4 134 1055 0.3 9 1643 4.3 131 2317 0.6 18	11 W 0252 4.6 140 1017 0.2 6 1554 4.5 137 2241 0.4 12	26 Th 0426 4.0 122 1101 0.2 6 1701 4.2 128 2335 0.6 18	11 Sa 0449 4.2 128 1147 -0.3 -9 1742 4.9 149	26 Su 0525 3.7 113 1144 0.0 0 1802 4.2 128						
12 Tu 0308 4.6 140 1045 0.6 18 1610 4.3 131 2256 0.5 15	27 W 0505 4.3 131 1145 0.3 9 1736 4.4 134	12 Th 0402 4.5 137 1115 0.1 3 1658 4.7 143 2349 0.3 9	27 F 0516 4.0 122 1147 0.1 3 1752 4.4 134	12 Su 0035 0.1 3 0552 4.1 125 1244 -0.3 -9 1841 5.0 152	27 M 0043 0.5 15 0616 3.7 113 1233 0.0 0 1850 4.4 134						
13 W 0425 4.6 140 1145 0.4 12 1717 4.6 140	28 Th 0011 0.6 18 0556 4.3 131 1231 0.2 6 1827 4.5 137	13 F 0510 4.5 137 1212 -0.1 -3 1800 5.0 152	28 Sa 0028 0.5 15 0606 3.9 119 1232 0.1 3 1840 4.5 137	13 M 0134 0.0 0 0652 4.1 125 1340 -0.4 -12 1937 5.2 158	28 Tu 0135 0.4 12 0705 3.7 113 1322 0.0 0 1936 4.5 137						
14 Th 0006 0.4 12 0536 4.7 143 1241 0.2 6 1820 4.9 149	29 F 0102 0.5 15 0645 4.3 131 1316 0.2 6 1915 4.7 143	14 Sa 0052 0.2 6 0613 4.5 137 1308 -0.2 -6 1859 5.2 158	29 Su 0119 0.4 12 0655 3.9 119 1316 0.1 3 1927 4.6 140	14 Tu 0230 -0.1 -3 0749 4.1 125 1434 -0.4 -12 2031 5.2 158	29 W 0224 0.3 9 0752 3.7 113 1411 0.0 0 2019 4.6 140						
15 F 0109 0.2 6 0639 4.7 143 1336 0.0 0 1918 5.2 158	30 Sa 0151 0.4 12 0732 4.3 131 1358 0.2 6 2000 4.8 146	15 Su 0151 0.0 0 0712 4.5 137 1402 -0.3 -9 1954 5.4 165	30 M 0207 0.3 9 0742 3.9 119 1400 0.1 3 2010 4.7 143	15 W 0324 -0.2 -6 0843 4.1 125 1527 -0.3 -9 2049 4.7 143	30 Th 0312 0.2 6 0836 3.8 116 1500 -0.1 -3 2058 4.7 143						
				31 Tu 0254 0.3 9 0826 3.9 119 1443 0.1 3 2049 4.7 143							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Wilmington, North Carolina, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0358 0.1 3 0917 3.9 119 1548 -0.1 -3 ● 2134 4.8 146	16 Sa 0437 -0.2 -6 1005 4.1 125 1643 -0.1 -3 2233 4.7 143		1 M 0502 -0.2 -6 1024 4.5 137 1711 -0.2 -6 2239 4.9 149			16 Tu 0526 0.1 3 1108 4.3 131 1743 0.4 12 2325 4.4 134			16 Th 0608 -0.2 -6 1154 5.1 155 1843 0.0 0		
2 Sa 0443 0.0 0 0958 4.0 122 1636 -0.2 -6 2210 4.8 146	17 Su 0520 -0.1 -3 1053 4.0 122 1728 0.1 3 2316 4.6 140		2 Tu 0547 -0.3 -9 1116 4.6 140 1803 -0.2 -6 2327 4.8 146			17 W 0600 0.2 6 1149 4.2 128 1822 0.5 15			2 F 0007 4.7 143 0657 -0.2 -6 1254 5.1 155 1938 0.2 6		
3 Su 0527 -0.1 -3 1041 4.1 125 1724 -0.1 -3 2250 4.8 146	18 M 0601 0.0 0 1141 4.0 122 1810 0.2 6		3 W 0632 -0.3 -9 1212 4.7 143 1856 0.0 0			18 Th 0004 4.2 128 0631 0.3 9 1230 4.2 128 1901 0.6 18			3 Sa 0107 4.5 137 0749 -0.1 -3 1355 5.0 152 2037 0.4 12		
4 M 0611 -0.2 -6 1130 4.2 128 1814 -0.1 -3 2336 4.7 143	19 Tu 0000 4.4 134 0639 0.0 0		4 Th 0022 4.6 140 0720 -0.3 -9 1312 4.7 143 1953 0.1 3			19 F 0044 4.1 125 0659 0.3 9 1310 4.1 125 1943 0.8 24			4 Su 0208 4.3 131 0847 0.0 0 1456 4.9 149 ● 2138 0.4 12		
5 Tu 0655 -0.2 -6 1226 4.3 131 1907 0.0 0	20 W 0043 4.2 128 0715 0.1 3 1315 3.9 119 1935 0.5 15		5 F 0120 4.5 137 0811 -0.3 -9 1412 4.7 143 2054 0.2 6			20 Sa 0125 3.9 119 0730 0.3 9 1351 4.1 125 2031 0.8 24			5 M 0308 4.2 128 0948 0.1 3 1555 4.8 146 2238 0.4 12		
6 W 0031 4.6 140 0742 -0.3 -9 1327 4.4 134 2005 0.1 3	21 Th 0128 4.0 122 0750 0.1 3 1402 3.9 119 2022 0.6 18		6 Sa 0221 4.3 131 0907 -0.2 -6 1512 4.8 146 ● 2157 0.3 9			21 Su 0210 3.8 116 0810 0.3 9 1436 4.1 125 ● 2128 0.9 27			6 Tu 0408 4.2 128 1049 0.2 6 1653 4.8 146 2336 0.4 12		
7 Th 0130 4.5 137 0833 -0.3 -9 1427 4.5 137 2108 0.2 6	22 F 0213 3.9 119 0826 0.2 6 1449 4.0 122 2115 0.7 21		7 Su 0321 4.1 125 1007 -0.2 -6 1612 4.8 146 2259 0.3 9			22 M 0259 3.7 113 0902 0.3 9 1529 4.2 128 2229 0.9 27			7 W 0506 4.2 128 1148 0.1 3 1749 4.8 146		
8 F 0232 4.3 131 0929 -0.3 -9 1527 4.6 140 ● 2213 0.2 6	23 Sa 0300 3.7 113 0908 0.2 6 1537 4.0 122 ● 2212 0.7 21		8 M 0421 4.1 125 1108 -0.1 -3 1711 4.8 146 2358 0.2 6			23 Tu 0354 3.7 113 1006 0.3 9 1626 4.3 131 2329 0.8 24			8 Th 0031 0.3 9 0603 4.3 131 1243 0.1 3 1841 4.8 146		
9 Sa 0333 4.2 128 1027 -0.3 -9 1627 4.7 143 2316 0.2 6	24 Su 0349 3.6 110 0958 0.2 6 1626 4.1 125 2310 0.7 21		9 Tu 0521 4.0 122 1206 -0.1 -3 1809 4.8 146			24 W 0451 3.8 116 1114 0.3 9 1725 4.4 134			9 F 0122 0.2 6 0657 4.4 134 1335 0.1 3 1930 4.9 149		
10 Su 0434 4.0 122 1126 -0.3 -9 1727 4.8 146	25 M 0441 3.6 110 1054 0.1 3 1718 4.2 128		10 W 0054 0.2 6 0620 4.1 125 1303 -0.2 -6 1904 4.8 146			25 Th 0026 0.7 21 0549 3.9 119 1218 0.2 6 1822 4.6 140			10 Sa 0209 0.1 3 0747 4.5 137 1425 0.1 3 2015 4.9 149		
11 M 0017 0.1 3 0535 4.0 122 1224 -0.3 -9 1825 4.9 149	26 Tu 0006 0.6 18 0534 3.6 110 1151 0.1 3 1810 4.3 131		11 Th 0148 0.1 3 0716 4.2 128 1356 -0.1 -3 1954 4.9 149			26 F 0119 0.5 15 0644 4.2 128 1318 0.1 3 1914 4.8 146			11 Su 0254 0.1 3 0834 4.6 140 1511 0.1 3 2057 4.8 146		
12 Tu 0115 0.0 0 0635 4.0 122 1321 -0.3 -9 1921 4.9 149	27 W 0100 0.5 15 0627 3.7 113 1247 0.0 0 1900 4.5 137		12 F 0238 0.0 0 0808 4.2 128 1447 -0.1 -3 2041 4.9 149			27 Sa 0210 0.3 9 0737 4.4 134 1415 -0.1 -3 2003 5.0 152			12 M 0336 0.1 3 0917 4.7 143 1556 0.2 6 ● 2137 4.7 143		
13 W 0210 -0.1 -3 0732 4.0 122 1415 -0.3 -9 2014 5.0 152	28 Th 0152 0.4 12 0717 3.8 116 1342 -0.1 -3 1947 4.7 143		13 Sa 0324 0.0 0 0856 4.3 131 1535 0.0 0			28 Su 0300 0.1 3 0827 4.7 143 1510 -0.2 -6 ● 2049 5.1 155			13 Tu 0414 0.2 6 0957 4.6 140 1637 0.3 9 2215 4.6 140		
14 Th 0302 -0.1 -3 0825 4.1 125 1507 -0.3 -9 2103 4.9 149	29 F 0242 0.2 6 0805 4.0 122 1436 -0.1 -3 2031 4.8 146		14 Su 0408 0.0 0 0942 4.3 131 1620 0.1 3 2205 4.7 143			29 M 0348 -0.1 -3 0916 4.9 149 1604 -0.2 -6 2134 5.1 155			14 W 0449 0.3 9 1035 4.6 140 1717 0.5 15 2252 4.4 134		
15 F 0351 -0.2 -6 0916 4.1 125 1557 -0.2 -6 ● 2149 4.9 149	30 Sa 0330 0.1 3 0851 4.2 128 1529 -0.2 -6 ● 2113 4.9 149		15 M 0449 0.0 0 1025 4.3 131 1703 0.2 6 2245 4.6 140			30 Tu 0434 -0.2 -6 1005 5.1 155 1657 -0.2 -6 2221 5.0 152			15 Th 0521 0.4 12 1109 4.5 137 1755 0.6 18 2326 4.2 128		
	31 Su 0417 -0.1 -3 0937 4.4 134 1620 -0.2 -6 2155 5.0 152					31 W 0521 -0.3 -9 1057 5.1 155 1749 -0.1 -3 2312 4.9 149					

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Wilmington, North Carolina, 2011

Times and Heights of High and Low Waters

October				November				December									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height						
h m 0635 Sa 1234 1921	ft -0.1 5.2 0.3	cm -3 158 9	16 Su 1107 1846 2340	0547 0.4 4.6 0.8 4.0	12 9 140 24 122	1 Tu 0802 1410 2048	0131 4.2 4.7 143 0.4 12	16 W 1213 1954	0.3 4.6 140 0.6 18	1 Th 0830 1430 2106	0203 4.0 4.3 122 0.2 6	16 F 0737 1257 2020	0042 4.1 125 0.1 3				
2 Su 0050 0728 1335 2017	4.5 0.1 5.0 0.4	137 3 152 12	17 M 1145 1928	0.4 0.9	12 27	2 W 0900 1504 ● 2143	0230 4.6 4.6 140 0.4 12	17 Th 0744 1312 2046	4.0 4.5 122 0.3 15	2 F 0926 1520 ● 2156	0257 4.2 4.2 122 0.2 6	17 Sa 0148 1402 ● 2115	0840 4.4 128 0.1 3				
3 M 0152 0825 1435 ● 2116	4.3 0.2 4.9 0.5	131 6 149 15	18 Tu 0704 1235 2018	4.0 4.5 0.9	122 27	3 Th 0959 1557 2237	0327 4.5 4.5 128 0.3 9	18 F 0850 1419 ● 2145	4.1 4.5 125 0.4 12	3 Sa 1023 1610 2246	0350 4.5 4.1 125 0.2 6	18 Su 0255 1509 2215	0949 4.3 131 0.0 0				
4 Tu 0252 0926 1533 ● 2116	4.3 0.4 4.8 0.5	131 12 146 15	19 W 0757 1335 ● 2116	4.0 4.5 0.8	122 24	4 F 1057 1648 2327	0422 4.4 4.4 128 0.5 6	19 Sa 1004 1530 2244	4.2 4.4 128 0.4 6	4 Su 1118 1700 2334	0442 4.0 4.0 125 0.4 3	19 M 0401 1616 2315	1058 4.2 137 -0.1 -3				
5 W 0350 1027 1628 2310	4.2 0.4 4.7 0.4	128 12 143 12	20 Th 0905 1446 2217	4.0 4.5 0.7	122 21 21	5 Sa 1152 1738	0516 4.4	131 134	20 Su 1114 1638 2342	0422 4.4 0.0	5 M 1211 1751	0533 4.2 128 0.4 12	20 Tu 1202 1720	0506 4.7 143 0.1 3			
6 Th 0447 1125 1721	4.3 0.4 4.7	131 12 143	21 F 1021 1600 2317	4.2 4.6 0.5	128 15 15	6 Su 1243	0015 4.5	3 137	21 M 1219 1742	4.7 4.5	143 137	6 Tu 0020 0624 1840	0.1 4.3 4.0	3 W 1301 1822	0015 4.8 -0.3 146 0.0 128		
7 F 0002 0543 1220 1812	0.3 4.4 0.3 4.7	9 134 9 143	22 Sa 1132 1707	0.4 4.7	134 143	7 M 0656	0100 4.6	3 140	22 Tu 0626 1320 1842	-0.1 0.0 4.5	-3 3 137	7 W 0711 1350 1927	0.0 0.2 4.0	0 9 122	0112 0708 1400 -0.4 -12 5.0 -15 1.3 131		
8 Sa 0051 0635 1311 1900	0.2 4.5 0.2 4.7	6 137 143 143	23 Su 0548 1237 1809	0.3 0.2 4.8	9 143	8 Tu 0742 1419 1958	0143 0.2 4.4	3 143	23 W 0724 1418 1938	-0.3 -0.1 4.6	-9 3 140	8 Th 0756 1436 2012	0.0 0.2 4.0	0 6 122	0209 0804 1455 -0.4 -12 5.1 155 -6 131		
9 Su 0137 0724 1400 1945	0.1 4.7 0.2 4.7	3 143 6 143	24 M 0647 1337 1906	0.1 0.0 4.9	3 149	9 W 0824 1504 2040	0225 0.2 4.3	3 131	24 Th 0818 1513 2032	-0.4 -0.2 4.6	-12 6 140	9 F 0838 1521 2053	0.0 0.2 4.0	0 6 122	0303 0857 1548 -0.5 -15 5.1 155 -6 131		
10 M 0220 0809 1446 2028	0.1 4.8 0.2 4.7	3 146 6 143	25 Tu 0742 1435 1959	-0.1 -0.1 4.9	-3 162 149	10 Th 0904 1547 ● 2119	0304 0.3 4.2	3 143	25 F 0911 1607 ● 2125	-0.4 -0.2 4.5	-12 6 137	10 Sa 0915 1604 ● 2131	0.0 0.2 4.0	0 6 122	0355 0948 1637 -0.5 -15 5.1 155 -6 131		
11 Tu 0301 0851 1530 ● 2108	0.2 4.8 0.3 4.6	6 146 9 140	26 W 0835 1530 ● 2051	-0.2 -0.1 4.9	-6 168 149	11 F 0939	0342 4.7	6 143	26 Sa 1004 1629 2155	-0.4 0.4 4.1	-12 6 125	11 Su 0947 1646 2218	0.0 0.2 4.4	0 6 134	0445 1037 1725 -0.4 -12 4.9 149 -6 128		
12 W 0339 0930 1612 2147	0.2 4.8 0.4 4.5	6 146 12 137	27 Th 0927 1624 2142	-0.3 -0.1 4.8	-9 171 146	12 Sa 1007 1709 2226	0418 0.4 4.0	6 140 122	27 Su 1057 1748 2312	-0.3 -0.1 4.3	-9 3 131	12 M 1012 1726 2232	0.0 0.3 3.9	0 9 119	0533 1126 1810 -0.2 -6 4.8 146 -3 128		
13 Th 0414 1005 1653 2222	0.3 4.7 0.5 4.3	9 143 15 131	28 F 1020 1717 2235	-0.3 -0.1 4.7	-9 168 143	13 Su 1023 1747 2249	0452 0.5 4.0	6 140 122	28 M 1151 1837	-0.2 0.0	-6 0	13 Tu 1036 1806 2303	0.0 0.2 4.0	0 6 122	0620 1214 1855 -0.1 -3 4.6 140 0.0 0		
14 F 0446 1034 1731 2253	0.4 4.7 0.6 4.2	12 143 18 128	29 Sa 1115 1808 2331	-0.2 0.0 4.5	-6 165 0 137	14 M 1045 1826 2315	0527 0.6 3.9	9 140 119	29 Tu 0644 1245 1926	0.0 4.7 0.1	128 0 3	14 W 1113 1847 2346	0.0 0.2 4.0	0 6 122	0037 0707 1303 4.1 125 0.1 3		
15 Sa 0516 1049 1808 2316	0.4 4.6 0.7 4.1	12 140 21 125	30 Su 1213 1901	-0.1 0.2	-3 155 6	15 Tu 1123 1908 2357	0606 0.6 4.0	9 140 122	30 W 0736 1338 2016	0.2 4.5	125 6	15 Th 1200 1931	0.0 0.2	0 6	0129 0756 1351 4.0 122 0.3 9 2022 0.2 6		
			31 M 0707 1312 1954	0.1 4.9 0.3	131 149 9							31 Sa 0848 1312 2108	0.4 4.9 0.2	122 122 6			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Myrtle Beach (Springmaid Pier), South Carolina, 2011

Times and Heights of High and Low Waters

January				February				March							
	Time	Height			Time	Height			Time	Height					
	h m	ft cm		h m	ft cm			h m	ft cm						
1 Sa	0444	5.7	174	16 Su	0400	5.0	152	1 Tu	0612	5.4	165	16 Tu	0502	5.0	152
	1113	-0.1	-3		1043	0.5	15		1230	-0.1	-3		1122	0.2	6
	1659	4.5	137		1627	4.1	125		1825	4.5	137		1721	4.5	137
	2318	-0.4	-12		2237	-0.3	-9						2340	0.0	0
2 Su	0539	5.8	177	17 M	0453	5.3	162	2 W	0040	-0.4	-12	2 W	0548	5.1	155
	1204	-0.2	-6		1132	0.1	3		0654	5.4	165		1202	0.1	3
	1752	4.6	140		1720	4.4	134		1309	-0.2	-6		1805	4.7	143
					2328	-0.6	-18		● 1906	4.6	140				
3 M	0008	-0.5	-15	18 Tu	0543	5.7	174	3 Th	0121	-0.4	-12	18 F	0052	-1.3	-40
	0628	5.9	180		1219	-0.2	-6		0732	5.4	165		0657	6.1	186
	1250	-0.2	-6		1809	4.8	146		1345	-0.3	-9		1325	-1.0	-30
	1841	4.7	143						1944	4.7	143		○ 1927	5.9	180
4 Tu	0054	-0.5	-15	19 W	0019	-0.9	-27	4 F	0159	-0.3	-9	19 Sa	0143	-1.4	-43
	0712	5.8	177		0631	6.0	183		0808	5.2	158		0746	6.1	186
	1333	-0.3	-9		1305	-0.5	-15		1420	-0.3	-9		1411	-1.2	-37
	● 1925	4.7	143		○ 1857	5.1	155		2019	4.7	143		2016	6.1	186
5 W	0138	-0.4	-12	20 Th	0108	-1.1	-34	5 Sa	0237	-0.2	-6	20 Su	0235	-1.4	-43
	0754	5.7	174		0717	6.1	186		0844	5.0	152		0740	5.1	155
	1413	-0.2	-6		1350	-0.8	-24		1455	-0.2	-6		1347	-0.2	-6
	2007	4.6	140		1945	5.3	162		2055	4.6	140		1950	5.0	152
6 Th	0220	-0.3	-9	21 F	0159	-1.2	-37	6 Su	0314	0.0	0	21 M	0327	-1.2	-37
	0834	5.5	168		0804	6.1	186		0921	4.8	146		0926	5.6	171
	1451	-0.2	-6		1436	-0.9	-27		1529	-0.1	-3		1545	-1.0	-30
	2047	4.5	137		2035	5.4	165		2131	4.5	137		2203	6.0	183
7 F	0301	-0.1	-3	22 Sa	0249	-1.2	-37	7 M	0351	0.2	6	22 Tu	0420	-0.9	-27
	0914	5.2	158		0853	6.0	183		0959	4.5	137		1021	5.2	158
	1528	-0.1	-3		1522	-1.0	-30		1604	0.0	0		1635	-0.7	-21
	2129	4.4	134		2127	5.5	168		2210	4.4	134		2302	5.7	174
8 Sa	0340	0.1	3	23 Su	0341	-1.0	-30	8 Tu	0429	0.4	12	23 W	0515	-0.4	-12
	0956	4.9	149		0945	5.7	174		1040	4.2	128		1120	4.8	146
	1605	0.1	3		1609	-0.9	-27		1640	0.1	3		1728	-0.4	-12
	2212	4.3	131		2224	5.5	168		2253	4.4	134				
9 Su	0420	0.4	12	24 M	0435	-0.7	-21	9 W	0510	0.6	18	24 Th	0003	5.5	168
	1039	4.6	140		1040	5.3	162		1125	4.0	122		0616	0.0	0
	1642	0.2	6		1658	-0.7	-21		1720	0.3	9		1222	4.4	134
	2257	4.2	128		2324	5.4	165		2341	4.4	134		○ 1829	-0.1	-3
10 M	0503	0.6	18	25 Tu	0532	-0.4	-12	10 Th	0556	0.8	24	25 F	0106	5.3	162
	1124	4.3	131		1139	4.9	149		1213	3.8	116		0725	0.3	9
	1722	0.3	9		1752	-0.5	-15		1806	0.4	12		1325	4.2	128
	2345	4.2	128									1940	0.2	6	
11 Tu	0549	0.8	24	26 W	0025	5.4	165	11 F	0033	4.4	134	26 Sa	0208	5.1	155
	1211	4.1	125		0636	-0.1	-3		0653	1.0	30		0838	0.5	15
	1805	0.4	12		1240	4.6	140		F 1305	3.7	113		1428	4.1	125
					○ 1852	-0.2	-6		○ 1901	0.4	12		2054	0.3	9
12 W	0033	4.2	128	27 Th	0127	5.3	162	12 Sa	0128	4.5	137	27 Su	0615	0.9	27
	0643	1.0	30		0746	0.2	6		0800	1.0	30		0943	0.5	15
	1259	3.9	119		1341	4.3	131		1400	3.8	116		1530	4.1	125
	○ 1853	0.4	12		2001	-0.1	-3		2005	0.3	9		2159	0.2	6
13 Th	0122	4.3	131	28 F	0228	5.2	158	13 Su	0226	4.7	143	28 M	0409	5.0	152
	0745	1.0	30		0859	0.3	9		0908	0.8	24		1037	0.4	12
	1348	3.8	116		1444	4.2	128		1457	3.9	119		1629	4.3	131
	1949	0.4	12		2110	-0.1	-3		2110	0.1	3		2253	0.1	3
14 F	0213	4.5	137	29 Sa	0330	5.2	158	14 M	0325	4.9	149	14 M	0151	4.9	149
	0851	1.0	30		1004	0.2	6		1008	0.5	15		0828	0.8	24
	1440	3.8	116		1546	4.1	125		1556	4.2	128		1429	4.2	128
	2047	0.3	9		2213	-0.1	-3		2210	-0.3	-9		2040	0.3	9
15 Sa	0306	4.7	143	30 Su	0430	5.2	158	15 Tu	0423	5.3	162	15 Tu	0252	5.1	155
	0950	0.7	21		1059	0.1	3		1101	0.1	3		0933	0.4	12
	1533	3.9	119		1646	4.2	128		1653	4.6	140		1530	4.6	140
	2144	0.0	0		2307	-0.3	-9		2306	-0.6	-18		2146	-0.1	-3
31 Th	0524	5.3	162	31 M	1147	0.0	0		1739	4.4	134		1147	0.0	0
					1739	4.4	134		2356	-0.3	-9		2357	0.2	6

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Myrtle Beach (Springmaid Pier), South Carolina, 2011

Times and Heights of High and Low Waters

April					May					June									
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height					
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm					
1 F	0557 1201 1813	4.9 149 0.1 3 5.1 155		16 Sa	0520 1141 1756	5.7 174 -0.7 -21 6.6 201	1 Su	0007 0601 1158 1814	0.4 12 4.7 143 0.2 6 5.5 168	16 M	0004 0554 1208 1829	-0.6 -18 5.3 162 -0.8 -24 6.8 207	1 W	0059 0647 1245 1859	0.3 9 4.5 137 0.0 0 5.8 177	16 Th	0133 0722 1334 1953	-0.4 -12 5.0 152 -0.4 -12 6.4 195	
2 Sa	0036 0635 1236 1847	0.1 3 5.0 152 0.0 0 5.3 162		17 Su	0019 0614 1231 O 1847	-0.9 -27 5.8 177 -0.9 -27 6.9 210	2 M	0047 0639 1236 1850	0.3 9 4.7 143 0.1 3 5.6 171	17 Tu	0057 0647 1300 O 1920	-0.7 -21 5.3 162 -0.8 -24 6.8 207	2 Th	0140 0727 1329 1938	0.2 6 4.5 137 0.0 0 5.8 177	17 F	0221 0812 1424 2041	-0.4 -12 4.9 149 -0.3 -9 6.1 186	
3 Su	0113 0711 1312 ● 1920	0.1 3 4.9 149 0.0 0 5.4 165		18 M	0112 0706 1321 ● 1937	-1.0 -30 5.8 177 -1.0 -30 6.9 210	3 Tu	0125 0716 1315 ● 1924	0.2 6 4.7 143 0.1 3 5.7 174	18 W	0149 0739 1351 2010	-0.7 -21 5.3 162 -0.6 -18 6.7 204	3 F	0221 0808 1413 2019	0.2 6 4.5 137 0.0 0 5.8 177	18 Sa	0306 0903 1512 2129	-0.2 -6 4.8 146 0.0 0 5.8 177	
4 M	0150 0746 1347 1952	0.1 3 4.8 146 0.0 0 5.4 165		19 Tu	0204 0757 1411 2028	-1.0 -30 5.6 171 -0.9 -27 6.8 207	4 W	0204 0753 1354 2000	0.2 6 4.6 140 0.1 3 5.7 174	19 Th	0239 0831 1442 2102	-0.6 -18 5.1 155 -0.4 -12 6.3 192	4 Sa	0302 0852 1458 2103	0.1 3 4.5 137 0.0 0 5.7 174	19 Su	0349 0954 1559 2217	-0.1 -3 4.7 143 0.3 9 5.4 165	
5 Tu	0226 0820 1423 2025	0.1 3 4.7 143 0.1 3 5.4 165		20 W	0256 0849 1501 2121	-0.8 -24 5.3 162 -0.6 -18 6.5 198	5 Th	0242 0830 1434 2038	0.3 9 4.5 137 0.2 6 5.6 171	20 F	0328 0924 1533 2155	-0.4 -12 4.9 149 -0.1 -3 5.9 180	5 Su	0344 0941 1545 2152	0.1 3 4.6 140 0.1 3 5.6 171	20 M	0431 1047 1646 2306	0.1 3 4.6 140 0.6 18 5.1 155	
6 W	0302 0855 1500 2101	0.3 9 4.5 137 0.2 6 5.3 162		21 Th	0347 0944 1553 2218	-0.5 -15 5.0 152 -0.3 -9 6.1 186	6 F	0321 0911 1516 2120	0.4 12 4.4 134 0.2 6 5.5 168	21 Sa	0416 1021 1624 2249	-0.1 -3 4.7 143 0.2 6 5.5 168	6 M	0428 1036 1636 2245	0.1 3 4.7 143 0.2 6 5.5 168	21 Tu	0512 1139 1734 2354	0.2 6 4.5 137 0.9 27 4.8 146	
7 Th	0339 0934 1538 2142	0.4 12 4.3 131 0.3 9 5.2 158		22 F	0438 1043 1646 2317	-0.1 -3 4.8 146 0.1 3 5.6 171	7 Sa	0401 0958 1600 2209	0.4 12 4.3 131 0.3 9 5.4 165	22 Su	0503 1120 1716 2343	0.2 6 4.5 137 0.6 18 5.2 158	7 Tu	0514 1134 1731 2342	0.0 0 4.8 146 0.3 9 5.4 165	22 W	0554 1228 1826	0.4 12 4.5 137 1.1 34	
8 F	0418 1018 1619 2230	0.6 18 4.2 128 0.4 12 5.1 155		23 Sa	0531 1145 1744	0.2 6 4.6 140 0.5 15	8 Su	0444 1052 1649 2303	0.5 15 4.3 131 0.4 12 5.3 162	23 M	0551 1217 1812	0.4 12 4.5 137 0.9 27	8 W	0605 1233 1832	0.0 0 5.1 155 0.4 12	23 Th	0042 0639 1314 1923	4.5 137 0.5 15 4.6 140 1.2 37	
9 Sa	0501 1109 1706 2324	0.7 21 4.1 125 0.5 15 5.0 152		24 Su	0016 0627 1246 ● 1848	5.3 162 0.5 15 4.4 134 0.8 24	9 M	0532 1150 1744	0.5 15 4.5 137 0.5 15	24 Tu	0035 0641 1309 ● 1913	4.9 149 0.5 15 4.5 137 1.1 34	9 Th	0039 0700 1330 1940	5.2 158 -0.1 -3 5.4 165 0.4 12	24 F	0128 0726 1359 2024	4.3 131 0.5 15 4.7 143 1.2 37	
10 Su	0550 1207 1800	0.8 24 4.2 128 0.6 18		25 M	0113 0727 1343 ● 1958	5.0 152 0.7 21 4.4 134 1.0 30	10 Tu	0001 0626 1249 ● 1847	5.3 162 0.4 12 4.7 143 0.5 15	25 W	0125 0731 1358 2016	4.7 143 0.6 18 4.6 140 1.2 37	10 F	0137 0800 1427 2049	5.1 155 -0.1 -3 5.7 174 0.2 6	25 Sa	0215 0816 1444 2122	4.2 128 0.5 15 4.8 146 1.1 34	
11 M	0623 0649 1307 ● 1905	5.0 152 0.8 24 4.3 131 0.5 15		26 Tu	0206 0825 1437 2103	4.8 146 0.7 21 4.5 137 1.0 30	11 W	0100 0726 1348 1956	5.2 158 0.3 9 5.1 155 0.4 12	26 Th	0213 0821 1445 2115	4.5 137 0.6 18 4.7 143 1.1 34	11 Sa	0236 0900 1525 2154	5.0 152 -0.3 -9 6.0 183 0.1 3	26 Su	0303 0907 1531 2214	4.1 125 0.5 15 5.0 152 1.0 30	
12 Tu	0123 0754 1406 2016	5.1 155 0.6 18 4.7 143 0.4 12		27 W	0257 0916 1528 2158	4.7 143 0.7 21 4.6 140 0.9 27	12 Th	0158 0827 1446 2105	5.2 158 0.1 3 5.5 168 0.2 6	27 F	0300 0909 1530 2206	4.4 134 0.5 15 4.8 146 1.0 30	12 Su	0337 0959 1623 2254	4.9 149 -0.4 -12 6.3 192 -0.1 -3	27 M	0353 0957 1618 2302	4.1 125 0.3 9 5.2 158 0.8 24	
13 W	0223 0858 1506 2124	5.2 158 0.3 9 5.1 155 0.1 3		28 Th	0347 1001 1615 2245	4.6 140 0.6 18 4.8 146 0.7 21	13 F	0258 0926 1544 2209	5.2 158 -0.2 -6 5.9 180 -0.1 -3	28 Sa	0349 0954 1615 2252	4.3 131 0.4 12 5.0 152 0.8 24	13 M	0437 1055 1720 2350	4.9 149 -0.5 -15 6.4 195 -0.3 -9	28 Tu	0443 1045 1705 2347	4.2 128 0.2 6 5.4 165 0.6 18	
14 Th	0324 0957 1605 2226	5.4 165 -0.1 -3 5.6 171 -0.3 -9		29 F	0434 1041 1658 2327	4.6 140 0.4 12 5.0 152 0.6 18	14 Sa	0358 1022 1641 2308	5.3 162 -0.4 -12 6.3 192 -0.4 -12	29 Su	0437 1038 1658 2336	4.3 131 0.3 9 5.3 162 0.6 18	14 Tu	0536 1150 1814 1820	4.9 149 -0.6 -18 6.5 198 5.6 171	29 W	0531 1132 1750 1833	4.3 131 0.0 0 5.7 174 5.9 180	
15 F	0423 1050 1702 2324	5.6 171 -0.4 -12 6.1 186 -0.6 -18		30 Sa	0519 1120 1738	4.7 143 0.3 9 5.3 162	15 Su	0457 1115 1736	5.3 162 -0.6 -18 6.6 201	30 M	0523 1120 1740	4.4 134 0.2 6 5.5 168	15 W	0042 0631 1243 1904	-0.4 -12 5.0 152 -0.5 -15 6.5 198	30 Th	0031 0617 1219 1833	0.4 12 4.5 137 -0.1 -3 5.9 180	
										31 Tu	0018 0606 1203 1820	0.4 12 4.4 134 0.1 3 5.6 171							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Myrtle Beach (Springmaid Pier), South Carolina, 2011

Times and Heights of High and Low Waters

July			August			September						
Time	Height		Time	Height		Time	Height		Time	Height		
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 F 0114 0.2 6 0701 4.7 143 1305 -0.2 -6 ● 1916 6.0 183	16 Sa 0157 -0.1 -3 0752 4.9 149 1404 -0.1 -3 2017 5.9 180		1 M 0213 -0.4 -12 0811 5.6 171 1424 -0.5 -15 2025 6.3 192			16 Th 0242 0.2 6 0846 5.1 155 1503 0.6 18 2106 5.3 162			16 F 0318 -0.5 -15 0934 6.5 198 1553 -0.2 -6 2149 5.8 177			
2 Sa 0157 0.0 0 0746 4.8 146 1353 -0.3 -9 1959 6.1 186	17 Su 0238 -0.1 -3 0837 4.9 149 1449 0.1 3 2059 5.6 171		2 Tu 0258 -0.5 -15 0902 5.8 177 1516 -0.4 -12 2115 6.0 183			17 W 0317 0.3 9 0925 5.1 155 1542 0.8 24 2146 5.0 152			2 F 0408 -0.3 -9 1033 6.4 195 1649 0.1 3 2248 5.4 165			
3 Su 0240 -0.2 -6 0832 4.9 149 1441 -0.3 -9 2045 6.0 183	18 M 0317 0.0 0 0922 4.8 146 1531 0.4 12 2142 5.3 162		3 W 0343 -0.5 -15 0957 5.9 180 1608 -0.2 -6 2208 5.7 174			18 Th 0353 0.4 12 1006 5.0 152 1621 1.0 30 2229 4.7 143			3 Sa 0501 -0.1 -3 1135 6.3 192 1748 0.5 15 2351 5.1 155			
4 M 0323 -0.3 -9 0923 5.0 152 1531 -0.2 -6 2134 5.8 177	19 Tu 0355 0.1 3 1007 4.7 143 1613 0.6 18 2226 5.0 152		4 Th 0431 -0.4 -12 1055 5.9 180 1704 0.0 0 2306 5.4 165			19 F 0430 0.6 18 1050 4.9 149 1703 1.2 37 2314 4.5 137			4 Su 0559 0.2 6 1238 6.1 186 1854 0.7 21			
5 Tu 0407 -0.3 -9 1018 5.2 158 1623 -0.1 -3 2227 5.6 171	20 W 0432 0.2 6 1053 4.7 143 1656 0.9 27 2311 4.7 143		5 F 0521 -0.3 -9 1155 5.9 180 1804 0.3 9			20 Sa 0510 0.7 21 1137 4.9 149 1750 1.4 43			5 M 0055 4.9 149 0705 0.5 15 1340 6.0 183 2005 0.9 27			
6 W 0453 -0.3 -9 1116 5.3 162 1718 0.1 3 2324 5.4 165	21 Th 0510 0.4 12 1140 4.6 140 1742 1.1 34 2358 4.5 137		6 Sa 0006 5.1 155 0617 -0.1 -3 1255 5.9 180 1910 0.5 15			21 Su 0002 4.3 131 0554 0.8 24 1226 4.9 149 1843 1.5 46			6 Tu 0157 4.8 146 0817 0.6 180 1440 5.9 180 2113 0.9 27			
7 Th 0543 -0.3 -9 1214 5.5 168 1818 0.2 6	22 F 0551 0.5 15 1226 4.7 143 1833 1.3 40		7 Su 0107 4.9 149 0720 0.1 3 1355 5.9 180 2021 0.6 18			22 M 0052 4.2 128 0645 0.9 27 1317 5.0 152 1946 1.6 49			7 W 0259 4.8 146 0925 0.6 18 1538 5.8 177 2210 0.8 24			
8 F 0022 5.1 155 0637 -0.2 -6 1312 5.7 174 ● 1925 0.4 12	23 Sa 0044 4.3 131 0637 0.6 18 1312 4.8 146 ● 1931 1.4 43		8 M 0207 4.7 143 0828 0.2 6 1455 5.9 180 2129 0.6 18			23 Tu 0143 4.2 128 0743 0.9 27 1410 5.2 158 2050 1.4 43			8 Th 0358 4.9 149 1023 0.6 18 1633 5.8 177 2258 0.7 21			
9 Sa 0120 4.9 149 0737 -0.1 -3 1410 5.8 177 2035 0.4 12	24 Su 0132 4.1 125 0727 0.6 18 1359 4.9 149 2034 1.3 40		9 Tu 0309 4.6 140 0934 0.2 6 1555 5.9 180 2228 0.5 15			24 W 0237 4.3 131 0844 0.7 27 1503 5.4 165 2147 1.2 37			9 F 0453 5.1 155 1113 0.5 15 1722 5.8 177 2340 0.5 15			
10 Su 0220 4.7 143 0841 -0.1 -3 1509 6.0 183 2141 0.3 9	25 M 0221 4.1 125 0823 0.6 18 1448 5.0 152 2132 1.2 37		10 W 0411 4.7 143 1033 0.1 3 1652 6.0 183 2320 0.4 12			25 Th 0332 4.6 140 0943 0.5 15 1557 5.7 174 2238 0.8 24			10 Sa 0542 5.3 162 1158 0.5 15 1805 5.8 177			
11 M 0321 4.6 140 0943 -0.2 -6 1608 6.1 186 2241 0.2 6	26 Tu 0312 4.1 125 0919 0.5 15 1539 5.2 158 2225 1.0 30		11 Th 0509 4.8 146 1126 0.1 3 1744 6.0 183			26 F 0427 4.9 149 1039 0.2 6 1650 6.0 183 2326 0.4 12			11 Su 0019 0.4 12 0624 5.4 165 1240 0.5 15 1845 5.8 177			
12 Tu 0422 4.6 140 1042 -0.2 -6 1706 6.2 189 2336 0.0 0	27 W 0405 4.2 128 1012 0.3 9 1631 5.5 168 2313 0.7 21		12 F 0007 0.3 9 0601 5.0 152 1215 0.1 3 1830 6.0 183			27 Sa 0521 5.3 162 1131 -0.1 -3 1740 6.3 192			12 M 0055 0.4 12 0702 5.5 168 1319 0.5 15 1921 5.7 174			
13 W 0522 4.7 143 1137 -0.3 -9 1800 6.2 189	28 Th 0458 4.5 137 1104 0.0 0 1720 5.8 177 2359 0.4 12		13 Sa 0049 0.2 6 0647 5.1 155 1300 0.1 3 ● 1911 5.9 180			28 Su 0012 0.0 0 0611 5.8 177 1223 -0.4 -12 ● 1829 6.5 198			13 Tu 0130 0.4 12 0737 5.6 171 1357 0.6 18 1957 5.5 168			
14 Th 0027 -0.1 -3 0616 4.8 146 1229 -0.3 -9 1849 6.2 189	29 F 0548 4.8 146 1154 -0.2 -6 1807 6.1 186		14 Su 0129 0.1 3 0729 5.2 158 1343 0.2 6 1950 5.8 177			29 M 0058 -0.3 -9 0700 6.2 189 1315 -0.5 -15 1916 6.6 201			14 W 0205 0.4 12 0811 5.6 171 1435 0.7 21 2033 5.3 162			
15 F 0114 -0.1 -3 0706 4.9 149 1318 -0.2 -6 ● 1934 6.1 186	30 Sa 0044 0.1 3 0636 5.1 155 1244 -0.4 -12 ● 1853 6.3 192		15 M 0206 0.1 3 0808 5.2 158 1423 0.4 12 2028 5.6 171			30 Tu 0144 -0.5 -15 0749 6.4 195 1407 -0.5 -15 2004 6.4 195			15 Th 0240 0.5 15 0845 5.5 168 1512 0.9 27 2110 5.0 152			
	31 Su 0128 -0.2 -6 0723 5.4 165 1334 -0.5 -15 1938 6.3 192					31 W 0230 -0.6 -18 0840 6.6 201 1459 -0.4 -12 2055 6.2 189						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Myrtle Beach (Springmaid Pier), South Carolina, 2011

Times and Heights of High and Low Waters

October				November				December							
	Time	Height			Time	Height			Time	Height					
1 Sa	0346	-0.2	-6	16 Su	0323	0.8	24	1 Tu	0520	0.5	15	16 W	0426	0.7	21
	1011	6.7	204		0929	5.5	168		1154	5.9	180		1039	5.4	165
	1632	0.2	6		1604	1.3	40		1806	0.7	21		1709	0.9	27
	2230	5.4	165		2159	4.6	140						2320	4.5	137
2 Su	0441	0.1	3	17 M	0404	0.9	27	2 W	0020	4.9	149	17 Th	0517	0.7	21
	1114	6.4	195		1015	5.4	165		0624	0.9	27		1135	5.3	162
	1730	0.6	18		1647	1.4	43		1253	5.6	171		1759	0.8	24
	2335	5.1	155		2249	4.4	134		1907	0.9	27		1916	0.7	21
3 M	0541	0.5	15	18 Tu	0449	1.0	30	3 Th	0121	4.9	149	18 F	0019	4.7	143
	1218	6.1	186		1108	5.4	165		0733	1.1	34		0615	0.8	24
	1834	0.9	27		1734	1.4	43		1348	5.4	165		1232	5.3	162
	●				2345	4.4	134		2008	1.0	30		1855	0.7	21
4 Tu	0041	5.0	152	19 W	0540	1.1	34	4 F	0218	4.9	149	19 Sa	0118	5.0	152
	0648	0.8	24		1205	5.4	165		0841	1.1	34		0721	0.7	21
	1320	5.9	180		1829	1.4	43		1440	5.2	158		1330	5.4	165
	1942	1.0	30		●				2102	0.9	27		1956	0.5	15
5 W	0143	4.9	149	20 Th	0044	4.6	140	5 Sa	0310	5.0	152	20 Su	0215	5.4	165
	0801	0.9	27		0639	1.1	34		0939	1.1	34		0830	0.5	15
	1419	5.7	174		1302	5.5	168		1530	5.1	155		1427	5.4	165
	2047	1.0	30		1930	1.2	37		2148	0.8	24		2055	0.2	6
6 Th	0243	5.0	152	21 F	0142	4.9	149	6 Su	0359	5.2	158	21 M	0312	5.8	177
	0909	1.0	30		0746	0.9	27		1028	1.0	30		0935	0.2	6
	1514	5.6	171		1358	5.6	171		1617	5.1	155		1526	5.5	168
	2142	1.0	30		2031	0.9	27		2228	0.7	21		2152	-0.1	-3
7 F	0339	5.1	155	22 Sa	0239	5.3	162	7 M	0443	5.3	162	22 Tu	0410	6.3	192
	1006	0.9	27		0852	0.7	21		1111	0.9	27		1035	-0.1	-3
	1605	5.6	171		1455	5.8	177		1702	5.1	155		1625	5.5	168
	2227	0.8	24		2128	0.5	15		2307	0.5	15		2247	-0.4	-12
8 Sa	0431	5.2	158	23 Su	0335	5.8	177	8 Tu	0524	5.5	168	23 W	0506	6.7	204
	1054	0.8	24		0954	0.3	9		1151	0.8	24		1132	-0.4	-12
	1653	5.6	171		1552	5.9	180		1744	5.1	155		1722	5.6	171
	2307	0.7	21		2221	0.1	3		2344	0.4	12		2339	-0.7	-21
9 Su	0516	5.4	165	24 M	0431	6.3	192	9 W	0601	5.7	174	24 Th	0600	6.9	210
	1137	0.8	24		1052	0.0	0		1230	0.7	21		1226	-0.5	-15
	1735	5.6	171		1648	6.1	186		1823	5.1	155		1816	5.7	174
	2344	0.6	18		2311	-0.2	-6		●				2352	0.1	3
10 M	0556	5.6	171	25 Tu	0525	6.8	207	10 Th	0022	0.3	9	25 F	0032	-0.8	-24
	1217	0.7	21		1147	-0.3	-9		0637	5.8	177		0653	7.1	216
	1815	5.5	168		1742	6.2	189		1308	0.6	18		1319	-0.6	-18
	●				●				1900	5.0	152		●	1909	5.6	171
11 Tu	0019	0.5	15	26 W	0001	-0.5	-15	11 F	0100	0.3	9	26 Sa	0124	-0.8	-24
	0632	5.7	174		0617	7.1	216		0712	5.8	177		0744	7.0	213
	1255	0.7	21		1241	-0.5	-15		1346	0.6	18		1411	-0.5	-15
	●	1852	5.5	168	●	1834	6.2	189		1936	4.9	149		2001	5.5	168
12 W	0055	0.5	15	27 Th	0051	-0.6	-18	12 Sa	0139	0.3	9	27 Su	0217	-0.6	-18
	0706	5.8	177		0709	7.3	223		0747	5.8	177		0836	6.7	204
	1332	0.7	21		1334	-0.5	-15		1424	0.7	21		1502	-0.3	-9
	1928	5.4	165		1925	6.1	186		2012	4.8	146		2054	5.3	162
13 Th	0130	0.5	15	28 F	0142	-0.6	-18	13 Su	0218	0.4	12	28 M	0309	-0.4	-12
	0739	5.8	177		0800	7.3	223		0824	5.7	174		0930	6.3	192
	1409	0.8	24		1427	-0.4	-12		1503	0.8	24		1551	-0.1	-3
	2003	5.2	158		2017	5.9	180		2050	4.6	140		2150	5.0	152
14 F	0207	0.5	15	29 Sa	0234	-0.5	-15	14 M	0258	0.5	15	29 Tu	0401	0.0	0
	0813	5.8	177		0854	7.0	213		0903	5.6	171		1025	5.9	180
	1447	0.9	27		1520	-0.2	-6		1542	0.9	27		1641	0.2	6
	2038	5.0	152		2112	5.6	171		2133	4.5	137		2250	4.8	146
15 Sa	0244	0.7	21	30 Su	0327	-0.2	-6	15 Tu	0341	0.6	18	30 W	0455	0.3	9
	0849	5.7	174		0951	6.7	204		0948	5.5	168		1122	5.5	168
	1525	1.1	34		1613	0.1	3		1624	0.9	27		1731	0.4	12
	2116	4.7	143		2211	5.3	162		2223	4.4	134		2350	4.7	143
31 Sa	0422	0.2	6	31 M	1052	6.3	192					31 Th	0004	4.4	134
	1708	0.5	15		1708	0.5	15						0605	0.8	24
	2315	5.0	152		2315	5.0	152						1226	4.4	134
	●												1820	0.4	12

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, South Carolina, 2011

Times and Heights of High and Low Waters

January				February				March						
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height			
h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 Sa	0521	5.9	180	16 Su	0437	5.3	162	1 Tu	0016	-0.3	-9	16 W		
1136	-0.1	-3		1107	0.4	12		0646	5.6	171		0556	5.9	180
1726	4.8	146		1700	4.4	134		1254	-0.2	-6		1219	-0.4	-12
2340	-0.5	-15		2305	-0.3	-9		1850	4.8	146		1820	5.2	158
2 Su	0614	6.0	183	17 M	0531	5.6	171	2 W	0102	-0.4	-12	17 Th		
1228	-0.2	-6		1158	0.1	3		0728	5.6	171		0647	6.1	186
1819	4.9	149		1753	4.7	143		1336	-0.3	-9		1307	-0.7	-21
				2358	-0.6	-18	●	1933	4.9	149		1912	5.6	171
3 M	0031	-0.5	-15	18 Tu	0622	5.9	180	3 Th	0145	-0.3	-9	18 F		
0703	6.0	183		1246	-0.2	-6		0806	5.6	171		0124	-1.3	-40
1316	-0.3	-9		1843	4.9	149		1415	-0.3	-9		0737	6.3	192
1907	4.9	149						2012	5.0	152		1355	-1.0	-30
4 Tu	0119	-0.5	-15	19 W	0049	-0.9	-27	4 F	0224	-0.3	-9	3 O		
0748	6.0	183		0710	6.2	189		0843	5.4	165		0043	-0.1	-3
1400	-0.3	-9		1333	-0.5	-15		1451	-0.2	-6		0701	5.4	165
● 1953	4.9	149		O 1932	5.2	158		2050	5.0	152		1306	-0.1	-3
5 W	0203	-0.4	-12	20 Th	0140	-1.1	-34	5 Sa	0302	-0.1	-3	18 F		
0830	5.8	177		0758	6.3	192		0917	5.2	158		0012	-0.9	-27
1443	-0.2	-6		1419	-0.7	-21		1525	-0.2	-6		0621	6.1	186
2035	4.9	149		2021	5.4	165		2126	5.0	152		1239	-0.8	-24
6 Th	0246	-0.2	-6	21 F	0230	-1.2	-37	6 Su	0339	0.1	3	19 O		
0910	5.7	174		0844	6.3	192		0951	5.0	152		0107	-1.1	-34
1522	-0.1	-3		1505	-0.9	-27		1558	0.0	0		0713	6.1	186
2116	4.9	149		2111	5.6	171		2201	5.0	152		1328	-1.1	-34
7 F	0326	0.0	0	22 Sa	0321	-1.1	-34	7 M	0415	0.3	9	20 O		
0948	5.4	165		0931	6.1	186		1024	4.8	146		0200	-1.2	-37
1600	0.0	0		1552	-0.9	-27		1631	0.1	3		0803	6.1	186
2156	4.8	146		2202	5.7	174		2236	4.9	149		1416	-1.2	-37
8 Sa	0406	0.2	6	23 Su	0414	-1.0	-30	8 Tu	0453	0.5	15	21 F		
1025	5.2	158		1019	5.9	180		1059	4.5	137		0252	-1.2	-37
1637	0.1	3		1640	-0.9	-27		1706	0.2	6		0852	5.9	180
2236	4.7	143		2256	5.7	174		2315	4.8	146		1504	-1.1	-34
9 Su	0446	0.5	15	24 M	0509	-0.7	-21	9 W	0535	0.7	21	22 Tu		
1102	4.9	149		1110	5.5	168		1137	4.3	131		0345	-1.0	-30
1714	0.3	9		1730	-0.7	-21		1747	0.3	9		0942	5.7	174
2318	4.7	143		2353	5.6	171		2359	4.8	146		1553	-0.9	-27
10 M	0528	0.7	21	25 Tu	0607	-0.3	-9	10 Th	0624	0.8	24	23 Tu		
1142	4.6	140		1204	5.1	155		1222	4.1	125		0438	-0.6	-18
1752	0.4	12		1824	-0.5	-15		1834	0.4	12		1052	5.3	162
11	0003	4.6	140	26 W	0054	5.5	168	11 Sa	0050	4.8	146	24 W		
Tu	0616	0.9	27	0710	0.0	0		0721	0.9	27		0034	5.6	171
1225	4.4	134		1303	4.8	146		1316	4.0	122		0425	0.4	12
1835	0.4	12		O 1922	-0.3	-9		1929	0.4	12		1024	4.6	140
12 W	0052	4.6	140	27 Th	0159	5.4	165	12 Sa	0243	5.3	162	25 F		
0709	1.0	30		0815	0.2	6		0858	0.4	12		0012	5.8	177
1314	4.2	128		1405	4.6	140		1452	4.4	134		0630	0.1	3
● 1923	0.4	12		2025	-0.2	-6		2109	0.2	6		1226	4.8	146
13 Th	0145	4.7	143	28 F	0305	5.4	165	13 M	0150	4.8	146	25 O		
0809	1.0	30		0920	0.2	6		0825	0.9	27		0551	0.7	21
1409	4.1	125		1510	4.5	137		1419	4.0	122		0113	5.5	168
2016	0.4	12		2129	-0.1	-3		2031	0.3	9		0730	0.4	12
14 F	0242	4.8	146	29 M	0408	5.4	165	14 Th	0400	5.3	162	26 O		
0912	0.9	27		1022	0.2	6		1032	0.4	12		0124	5.5	155
1507	4.1	125		1613	4.5	137		1627	4.5	137		0855	0.7	21
2113	0.3	9		2229	-0.2	-6		2238	-0.3	-9		1451	4.4	134
15 Sa	0340	5.1	155	30 Su	0507	5.5	168	15 Tu	0500	5.6	171	29 Tu		
1011	0.7	21		1118	0.1	3		1128	0.0	0		0216	5.2	158
1605	4.2	128		1711	4.6	140		1725	4.8	146		1021	0.5	15
2210	0.0	0		2325	-0.3	-9		2336	-0.7	-21		1626	4.8	146
31 M	0559	5.6	171	31 M	1208	-0.1	-3					2244	0.5	15
				1803	4.7	143						0411	5.1	155

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, South Carolina, 2011

Times and Heights of High and Low Waters

April			May			June					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0019 0.3 9 0627 5.2 158 1230 0.1 3 1841 5.5 168	16 Sa 0553 5.8 177 1211 -0.8 -24 1831 6.6 201		1 Su 0032 0.4 12 0631 4.9 149 1229 0.1 3 1848 5.8 177		16 M 0034 -0.6 -18 0623 5.5 168 1237 -0.8 -24 1906 6.8 207		1 W 0124 0.3 9 0719 4.6 140 1314 0.0 0 1936 6.0 183		16 Th 0201 -0.4 -12 0752 5.1 155 1400 -0.5 -15 2032 6.4 195		
	2 Sa 0100 0.2 6 0706 5.2 158 1307 0.0 0 1919 5.6 171	17 Su 0050 -0.9 -27 0647 5.9 180 1301 -1.0 -30 1924 6.8 207	2 M 0112 0.3 9 0711 4.9 149 1306 0.1 3 1925 5.9 180	17 Tu 0127 -0.7 -21 0718 5.4 165 1329 -0.8 -24 1959 6.8 207		2 Th 0205 0.3 9 0801 4.6 140 1356 -0.1 -3 2016 6.0 183		17 F 0250 -0.3 -9 0843 5.0 152 1450 -0.3 -9 2120 6.2 189			
	3 Su 0139 0.1 3 0743 5.1 155 1342 0.0 0 1954 5.7 174	18 M 0144 -1.0 -30 0740 5.8 177 1351 -1.0 -30 2016 6.9 210	3 Tu 0151 0.3 9 0750 4.8 146 1343 0.1 3 2001 5.9 180	18 W 0219 -0.6 -18 0811 5.3 162 1420 -0.7 -21 2050 6.7 204		3 F 0246 0.2 6 0842 4.6 140 1439 -0.1 -3 2056 6.0 183		18 Sa 0337 -0.2 -6 0933 4.9 149 1538 0.0 0 2205 5.9 180			
	4 M 0216 0.2 6 0819 5.0 152 1415 0.0 0 2028 5.7 174	19 Tu 0236 -0.9 -27 0831 5.7 174 1441 -0.9 -27 2108 6.8 207	4 W 0229 0.3 9 0827 4.7 143 1421 0.1 3 2036 5.9 180	19 Th 0310 -0.5 -15 0903 5.2 158 1510 -0.4 -12 2141 6.4 195		4 Sa 0328 0.1 3 0924 4.7 143 1524 -0.1 -3 2138 6.0 183		19 Su 0422 -0.1 -3 1021 4.9 149 1625 0.3 9 2249 5.6 171			
5 Tu 0251 0.2 6 0853 4.9 149 1449 0.1 3 2100 5.7 174	20 W 0328 -0.7 -21 0923 5.5 168 1531 -0.6 -18 2200 6.6 201		5 Th 0307 0.3 9 0903 4.7 143 1459 0.1 3 2112 5.9 180	20 F 0400 -0.3 -9 0955 5.1 155 1600 -0.1 -3 2231 6.1 186		5 Su 0412 0.1 3 1010 4.7 143 1613 0.0 0 2223 5.9 180		20 M 0506 0.1 3 1109 4.8 146 1713 0.6 18 2333 5.3 162			
	6 W 0327 0.3 9 0926 4.7 143 1524 0.2 6 2133 5.6 171	21 Th 0420 -0.4 -12 1015 5.2 158 1622 -0.3 -9 2253 6.2 189	6 F 0346 0.4 12 0940 4.6 140 1541 0.2 6 2151 5.8 177	21 Sa 0449 -0.1 -3 1047 4.9 149 1652 0.2 6 2321 5.7 174		6 M 0457 0.0 0 1100 4.9 149 1705 0.1 3 2312 5.8 177		21 Tu 0549 0.2 6 1157 4.8 146 1803 0.9 27			
	7 Th 0404 0.4 12 0959 4.6 140 1601 0.3 9 2209 5.6 171	22 F 0512 -0.1 -3 1109 5.0 152 1716 0.1 3 2348 5.8 177	7 Sa 0428 0.4 12 1020 4.6 140 1626 0.3 9 2235 5.8 177	22 Su 0539 0.1 3 1140 4.8 146 1745 0.6 18		7 Tu 0546 0.0 0 1155 5.0 152 1803 0.2 6		22 W 0017 5.0 152 0632 0.3 9 1246 4.8 146 1855 1.1 34			
	8 F 0444 0.6 18 1035 4.5 137 1644 0.4 12 2251 5.5 168	23 Sa 0606 0.2 6 1205 4.8 146 1812 0.5 15	8 Su 0514 0.4 12 1108 4.6 140 1717 0.3 9 2324 5.7 174	23 M 0010 5.4 165 0628 0.3 9 1233 4.7 143 1840 0.9 27		8 W 0005 5.6 171 0638 -0.1 -3 1255 5.2 158 1905 0.3 9		23 Th 0102 4.8 146 0715 0.4 12 1335 4.9 149 1950 1.2 37			
9 Sa 0530 0.7 21 1120 4.4 134 1733 0.4 12 2341 5.4 165	24 Su 0044 5.5 168 0701 0.4 12 1303 4.7 143 1913 0.7 21		9 M 0604 0.4 12 1204 4.7 143 1815 0.4 12	24 Tu 0100 5.1 155 0717 0.5 15 1327 4.8 146 1938 1.0 30		9 Th 0101 5.5 168 0733 -0.2 -6 1357 5.5 168 2011 0.3 9		24 F 0150 4.6 140 0801 0.4 12 1425 5.0 152 2046 1.2 37			
	10 Su 0622 0.7 21 1215 4.5 137 1830 0.5 15	25 M 0141 5.2 158 0757 0.6 18 1402 4.7 143 2015 0.9 27	10 Tu 0021 5.6 171 0659 0.3 9 1306 4.9 149 1919 0.4 12	25 W 0150 4.9 149 0805 0.5 15 1419 4.9 149 2036 1.1 34		10 F 0201 5.3 162 0830 -0.3 -9 1459 5.8 177 2117 0.2 6		25 Sa 0240 4.5 137 0847 0.4 12 1516 5.2 158 2141 1.1 34			
	11 M 0040 5.4 165 0721 0.7 21 1319 4.6 140 1935 0.4 12	26 Tu 0236 5.0 152 0850 0.6 18 1458 4.8 146 2116 0.9 27	11 W 0121 5.5 168 0757 0.2 6 1411 5.2 158 2026 0.3 9	26 Th 0240 4.7 143 0852 0.5 15 1511 5.0 152 2132 1.1 34		11 Sa 0303 5.2 158 0928 -0.4 -12 1600 6.1 186 2220 0.0 0		26 Su 0331 4.4 134 0936 0.3 9 1605 5.4 165 2234 1.0 30			
	12 Tu 0145 5.4 165 0824 0.5 15 1428 4.8 146 2044 0.3 9	27 W 0328 4.9 149 0940 0.5 15 1551 5.0 152 2212 0.9 27	12 Th 0224 5.5 168 0856 -0.1 -3 1515 5.6 171 2133 0.1 3	27 F 0329 4.7 143 0938 0.4 12 1600 5.3 162 2225 1.0 30		12 Su 0404 5.1 155 1026 -0.6 -18 1659 6.3 192 2320 -0.1 -3		27 M 0422 4.4 134 1024 0.2 6 1654 5.6 171 2324 0.8 24			
13 W 0252 5.5 168 0925 0.2 6 1535 5.2 158 2152 0.0 0	28 Th 0418 4.9 149 1027 0.4 12 1640 5.2 158 2303 0.7 21		13 F 0327 5.5 168 0954 -0.3 -9 1617 6.0 183 2237 -0.1 -3	28 Sa 0418 4.6 140 1023 0.3 9 1647 5.5 168 2314 0.8 24		13 M 0504 5.1 155 1122 -0.6 -18 1756 6.5 198		28 Tu 0513 4.4 134 1113 0.1 3 1741 5.8 177			
	14 Th 0356 5.6 171 1024 -0.1 -3 1637 5.7 174 2255 -0.3 -9	29 F 0504 4.9 149 1109 0.3 9 1726 5.5 168 2349 0.6 18	14 Sa 0428 5.5 168 1050 -0.6 -18 1715 6.4 195 2337 -0.4 -12	29 Su 0506 4.6 140 1107 0.2 6 1732 5.7 174 2359 0.6 18		14 Tu 0017 -0.3 -9 0602 5.1 155 1217 -0.7 -21 1850 6.6 201		29 W 0010 0.6 18 0601 4.5 137 1200 -0.1 -3 1827 5.9 180			
	15 F 0456 5.7 174 1118 -0.5 -15 1736 6.2 189 2355 -0.6 -18	30 Sa 0548 4.9 149 1150 0.2 6 1808 5.7 174	15 Su 0527 5.5 168 1144 -0.7 -21 1812 6.7 204	30 M 0552 4.6 140 1150 0.1 3 1815 5.8 177		15 W 0110 -0.4 -12 0658 5.1 155 1309 -0.6 -18 1942 6.5 198		30 Th 0056 0.4 12 0648 4.6 140 1247 -0.2 -6 1912 6.1 186			
				31 Tu 0043 0.5 15 0637 4.6 140 1232 0.0 0 1856 5.9 180							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, South Carolina, 2011

Times and Heights of High and Low Waters

July			August			September											
Time	Height		Time	Height		Time	Height		Time	Height							
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm						
1 F 0140 0735 1334 ● 1955	0.2 4.7 -0.3 6.2	6 143 -9 189	16 Sa 0226 0820 1429 2054	-0.1 5.1 -0.1 6.0	-3 155 -3 183	1 M 0242 0848 1455 2104	-0.4 5.6 -0.5 6.4	-12 171 -15 195	16 Tu 0313 0916 1528 2139	0.2 5.4 0.6 5.5	6 165 18 168	1 Th 0349 1012 1627 2223	-0.5 6.6 -0.2 6.0	-15 201 -6 183	16 F 0343 0954 1615 2215	0.7 5.7 1.2 5.1	21 174 37 155
2 Sa 0223 0821 1421 2039	0.0 4.9 -0.4 6.2	0 149 -12 189	17 Su 0309 0906 1514 2135	-0.1 5.0 0.2 5.8	-3 152 6 177	2 Tu 0327 0939 1547 2152	-0.5 5.8 -0.4 6.2	-15 177 -12 189	17 W 0348 0955 1608 2215	0.3 5.4 0.8 5.2	9 165 24 158	2 F 0440 1109 1724 2317	-0.4 6.5 0.1 5.7	-12 198 3 174	17 Sa 0419 1031 1655 2252	0.8 5.6 1.3 4.9	24 171 40 149
3 Su 0307 0907 1510 2123	-0.2 5.0 -0.3 6.2	-6 152 -9 189	18 M 0350 0950 1557 2215	0.0 5.0 0.4 5.5	0 152 12 168	3 W 0414 1032 1642 2241	-0.5 5.9 -0.2 5.9	-15 180 -6 180	18 Th 0423 1034 1648 2252	0.5 5.3 1.1 5.0	15 162 34 152	3 Sa 0533 1209 1823	-0.1 6.3 0.5	-3 192 15	18 Su 0459 1113 1740 2335	0.9 5.6 1.5 4.8	27 171 46 146
4 M 0352 0956 1601 2209	-0.3 5.1 -0.3 6.0	-9 155 -9 183	19 Tu 0429 1033 1640 2254	0.2 5.0 0.7 5.2	6 152 21 158	4 Th 0503 1128 1739 2333	-0.5 6.0 0.0 5.6	-15 183 0 171	19 F 0459 1114 1730 2332	0.6 5.3 1.3 4.8	18 162 40 146	4 Su 0015 0631 1312 ● 1926	5.4 0.1 6.2 0.7	165 3 189 21	19 M 0544 1202 1832	1.0 5.5 1.6	30 168 49
5 Tu 0437 1048 1654 2257	-0.3 5.3 -0.1 5.9	-9 162 -3 180	20 W 0507 1116 1725 2333	0.3 5.0 0.9 5.0	9 152 27 152	5 F 0555 1226 1839	-0.4 6.0 0.3	-12 183 9 9	20 Sa 0538 1158 1817	0.7 5.3 1.4	21 162 43	5 M 0117 0733 1416 2029	5.2 0.3 6.1 0.8	158 9 186 24	20 Tu 0025 0637 1258 ● 1930	4.7 1.0 5.6 1.5	143 30 171 46
6 W 0525 1143 1752 2349	-0.4 5.4 0.0 5.6	-12 165 0 171	21 Th 0545 1201 1811	0.4 5.0 1.1	12 152 34	6 Sa 0029 0650 1328 ● 1942	5.3 -0.2 6.0 0.5	162 -6 183 15 15	21 Su 0016 0623 1247 ● 1910	4.6 0.8 5.3 1.5	140 24 162 46	6 Tu 0221 0838 1518 2130	5.1 0.4 6.0 0.8	155 12 183 24	21 W 0124 0736 1400 2032	4.7 0.9 5.7 1.4	143 27 174 43
7 Th 0616 1242 1853	-0.4 5.6 0.2	-12 171 6	22 F 0016 0625 1247 1902	4.7 0.5 5.0 1.3	143 15 152 40	7 Su 0129 0750 1431 2046	5.1 -0.1 6.0 0.5	155 -3 183 15 15	22 M 0106 0714 1342 2009	4.5 0.8 5.3 1.5	137 24 162 46	7 W 0323 0940 1616 2226	5.1 0.5 6.0 0.7	155 15 183 21	22 Th 0228 0840 1501 2131	4.9 0.8 5.9 1.1	149 24 180 34
8 F 0044 0711 1342 ● 1957	5.4 -0.4 5.8 0.3	165 -12 177 9	23 Sa 0102 0709 1337 ● 1957	4.5 0.5 5.1 1.3	137 15 155 40	8 M 0232 0852 1534 2149	5.0 0.0 6.0 0.5	152 0 183 15 15	23 Tu 0202 0810 1440 2110	4.5 0.7 5.5 1.3	137 21 168 40	8 Th 0421 1038 1708 2317	5.2 0.5 6.0 0.6	158 15 183 18	23 F 0330 0943 1600 2227	5.2 0.5 6.1 0.7	158 15 186 21
9 Sa 0143 0808 1444 2102	5.1 -0.4 5.9 0.3	155 -12 180 9	24 Su 0152 0758 1429 2054	4.4 0.5 5.2 1.3	134 15 158 40	9 Tu 0334 0954 1633 2247	4.9 0.0 6.1 0.4	149 18 186 12	24 W 0301 0910 1538 2208	4.6 0.6 5.7 1.1	140 18 174 34	9 F 0515 1130 1754	5.4 0.4 6.1	165 12 186	24 Sa 0429 1044 1655 2320	5.6 0.2 6.4 0.3	171 6 195 9
10 Su 0245 0908 1546 2205	5.0 -0.4 6.0 0.2	152 -12 183 6	25 M 0245 0851 1522 2151	4.4 0.5 5.4 1.2	134 15 165 37	10 W 0435 1052 1728 2340	5.0 0.0 6.1 0.3	152 0 186 9	25 Th 0400 1009 1634 2302	4.8 0.3 6.0 0.8	146 9 183 24	10 Sa 0003 0603 1218 1837	0.5 5.5 0.4 6.0	15 168 12 183	25 Su 0525 1141 1218 1748	6.1 -0.1 6.5 6.5	186 -3 198 198
11 M 0347 1008 1646 2304	4.9 -0.4 6.2 0.1	149 -12 189 3	26 Tu 0340 0945 1616 2246	4.4 0.3 5.6 0.9	134 9 171 27	11 Th 0531 1146 1818	5.1 0.0 6.2	155 0 189	26 F 0456 1106 1727 2352	5.1 0.0 6.3 0.4	155 0 192 12	11 Su 0045 0647 1303 1916	0.4 5.7 0.4 6.0	12 174 12 183	26 M 0010 0619 1236 1839	-0.1 6.5 -0.4 6.6	-3 198 -12 201
12 Tu 0447 1105 1742	4.9 -0.4 6.3	149 -12 192	27 W 0434 1039 1708 2336	4.5 0.2 5.8 0.7	134 6 177 21	12 F 0030 0623 1236 1904	0.2 5.2 0.0 6.1	6 158 0 186	27 M 0551 1201 1817 1904	5.5 -0.2 6.5 6.1	168 -6 198 186	12 Tu 0124 0728 1344 ● 1954	0.3 5.8 0.5 5.9	9 177 15 180	27 W 0058 0712 1330 ● 1930	-0.4 6.8 -0.5 6.6	-12 207 -15 201
13 W 0000 0546 1201 1836	0.0 4.9 -0.4 6.3	0 149 -12 192	28 Th 0527 1132 1758 ● 1946	4.7 -0.1 6.1	143 -3 186 6.1	13 Sa 0115 0711 1323 ● 1906	0.1 5.3 0.1 6.1	3 162 3 186	28 Tu 0040 0643 1254 ● 1906	0.0 5.8 -0.5 6.6	0 177 -15 201	13 M 0201 0806 1423 2030	0.4 5.8 0.6 5.7	12 177 18 174	28 W 0147 0805 1423 2020	-0.5 7.1 -0.5 6.5	-15 216 -15 198
14 Th 0051 0640 1253 1925	-0.1 5.0 -0.4 6.3	-3 152 -12 192	29 F 0025 0618 1223 1845	0.4 4.9 -0.3 6.3	134 149 15 192	14 Su 0157 0755 1407 2025	0.1 5.4 0.2 5.9	3 165 6 180	29 W 0551 0734 1347 1954	5.5 6.2 -0.6 6.6	168 189 -18 198	14 M 0236 0843 1501 2105	0.4 5.8 0.8 5.5	12 177 24 168	29 Th 0235 0858 1516 2111	-0.6 7.1 -0.3 6.2	-18 216 -9 189
15 F 0140 0732 1342 ● 2011	-0.1 5.0 -0.2 6.2	-3 152 -6 189	30 Sa 0111 0708 1314 ● 1932	0.1 5.2 -0.5 6.4	3 158 165 12 195	15 M 0236 0836 1448 2103	0.1 5.4 0.4 5.7	3 165 12 174	30 Tu 0214 0826 1439 2042	-0.5 6.4 -0.6 6.5	-15 195 -18 198	15 Th 0309 0918 1538 2140	0.6 5.8 1.0 5.3	18 177 30 162	30 F 0325 0952 1610 2204	-0.4 7.0 -0.1 6.0	-12 213 -3 183
			31 Su 0156 0758 1404 2018	-0.2 5.4 -0.5 6.4	-6 165 -15 195				31 W 0301 0918 1532 2132	-0.6 6.5 -0.4 6.3	-18 198 -12 192						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charleston, South Carolina, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
1 Sa 1050 1706 2300	h m 0418 1050 1706 2300	ft -0.2 6.8 0.3 5.7	cm -6 207 9 174	16 Su 0347 0958 1628 2220	h m 0.8 5.9 1.2 4.9	ft 24 180 37 149	cm	1 Tu 0550 1226 1839	h m 0.5 6.1 0.7	ft 15 186 21	cm
	0418 1050 1706 2300	h m -0.2 6.8 0.3 5.7	ft -6 207 9 174	16 Su 0347 0958 1628 2220	h m 0.8 5.9 1.2 4.9	ft 24 180 37 149	cm	16 Th 0452 1101 1737 2331	h m 0.6 5.8 0.9 4.8	ft 18 177 27 146	cm
	0513 1150 1805 2359	0.1 6.5 0.6 5.4	3 198 18 165	17 M 0427 1039 1712 2302	0.9 5.8 1.3 4.8	27 177 40 146		17 W 0040 0651 1324 ● 1935	0.7 0.8 5.8 0.8	21 174 24 24	
	0612 1252 1905 ●	0.4 6.2 0.8	12 189 24	18 Tu 0514 1127 1802 2354	1.0 5.7 1.4 4.8	30 174 43 146		18 Th 0140 0754 1420 2031	5.2 1.0 5.6 0.9	158 30 171 27	
4 Tu 0715 1355 2006	0102 715 1355 2006	5.3 0.7 6.0 0.9	162 21 183 27	19 W 0608 1222 1857 ●	1.0 5.7 1.3	30 174 40		19 F 0239 0855 1512 2123	5.2 1.1 5.5 0.8	158 34 168 24	
	0205 0820 1454 2104	5.2 0.8 5.9 0.9	158 24 180 27	20 Th 0054 0709 1323 1957	4.9 0.9 5.8 1.1	149 27 177 34		20 Sa 0333 0952 1601 2210	5.4 1.1 5.4 0.7	165 34 165 21	
	0306 0922 1549 2158	5.3 0.9 5.9 0.9	162 27 180 27	21 F 0200 0814 1426 2057	5.1 0.8 5.9 0.8	155 24 180 24		21 Su 0423 1044 1647 2254	5.6 1.0 5.4 0.6	171 30 165 18	
	0402 1019 1639 2247	5.4 0.8 5.8 0.7	165 24 177 21	22 F 0304 0920 1527 2154	5.5 0.6 6.0 0.5	168 18 183 15		22 M 0509 1131 1731 2335	5.8 0.8 5.4 0.5	177 24 165 15	
8 Sa 1110 1724 2331	0453 1110 1724 2331	5.6 0.8 5.8 0.6	171 24 177 18	23 Su 0405 1023 1625 2248	5.9 0.2 6.2 0.1	180 6 189 3		23 W 0551 1215 1813	5.9 0.7 5.3	180 21 162	
	0538 1157 1805	5.8 0.7 5.8	177 21 177	24 M 0503 1123 1720 2341	6.4 -0.1 6.3 -0.3	195 -3 192 -9		24 W 0015 0632 1256 1853	0.4 6.1 0.7 5.3	12 186 21 162	
	0012 0620 1240 1845	0.5 6.0 0.7 5.8	15 183 21 177	25 M 0558 1219 1814	6.8 -0.3 6.3	207 -9 192		25 Tu 0052 0710 1334 ● 1932	0.3 6.1 0.7 5.2	9 186 21 158	
	0050 0700 1320 ○ 1923	0.4 6.1 0.7 5.7	12 186 21 174	26 Tu 0032 0652 1313 ● 1907	-0.5 7.1 -0.5 6.3	-15 216 -15 192		26 F 0129 0747 1412 2009	0.3 6.1 0.7 5.1	9 186 21 155	
12 W 1359 2000	0126 6.1 0.7 5.5	0.4 186 0.7 168	12 186 21 168	27 Th 0122 0746 1407 1959	-0.7 7.3 -0.5 6.2	-21 223 -15 189		27 Sa 0206 0823 1449 2045	0.4 6.1 0.7 5.0	12 186 21 152	
	0200 0812 1436 2035	0.5 6.1 0.8 5.4	15 186 24 165	28 Th 0213 0839 1459 2052	-0.6 7.2 -0.3 6.0	-18 219 -9 183		28 Su 0243 0858 1527 2120	0.4 6.0 0.8 4.9	12 183 24 149	
	0235 0847 1512 2110	0.6 6.0 1.0 5.2	18 183 30 158	29 F 0304 0934 1553 2145	-0.5 7.0 -0.1 5.8	-15 213 -3 177		29 M 0323 0935 1606 2157	0.5 5.9 0.9 4.8	15 180 27 146	
	0310 0921 1549 2144	0.7 5.9 1.1 5.0	21 180 34 152	30 Sa 0357 1030 1647 2241	-0.2 6.7 0.2 5.5	-6 204 6 168		30 W 0405 1015 1649 2240	0.6 5.8 0.9 4.8	18 177 27 146	
15 Sa 1549 2144	0452 1127 1742 2339	0.2 6.4 0.5 5.3	6 195 15 162	31 M 0452 1127 1742 2339	0.2 6.4 0.5 5.3	6 195 15 162		31 Sa 0020 0636 1246 1856	0.2 0.8 4.7 0.4	6 168 15 12	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Savannah River Entrance, Georgia, 2011

Times and Heights of High and Low Waters

January				February				March					
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height		
h m	ft	cm		h m	ft	cm		h m	ft	cm			
1 Sa	0524	7.5	229	16 Su	0443	6.9	210	1 Tu	0034	-0.3	-9	16 W	
	1153	0.0	0		1119	0.6	18		0652	7.2	219		
	1733	6.5	198		1710	5.9	180		1312	-0.2	-6		
	2359	-0.4	-12		2328	-0.2	-6		1858	6.5	198		
2 Su	0619	7.6	232	17 M	0538	7.3	223	2 W	0121	-0.3	-9	17 Th	
	1245	-0.2	-6		1212	0.2	6		0735	7.2	219		
	1827	6.6	201		1803	6.2	189		1354	-0.3	-9		
							● 1941		6.6	201			
3 M	0050	-0.5	-15	18 Tu	0021	-0.6	-18	3 Th	0203	-0.3	-9	18 F	
	0708	7.7	235		0630	7.7	235		0813	7.2	219		
	1334	-0.3	-9		1302	-0.2	-6		1433	-0.3	-9		
	1916	6.6	201		1853	6.6	201		2021	6.7	204		
4 Tu	0138	-0.4	-12	19 W	0113	-1.0	-30	4 F	0243	-0.2	-6	19 Sa	
	0754	7.6	232		0718	8.0	244		0850	7.1	216		
	1419	-0.3	-9		1350	-0.7	-21		1509	-0.3	-9		
	● 2001	6.7	204		○ 1941	6.9	210		2058	6.7	204		
5 W	0223	-0.4	-12	20 Th	0203	-1.3	-40	5 Sa	0320	-0.1	-3	20 Su	
	0835	7.5	229		0805	8.2	250		0925	6.9	210		
	1501	-0.3	-9		1437	-1.0	-30		1543	-0.2	-6		
	2044	6.6	201		2029	7.2	219		2135	6.7	204		
6 Th	0305	-0.2	-6	21 F	0253	-1.4	-43	6 Su	0355	0.1	3	21 M	
	0915	7.3	223		0852	8.2	250		1000	6.6	201		
	1539	-0.2	-6		1523	-1.2	-37		1616	-0.1	-3		
	2125	6.6	201		2117	7.4	226		2213	6.6	201		
7 F	0344	0.0	0	22 Sa	0342	-1.4	-43	7 M	0430	0.3	9	22 Tu	
	0955	7.0	213		0940	8.1	247		1036	6.3	192		
	1616	0.0	0		1609	-1.2	-37		1649	0.1	3		
	2207	6.4	195		2209	7.4	226		2251	6.5	198		
8 Sa	0421	0.3	9	23 Su	0433	-1.2	-37	8 Tu	0506	0.6	18	23 W	
	1034	6.7	204		1030	7.8	238		1115	6.0	183		
	1651	0.2	6		1656	-1.1	-34		1725	0.3	9		
	2250	6.3	192		2304	7.4	226		2333	6.4	195		
9 Su	0459	0.6	18	24 M	0525	-0.8	-24	9 W	0546	0.8	24	24 Th	
	1115	6.4	195		1123	7.4	226		1157	5.7	174		
	1727	0.3	9		1745	-0.9	-27		1806	0.5	15		
	2334	6.2	189							● 1913	0.0	0	
10 M	0539	0.9	27	25 Tu	0001	7.3	223	10 Th	0019	6.3	192	10 F	
	1158	6.1	186		0621	-0.4	-12		0633	1.1	34		
	1806	0.5	15		1219	6.9	210		1244	5.6	171		
					1838	-0.6	-18		1853	0.6	18		
11 Tu	0020	6.2	189	26 W	0101	7.2	219	11 F	0110	6.3	192	11 Sa	
	0624	1.1	34		0723	0.0	0		0730	1.2	37		
	1244	5.8	177		1317	6.6	201		1337	5.5	168		
	1850	0.6	18		● 1937	-0.2	-6		● 1951	0.7	21		
12 W	0109	6.2	189	27 Th	0202	7.0	213	12 Sa	0244	6.8	207	12 F	
	0716	1.3	40		0830	0.3	9		0915	0.6	18		
	1332	5.6	171		1416	6.3	192		1457	6.0	183		
	● 1940	0.7	21		2042	0.0	0		2127	0.5	15		
13 Th	0159	6.3	192	28 F	0304	6.9	210	13 Su	0306	6.5	198	13 M	
	0817	1.4	43		0937	0.4	12		0944	1.0	30		
	1424	5.5	168		1516	6.1	186		1535	5.7	174		
	2037	0.7	21		2147	0.0	0		2200	0.3	9		
14 F	0252	6.4	195	29 Sa	0408	6.9	210	14 M	0407	6.8	207	14 Tu	
	0922	1.3	40		1040	0.3	9		1046	0.6	18		
	1518	5.5	168		1617	6.1	186		1636	6.0	183		
	2135	0.5	15		2248	0.0	0		2300	-0.2	-6		
15 Sa	0347	6.6	201	30 Su	0509	7.0	213	15 Tu	0508	7.2	219	15 W	
	1023	1.0	30		1135	0.2	6		1142	0.1	3		
	1614	5.7	174		1716	6.1	186		1735	6.4	195		
	2233	0.2	6		2344	-0.1	-3		2358	-0.7	-21		
31 Th	0604	7.1	216	31 M	0626	0.0	0		1226	6.3	192		
					1810	6.3	192						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Savannah River Entrance, Georgia, 2011

Times and Heights of High and Low Waters

April					May					June									
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height					
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm					
1 <i>F</i>	0034	0.4	12	16 <i>Sa</i>	0013	-0.7	-21	1 <i>Su</i>	0044	0.6	18	16 <i>M</i>	0051	-0.7	-21	1 <i>W</i>	0138	0.4	12
	0637	6.8	207		0604	7.8	238		0642	6.5	198		0634	7.4	226		0729	6.3	192
	1248	0.1	3		1230	-0.9	-27		1248	0.2	6		1257	-0.9	-27		1338	0.1	3
	1848	7.3	223		1837	8.5	259		1855	7.6	232		1910	8.7	265		1944	7.8	238
2 <i>Sa</i>	0115	0.3	9	17 <i>Su</i>	0109	-1.0	-30	2 <i>M</i>	0125	0.4	12	17 <i>Tu</i>	0145	-0.8	-24	2 <i>Th</i>	0220	0.3	9
	0716	6.8	207		0657	7.9	241		0722	6.5	198		0727	7.4	226		0809	6.3	192
	1326	0.0	0		1321	-1.1	-34		1328	0.1	3		1349	-0.9	-27		1422	0.0	0
	1926	7.4	226		○ 1929	8.8	268		1933	7.7	235		○ 2002	8.7	265		2023	7.8	238
3 <i>Su</i>	0154	0.2	6	18 <i>M</i>	0203	-1.2	-37	3 <i>Tu</i>	0205	0.4	12	18 <i>W</i>	0237	-0.8	-24	3 <i>F</i>	0302	0.2	6
	0753	6.8	207		0749	7.8	238		0759	6.5	198		0818	7.2	219		0848	6.3	192
	1402	0.0	0		1411	-1.2	-37		1407	0.1	3		1440	-0.8	-24		1505	0.0	0
	● 2002	7.5	229		2020	8.9	271		● 2009	7.7	235		2053	8.5	259		2104	7.8	238
4 <i>M</i>	0231	0.2	6	19 <i>Tu</i>	0254	-1.2	-37	4 <i>W</i>	0243	0.3	9	19 <i>Th</i>	0327	-0.7	-21	4 <i>Sa</i>	0344	0.1	3
	0828	6.7	204		0839	7.7	235		0835	6.4	195		0910	7.1	216		0930	6.3	192
	1438	0.0	0		1501	-1.1	-34		1446	0.2	6		1529	-0.5	-15		1550	0.0	0
	2036	7.5	229		2111	8.7	265		2045	7.7	235		2144	8.1	247		2147	7.7	235
5 <i>Tu</i>	0307	0.2	6	20 <i>W</i>	0344	-1.0	-30	5 <i>Th</i>	0322	0.3	9	20 <i>F</i>	0415	-0.4	-12	5 <i>Su</i>	0426	0.0	0
	0902	6.5	198		0930	7.4	226		0910	6.3	192		1002	6.8	207		1017	6.3	192
	1513	0.1	3		1550	-0.8	-24		1525	0.2	6		1618	-0.1	-3		1636	0.1	3
	2110	7.4	226		2203	8.3	253		2122	7.6	232		2236	7.7	235		2235	7.6	232
6 <i>W</i>	0342	0.3	9	21 <i>Th</i>	0434	-0.6	-18	6 <i>F</i>	0401	0.4	12	21 <i>Sa</i>	0502	-0.1	-3	6 <i>M</i>	0511	0.0	0
	0935	6.3	192		1023	7.0	213		0948	6.2	189		1056	6.6	201		1111	6.4	195
	1549	0.2	6		1639	-0.3	-9		1606	0.3	9		1706	0.4	12		1726	0.2	6
	2144	7.3	223		2258	7.9	241		2203	7.5	229		2329	7.3	223		2328	7.5	229
7 <i>Th</i>	0419	0.5	15	22 <i>F</i>	0524	-0.1	-3	7 <i>Sa</i>	0442	0.4	12	22 <i>Su</i>	0549	0.3	9	7 <i>Tu</i>	0559	0.0	0
	1010	6.1	186		1119	6.7	204		1031	6.1	186		1151	6.4	195		1208	6.6	201
	1626	0.4	12		1729	0.2	6		1650	0.4	12		1755	0.8	24		1822	0.3	9
	2223	7.2	219		2355	7.4	226		2250	7.4	226						1258	6.4	195
8 <i>F</i>	0458	0.6	18	23 <i>Sa</i>	0617	0.3	9	8 <i>Su</i>	0527	0.5	15	23 <i>M</i>	0021	6.9	210	8 <i>W</i>	0024	7.3	223
	1050	6.0	183		1216	6.5	198		1123	6.1	186		0638	0.5	15		0652	-0.1	-3
	1708	0.5	15		1824	0.7	21		1739	0.5	15		1244	6.4	195		1307	6.9	210
	2308	7.1	216						2343	7.3	223		1849	1.2	37		○ 1924	0.4	12
9 <i>Sa</i>	0542	0.8	24	24 <i>Su</i>	0053	7.0	213	9 <i>M</i>	0617	0.5	15	24 <i>Tu</i>	0112	6.6	201	9 <i>Th</i>	0121	7.2	219
	1138	5.9	180		0712	0.7	21		1220	6.3	192		0728	0.7	21		0749	-0.1	-3
	1755	0.7	21		1313	6.3	192		1835	0.6	18		1336	6.4	195		1405	7.2	219
	○ 1957	1.1	34		○ 1924	1.1	34						○ 1947	1.4	43		2030	0.4	12
10 <i>Su</i>	0002	7.0	213	25 <i>M</i>	0148	6.7	204	10 <i>Tu</i>	0041	7.2	219	25 <i>W</i>	0201	6.4	195	10 <i>F</i>	0218	7.1	216
	0634	0.9	27		0810	0.9	27		0712	0.5	15		0819	0.8	24		0848	-0.3	-9
	1235	6.0	183		1409	6.3	192		1321	6.5	198		1426	6.5	198		1503	7.6	232
	1851	0.8	24		2029	1.3	40		○ 1939	0.6	18		2048	1.5	46		2136	0.3	9
11 <i>M</i>	0101	7.0	213	26 <i>Tu</i>	0242	6.5	198	11 <i>W</i>	0140	7.2	219	26 <i>Th</i>	0249	6.2	189	11 <i>Sa</i>	0317	7.0	213
	0734	0.9	27		0907	0.9	27		0813	0.3	9		0909	0.8	24		0948	-0.4	-12
	1336	6.1	186		1503	6.4	195		1421	6.9	210		1515	6.7	204		1603	7.9	241
	○ 1957	0.7	21		2132	1.3	40		2047	0.5	15		2145	1.4	43		2239	0.0	0
12 <i>Tu</i>	0203	7.1	216	27 <i>W</i>	0334	6.4	195	12 <i>F</i>	0240	7.2	219	27 <i>M</i>	0339	6.1	186	12 <i>Su</i>	0416	6.9	210
	0839	0.7	21		0958	0.8	24		0914	0.0	0		0956	0.6	18		1046	-0.6	-18
	1439	6.4	195		1555	6.6	201		1522	7.3	223		1604	6.9	210		1702	8.1	247
	2107	0.5	15		2227	1.2	37		2154	0.2	6		2237	1.2	37		2338	-0.2	-6
13 <i>W</i>	0305	7.2	219	28 <i>Th</i>	0424	6.4	195	13 <i>F</i>	0340	7.3	223	28 <i>Sa</i>	0428	6.1	186	13 <i>M</i>	0515	6.9	210
	0942	0.4	12		1044	0.6	18		1013	-0.3	-9		1042	0.5	15		1142	-0.7	-21
	1542	6.9	210		1644	6.9	210		1622	7.8	238		1652	7.1	216		1759	8.3	253
	2213	0.1	3		2317	1.0	30		2256	-0.1	-3		2325	1.0	30				
14 <i>Th</i>	0407	7.4	226	29 <i>F</i>	0513	6.4	195	14 <i>Sa</i>	0439	7.3	223	29 <i>Su</i>	0517	6.1	186	14 <i>Tu</i>	0034	-0.4	-12
	1041	-0.1	-3		1127	0.4	12		1109	-0.6	-18		1126	0.4	12		0612	6.9	210
	1644	7.5	229		1731	7.2	219		1720	8.2	250		1738	7.4	226		1237	-0.7	-21
	2315	-0.3	-9						2355	-0.5	-15						1854	8.4	256
15 <i>F</i>	0507	7.6	232	30 <i>Sa</i>	0002	0.8	24	15 <i>Su</i>	0538	7.4	226	30 <i>M</i>	0010	0.8	24	15 <i>W</i>	0127	-0.5	-15
	1137	-0.5	-15		0559	6.5	198		1204	-0.8	-24		0604	6.2	189		0707	6.9	210
	1742	8.0	244		1208	0.3	9		1817	8.5	259		1211	0.2	6		1330	-0.6	-18
					1815	7.4	226					1822	7.6	232		1945	8.3	253	
												31 <i>Tu</i>	0054	0.6	18		0648	6.2	189
													1254	0.1	3		1254	0.1	3
													1904	7.7	235				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

Savannah River Entrance, Georgia, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 1359 ●	0154 0.2 6 0743 6.4 195 1359 -0.3 -9 2002 8.0 244	16 Sa 0826 6.8 207 1448 0.0 0 2058 7.7 235	1 M 0259 -0.6 -18 0853 7.4 226 1517 -0.6 -18 2112 8.3 253	16 Tu 0331 0.2 6 0923 7.1 216 1544 0.7 21 2147 7.1 216	1 Th 0408 -0.8 -24 1017 8.4 256 1644 -0.3 -9 2234 7.9 241	16 F 1005 7.4 226 1629 1.3 40 2228 6.6 201					
2 Sa 1446 2046	0239 -0.1 -3 0827 6.5 198 1446 -0.4 -12 2046 8.0 244	17 Su 0325 -0.1 -3 0912 6.7 204 1531 0.2 6 2140 7.4 226	2 Tu 0345 -0.7 -21 0943 7.6 232 1608 -0.5 -15 2201 8.0 244	17 W 0406 0.4 12 1003 7.0 213 1622 1.0 30 2226 6.8 207	2 F 0457 -0.5 -15 1115 8.3 253 1738 0.1 3 2331 7.5 229	17 Sa 0441 1.0 30 1046 7.2 219 1708 1.5 46 2309 6.3 192					
3 Su 1534 2131	0323 -0.3 -9 0913 6.7 204 1534 -0.4 -12 2131 8.0 244	18 M 0405 0.0 0 0957 6.7 204 1612 0.5 15 2223 7.0 213	3 W 0431 -0.8 -24 1038 7.7 235 1659 -0.3 -9 2254 7.7 235	18 Th 0440 0.6 18 1045 6.9 210 1659 1.2 37 2307 6.5 198	3 Sa 0549 -0.2 -6 1216 8.1 247 1836 0.5 15	18 Su 0520 1.2 37 1132 7.1 216 1751 1.7 52 2356 6.2 189					
4 M 1623 2220	0408 -0.4 -12 1002 6.8 207 1623 -0.3 -9 2220 7.8 238	19 Tu 0442 0.2 6 1042 6.6 201 1653 0.9 27 2305 6.7 204	4 Th 0519 -0.6 -18 1135 7.7 235 1754 0.0 0 2349 7.4 226	19 F 0517 0.8 24 1129 6.9 210 1740 1.5 46 2351 6.2 189	4 Su 0030 7.2 219 0646 0.2 6 1318 7.9 241 1939 0.9 27	19 M 0605 1.3 40 1223 7.1 216 1842 1.9 58					
5 Tu 1714 2312	0453 -0.5 -15 1056 7.0 213 1714 -0.1 -3 2312 7.6 232	20 W 0519 0.4 12 1128 6.6 201 1734 1.2 37 2349 6.4 195	5 F 0610 -0.4 -12 1234 7.7 235 1853 0.3 9	20 Sa 0556 0.9 27 1216 6.8 207 1825 1.7 52	5 M 0130 6.9 210 0749 0.5 15 1419 7.7 235 2045 1.0 30	20 Tu 0048 6.1 186 0658 1.4 43 1317 7.2 219 1941 1.9 58					
6 W 1809	0540 -0.5 -15 1153 7.1 216 1809 0.1 3	21 Th 0558 0.6 18 1215 6.6 201 1818 1.4 43	6 Sa 0047 7.1 216 0706 -0.2 -6 1334 7.7 235 1957 0.6 18	21 Su 0038 6.0 183 0642 1.1 34 1305 6.8 207 1918 1.8 55	6 Tu 0229 6.8 207 0855 0.7 21 1519 7.6 232 2148 1.0 30	21 W 0144 6.2 189 0759 1.3 40 1414 7.3 223 2045 1.7 52					
7 Th 1251 1909	0007 7.4 226 0631 -0.4 -12 1251 7.3 223 1909 0.3 9	22 F 0035 6.2 189 0639 0.7 21 1302 6.6 201 1908 1.6 49	7 Su 0145 6.9 210 0807 0.0 0 1434 7.7 235 2103 0.7 21	22 M 0128 6.0 183 0734 1.1 34 1357 6.9 210 2019 1.8 55	7 W 0328 6.8 207 0958 0.7 21 1617 7.6 232 2244 0.9 27	22 Th 0241 6.5 198 0903 1.1 34 1511 7.6 232 2146 1.3 40					
8 F 1349 ● 2014	0103 7.1 216 0726 -0.3 -9 1349 7.5 229 ● 0.4 12	23 Sa 0121 6.0 183 0726 0.8 24 1350 6.7 204 2004 1.7 52	8 M 0243 6.7 204 0911 0.1 3 1534 7.7 235 2206 0.6 18	23 Tu 0220 6.0 183 0833 1.1 34 1450 7.1 216 2122 1.6 49	8 Th 0426 6.9 210 1056 0.7 21 1711 7.7 235 2334 0.7 21	23 F 0340 6.8 207 1006 0.7 21 1609 7.9 241 2243 0.8 24					
9 Sa 1448 2120	0200 6.9 210 0826 -0.3 -9 1448 7.6 232 2120 0.4 12	24 Su 0210 5.9 180 0818 0.8 24 1439 6.8 207 2104 1.6 49	9 Tu 0342 6.6 201 1013 0.1 3 1634 7.7 235 2304 0.5 15	24 W 0314 6.1 186 0934 0.9 27 1546 7.4 226 2221 1.3 40	9 F 0520 7.1 216 1148 0.6 18 1800 7.7 235	24 Sa 0438 7.3 223 1105 0.3 9 1704 8.2 250 2336 0.3 9					
10 Su 1547 2222	0258 6.8 207 0927 -0.3 -9 1547 7.8 238 2222 0.3 9	25 M 0300 5.8 177 0913 0.8 24 1530 7.0 213 2202 1.4 43	10 W 0442 6.7 204 1111 0.1 3 1731 7.8 238 2358 0.4 12	25 Th 0411 6.4 195 1032 0.5 15 1641 7.7 235 2315 0.9 27	10 Sa 0020 0.5 15 0609 7.3 223 1235 0.6 18 1844 7.7 235	25 Su 0534 7.8 238 1201 -0.1 -3 1758 8.4 256					
11 M 1647 2321	0357 6.7 204 1027 -0.3 -9 1647 7.9 241 2321 0.1 3	26 Tu 0352 5.9 180 1008 0.6 18 1622 7.2 219 2257 1.1 34	11 Th 0538 6.8 207 1204 0.1 3 1822 7.8 238	26 F 0507 6.7 204 1128 0.2 6 1735 8.0 244	11 Sa 0103 0.4 12 0654 7.5 229 1319 0.6 18 1924 7.7 235	26 M 0027 -0.2 -6 0628 8.4 256 1256 -0.4 -12 1849 8.6 262					
12 Tu 1745	0457 6.6 201 1125 -0.4 -12 1745 8.0 244	27 W 0446 6.0 183 1102 0.3 9 1714 7.5 229 2348 0.8 24	12 F 0047 0.2 6 0630 6.9 210 1255 0.1 3 1909 7.8 238	27 Sa 0007 0.4 12 0600 7.2 219 1223 -0.2 -6 1826 8.3 253	12 M 0142 0.4 12 0735 7.6 232 1401 0.6 18 2002 7.5 229	27 Tu 0117 -0.5 -15 0719 8.8 268 1350 -0.6 -18 ● 1939 8.6 262					
13 W 1220 1839	0017 0.0 0 0554 6.7 204 1220 -0.4 -12 1839 8.0 244	28 Th 0538 6.3 192 1154 0.1 3 1805 7.8 238	13 Sa 0133 0.1 3 0718 7.0 213 1342 0.2 6 1951 7.7 235	28 Su 0057 0.0 0 0652 7.6 232 1316 -0.5 -15 ● 1915 8.6 262	13 Tu 0220 0.4 12 0813 7.6 232 1440 0.8 24 2038 7.4 226	28 W 0207 -0.7 -21 0810 9.0 274 1443 -0.7 -21 2029 8.5 259					
14 Th 1312	0109 -0.1 -3 0649 6.7 204 1312 -0.3 -9 1929 8.0 244	29 F 0038 0.4 12 0629 6.6 201 1246 -0.2 -6 1853 8.1 247	14 Su 0215 0.1 3 0801 7.1 216 1425 0.3 9 2031 7.6 232	29 M 0145 -0.4 -12 0742 8.0 244 1408 -0.7 -21 2003 8.6 262	14 W 0255 0.5 15 0850 7.6 232 1517 0.9 27 2114 7.1 216	29 Th 0256 -0.8 -24 0902 9.0 274 1535 -0.5 -15 2120 8.2 250					
15 F 1402	0158 -0.2 -6 0739 6.8 207 1402 -0.2 -6 ● 2015 7.9 241	30 Sa 0126 0.0 0 0717 6.9 210 1337 -0.4 -12 ● 1939 8.3 253	15 M 0254 0.1 3 0843 7.1 216 1506 0.5 15 2109 7.3 223	30 Tu 0233 -0.7 -21 0831 8.3 253 1500 -0.7 -21 2051 8.5 259	15 Th 0330 0.6 18 0927 7.5 229 1553 1.1 34 2150 6.8 207	30 F 0345 -0.6 -18 0956 8.9 271 1627 -0.2 -6 2214 7.9 241					
		31 Su 1427 2025	31 W 0213 -0.3 -9 0805 7.2 219 1427 -0.6 -18 2025 8.3 253	31 W 0320 -0.8 -24 0922 8.4 256 1551 -0.6 -18 2141 8.2 250							

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Savannah River Entrance, Georgia, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0435 0.435 -0.3 259	16 Su 0412 1.0 30	1 Tu 0602 0.7 21	16 W 0515 0.8 24	1 Th 0020 6.6 201	16 F 0549 0.3 9	Sa 1055 8.5 259	Su 1011 7.5 229	Tu 1233 7.7 235	W 1119 7.4 226	Th 0629 1.0 30	F 1150 7.2 219
1720 0.2 6	1643 1.4 43	1850 0.9 27	1750 1.0 30	1253 6.9 210	1817 0.1 3	2312 7.5 229	2234 6.4 195	2350 6.4 195	1908 0.8 24	1817 0.1 3	1817 0.1 3
2 Su 0528 0.1 3	17 M 0452 1.1 34	2 W 0051 6.9 210	17 Th 0607 0.9 27	2 O 0114 6.6 201	17 0026 6.7 204	2 Sa 1156 8.2 250	1055 7.4 226	1214 7.4 226	F 0727 1.3 40	17 Sa 0646 0.4 12	1246 7.1 216
1817 0.6 18	1725 1.5 46	1330 7.4 226	1842 0.9 27	1344 6.6 201	O 1912 0.1 3	2321 6.3 192	1949 1.1 34	2000 0.9 27	1912 0.1 3	1912 0.1 3	1912 0.1 3
3 M 0012 7.2 219	18 Tu 0537 1.2 37	3 Th 0148 6.8 207	18 F 0048 6.6 201	3 Sa 0206 6.6 201	18 0125 6.9 210	3 M 0625 0.6 18	1147 7.3 223	0806 1.4 43	0829 1.5 46	18 Su 0751 0.5 15	1344 7.0 213
1259 7.9 241	Tu 1813 1.6 49	1425 7.2 219	1311 7.3 223	1434 6.4 195	2011 0.0 0	O 1918 1.0 30	2047 1.1 34	1940 0.8 24	2053 0.9 27	2011 0.0 0	2011 0.0 0
4 Tu 0113 7.0 213	19 W 0015 6.3 192	4 F 0243 6.9 210	19 Sa 0148 6.9 210	4 Su 0257 6.7 204	19 0226 7.2 219	4 Tu 0728 0.9 27	0629 1.3 40	0910 1.5 46	0929 1.5 46	19 M 0859 0.4 12	1443 6.9 210
1359 7.7 235	1243 7.3 223	1516 7.0 213	1410 7.4 226	1524 6.3 192	2143 0.9 27	2021 1.2 37	2140 1.1 34	2141 0.5 15	2143 0.9 27	2114 0.2 27	2114 0.2 27
5 W 0213 6.9 210	20 Th 0114 6.4 195	5 Sa 0335 7.0 213	20 Su 0248 7.3 223	5 M 0347 6.9 210	20 0328 7.5 229	5 W 0835 1.2 37	0730 1.3 40	1008 1.4 43	1023 1.4 43	20 Tu 1005 0.2 6	1544 6.8 207
1457 7.5 229	1341 7.4 226	1606 6.9 210	1508 7.4 226	1614 6.2 189	2230 0.7 21	2122 1.2 37	2228 0.9 27	2141 0.2 6	2230 0.7 21	2215 0.4 12	2215 0.4 12
6 Th 0310 6.9 210	21 F 0213 6.7 204	6 Su 0425 7.2 219	21 M 0348 7.7 235	6 Tu 0437 7.0 213	21 0430 7.8 238	6 Th 0939 1.2 37	0836 1.1 37	1059 1.3 40	1102 1.2 37	21 W 1107 0.1 3	1646 6.9 210
1551 7.4 226	1439 7.6 232	1654 6.9 210	1608 7.5 229	1703 6.3 192	2315 0.6 18	2217 1.0 30	2113 1.0 30	2312 0.8 24	2316 0.6 18	2315 0.6 18	2315 0.6 18
7 F 0405 7.1 216	22 Sa 0313 7.2 219	7 M 0513 7.5 229	22 Tu 0448 8.2 250	7 W 0525 7.2 219	22 0531 8.1 247	7 F 1036 1.1 34	0941 0.8 24	1145 1.1 34	1157 1.0 30	22 Th 1205 0.4 12	1745 7.0 213
1643 7.4 226	1537 7.8 238	1740 6.9 210	1707 7.6 232	1751 6.3 192	2334 0.5 15	2305 0.9 27	2211 0.6 18	2353 0.6 18	2334 0.5 15	2334 0.5 15	2334 0.5 15
8 Sa 0456 7.3 223	23 Su 0412 7.7 235	8 Tu 0557 7.7 235	23 W 0546 8.6 262	8 Th 0000 0.4 12	23 0012 0.9 227	8 Sa 1126 1.0 30	1043 0.4 12	1228 1.0 30	0610 7.4 226	0629 8.3 253	23 F 1730 7.4 226
1730 7.4 226	1635 8.0 244	1823 7.0 213	1803 7.7 235	1241 0.8 24	1836 6.4 195	2348 0.7 21	2306 0.1 3	213 0.1 3	1836 6.4 195	1301 0.6 18	1842 7.1 216
9 Su 0544 7.5 229	24 M 0510 8.2 250	9 W 0033 0.5 15	24 Th 0029 0.8 24	9 F 0043 0.2 6	24 0107 1.0 30	9 Su 1212 0.9 27	1141 0.0 0	0639 0.7 238	0653 0.7 232	24 Sa 0723 0.4 256	1353 0.7 21
1814 7.5 229	1731 8.2 250	1309 0.9 27	1316 0.6 18	1323 0.6 18	1917 6.4 195	2359 0.7 21	2359 0.3 9	1904 6.9 210	1858 7.7 235	24 O 1935 7.2 219	1935 7.2 219
10 M 0029 0.6 18	25 Tu 0605 8.7 265	10 Th 0113 0.5 15	25 F 0123 0.9 27	10 Sa 0125 0.1 3	25 0159 1.0 30	10 M 0627 0.7 235	1238 0.4 12	0718 7.9 241	0735 9.0 274	25 Su 0814 8.3 253	1442 0.8 24
1255 0.9 27	1825 8.3 253	1349 0.8 24	1409 0.7 21	1404 0.4 12	2025 6.5 198	1854 7.4 226	1943 6.9 210	O 1943 6.9 210	1950 7.7 235	2025 7.1 216	2025 7.1 216
11 Tu 0108 0.5 15	26 W 0051 0.7 21	11 F 0152 0.5 15	26 Sa 0215 0.9 27	11 M 0207 0.0 0	26 0249 0.9 227	11 Tu 0707 7.9 241	0659 9.1 277	0755 7.9 241	0828 8.8 268	0811 7.7 235	26 M 0902 8.1 247
1335 0.8 24	1332 0.6 18	1427 0.8 24	1501 0.6 18	1444 0.3 9	2033 6.4 195	O 1933 7.4 226	● 1917 8.3 253	2019 6.8 207	2042 7.5 229	1444 0.3 9	2114 7.0 213
12627 0.7 235	1825 8.3 253	1349 0.8 24	1409 0.7 21	1404 0.4 12	2033 6.4 195	1854 7.4 226	● 1917 8.3 253	2019 6.8 207	2042 7.5 229	1444 0.3 9	2114 7.0 213
1255 0.9 27	1825 8.3 253	1349 0.8 24	1409 0.7 21	1404 0.4 12	2033 6.4 195	1854 7.4 226	● 1917 8.3 253	2019 6.8 207	2042 7.5 229	1444 0.3 9	2114 7.0 213
12 F 0145 0.5 15	27 Th 0143 0.8 24	12 Sa 0231 0.5 15	27 Su 0306 0.7 21	12 M 0249 0.0 0	27 0336 0.6 18	12 W 0745 8.0 244	0751 9.3 283	0832 7.8 238	0920 8.6 262	0849 7.7 235	27 Tu 0950 7.8 238
1414 0.9 27	1425 0.6 18	1505 0.8 24	1550 0.4 12	1523 0.3 9	2203 6.9 210	2009 7.2 219	2009 8.2 250	2055 6.6 201	2134 7.3 223	1614 0.5 15	2203 6.9 210
2009 7.2 219	1425 0.6 18	1505 0.8 24	1550 0.4 12	1523 0.3 9	2203 6.9 210	1425 0.6 18	2009 8.2 250	2055 6.6 201	2134 7.3 223	1614 0.5 15	2203 6.9 210
13 Th 0222 0.6 18	28 F 0234 0.8 24	13 Su 0310 0.6 18	28 M 0356 0.4 12	13 Tu 0330 0.0 0	28 W 0422 0.2 6	13 W 0821 7.9 241	0843 9.2 280	0908 7.7 235	1013 8.2 250	0928 7.6 232	28 Tu 1037 7.3 223
1451 1.0 30	1518 0.5 15	1543 0.9 27	1639 0.1 3	1603 0.2 6	2252 6.7 204	2045 7.0 213	2100 8.0 244	2130 6.5 198	2228 7.1 216	2151 6.4 195	2252 6.7 204
2045 7.0 213	2100 8.0 244	2130 6.5 198	2228 7.1 216	2151 6.4 195	2252 6.7 204	2100 8.0 244	2130 6.5 198	2228 7.1 216	2151 6.4 195	2252 6.7 204	2252 6.7 204
14 F 0258 0.7 21	29 Sa 0325 0.6 18	14 M 0349 0.6 18	29 Tu 0445 0.0 0	14 W 0413 0.0 0	29 0507 0.2 6	14 W 0856 7.8 238	0937 8.9 271	0946 7.6 232	1107 7.7 235	1727 0.2 6	29 Th 1124 6.9 210
1527 1.1 34	1609 0.2 6	1622 0.9 27	2209 6.4 195	1644 0.2 6	2342 6.5 198	2120 6.8 207	2154 7.7 235	2209 6.4 195	2324 6.8 207	2236 6.4 195	2342 6.5 198
2120 6.8 207	2154 7.7 235	2209 6.4 195	2324 6.8 207	2236 6.4 195	2342 6.5 198	2120 6.8 207	2154 7.7 235	2209 6.4 195	2324 6.8 207	2236 6.4 195	2342 6.5 198
15 Sa 0335 0.8 24	30 Su 0415 0.3 9	15 Tu 0430 0.7 21	30 W 0535 0.5 15	15 Th 0459 0.2 6	30 0552 0.7 21	15 Sa 0932 7.7 235	1034 8.5 259	1704 1.0 30	1201 7.3 223	1058 7.4 226	30 F 1211 6.5 198
0932 7.7 235	1034 8.5 259	1704 1.0 30	1816 0.5 15	1816 0.5 15	30 0552 0.7 21	1604 1.2 37	2251 7.3 223	2255 6.3 192	2329 6.5 198	1822 0.4 12	30 F 1822 0.4 12
1604 1.2 37	2251 7.3 223	2255 6.3 192	2329 6.5 198	2329 6.5 198	30 0552 0.7 21	2155 6.6 201	31 M 1134 8.1 247	1754 0.5 15	2351 7.0 213	1908 0.6 18	31 Sa 0641 1.1 34
2155 6.6 201	31 M 1134 8.1 247	1754 0.5 15	2351 7.0 213	2351 7.0 213	31 0032 6.4 195	1259 6.2 189	1259 6.2 189	1908 0.6 18	1908 0.6 18	1908 0.6 18	1908 0.6 18

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Savannah, Georgia, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0601	8.5	259	16 Su 0508	7.9	241	1 Tu 0112	-0.4	-12	16 W 0041	-0.6	-18
1230 -0.1	-3		1158 0.7	21		0730 8.3	253		0636 8.4	256	
1803 7.5	229		1737 6.9	210		1350 -0.4	-12		1320 -0.3	-9	
						1931 7.5	229		1906 7.7	235	
2 Su 0039	-0.5	-15	17 M 0008	-0.2	-6	2 W 0201	-0.4	-12	17 Th 0138	-1.0	-30
0658 8.6	262		0607 8.2	250		0813 8.3	253		0731 8.7	265	
1323 -0.3	-9		1254 0.3	9		1434 -0.5	-15		1413 -0.8	-24	
1858 7.6	232		1835 7.1	216	●	2014 7.7	235		1959 8.2	250	
3 M 0131	-0.5	-15	18 Tu 0104	-0.5	-15	3 Th 0246	-0.4	-12	18 F 0233	-1.4	-43
0748 8.7	265		0702 8.6	262		0851 8.3	253		0820 8.9	271	
1413 -0.4	-12		1347 -0.2	-6		1515 -0.5	-15		1502 -1.2	-37	
1948 7.7	235		1928 7.5	229		2052 7.7	235	○	2048 8.5	259	
4 Tu 0221	-0.5	-15	19 W 0158	-0.9	-27	4 F 0326	-0.4	-12	19 Sa 0325	-1.7	-52
0833 8.7	265		0752 8.9	271		0925 8.1	247		0907 8.9	271	
1500 -0.5	-15		1438 -0.6	-18		1552 -0.5	-15		1549 -1.4	-43	
● 2033 7.7	235		2016 7.8	238		2127 7.7	235		2136 8.7	265	
5 W 0307	-0.5	-15	20 Th 0250	-1.3	-40	5 Sa 0402	-0.2	-6	20 Su 0415	-1.7	-52
0913 8.5	259		0838 9.0	274		0955 7.9	241		0953 8.7	265	
1543 -0.5	-15		1525 -1.0	-30		1625 -0.3	-9		1634 -1.4	-43	
2114 7.7	235		2102 8.0	244		2159 7.6	232		2226 8.7	265	
6 Th 0349	-0.3	-9	21 F 0340	-1.5	-46	6 Su 0436	0.0	0	21 M 0504	-1.4	-43
0950 8.3	253		0923 9.0	274		1023 7.6	232		1042 8.4	256	
1621 -0.3	-9		1610 -1.2	-37		1657 -0.2	-6		1719 -1.3	-40	
2152 7.5	229		2149 8.2	250		2232 7.5	229		2320 8.6	262	
7 F 0427	-0.1	-3	22 Sa 0429	-1.5	-46	7 M 0508	0.3	9	22 Tu 0553	-1.0	-30
1025 8.0	244		1008 8.8	268		1054 7.3	223		1134 8.0	244	
1658 -0.1	-3		1655 -1.2	-37		1727 0.0	0		1806 -0.9	-27	
2231 7.4	226		2239 8.2	250		2307 7.5	229		20411 0.1	3	
8 Sa 0503	0.3	9	23 Su 0518	-1.2	-37	8 Tu 0540	0.5	15	22 M 0411	0.1	3
1100 7.7	235		1058 8.5	259		1130 7.1	216		0951 7.6	232	
1732 0.1	3		1740 -1.1	-34		1759 0.2	6		1624 -0.1	-3	
2311 7.2	219		2335 8.1	247		2349 7.4	226		2158 8.0	244	
9 Su 0537	0.6	18	24 M 0608	-0.9	-27	9 W 0615	0.7	21	23 W 0448	-1.3	-40
1138 7.4	226		1152 8.1	247		1213 6.9	210		1023 8.3	253	
1806 0.3	9		1827 -0.8	-24		1836 0.3	9		1658 -1.1	-34	
2354 7.1	216								2302 9.0	274	
10 M 0613	0.9	27	25 Tu 0037	8.1	247	10 Th 0036	7.4	226	8 Tu 0443	0.2	6
1220 7.1	216		0703 -0.4	-12		0659 1.0	30		1019 7.4	226	
1842 0.5	15		1249 7.8	238		1302 6.8	207		1654 0.0	0	
			1919 -0.5	-15		1921 0.4	12		2230 8.0	244	
11 Tu 0041	7.1	216	26 W 0139	8.0	244	11 F 0129	7.4	226	9 W 0515	0.4	12
0654 1.1	34		0803 0.0	0		0756 1.2	37		1027 7.2	219	
1306 6.9	210		1347 7.5	229		1356 6.7	204		1726 0.1	3	
1923 0.6	18		● 2017 -0.2	-6	○	2019 0.5	15		2308 7.9	241	
12 W 0129	7.2	219	27 Th 0240	8.0	244	26 Sa 0322	7.8	238	10 F 0550	0.6	18
0744 1.3	40		0908 0.3	9		0948 0.5	15		1133 7.1	216	
1354 6.8	207		1445 7.3	223		1527 7.1	216		1803 0.2	6	
● 2012 0.7	21		2121 -0.1	-3		2202 0.3	9		2354 7.9	241	
13 Th 0220	7.3	223	28 F 0341	7.9	241	13 Su 0325	7.6	232	11 F 0631	0.8	24
0846 1.4	43		1012 0.3	9		1019 1.1	34		1222 7.0	213	
1445 6.7	204		1544 7.2	219		1555 6.7	204		1847 0.4	12	
2109 0.6	18		2224 -0.1	-3		2235 0.2	6				
14 F 0313	7.4	226	29 M 0443	7.9	241	14 M 0429	7.8	238	26 F 0103	8.3	253
0954 1.3	40		1112 0.2	6		1124 0.7	21		0721 0.1	3	
1539 6.7	204		1645 7.1	216		1701 6.9	210		1313 7.4	226	
2210 0.5	15		2324 -0.2	-6		2340 -0.1	-3		1930 0.3	9	
15 Sa 0409	7.6	232	30 Su 0544	8.0	244	15 Tu 0534	8.1	247	26 W 0202	8.0	244
1058 1.1	34		1208 0.0	0		1224 0.2	6		0819 0.5	15	
1637 6.7	204		1745 7.2	219		1806 7.3	223		1411 7.3	223	
2310 0.2	6								● 2031 0.7	21	
31 M 0020	-0.3	-9									
0640 8.1	247										
1301 -0.2	-6										
1841 7.4	226										

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Savannah, Georgia, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0110	0.4	12	16 Sa 0058	-0.5	-15	1 Su 0122	0.7	21	1 W 0220	0.5	15
0713	7.9	241	0636	8.4	256	0716	7.6	232	W 0759	7.3	223
1328	0.0	0	1316	-0.6	-18	1330	0.2	6	M 1344	-0.7	-21
1922	8.3	253	1916	9.2	280	1928	8.5	259	1951	9.5	290
2 Sa 0154	0.3	9	17 Su 0155	-0.9	-27	2 M 0206	0.6	18	2 Th 0303	0.3	9
0752	7.9	241	0732	8.5	259	0754	7.6	232	0835	7.3	223
1408	0.0	0	1409	-0.9	-27	1411	0.2	6	Tu 1437	-0.7	-21
2000	8.4	256	O 2010	9.5	290	2003	8.6	262	O 2043	9.5	290
3 Su 0235	0.2	6	18 M 0250	-1.1	-34	3 Tu 0247	0.4	12	3 F 0345	0.2	6
0827	7.8	238	0824	8.5	259	0827	7.5	229	W 0852	8.0	244
1446	0.0	0	1500	-1.0	-30	1450	0.2	6	1528	-0.6	-18
● 2032	8.4	256	2101	9.6	293	● 2034	8.7	265	2134	9.3	283
4 M 0313	0.2	6	19 Tu 0341	-1.1	-34	4 W 0326	0.4	12	4 Sa 0426	0.0	0
0856	7.7	235	0913	8.4	256	0858	7.4	226	W 0950	7.4	226
1521	0.0	0	1550	-0.9	-27	1528	0.1	3	1616	-0.4	-12
2100	8.5	259	2151	9.4	287	2106	8.8	268	2224	9.0	274
5 Tu 0348	0.2	6	20 W 0431	-1.0	-30	5 Th 0404	0.3	9	5 Su 0458	0.0	0
0923	7.6	232	1003	8.1	247	0929	7.4	226	F 1034	7.7	235
1555	0.1	3	1637	-0.7	-21	1606	0.1	3	1703	-0.1	-3
2129	8.5	259	2244	9.1	277	2140	8.8	268	2317	8.6	262
6 W 0422	0.3	9	21 Th 0518	-0.7	-21	6 F 0441	0.3	9	6 M 0551	-0.1	-3
0951	7.4	226	1056	7.9	241	1004	7.3	223	Sa 1129	7.5	229
1628	0.1	3	1724	-0.3	-9	1645	0.2	6	W 1806	0.1	3
2201	8.5	259	2341	8.7	265	2220	8.7	265	2348	8.6	262
7 Th 0456	0.4	12	22 F 0607	-0.2	-6	7 Sa 0521	0.3	9	7 Tu 0638	-0.1	-3
1024	7.3	223	1154	7.6	232	1047	7.3	223	Su 1230	7.7	235
1702	0.2	6	1812	0.2	6	1727	0.2	6	W 1900	0.3	9
2239	8.4	256	2307	8.7	265	2307	8.7	265	1330	7.5	229
8 F 0533	0.5	15	23 Sa 0040	8.4	256	8 Su 0604	0.4	12	22 W 1937	1.5	46
1105	7.2	219	0657	0.2	6	1140	7.3	223	22 Th 0107	7.6	232
1741	0.3	9	1253	7.5	229	1815	0.3	9	W 0720	0.5	15
2326	8.4	256	1904	0.6	18	23 M 0102	8.0	244	22 1330	7.5	229
9 Sa 0615	0.6	18	24 Tu 0136	8.1	247	9 M 0002	8.5	259	22 Th 1937	1.5	46
1156	7.2	219	0750	0.5	15	W 0652	0.4	12	22 F 0107	7.6	232
1827	0.4	12	1350	7.5	229	1240	7.4	226	W 0805	0.7	21
● 2001	1.0	30	● 2001	1.0	30	1910	0.5	15	23 Th 1417	7.6	232
10 Su 0021	8.3	253	25 M 0228	7.9	241	10 Tu 0102	8.5	259	● O 2031	1.7	52
0706	0.8	24	0845	0.7	21	0748	0.4	12	9 Sa 0145	8.3	253
1255	7.2	219	1443	7.5	229	1343	7.7	235	24 F 0237	7.2	219
1923	0.6	18	2103	1.2	37	● O 2015	0.6	18	W 0853	0.7	21
11 M 0122	8.2	250	26 Tu 0318	7.8	238	11 W 0203	8.4	256	23 1503	7.7	235
0807	0.8	24	0940	0.7	21	0849	0.3	9	W 2129	1.7	52
1358	7.3	223	1534	7.7	235	1445	8.0	244	25 Th 0322	7.1	216
● 2031	0.6	18	2203	1.2	37	2125	0.5	15	Sa 0943	0.7	21
12 Tu 0224	8.2	250	27 W 0407	7.7	235	27 F 0238	7.6	232	W 1549	7.9	241
0915	0.7	21	1032	0.6	18	1041	0.4	12	22 F 2225	1.6	49
1502	7.6	232	1625	7.8	238	1045	0.7	21	22 Sa 0442	8.1	247
2144	0.5	15	2258	1.1	34	1459	7.7	235	25 W 0943	0.7	21
13 W 0327	8.2	250	28 Th 0457	7.6	232	2121	1.5	46	22 W 1532	8.5	259
1021	0.5	15	1119	0.5	15	2121	1.5	46	22 Th 2225	1.6	49
1607	7.9	241	1715	8.0	244	2337	0.3	9	22 F 0322	7.1	216
2253	0.2	6	2349	1.0	30	2337	0.0	0	22 W 1549	7.9	241
14 Th 0431	8.3	253	29 F 0546	7.6	232	2337	1.1	34	22 M 2225	1.6	49
1122	0.1	3	1204	0.4	12	1347	8.3	253	22 Th 2319	1.4	43
1713	8.3	253	1804	8.2	250	1651	8.7	265	22 F 0442	7.8	238
2357	-0.2	-6	● 1804	8.2	250	1651	8.7	265	27 Th 0501	7.0	213
15 F 0535	8.3	253	30 Sa 0037	0.8	24	2337	0.0	0	27 M 1124	0.5	15
1220	-0.3	-9	0633	7.6	232	2337	1.1	34	27 W 1728	8.2	250
1817	8.8	268	1248	0.3	9	1347	8.0	244	28 Th 0553	7.0	213
			1848	8.4	256	1347	9.3	283	28 F 1214	0.3	9
						1347	9.3	283	28 W 1818	8.4	256
						1347	9.3	283	28 Th 1818	8.4	256
						1347	9.3	283	28 F 1905	8.6	262
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271
						1347	9.3	283	28 F 1949	8.9	271
						1347	9.3	283	28 Th 1949	8.9	271

Savannah, Georgia, 2011

Times and Heights of High and Low Waters

July			August			September						
Time	Height		Time	Height		Time	Height		Time	Height		
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 F 0239 0.2 6 0813 7.4 226 1444 -0.3 -9 ● 2030 9.0 274	16 Sa 0325 -0.4 -12 0859 7.8 238 1533 -0.1 -3 2135 8.7 265		1 M 0346 -0.6 -18 0923 8.3 253 1604 -0.7 -21 2139 9.2 280			16 Tu 0412 0.0 0 0948 8.1 247 1626 0.7 21 2211 8.1 247			16 Th 0453 -0.7 -21 1047 9.1 277 1727 -0.3 -9 2259 8.6 262			
2 Sa 0325 -0.1 -3 0855 7.5 229 1532 -0.4 -12 2111 9.1 277	17 Su 0407 -0.3 -9 0942 7.8 238 1615 0.2 6 2213 8.4 256		2 Tu 0430 -0.8 -24 1011 8.5 259 1653 -0.6 -18 2226 8.9 271			17 W 0446 0.3 9 1023 8.0 244 1700 1.0 30 2244 7.8 238			17 Sa 0539 -0.5 -15 1148 9.0 274 1820 0.1 3 2357 8.2 250			
3 Su 0408 -0.3 -9 0938 7.7 235 1619 -0.5 -15 2154 9.0 274	18 M 0446 -0.2 -6 1024 7.7 235 1655 0.5 15 2252 8.1 247		3 W 0514 -0.7 -21 1104 8.5 259 1743 -0.3 -9 2318 8.6 262			18 Th 0518 0.5 15 1101 7.9 241 1734 1.3 40 2320 7.5 229			18 Su 0630 -0.1 -3 1255 8.8 268 1916 0.6 18			
4 M 0451 -0.5 -15 1025 7.8 238 1706 -0.4 -12 2241 8.8 268	19 Tu 0523 0.1 3 1107 7.6 232 1732 0.9 27 2331 7.7 235		4 Th 0600 -0.6 -18 1205 8.5 259 1835 0.0 0			19 F 0551 0.7 21 1142 7.8 238 1810 1.5 46			4 Su 0100 7.9 241 0725 0.3 9 1359 8.7 265 2018 0.9 27			
5 Tu 0534 -0.5 -15 1119 7.9 241 1755 -0.2 -6 2334 8.6 262	20 W 0558 0.3 9 1152 7.5 229 1810 1.2 37		5 F 0015 8.2 250 0650 -0.4 -12 1309 8.5 259 1933 0.4 12			20 Sa 0003 7.3 223 0626 0.9 27 1230 7.8 238 1852 1.8 55			5 M 0202 7.8 238 0827 0.6 18 1500 8.7 265 2122 1.0 30			
6 W 0620 -0.5 -15 1219 8.0 244 1849 0.1 3	21 Th 0014 7.4 226 0634 0.5 15 1239 7.5 229 1851 1.5 46		6 Sa 0114 7.9 241 0745 -0.1 -3 1411 8.6 262 2037 0.7 21			21 Su 0052 7.1 216 0709 1.0 30 1322 7.8 238 1945 1.9 58			6 Tu 0302 7.8 238 0933 0.7 21 1558 8.7 265 2223 0.9 27			
7 Th 0031 8.3 253 0710 -0.4 -12 1321 8.2 250 1949 0.3 9	22 F 0059 7.2 219 0714 0.7 21 1326 7.5 229 1939 1.7 52		7 Su 0214 7.8 238 0846 0.1 3 1511 8.6 262 2141 0.7 21			22 M 0145 7.1 216 0801 1.1 34 1415 8.0 244 2050 1.9 58			7 W 0401 7.9 241 1035 0.6 18 1654 8.7 265 2319 0.7 21			
8 F 0129 8.1 247 0805 -0.2 -6 1421 8.4 256 ● 2053 0.5 15	23 Sa 0146 7.1 216 0758 0.8 24 1414 7.7 235 2035 1.8 55		8 M 0312 7.7 235 0950 0.2 6 1611 8.7 265 2243 0.6 18			23 Tu 0240 7.1 216 0904 1.0 30 1511 8.2 250 2157 1.8 55			8 Th 0459 8.0 244 1132 0.5 15 1748 8.8 268			
9 Sa 0227 7.9 241 0905 -0.2 -6 1520 8.6 262 2158 0.5 15	24 Su 0233 7.0 213 0851 0.8 24 1502 7.8 238 2137 1.8 55		9 Tu 0412 7.6 232 1051 0.1 3 1711 8.7 265 2341 0.4 12			24 W 0337 7.2 219 1009 0.9 27 1609 8.4 256 2300 1.4 43			9 F 0010 0.4 12 0554 8.2 250 1225 0.4 12 1837 8.9 271			
10 Su 0325 7.7 235 1007 -0.2 -6 1620 8.7 265 2301 0.4 12	25 M 0323 6.9 210 0947 0.8 24 1553 8.0 244 2237 1.6 49		10 W 0512 7.7 235 1149 0.1 3 1809 8.8 268			25 Th 0437 7.4 226 1112 0.6 18 1708 8.7 265 2357 1.0 30			10 Sa 0057 0.2 6 0645 8.4 256 1314 0.4 12 1921 8.9 271			
11 M 0424 7.6 232 1107 -0.2 -6 1723 8.8 268	26 Tu 0417 6.9 210 1044 0.6 18 1647 8.2 250 2335 1.3 40		11 Th 0034 0.2 6 0611 7.8 238 1244 0.0 0 1901 8.9 271			26 F 0538 7.7 235 1211 0.2 6 1806 9.0 274			11 Su 0142 0.1 3 0730 8.6 262 1400 0.4 12 2001 8.9 271			
12 Tu 0000 0.2 6 0526 7.6 232 1206 -0.3 -9 1824 8.9 271	27 W 0513 7.0 213 1141 0.4 12 1743 8.5 259		12 F 0125 0.0 0 0705 8.0 244 1336 0.0 0 1948 8.9 271			27 Sa 0052 0.5 15 0636 8.1 247 1308 -0.2 -6 1900 9.3 283			12 M 0224 0.1 3 0809 8.7 265 1443 0.5 15 2036 8.7 265			
13 W 0056 0.0 0 0626 7.6 232 1302 -0.3 -9 1920 9.0 274	28 Th 0030 0.9 27 0610 7.2 219 1236 0.1 3 1836 8.8 268		13 Sa 0212 -0.1 -3 0752 8.1 247 1424 0.1 3 2029 8.9 271			28 Su 0144 0.0 0 0729 8.5 259 1403 -0.5 -15 ● 1949 9.4 287			13 Tu 0303 0.2 6 0844 8.7 265 1522 0.7 21 2107 8.5 259			
14 Th 0149 -0.2 -6 0722 7.7 235 1356 -0.3 -9 2009 9.0 274	29 F 0122 0.5 15 0703 7.5 229 1331 -0.2 -6 1925 9.0 274		14 Su 0256 -0.2 -6 0835 8.2 250 1508 0.2 6 2106 8.7 265			29 M 0233 -0.4 -12 0818 8.9 271 1456 -0.7 -21 2035 9.5 290			14 W 0338 0.3 9 0915 8.6 262 1558 0.9 27 2135 8.2 250			
15 F 0239 -0.3 -9 0813 7.8 238 1446 -0.2 -6 ● 2054 8.9 271	30 Sa 0213 0.1 3 0752 7.8 238 1424 -0.5 -15 ● 2011 9.2 280		15 M 0336 -0.1 -3 0913 8.2 250 1549 0.4 12 2139 8.4 256			30 Tu 0321 -0.7 -21 0905 9.2 280 1547 -0.8 -24 2120 9.3 283			15 Th 0411 0.5 15 0946 8.5 259 1631 1.1 34 2204 8.0 244			
	31 Su 0300 -0.3 -9 0838 8.1 247 1515 -0.7 -21 2055 9.3 283					31 W 0407 -0.8 -24 0954 9.2 280 1637 -0.6 -18 2207 9.0 274						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Savannah, Georgia, 2011

Times and Heights of High and Low Waters

October				November				December						
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height			
h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 Sa 0519	-0.2	-6		16 Su 0445	0.8	24		1 Th 0024	7.9	241		16 F 0626	0.2	6
1130 9.3	283			1021 8.7	265			0642 0.7	21			1210 8.4	256	
1802 0.2	6			1715 1.4	43			1317 8.6	262			1853 0.1	3	
2339 8.2	250			2241 7.6	232			1928 0.9	27					
2 Su 0609	0.2	6		17 M 0521	0.9	27		0127 7.8	238			0047 7.7	235	
1238 9.0	274			1104 8.6	262			0740 1.2	37			0724 0.4	12	
1857 0.7	21			1754 1.5	46			1413 8.4	256			1309 8.2	250	
				2328 7.5	229			2025 1.0	30			1949 0.2	6	
3 M 0044	7.9	241		18 Tu 0604	1.1	34		0225 7.9	241			0150 7.9	241	
0705 0.7	21			1157 8.5	259			0842 1.4	43			0830 0.5	15	
1343 8.8	268			1842 1.6	49			1505 8.3	253			1409 8.0	244	
● 1956 1.0	30							2122 1.0	30			2051 0.1	3	
4 Tu 0148	7.9	241		19 W 0027	7.4	226		0319 8.0	244			0253 8.2	250	
0806 1.0	30			0656 1.2	37			0945 1.4	43			0939 0.5	15	
1441 8.7	265			1258 8.5	259			1554 8.3	253			1509 7.9	241	
2057 1.1	34			● 1939 1.6	49			2216 0.9	27			2155 0.0	0	
5 W 0248	7.9	241		20 Th 0131	7.5	229		0410 8.2	250			0357 8.4	256	
0911 1.2	37			0800 1.3	40			1042 1.3	40			1046 0.3	9	
1536 8.6	262			1401 8.6	262			1643 8.2	250			1611 7.8	238	
2157 1.0	30			2046 1.5	46			2305 0.7	21			2258 -0.3	-9	
6 Th 0344	8.1	247		21 F 0236	7.8	238		0501 8.4	256			0503 8.6	262	
1014 1.1	34			0912 1.1	34			1133 1.2	37			1148 0.0	0	
1628 8.6	262			1502 8.7	265			1731 8.2	250			1714 7.7	235	
2251 0.8	24			2152 1.1	34			2350 0.5	15			2358 -0.5	-15	
7 F 0439	8.3	253		22 Sa 0339	8.2	250		0549 8.6	262			0609 8.9	271	
1110 1.0	30			1022 0.8	24			1220 1.0	30			1247 -0.3	-9	
1719 8.7	265			1604 8.8	268			1817 8.2	250			1817 7.8	238	
2340 0.6	18			2253 0.7	21									
8 Sa 0531	8.5	259		23 Su 0443	8.6	262		0033 0.4	12			0056 -0.7	-21	
1202 0.9	27			1126 0.4	12			0634 8.8	268			0710 9.1	277	
1807 8.7	265			1705 8.9	271			1306 0.9	27			1344 -0.5	-15	
				2350 0.2	6			1859 8.2	250			1915 7.9	241	
9 Su 0026	0.4	12		24 M 0545	9.1	277		0115 0.4	12			0152 0.2	-27	
0620 8.7	265			1226 0.1	3			0715 8.9	271			0805 9.2	280	
1249 0.8	24			1804 9.0	274			1349 0.9	27			1437 -0.7	-21	
1851 8.7	265							1938 8.1	247			2008 8.0	244	
10 M 0109	0.3	9		25 Tu 0045	-0.2	-6		0156 0.4	12			0245 -0.9	-27	
0704 8.9	271			0644 9.6	293			0751 9.0	274			0855 9.2	280	
1334 0.7	21			1324 -0.3	-9			1430 0.8	24			1526 -0.8	-24	
1931 8.7	265			1900 9.1	277			● 2012 8.0	244			2058 8.0	244	
11 Tu 0150	0.3	9		26 W 0139	-0.5	-15		0234 0.4	12			0334 -0.9	-27	
0742 9.0	274			0739 9.9	302			0823 9.0	274			0941 9.0	274	
1416 0.8	24			1420 -0.5	-15			1508 0.8	24			1612 -0.8	-24	
○ 2007 8.6	262			● 1951 9.1	277			2042 7.9	241			2145 7.9	241	
12 W 0229	0.4	12		27 Th 0231	-0.7	-21		0312 0.4	12			0329 -0.1	-3	
0816 9.0	274			0830 10.0	305			0853 8.9	271			0421 -0.6	-18	
1455 0.8	24			1513 -0.6	-18			1545 0.8	24			1027 8.7	265	
2038 8.4	256			2041 9.0	274			2111 7.8	238			1656 -0.6	-18	
13 Th 0305	0.5	15		28 F 0322	-0.7	-21		0352 0.7	-21			2233 7.8	238	
0847 9.0	274			0920 10.0	305			0958 9.4	287					
1532 1.0	30			1604 -0.5	-15			1634 -0.5	-15					
2106 8.2	250			2129 8.8	268			2203 8.1	247					
14 F 0339	0.6	18		29 Sa 0411	-0.5	-15		0425 0.5	15			2323 7.6	232	
0915 8.9	271			1013 9.7	296			0959 8.9	271					
1606 1.1	34			1653 -0.2	-6			1658 0.9	27					
2133 8.0	244			2221 8.4	256			2219 7.6	232					
15 Sa 0412	0.7	21		30 Su 0459	-0.2	-6		0504 0.5	15			0015 7.4	226	
0946 8.8	268			1111 9.3	283			1041 8.8	268			0632 0.7	21	
1640 1.3	40			1743 0.1	3			1738 0.9	27			1248 7.5	229	
2204 7.8	238			2319 8.1	247			2305 7.5	229			1902 0.3	9	
31 M 0549	0.3	9										0106 7.3	223	
				1215 8.9	271							0720 1.1	34	
				1834 0.5	15							1336 7.2	219	
												1948 0.6	18	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Fernandina Beach, Amelia River, Florida, 2011

Times and Heights of High and Low Waters

January				February				March				
	Time	Height			Time	Height			Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm	
1	0613	6.5	198	16	0536	5.9	180	1	0052	-0.4	-12	
Sa	1212	-0.3	-9	Su	1143	0.3	9	Tu	0737	6.3	192	
	1824	5.4	165		1754	5.0	152		1334	-0.3	-9	
					2346	-0.5	-15		1946	5.5	168	
2	0015	-0.7	-21	17	0630	6.2	189	2	0140	-0.5	-15	
Su	0707	6.6	201	M	1235	-0.1	-3	W	0820	6.3	192	
	1306	-0.4	-12		1847	5.3	162		1416	-0.4	-12	
	1917	5.5	168			●	2030	5.6	171			
3	0108	-0.8	-24	18	0038	-0.8	-24	3	0223	-0.5	-15	
M	0756	6.7	204	Tu	0720	6.6	201	F	0834	7.1	216	
	1355	-0.5	-15		1323	-0.5	-15		1454	-0.4	-12	
	2006	5.5	168		1938	5.6	171		2110	5.7	174	
4	0156	-0.7	-21	19	0129	-1.1	-34	4	0303	-0.4	-12	
Tu	0842	6.6	201	W	0808	6.8	207	F	0936	6.1	186	
	1439	-0.6	-18		1410	-0.8	-24		1529	-0.4	-12	
	● 2052	5.5	168		O	2027	5.9	180		2148	5.7	174
5	0241	-0.6	-18	20	0219	-1.4	-43	5	0341	-0.2	-6	
W	0925	6.5	198	Sa	0856	7.0	213	Sa	0923	-1.4	-43	
	1521	-0.5	-15		1455	-1.1	-34		1516	-1.4	-43	
	2135	5.5	168		2116	6.1	186		2239	7.1	216	
6	0323	-0.5	-15	21	0307	-1.5	-46	6	0418	0.0	0	
Th	1004	6.2	189	F	0943	7.0	213	Su	1046	5.6	171	
	1600	-0.4	-12		1539	-1.3	-40		1637	-0.2	-6	
	2216	5.4	165		2206	6.3	192		2301	5.6	171	
7	0404	-0.2	-6	22	0356	-1.4	-43	7	0455	0.2	6	
F	1042	6.0	183	Sa	1031	6.9	210	M	1121	5.4	165	
	1637	-0.2	-6		1625	-1.3	-40		1711	0.0	0	
	2256	5.4	165		2257	6.4	195		2338	5.6	171	
8	0444	0.1	3	23	0448	-1.2	-37	8	0535	0.5	15	
Sa	1119	5.7	174	Su	1119	6.6	201	W	1157	5.2	158	
	1715	-0.1	-3		1713	-1.2	-37		1748	0.2	6	
	2335	5.3	162		2349	6.4	195					
9	0526	0.3	9	24	0543	-0.9	-27	9	0018	5.5	168	
Su	1156	5.4	165	M	1209	6.3	192	W	0620	0.7	21	
	1754	0.1	3		1804	-1.0	-30		1236	5.0	152	
									1831	0.3	9	
10	0016	5.2	158	25	0043	6.3	192	10	0101	5.5	168	
M	0612	0.6	18	Tu	0643	-0.5	-15	Th	0712	0.8	24	
	1234	5.1	155		1301	5.9	180		1321	4.8	146	
	1835	0.2	6		1900	-0.8	-24		1921	0.4	12	
11	0058	5.2	158	26	0141	6.2	189	11	0151	5.4	165	
Tu	0703	0.8	24	W	0747	-0.2	-6	Sa	0810	0.9	27	
	1316	4.9	149		1357	5.5	168		1412	4.7	143	
	1921	0.3	9		● 2000	-0.6	-18		● 2017	0.3	9	
12	0145	5.2	158	27	0244	6.1	186	12	0250	5.5	168	
W	0759	0.9	27	Th	0852	0.0	0	Sa	0911	0.8	24	
	1404	4.7	143		1458	5.2	158		1512	4.7	143	
	● 2011	0.3	9		2101	-0.4	-12		2117	0.2	6	
13	0238	5.2	158	28	0351	6.0	183	13	0355	5.6	171	
Th	0857	0.9	27	F	0955	0.1	3	Su	1010	0.7	21	
	1458	4.6	140		1604	5.1	155		1618	4.8	146	
	2104	0.2	6		2203	-0.4	-12		2217	0.0	0	
14	0337	5.4	165	29	0457	6.0	183	14	0500	5.9	180	
F	0954	0.8	24	Sa	1056	0.0	0	M	1108	0.4	12	
	1557	4.6	140		1708	5.1	155		1721	5.1	155	
	2158	0.1	3		2302	-0.3	-9		2317	-0.3	-9	
15	0438	5.6	171	30	0557	6.1	186	15	0600	6.3	192	
Sa	1049	0.5	15	Su	1154	-0.1	-3	Tu	1203	0.0	0	
	1658	4.7	143		1807	5.2	158		1820	5.6	171	
	2252	-0.2	-6		2359	-0.4	-12					
					31	0650	6.2	189				
					M	1246	-0.2	-6				
					1859	5.4	165					

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Fernandina Beach, Amelia River, Florida, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0057	0.5	15	16 Sa 0031	-0.4	-12	1 Su 0110	0.7	21	16 W 0202	0.6	18
0718	6.1	186	0652	7.0	213	0721	6.0	183	0812	5.8	177
1311	0.3	9	1247	-0.7	-21	1311	0.4	12	1356	0.2	6
1934	6.5	198	1924	7.8	238	1941	6.9	210	2034	7.1	216
2 Sa 0139	0.4	12	17 Su 0127	-0.7	-21	2 M 0151	0.6	18	2 Th 0242	0.4	12
0757	6.2	189	0746	7.1	216	0802	6.0	183	0855	5.8	177
1348	0.2	6	1339	-0.9	-27	1349	0.4	12	1437	0.2	6
2013	6.7	204	O 2017	8.0	244	2021	7.0	213	2116	7.1	216
3 Su 0218	0.3	9	18 M 0221	-0.8	-24	3 Tu 0229	0.5	15	3 F 0321	0.4	12
0835	6.1	186	0838	7.1	216	0842	6.0	183	0938	5.8	177
1423	0.2	6	1428	-1.0	-30	1426	0.4	12	1518	0.2	6
● 2050	6.7	204	2110	8.1	247	● 2059	7.0	213	2159	7.1	216
4 M 0255	0.3	9	19 Tu 0312	-0.8	-24	4 W 0306	0.5	15	4 Sa 0402	0.3	9
0912	6.0	183	0930	7.0	213	0922	5.9	180	1023	5.8	177
1457	0.2	6	1517	-0.8	-24	1502	0.4	12	1601	0.2	6
2126	6.7	204	2202	8.0	244	2138	7.0	213	2243	7.0	213
5 Tu 0330	0.4	12	20 W 0402	-0.6	-18	5 Th 0343	0.5	15	5 Su 0444	0.3	9
0948	5.9	180	1021	6.8	207	1001	5.8	177	1109	5.9	180
1530	0.3	9	1606	-0.5	-15	1539	0.4	12	1648	0.3	9
2202	6.7	204	2254	7.7	235	2218	6.9	210	2328	6.9	210
6 W 0405	0.5	15	21 Th 0453	-0.2	-6	6 F 0421	0.6	18	6 M 0531	0.3	9
1024	5.8	177	1113	6.5	198	1041	5.7	174	1157	6.0	183
1604	0.4	12	1657	-0.1	-3	1618	0.5	15	1741	0.4	12
2239	6.6	201	2346	7.4	226	2259	6.9	210	21	0024	6.2
7 Th 0442	0.6	18	22 F 0547	0.2	6	7 Sa 0503	0.7	21	22 Tu 0015	6.8	207
1101	5.6	171	1205	6.2	189	1123	5.7	174	0621	0.2	6
1640	0.5	15	1751	0.4	12	1702	0.6	183	1249	6.1	186
2318	6.5	198	2343	6.8	207	2343	6.8	207	1841	0.5	15
8 F 0522	0.8	24	23 Sa 0038	7.0	213	8 Su 0549	0.7	21	8 W 0106	6.6	201
1141	5.5	168	0643	0.5	15	1209	5.7	174	0716	0.1	3
1722	0.6	18	1257	6.0	183	1754	0.7	21	1323	5.9	180
1850	0.8	24	1850	0.8	24	1323	5.9	180	1921	1.3	40
9 Sa 0000	6.4	195	24 Tu 0131	6.5	198	9 M 0031	6.7	204	24 O 0147	6.1	186
0609	0.9	27	0741	0.8	24	0642	0.7	21	24 Tu 0147	6.1	186
1225	5.5	168	1352	5.8	177	1300	5.8	177	0759	0.8	24
1812	0.7	21	● 1952	1.1	34	1854	0.8	24	1414	5.8	177
10 Su 0049	6.4	195	25 M 0226	6.2	189	10 Tu 0123	6.6	201	25 W 0236	5.8	177
0704	1.0	30	0838	0.9	27	0739	0.6	18	0848	0.8	24
1315	5.5	168	1449	5.8	177	1357	6.0	183	1507	5.9	180
1912	0.8	24	2055	1.3	40	● 2000	0.8	24	2118	1.5	46
11 M 0143	6.3	192	26 Tu 0322	6.0	183	11 W 0221	6.5	198	11 Th 0327	5.7	174
0804	0.9	27	0930	0.9	27	0837	0.4	12	0935	0.8	24
1413	5.6	171	1547	5.8	177	1500	6.3	192	1559	6.1	186
● 2018	0.7	21	2154	1.3	40	2107	0.6	18	2211	1.4	43
12 Tu 0245	6.3	192	27 W 0417	5.9	180	12 Th 0323	6.5	198	27 F 0418	5.6	171
0904	0.7	21	1019	0.9	27	0934	0.2	6	1020	0.7	21
1519	5.8	177	1642	6.0	183	1605	6.7	204	1651	6.3	192
2125	0.6	18	2248	1.2	37	2211	0.4	12	2255	0.2	6
13 W 0352	6.4	195	28 Th 0508	5.9	180	13 F 0427	6.5	198	13 M 0605	6.2	189
1002	0.4	12	1105	0.8	24	1031	-0.1	-3	1158	-0.5	-15
1626	6.2	189	1732	6.3	192	1709	7.1	216	1849	7.6	232
2230	0.3	9	2339	1.1	34	2313	0.1	3	2350	1.1	34
14 Th 0457	6.6	201	29 F 0555	5.9	180	14 Sa 0529	6.6	201	14 W 0557	5.6	171
1059	0.1	3	1149	0.6	18	1126	-0.4	-12	0702	6.3	192
1730	6.8	207	1818	6.5	198	1808	7.6	232	1253	-0.6	-18
2332	-0.1	-3							1943	7.7	235
15 F 0557	6.8	207	30 Sa 0026	0.9	27	15 Su 0013	-0.1	-3	15 W 0146	-0.2	-6
1154	-0.3	-9	0639	5.9	180	0627	6.7	204	0644	5.7	174
1829	7.3	223	1231	0.5	15	1221	-0.6	-18	1232	0.4	12
			1901	6.8	207	1905	7.9	241	1909	6.9	210
									31 Tu 0120	0.7	21
									0728	5.8	177
									1315	0.3	9
									1952	7.0	213

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Fernandina Beach, Amelia River, Florida, 2011

Times and Heights of High and Low Waters

July			August			September						
Time	Height		Time	Height		Time	Height		Time	Height		
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 F 0216 0.2 6 0829 5.8 177 1414 -0.1 -3 ● 2054 7.2 219	16 Sa 0302 -0.1 -3 0918 6.0 183 1506 0.0 0 2148 6.9 210		1 M 0316 -0.5 -15 0943 6.6 201 1531 -0.5 -15 2205 7.2 219			16 Tu 0350 0.2 6 1015 6.2 189 1607 0.6 18 2235 6.2 189			16 Th 0423 -0.7 -21 1106 7.5 229 1701 -0.3 -9 2324 6.9 210			16 F 0423 0.6 18 1057 6.4 195 1656 1.1 34 2315 5.7 174
2 Sa 0258 0.1 3 0916 5.9 180 1459 -0.2 -6 2140 7.2 219	17 Su 0344 0.0 0 1005 6.0 183 1550 0.3 9 2230 6.6 201		2 Tu 0400 -0.6 -18 1034 6.8 207 1622 -0.4 -12 2253 7.1 216			17 W 0426 0.4 12 1054 6.2 189 1647 0.9 27 2312 5.9 180			2 F 0514 -0.6 -18 1201 7.4 226 1758 0.1 3			17 Sa 0459 0.8 24 1137 6.3 192 1737 1.3 40 2355 5.6 171
3 Su 0340 -0.1 -3 1004 6.0 183 1546 -0.2 -6 2225 7.1 216	18 M 0425 0.2 6 1048 5.9 180 1634 0.6 18 2309 6.3 192		3 W 0447 -0.6 -18 1126 6.9 210 1716 -0.2 -6 2342 6.8 207			18 Th 0502 0.6 18 1133 6.1 186 1729 1.1 34 2349 5.7 174			3 Sa 0016 6.6 201 0609 -0.3 -9 1257 7.2 219 1859 0.4 12			18 Su 0539 0.9 27 1219 6.3 192 1824 1.5 46
4 M 0424 -0.2 -6 1053 6.2 189 1635 -0.1 -3 2312 7.0 213	19 Tu 0505 0.3 9 1131 5.9 180 1719 0.9 27 2348 6.0 183		4 Th 0537 -0.5 -15 1219 6.9 210 1814 0.1 3			19 F 0540 0.7 21 1214 6.1 186 1815 1.3 40			4 Su 0111 6.3 192 0708 0.0 0 1356 7.0 213 2003 0.6 18			19 M 0037 5.5 168 0627 1.0 30 1306 6.2 189 1918 1.5 46
5 Tu 0510 -0.2 -6 1143 6.3 192 1729 0.1 3	20 W 0545 0.5 15 1212 5.9 180 1806 1.2 37		5 F 0033 6.6 201 0631 -0.4 -12 1314 6.9 210 1916 0.3 9			20 Sa 0029 5.5 168 0623 0.8 24 1257 6.0 183 1905 1.5 46			5 M 0209 6.1 186 0811 0.2 6 1459 6.8 207 2105 0.7 21			20 Tu 0124 5.4 165 0722 1.0 30 1358 6.2 189 2016 1.5 46
6 W 0000 6.8 207 0600 -0.3 -9 1235 6.5 198 1828 0.3 9	21 Th 0026 5.7 174 0627 0.6 18 1254 5.9 180 1857 1.3 40		6 Sa 0127 6.3 192 0729 -0.3 -9 1413 6.9 210 ● 2020 0.5 15			21 Su 0112 5.4 165 0710 0.9 27 1344 6.0 183 ● 2000 1.5 46			6 Tu 0311 5.9 180 0913 0.4 12 1603 6.8 207 2205 0.7 21			21 W 0218 5.4 165 0822 0.9 27 1456 6.3 192 2113 1.3 40
7 Th 0050 6.6 201 0653 -0.3 -9 1330 6.6 201 1931 0.4 12	22 F 0107 5.5 168 0712 0.7 21 1339 5.9 180 1951 1.4 43		7 Su 0224 6.0 183 0829 -0.2 -6 1516 6.9 210 2123 0.5 15			22 M 0159 5.3 162 0803 0.9 27 1437 6.1 186 2056 1.5 46			7 W 0415 5.9 180 1014 0.4 12 1703 6.7 204 2301 0.7 21			22 Th 0319 5.6 171 0923 0.8 24 1558 6.5 198 2209 1.0 30
8 F 0143 6.3 192 0750 -0.3 -9 1429 6.8 207 ● 2036 0.4 12	23 Sa 0151 5.3 162 0759 0.7 21 1427 5.9 180 ● 2045 1.4 43		8 M 0326 5.9 180 0929 -0.1 -3 1621 6.9 210 2223 0.5 15			23 Tu 0254 5.3 162 0858 0.8 24 1535 6.2 189 2151 1.3 40			8 Th 0515 6.0 183 1111 0.4 12 1757 6.8 207 2353 0.5 15			23 F 0422 5.9 180 1024 0.5 15 1658 6.7 204 2303 0.6 18
9 Sa 0241 6.1 186 0848 -0.3 -9 1531 6.9 210 2138 0.4 12	24 Su 0241 5.2 158 0848 0.7 21 1520 6.0 183 2138 1.3 40		9 Tu 0430 5.8 177 1028 0.0 0 1722 6.9 210 2321 0.4 12			24 W 0353 5.4 165 0954 0.6 18 1635 6.4 195 2245 1.0 30			9 F 0610 6.1 186 1205 0.4 12 1845 6.8 207			24 Sa 0523 6.3 192 1122 0.2 6 1754 7.0 213 2355 0.1 3
10 Su 0342 6.0 183 0945 -0.3 -9 1635 7.0 213 2239 0.3 9	25 M 0335 5.2 158 0938 0.6 18 1616 6.2 189 2230 1.2 37		10 W 0532 5.8 177 1125 0.0 0 1818 7.0 213			25 Th 0453 5.6 171 1050 0.4 12 1732 6.7 204 2337 0.7 21			10 Sa 0040 0.4 12 0659 6.3 192 1256 0.4 12 1929 6.7 204			25 Su 0620 6.8 207 1220 -0.2 -6 1847 7.2 219
11 M 0446 5.9 180 1043 -0.4 -12 1737 7.2 219 2338 0.2 6	26 Tu 0432 5.2 158 1029 0.5 15 1712 6.4 195 2322 1.0 30		11 Th 0016 0.3 9 0628 5.9 180 1221 0.0 0 1909 7.0 213			26 F 0551 5.9 180 1146 0.1 3 1825 7.0 213			11 Su 0124 0.3 9 0743 6.4 195 1342 0.4 12 2010 6.6 201			26 M 0046 -0.3 -9 0714 7.3 223 1315 -0.5 -15 1938 7.4 226
12 Tu 0547 5.9 180 1140 -0.4 -12 1834 7.3 223	27 W 0528 5.4 165 1121 0.3 9 1805 6.7 204		12 F 0107 0.2 6 0720 6.0 183 1313 0.1 3 1956 7.0 213			27 Sa 0028 0.3 9 0645 6.3 192 1241 -0.2 -6 1915 7.3 223			12 O 0204 0.3 9 0825 6.5 198 1424 0.5 15 2048 6.5 198			27 Tu 0136 -0.6 -18 0807 7.6 232 1408 -0.7 -21 ● 2029 7.4 226
13 W 0035 0.1 3 0645 5.9 180 1236 -0.3 -9 1927 7.3 223	28 Th 0012 0.7 21 0621 5.6 171 1213 0.0 0 1855 6.9 210		13 Sa 0153 0.1 3 0808 6.1 186 1401 0.1 3 ● 2039 6.8 207			28 Su 0117 -0.1 -3 0737 6.7 204 1334 -0.5 -15 ● 2004 7.4 226			13 Tu 0241 0.3 9 0904 6.6 201 1503 0.6 18 2125 6.3 192			28 W 0224 -0.9 -27 0859 7.9 241 1500 -0.7 -21 2120 7.3 223
14 Th 0128 0.0 0 0739 6.0 183 1329 -0.3 -9 2017 7.3 223	29 F 0101 0.4 12 0712 5.8 177 1304 -0.2 -6 1943 7.1 216		14 Su 0235 0.1 3 0853 6.2 189 1445 0.2 6 2119 6.7 204			29 M 0204 -0.5 -15 0829 7.0 213 1425 -0.6 -18 2053 7.4 226			14 W 0316 0.4 12 0942 6.6 201 1541 0.7 21 2202 6.1 186			29 Th 0312 -0.9 -27 0953 7.9 241 1551 -0.6 -18 2212 7.1 216
15 F 0217 -0.1 -3 0830 6.0 183 1419 -0.2 -6 ● 2104 7.1 216	30 Sa 0147 0.1 3 0802 6.1 186 1353 -0.4 -12 ● 2030 7.3 223		15 M 0314 0.1 3 0935 6.2 189 1527 0.4 12 2158 6.4 195			30 Tu 0250 -0.7 -21 0921 7.3 223 1516 -0.7 -21 2143 7.3 223			15 Th 0349 0.5 15 1019 6.5 198 1618 0.9 27 2238 5.9 180			30 F 0401 -0.8 -24 1047 7.8 238 1644 -0.3 -9 2304 6.9 210
	31 Su 0232 -0.2 -6 0852 6.3 192 1442 -0.5 -15 2117 7.3 223					31 W 0336 -0.8 -24 1013 7.4 226 1607 -0.5 -15 2233 7.2 219						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Fernandina Beach, Amelia River, Florida, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
	h m	ft cm		h m	ft cm			h m	ft cm		
1 Sa	0452	-0.5	-15	16 Su	0426	0.7	21	1 Tu	0033	6.1	186
	1142	7.6	232	16 Su	1106	6.5	198	16 W	0529	0.5	15
	1740	0.1	3	17 M	1707	1.1	34	17 Th	1209	6.3	192
	2358	6.6	201	17 M	2326	5.5	168	17 W	1814	0.6	18
2 Su	0547	-0.1	-3	17 W	0506	0.8	24	2 F	0129	5.9	180
	1238	7.3	223	17 M	1148	6.4	195	2 O	0624	0.7	21
	1839	0.4	12	17 O	1752	1.2	37	2 O	1406	6.4	195
				17 O	2014	0.7	21	2 O	1908	0.6	18
3 M	0053	6.3	192	18 Tu	0008	5.5	168	18 F	0227	5.8	177
	0647	0.3	9	18 Tu	0553	0.9	27	18 O	0126	5.6	171
	1336	7.0	213	18 M	1234	6.3	192	18 O	0727	0.6	18
	1942	0.7	21	18 O	1843	1.3	40	18 O	1351	6.1	186
4 Tu	0151	6.1	186	19 W	0056	5.5	168	19 Sa	0225	5.8	177
	0751	0.6	18	19 W	0648	1.0	30	19 Sa	0833	0.5	15
	1436	6.7	204	19 O	1325	6.3	192	19 Sa	1450	6.1	186
	2044	0.8	24	19 O	1940	1.2	37	19 Sa	2110	0.7	21
5 W	0252	5.9	180	20 Th	0149	5.5	168	20 Sa	0423	5.9	180
	0856	0.7	21	20 Th	0752	0.9	27	20 Su	0938	0.3	9
	1537	6.5	198	20 Th	1421	6.3	192	20 Su	1553	6.1	186
	2141	0.8	24	20 Th	2038	1.0	30	20 Su	2200	-0.2	-6
6 Th	0355	5.9	180	21 F	0250	5.7	174	21 Su	1028	1.0	30
	0956	0.8	24	21 F	0856	0.7	27	21 M	1650	5.8	177
	1635	6.4	195	21 F	1522	6.4	195	21 M	2248	0.6	18
	2234	0.7	21	21 F	2135	0.6	18	21 M	0436	5.7	174
7 F	0454	6.1	186	22 Sa	0354	6.1	186	22 M	1047	0.8	24
	1053	0.8	24	22 Sa	1000	0.5	15	22 M	1655	5.1	155
	1728	6.4	195	22 Sa	1624	6.5	198	22 M	2252	0.3	9
	2323	0.6	18	22 Sa	2230	0.3	9	22 M	0415	6.3	192
8 Sa	0546	6.3	192	23 Su	0458	6.6	201	23 W	0015	0.4	12
	1146	0.8	24	23 Su	1101	0.1	3	23 W	0646	6.5	198
	1815	6.4	195	23 Su	1724	6.7	204	23 W	1254	0.6	18
				23 Su	2324	-0.2	-6	23 W	1905	5.8	177
9 Su	0009	0.5	15	24 M	0557	7.1	216	24 W	0056	0.3	9
	0633	6.5	198	24 M	1200	-0.2	-6	24 W	0727	6.7	204
	1235	0.7	21	24 M	1820	6.9	210	24 W	1336	0.5	15
	1858	6.4	195	24 M	1945	5.8	177	24 W	1947	6.5	198
10 M	0051	0.4	12	25 Tu	0017	-0.5	-15	25 Th	0135	0.2	6
	0716	6.6	201	25 Tu	0653	7.5	229	25 Th	0806	6.7	204
	1320	0.6	18	25 Tu	1257	-0.5	-15	25 Th	1415	0.4	12
	1938	6.3	192	25 Tu	1914	7.0	213	25 Th	2025	5.8	177
11 Tu	0130	0.4	12	26 W	0109	-0.8	-24	26 F	0213	0.2	6
	0756	6.8	207	26 W	0747	7.9	241	26 O	0845	6.7	204
	1401	0.6	18	26 W	1351	-0.7	-21	26 O	1452	0.4	12
	2016	6.3	192	26 W	2006	7.0	213	26 O	2104	5.7	174
12 W	0207	0.3	9	27 Th	0200	-1.0	-30	27 Sa	0249	0.2	6
	0834	6.8	207	27 Th	0841	8.0	244	27 Sa	0924	6.7	204
	1439	0.6	18	27 Th	1443	-0.8	-24	27 Sa	1528	0.4	12
	2054	6.1	186	27 Th	2059	7.0	213	27 Sa	2143	5.6	171
13 Th	0243	0.4	12	28 F	0250	-1.0	-30	28 Su	0325	0.2	6
	0912	6.8	207	28 F	0935	8.0	244	28 M	1003	6.6	201
	1516	0.7	21	28 F	1535	-0.6	-18	28 M	1605	0.5	15
	2131	6.0	183	28 F	2152	6.8	207	28 M	2222	5.5	168
14 F	0317	0.5	15	29 Sa	0340	-0.9	-27	29 Tu	0402	0.3	9
	0949	6.7	204	29 Sa	1029	7.8	238	29 Tu	1152	6.7	204
	1551	0.8	24	29 Sa	1626	-0.4	-12	29 Tu	1643	0.6	18
	2208	5.8	177	29 Sa	2245	6.6	201	29 Tu	2303	5.4	165
15 Sa	0351	0.6	18	30 Su	0431	-0.5	-15	30 Tu	0442	0.4	12
	1027	6.6	201	30 Su	1123	7.5	229	30 Tu	1124	6.4	195
	1628	0.9	27	30 Su	1720	0.0	0	30 Tu	1726	0.6	18
	2246	5.7	174	30 Su	2339	6.4	195	30 Tu	2346	5.4	165
31 Sa	0525	-0.1	-3	31 M	1217	7.1	216	31 M	1816	0.3	9
				31 M	1816	0.3	9	31 M	2052	-0.1	-3
				31 M	2143	5.6	171	31 M	2245	5.4	165
				31 M	2303	5.4	165	31 M	2346	5.4	165

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Mayport, Florida, 2011

Times and Heights of High and Low Waters

January				February				March															
	Time	Height			Time	Height			Time	Height													
	h m	ft cm			h m	ft cm			h m	ft cm													
1 Sa	0609 1202 1821	5.0 -0.1 4.2	152 -3 128	16 Su	0521 1125 1737 2320	4.5 0.3 3.8 -0.3	137 9 116 -9	1 Tu	0040 0731 1323 1942	-0.5 4.7 -0.4 4.0	-15 143 -12 122	16 W	0638 1234 1859	4.9 -0.6 4.4	-18 134	1 Tu	0623 1213 1836	4.5 0.0 4.1	137 0 125	16 W	0515 1111 1742 2332	4.7 -0.2 4.5 -0.5	143 -6 137 -15
2 Su	0002 0701 1255 1913	-0.5 5.1 -0.3 4.2	-15 155 -9 128	17 M	0614 1215 1830	4.7 0.0 4.0	143 0 122	2 W	0126 0812 1404 ● 2024	-0.6 4.6 -0.5 4.1	-18 140 -15 125	17 Th	0046 0729 1322 1951	-1.1 5.0 -1.0 4.6	-34 152 -30 140	2 W	0023 0706 1257 1919	-0.2 4.5 -0.2 4.2	-6 137 -6 128	17 Th	0611 1204 1838	4.9 -0.6 4.8	149 -18 146
3 M	0053 0748 1342 2000	-0.6 5.0 -0.4 4.2	-18 152 -12 128	18 Tu	0013 0703 1302 1921	-0.6 4.9 -0.4 4.1	-18 149 -12 125	3 Th	0208 0850 1442 2102	-0.6 4.6 -0.5 4.1	-18 140 -15 125	18 F	0138 0818 1408 ● 2043	-1.3 5.1 -1.3 4.9	-40 155 -40 149	3 Th	0108 0745 1336 1959	-0.3 4.5 -0.3 4.3	-9 137 -9 131	18 F	0030 0704 1254 1931	-0.9 5.0 -1.0 5.1	-27 152 -30 155
4 Tu	0140 0833 1426 ● 2045	-0.6 5.0 -0.4 4.2	-18 152 -12 128	19 W	0103 0752 1347 ○ 2012	-0.9 5.1 -0.7 4.3	-27 155 -21 131	4 F	0246 0924 1516 2139	-0.5 4.5 -0.4 4.1	-15 137 -12 125	19 Sa	0229 0907 1453 2134	-1.4 5.1 -1.4 5.0	-43 155 -43 152	4 F	0149 0821 1411 ● 2035	-0.4 4.5 -0.4 4.4	-12 137 -12 134	19 Sa	0124 0755 1342 ○ 2023	-1.2 5.1 -1.3 5.4	-37 155 -40 165
5 W	0224 0914 1508 2127	-0.5 4.9 -0.4 4.1	-15 149 -12 125	20 Th	0152 0839 1431 2102	-1.1 5.2 -0.9 4.5	-34 158 -27 137	5 Sa	0323 0957 1548 2214	-0.4 4.3 -0.3 4.2	-12 131 -9 128	20 Su	0321 0956 1540 2225	-1.3 5.0 -1.4 5.1	-40 152 -43 155	5 Sa	0226 0854 1442 2109	-0.4 4.4 -0.3 4.4	-12 134 -9 134	20 Su	0216 0846 1429 2114	-1.3 5.1 -1.4 5.5	-40 155 -43 168
6 Th	0306 0953 1547 2207	-0.4 4.7 -0.3 4.1	-12 143 -9 125	21 F	0242 0927 1516 2153	-1.2 5.2 -1.1 4.6	-37 158 -34 140	6 Su	0359 1030 1618 2249	-0.1 4.2 -0.1 4.2	-3 128 -3 128	21 M	0414 1046 1629 2318	-1.1 4.8 -1.2 5.0	-34 146 -37 152	6 Su	0301 0927 1511 2143	-0.3 4.3 -0.2 4.5	-9 131 -6 137	21 M	0308 0936 1516 2206	-1.3 4.9 -1.3 5.4	-40 149 -40 165
7 F	0346 1029 1626 2246	-0.2 4.6 -0.1 4.1	-6 140 -3 125	22 Sa	0332 1015 1603 2244	-1.1 5.1 -1.1 4.7	-34 155 -34 143	7 M	0435 1103 1649 2325	0.1 4.1 0.0 4.2	3 125 0 128	22 Tu	0512 1138 1723 1823	-0.8 4.5 -0.9 -0.5	-24 137 -27 -15	7 M	0333 0959 1538 2216	-0.1 4.2 -0.1 4.5	-3 128 -3 137	22 Tu	0400 1027 1606 2259	-1.0 4.8 -1.0 5.3	-30 146 -30 162
8 Sa	0427 1104 1704 2325	0.1 4.4 0.1 4.1	3 134 3 125	23 Su	0427 1105 1653 2337	-0.9 4.9 -1.0 4.8	-27 149 -30 146	8 Tu	0514 1139 1723	0.4 4.0 0.2	12 122 6	23 W	0014 0615 1233 1823	4.9 -0.4 4.3 -0.5	149 -12 131 -15	8 Tu	0406 1033 1606 2250	0.1 4.1 0.0 4.4	3 125 0 134	23 W	0456 1120 1700 2353	-0.7 4.5 -0.6 5.1	-21 137 -18 155
9 Su	0511 1140 1742	0.4 4.3 0.3	12 131 9	24 M	0526 1156 1747	-0.6 4.6 -0.8	-18 140 -24	9 W	0003 0558 1218 1804	4.2 0.6 3.8 0.3	128 18 116 9	24 Th	0114 0721 1333 ● 1927	4.7 -0.1 4.0 -0.2	143 -3 122 -6	9 W	0440 1108 1640 2327	0.3 4.0 0.2 4.4	9 122 6 134	24 Th	0557 1215 1800	-0.3 4.3 -0.2	-9 131 -6
10 M	0005 0558 1217 1822	4.1 0.6 4.1 0.4	125 18 125 12	25 Tu	0034 0631 1251 1847	4.7 -0.3 4.4 -0.6	143 -9 134 -18	10 Th	0046 0650 1302 1853	4.1 0.7 3.7 0.4	125 21 113 12	25 F	0221 0827 1440 2033	4.5 0.1 3.9 0.0	137 3 119 0	10 Th	0520 1146 1721 1905	0.5 3.9 0.3 0.1	15 119 9 3	25 F	0052 0701 1314 1905	4.8 0.0 4.1 0.1	146 0 125 3
11 Tu	0047 0651 1259 1904	4.1 0.8 3.9 0.5	125 24 119 15	26 W	0135 0739 1352 ● 1949	4.6 -0.1 4.1 -0.4	140 -3 125 -12	11 F	0136 0748 1354 ● 1948	4.1 0.8 3.6 0.4	125 24 110 12	26 Sa	0332 0930 1550 2137	4.4 0.2 3.8 0.1	134 6 116 3	11 F	0009 0608 1230 1812	4.4 0.7 3.8 0.4	134 21 116 12	26 Sa	0155 0804 1418 ● 2012	4.6 0.3 4.0 0.3	140 9 122 9
12 W	0134 0746 1346 ● 1950	4.1 0.9 3.8 0.5	125 27 116 15	27 Th	0243 0846 1459 2052	4.6 0.0 3.9 -0.3	140 0 119 -9	12 Sa	0235 0849 1456 2049	4.1 0.7 3.6 0.2	125 21 110 6	27 Su	0057 1029 1653 2237	4.3 0.2 3.9 0.0	131 6 119 0	12 Sa	0302 0905 1525 ● 1911	4.5 0.4 4.0 0.4	137 12 122 12				
13 Th	0227 0842 1441 2040	4.2 0.9 3.7 0.4	128 27 113 12	28 F	0353 0949 1608 2153	4.5 0.1 3.8 -0.2	137 3 116 -6	13 Su	0342 0950 1604 2151	4.2 0.6 3.6 0.0	128 18 110 0	28 M	0534 1124 1748 2333	4.5 0.1 4.0 -0.1	137 3 122 -3	13 Su	0156 0809 1423 2016	4.3 0.7 3.8 0.3	131 21 116 9	28 M	0406 1001 1627 2215	4.4 0.4 4.1 0.4	134 12 125 12
14 F	0325 0938 1541 2132	4.2 0.8 3.6 0.3	128 24 110 9	29 Sa	0458 1050 1711 2253	4.6 0.0 3.8 -0.3	140 0 116 -9	14 M	0447 1049 1707 2252	4.4 0.3 3.8 -0.3	134 9 116 -9	29 Tu	0304 0913 1533 2124	4.4 0.5 3.9 0.1	134 15 119 3	14 M	0502 1053 1721 2310	4.4 0.3 4.3 0.4	134 9 131 12				
15 Sa	0425 1033 1641 2226	4.3 0.6 3.7 0.1	131 18 113 3	30 Su	0555 1146 1807 2349	4.6 -0.1 3.9 -0.4	140 -3 119 -12	15 Tu	0545 1143 1805 2351	4.6 -0.1 4.1 -0.7	140 -3 125 -21	30 W	0413 1014 1641 2229	4.5 0.2 4.1 -0.2	137 6 125 -6	15 Tu	0550 1140 1808 1850	4.4 0.2 4.4 4.5	134 6 134 137				
				31 M	0646 1238 1857	4.7 -0.3 4.0	143 -9 122					31 Th	0000 1223 1808 1850	0.2 0.1 4.4 4.5	6 3 134 137								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Mayport, Florida, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0045 0.1 0045	3 ft cm	16 Sa 0014 -0.7 0014	-21 ft cm	1 Su 0059 0.3 0059	9 ft cm	16 M 0055 -0.7 0055	-21 ft cm	1 W 0146 0.1 0146	3 ft cm	16 Th 0223 -0.7 0223	-21 ft cm
0712 4.4 134		0640 4.9 149		0711 4.2 128		0714 4.6 140		0758 4.0 122		0844 4.2 128	
1301 0.0 0		1227 -0.9 -27		1256 0.1 3		1255 -1.0 -30		1330 -0.1 -3		1419 -0.7 -21	
1929 4.7 143		1912 5.5 168		1932 4.9 149		1948 5.6 171		2020 5.0 152		2115 5.2 158	
2 Sa 0126 0.0 0		17 Su 0109 -0.9 -27		2 M 0137 0.1 3		17 Tu 0148 -0.8 -24		2 Th 0222 0.0 0		17 F 0311 -0.6 -18	
0748 4.4 134		0733 4.9 149		0750 4.2 128		0808 4.5 137		0841 4.0 122		0934 4.2 128	
1335 -0.1 -3		1317 -1.1 -34		1330 0.0 0		1346 -1.0 -30		1408 -0.2 -6		1507 -0.6 -18	
2005 4.7 143		2004 5.6 171		2009 4.9 149		2040 5.6 171		2101 5.0 152		2201 5.0 152	
3 Su 0203 -0.1 -3		18 M 0202 -1.1 -34		3 Tu 0213 0.1 3		18 W 0239 -0.8 -24		3 F 0258 0.0 0		18 Sa 0358 -0.5 -15	
0823 4.3 131		0826 4.9 149		0828 4.1 125		0900 4.5 137		0924 4.0 122		1022 4.2 128	
1406 -0.1 -3		1406 -1.2 -37		1401 0.0 0		1435 -0.9 -27		1448 -0.2 -6		1556 -0.3 -9	
● 2039 4.8 146		2056 5.7 174		● 2046 4.9 149		2132 5.4 165		2143 5.0 152		2246 4.9 149	
4 M 0238 -0.1 -3		19 Tu 0253 -1.0 -30		4 W 0246 0.1 3		19 Th 0329 -0.7 -21		4 Sa 0337 -0.1 -3		19 Su 0445 -0.3 -9	
0857 4.3 131		0918 4.8 146		0906 4.1 125		0952 4.4 134		1009 4.1 125		1109 4.2 128	
1435 -0.1 -3		1454 -1.1 -34		1433 0.0 0		1525 -0.7 -21		1531 -0.2 -6		1646 0.0 0	
2113 4.8 146		2148 5.6 171		2123 4.9 149		2222 5.3 162		2227 5.0 152		2328 4.7 143	
5 Tu 0309 0.0 0		20 W 0345 -0.8 -24		5 Th 0319 0.1 3		20 F 0420 -0.5 -15		5 Su 0419 -0.1 -3		20 M 0533 -0.1 -3	
0932 4.2 128		1010 4.6 140		0945 4.1 125		1043 4.3 131		1055 4.1 125		1154 4.2 128	
1502 0.0 0		1544 -0.8 -24		1507 0.0 0		1617 -0.3 -9		1620 -0.1 -3		1739 0.4 12	
2147 4.8 146		2240 5.4 165		2202 4.9 149		2311 5.0 152		2312 4.9 149			
6 W 0341 0.2 6		21 Th 0439 -0.5 -15		6 F 0355 0.2 6		21 Sa 0513 -0.2 -6		6 M 0507 -0.1 -3		21 Tu 0009 4.5 137	
1007 4.1 125		1102 4.5 137		1025 4.1 125		1134 4.2 128		1144 4.3 131		0621 0.1 3	
1533 0.1 3		1638 -0.4 -12		1547 0.1 3		1712 0.1 3		1716 0.1 3		1240 4.2 128	
2223 4.7 143		2333 5.1 155		2243 4.9 149		2359 4.8 146		2366 0.6 18			
7 Th 0414 0.3 9		22 F 0536 -0.2 -6		7 Sa 0436 0.3 9		22 Su 0608 0.0 0		7 Tu 0000 4.9 149		22 W 0051 4.3 131	
1044 4.1 125		1156 4.3 131		1109 4.1 125		1225 4.2 128		0600 -0.1 -3		0708 0.3 9	
1609 0.2 6		1737 0.0 0		1633 0.2 6		1812 0.4 12		1237 4.4 134		1327 4.2 128	
2301 4.7 143				2327 4.9 149		1819 0.2 6		1933 0.8 24			
8 F 0454 0.5 15		23 Sa 0027 0.1 3		8 Su 0524 0.4 12		23 M 0048 0.2 6		8 W 0052 -0.1 -3		23 Th 0135 4.1 125	
1124 4.0 122		0637 0.1 3		1156 4.1 125		0702 0.2 6		0656 -0.1 -3		0753 0.4 12	
1652 0.3 9		1251 4.2 128		1727 0.3 9		1318 4.2 128		1334 4.5 137		1416 4.3 131	
2343 4.7 143		1841 0.3 9				1914 0.7 21		1928 0.3 9		2028 0.9 27	
9 Sa 0542 0.6 18		24 Su 0124 0.3 9		9 M 0015 0.4 12		24 Tu 0138 4.4 134		9 Th 0149 4.6 140		24 F 0223 3.9 119	
1209 4.0 122		0736 0.3 9		0619 0.4 12		0754 0.4 12		0753 -0.2 -6		0837 0.5 15	
1744 0.4 12		1351 4.1 125		1248 4.2 128		1412 4.2 128		1437 4.7 143		1508 4.4 134	
● 1946 0.6 18				1830 0.4 12		2013 0.8 24		2036 0.2 6		2120 0.9 27	
10 Su 0032 4.6 140		25 M 0223 4.5 137		10 Tu 0108 4.8 146		25 W 0229 4.2 128		10 F 0251 4.4 134		25 Sa 0316 3.8 116	
0638 0.7 21		0833 0.4 12		0717 0.3 9		0842 0.4 12		0851 -0.4 -12		0920 0.5 15	
1301 4.0 122		1452 4.2 128		1348 4.3 131		1507 4.3 131		1542 4.9 149		1600 4.5 137	
1845 0.5 15		2048 0.7 21		● 1939 0.4 12		2109 0.9 27		2141 0.1 3		2211 0.9 27	
11 M 0128 4.6 140		26 Tu 0323 4.3 131		11 W 0208 4.7 143		26 Th 0322 4.1 125		11 Sa 0356 4.3 131		26 Su 0410 3.8 116	
0740 0.6 18		0925 0.5 15		0817 0.1 3		0928 0.5 15		0948 -0.5 -15		1004 0.4 12	
1402 4.1 125		1552 4.3 131		1453 4.5 137		1600 4.4 134		1646 5.1 155		1651 4.6 140	
● 1954 0.4 12		2145 0.7 21		2048 0.3 9		2202 0.8 24		2244 -0.1 -3		2301 0.8 24	
12 Tu 0233 4.6 140		27 W 0418 4.3 131		12 Th 0313 4.6 140		27 F 0413 4.0 122		12 Su 0500 4.3 131		27 M 0502 3.8 116	
0843 0.4 12		1013 0.5 15		0915 -0.1 -3		1012 0.4 12		1045 -0.6 -18		1049 0.3 9	
1511 4.2 128		1645 4.4 134		1559 4.8 146		1649 4.5 137		1746 5.2 158		1739 4.7 143	
2103 0.3 9		2239 0.7 21		2155 0.1 3		2253 0.7 21		2344 -0.3 -9		2349 0.6 18	
13 W 0341 4.6 140		28 Th 0507 4.3 131		13 F 0418 4.6 140		28 Sa 0502 4.0 122		13 M 0601 4.2 128		28 Tu 0553 3.8 116	
0942 0.1 3		1059 0.4 12		1011 -0.4 -12		1054 0.4 12		1142 -0.7 -21		1134 0.1 3	
1619 4.5 137		1733 4.6 140		1702 5.1 155		1735 4.7 143		1842 5.3 162		1825 4.8 146	
2211 0.0 0		2330 0.6 18		2258 -0.2 -6		2341 0.6 18					
14 Th 0445 4.7 143		29 F 0551 4.2 128		14 Sa 0520 4.6 140		29 Su 0548 3.9 119		14 Tu 0040 -0.5 -15		29 W 0641 3.8 116	
1040 -0.2 -6		1141 0.3 9		1107 -0.6 -18		1136 0.3 9		0658 4.2 128		1219 -0.1 -3	
1721 4.9 149		1815 4.7 143		1800 5.3 162		1818 4.8 146		1237 -0.8 -24		1910 4.9 149	
2314 -0.3 -9				2358 -0.5 -15				1935 5.4 165			
15 F 0545 4.8 146		30 Sa 0016 0.4 12		15 Su 0618 4.6 140		30 M 0026 0.4 12		15 W 0133 -0.6 -18		30 Th 0115 0.1 3	
1134 -0.6 -18		0632 4.2 128		1202 -0.9 -27		0633 3.9 119		0752 4.3 131		0728 3.9 119	
1818 5.2 158		1220 0.2 6		1855 5.5 168		1215 0.1 3		1329 -0.8 -24		1303 -0.3 -9	
						1859 4.9 149		2026 5.3 162		1955 5.0 152	
						31 Tu 0107 0.3 9					
						0716 3.9 119					
						1253 0.0 0					
						1940 4.9 149					

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Mayport, Florida, 2011

Times and Heights of High and Low Waters

July			August			September											
Time	Height		Time	Height		Time	Height										
h m	ft	cm	h m	ft	cm	h m	ft	cm									
1 F 0156 4.0 122 1347 -0.4 -12 ● 2039 5.1 155	-0.1	-3	16 Sa 0249 0.4 -12 1449 -0.4 -12 2137 4.9 149	-0.4	-12	1 M 0252 0.6 -18 1506 -0.6 -18 2149 5.3 162	-0.6	-18	16 Th 0336 0.1 3 1006 4.7 143 2219 4.7 143	0.1	3	16 F 0359 -0.5 -15 1052 5.7 174 1642 -0.1 -3 2310 5.2 158	-0.5	-15	16 1043 5.1 155 1635 1.2 37 2258 4.7 143	0.8	24
2 Sa 0235 4.1 125 1431 -0.5 -15 2124 5.1 155	-0.3	-9	17 Su 0332 4.3 131 1534 -0.1 -3 2217 4.8 146	-0.3	-9	2 Tu 0336 0.7 -21 1558 -0.4 -12 2237 5.2 158	-0.7	-21	17 W 0409 0.3 9 1043 4.7 143 2254 4.6 140	0.3	9	2 F 0452 -0.3 -9 1147 5.7 174 1745 0.3 9	-0.3	-9	17 Sa 0430 5.1 155 1715 1.4 43 2337 4.6 140	1.0	30
3 Su 0316 4.3 131 1518 -0.5 -15 2209 5.1 155	-0.4	-12	18 M 0412 4.3 131 1618 0.1 3 2254 4.6 140	-0.2	-6	3 W 0424 0.6 -18 1112 5.1 155 2327 5.0 152	-0.6	-18	18 Th 0443 0.5 15 1120 4.7 143 2331 4.5 137	0.5	15	3 Sa 0005 0.0 0 0551 5.6 171 1851 0.5 15	5.0	152	18 Su 0510 5.1 155 1202 1.6 49	1.1	34
4 M 0400 4.4 134 1609 -0.3 -9 2256 5.0 152	-0.5	-15	4 Tu 0453 4.3 131 1705 0.4 12 2331 4.4 134	0.0	0	4 Th 0515 0.5 -15 1206 5.2 158 1759 0.1 3	-0.5	-15	19 F 0518 0.7 21 1158 4.7 143 1758 1.2 37	0.7	21	4 Su 0103 0.3 9 0655 5.4 165 1957 0.7 21	4.8	146	19 M 0019 1.3 40 0558 5.1 155 1249 1.7 52	4.5	137
5 Tu 0447 4.6 140 1706 -0.2 -6 2344 4.9 149	-0.5	-15	20 W 0533 4.3 131 1200 4.3 131 1754 0.7 21	0.2	6	5 F 0020 4.8 146 0612 -0.3 -9 1304 5.2 158 1906 0.3 9	4.8	146	20 Sa 0010 0.9 27 0557 5.4 165 1849 1.4 43	4.4	134	5 M 0208 0.5 15 0801 5.4 165 2100 0.8 24	4.7	143	20 Tu 0108 1.3 40 0653 5.1 155 1955 1.6 49	4.5	137
6 W 0538 4.7 143 1223 4.7 143 1810 0.0 0	-0.4	-12	21 Th 0008 4.3 131 0614 0.4 12 1241 4.4 134 1847 0.9 27	4.3	131	6 Sa 0117 4.6 140 0713 -0.2 -6 1407 5.1 155 ● 2012 0.4 12	4.6	140	21 Su 0052 1.0 30 0644 5.1 155 1327 4.8 146 ● 1944 1.4 43	4.3	131	6 Tu 0316 0.6 165 0905 5.4 165 2200 0.8 24	4.6	140	21 W 0204 1.2 37 0755 5.2 158 2053 1.5 46	4.5	137
7 Th 0036 4.8 146 1320 4.8 146 1917 0.2 6	-0.4	-12	22 F 0049 4.1 125 0656 0.5 15 1326 4.4 134 1941 1.1 34	4.1	125	7 Su 0220 4.4 134 0815 0.0 0 1514 5.1 155 2116 0.4 12	4.4	134	22 M 0141 4.2 128 0735 1.0 30 1421 4.8 146 2039 1.4 43	4.2	128	7 W 0421 0.6 18 1006 5.4 165 2255 0.7 21	4.7	143	22 Th 0307 1.1 34 0858 5.3 162 2149 1.2 37	4.6	140
8 F 0132 4.5 137 0732 -0.4 -12 1422 4.9 149 ● 2024 0.2 6	-0.4	-12	23 Sa 0133 4.0 122 0740 0.6 18 1415 4.5 137 ● 2034 1.1 34	4.0	122	8 M 0328 4.3 131 0917 0.0 0 1621 5.2 158 2217 0.4 12	4.3	131	23 Tu 0237 0.9 27 0831 0.9 27 1521 4.9 149 2133 1.3 40	4.2	128	8 Th 0520 0.6 18 1103 5.4 165 2346 0.6 18	4.8	146	23 F 0411 0.8 24 1000 5.5 168 2242 0.8 24	4.8	146
9 Sa 0234 4.3 131 0831 -0.4 -12 1528 5.0 152 2129 0.2 6	-0.4	-12	24 Su 0224 3.9 119 0826 0.6 18 1509 4.5 137 2126 1.1 34	3.9	119	9 Tu 0435 4.3 131 1017 0.1 3 1721 5.2 158 2315 0.3 9	4.3	131	24 W 0339 4.2 128 0928 0.8 24 1621 5.0 152 2227 1.0 30	4.2	128	9 F 0612 0.5 15 1156 5.4 165 1841 5.4 165	4.9	149	24 Sa 0511 0.5 15 1100 5.6 171 2334 0.4 12	5.1	155
10 Su 0340 4.2 128 0930 -0.4 -12 1633 5.1 155 2231 0.1 3	-0.4	-12	25 M 0320 3.9 119 0915 0.6 18 1605 4.6 140 2217 1.0 30	3.9	119	10 W 0535 4.4 134 1116 0.0 0 1816 5.2 158	4.4	134	25 Th 0440 4.3 131 1026 0.5 15 1717 5.2 158 2319 0.7 21	4.3	131	10 Sa 0033 0.5 15 0658 5.0 152 1244 0.5 15	4.5	168	25 Su 0607 0.2 6 1158 5.7 174	5.5	168
11 M 0446 4.1 125 1029 -0.4 -12 1734 5.1 155 2330 0.0 0	-0.4	-12	26 Tu 0418 3.9 119 1005 0.4 12 1700 4.7 143 2308 0.8 24	3.9	119	11 Th 0009 0.2 6 0630 4.4 134 1211 0.0 0 1905 5.2 158	0.2	6	26 F 0538 4.6 140 1123 0.2 6 1809 5.4 165	4.6	140	11 Su 0114 0.4 12 0741 5.1 155 1328 0.4 12 2001 5.2 158	0.4	12	26 M 0023 0.0 0 0700 5.8 177	0.0	0
12 Tu 0547 4.1 125 1127 -0.5 -15 1830 5.2 158	-0.4	-12	27 W 0515 3.9 119 1057 0.2 6 1751 4.9 149 2356 0.5 15	3.9	119	12 F 0058 0.1 3 0720 4.5 137 1301 -0.1 -3 1950 5.2 158	0.1	3	27 Sa 0008 0.3 9 0632 4.8 146 1217 -0.1 -3 1859 5.5 168	0.3	9	12 M 0152 0.4 12 0820 5.1 155 1409 0.5 15 2037 5.1 155	0.4	12	27 Tu 0111 0.3 -9 0752 6.0 183	-0.3	-9
13 W 0026 -0.2 -6 0644 4.2 128 1223 -0.5 -15 1922 5.2 158	-0.2	-6	28 Th 0608 4.1 125 1149 0.0 0 1840 5.1 155	4.1	125	13 Sa 0142 0.0 0 0805 4.6 140 1347 -0.1 -3 ● 2031 5.1 155	0.0	0	28 Su 0055 0.1 3 0724 5.1 155 1310 -0.3 -9 ● 1948 5.6 171	-0.1	-3	13 Tu 0226 0.4 12 0857 5.2 158 1447 0.6 18 2112 5.0 152	0.4	12	28 W 0159 0.5 15 0845 6.2 189	-0.5	-15
14 Th 0118 -0.3 -9 0737 4.2 128 1315 -0.5 -15 2010 5.1 155	-0.3	-9	29 F 0042 0.2 6 0659 4.2 128 1239 -0.3 -9 1928 5.2 158	0.2	6	14 Su 0223 -0.1 -3 0848 4.6 140 1430 0.0 0 2109 5.0 152	-0.1	-3	29 M 0140 -0.4 -12 0815 5.4 165 1401 -0.5 -15 2037 5.6 171	-0.4	-12	14 W 0258 0.5 15 0932 5.2 158 1523 0.7 21 2146 4.9 149	0.5	15	29 Th 0247 -0.5 -15 0938 6.2 189	-0.5	-15
15 F 0205 -0.4 -12 0826 4.2 128 1403 -0.5 -15 ● 2055 5.1 155	-0.4	-12	30 F 0126 -0.1 -3 0749 4.4 134 1328 -0.5 -15 ● 2014 5.3 162	-0.1	-3	15 Sa 0300 0.0 0 0928 4.6 140 1510 0.2 6 2145 4.8 146	0.0	0	30 M 0225 -0.6 -18 0907 5.6 171 1452 -0.5 -15 2127 5.6 171	-0.6	-18	15 W 0328 0.6 18 1007 5.2 158 1559 0.9 27 2221 4.8 146	0.6	18	30 Th 0337 -0.3 -9 1033 6.1 186	-0.3	-9
			31 Su 0209 -0.4 -12 0839 4.6 140 1416 -0.6 -18 2101 5.3 162	-0.4	-12				31 W 0311 -0.6 -18 0959 5.7 174 1546 -0.3 -9 2218 5.4 165	-0.6	-18				30 F 0337 0.3 -9 1033 6.1 186	-0.3	-9

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Mayport, Florida, 2011

Times and Heights of High and Low Waters

October			November			December					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 1129 1728 2348	0.0 6.0 0.4 5.2	0 183 12 158	16 Su 1051 1642 2310	0.355 5.4 1.4 4.7	1.0 165 43 143	1 Tu 0028 0614 1303 1912	5.0 0.7 5.5 0.8	152 21 168 24	16 Th 0501 W 1154 1751	0.9 5.3 162 1.0	27 30 18
			2 Su 1227 1833	0.530 5.8 0.7	1.2 177 21	17 M 0436 1132 1727 2353	4.9 5.3 1.5 4.7	149 162 162 143	2 W 0128 0721 1402 0211	4.6 1.0 5.3 0.9	140 30 158 27
3 M 1330 ● 1938	0.048 0.7 5.6	5.0 21 171	18 Tu 0524 1218 1820	1.3 5.3 1.6	40 162 49	3 Th 0230 0825 1502 2105	4.9 1.1 5.2 1.0	149 34 158 30	18 F 0116 0704 1338 1945	4.7 1.0 5.2 0.8	143 30 158 24
			4 Tu 0744 1435 2040	4.9 5.5 1.0	149 168 30	19 W 0042 0622 1310 01918	4.7 1.3 5.3 1.5	143 40 162 46	4 F 0331 0924 1557 2154	5.0 1.2 5.1 1.0	152 37 155 30
5 W 0849 1538 2136	0.257 1.0 5.4	4.9 30 165	20 Th 0138 0726 1407 2017	4.8 1.3 5.3 1.3	146 40 162 40	5 Sa 0427 1018 1648 2240	5.1 1.2 5.0 0.9	155 37 152 27	20 Su 0322 0920 1542 2139	5.1 0.7 5.1 0.2	155 21 155 6
			6 Th 0949 1636 2228	5.0 5.4 1.0	152 165 30	21 F 0240 0833 1509 2114	4.9 1.1 5.4 1.0	149 34 165 30	6 M 0426 1024 1644 2324	5.4 0.4 5.1 0.8	165 165 155 24
7 F 1044 1726 2317	0.457 1.0 5.4	5.1 30 165	22 Sa 0345 0938 1611 2209	5.2 0.9 5.5 0.6	158 27 168 18	7 M 0600 1158 1816 2330	5.3 1.0 4.9 -0.4	162 30 149 -12	22 W 0526 1125 1744 2330	5.7 0.2 5.1 -12	174 6 155 -12
			8 Sa 1136 1811	5.2 1.0 5.3	158 30 162	8 Su 0447 1041 1709 2302	5.5 0.6 5.5 0.2	168 18 168 6	23 Tu 0005 0641 1242 1855	0.7 5.4 0.9 4.8	21 165 27 146
9 Su 1223 1851	0.001 0.53 0.9	0.8 24 162	24 M 0544 1140 1805 2355	5.8 0.3 5.6 -0.1	177 9 171 -3	9 W 0043 0719 1322 1934	0.7 5.4 0.8 4.8	21 165 24 146	24 Th 0025 0718 1318 1936	-0.6 6.0 -0.3 5.1	-18 183 -9 155
			10 M 0712 1307 1929	0.041 0.54 0.8	21 165 24	25 Tu 0639 1237 1859	6.1 0.0 5.6	186 0 171	25 F 0118 0756 1400 02011	0.6 5.4 0.7 4.7	18 165 21 143
11 Tu 1347 ○ 2005	0.118 0.750 0.8	0.6 168 24	26 W 0046 0733 1331 ● 1952	-0.4 6.3 -0.2 5.6	-12 192 -6 171	11 F 0151 0833 1434 2049	0.6 5.4 0.8 4.6	18 165 24 140	11 Sa 0209 0905 1502 2124	-0.7 6.0 -0.4 4.9	-21 183 -12 149
			12 W 1424 2041	0.152 0.55 0.8	18 168 24	12 Th 0136 0826 1424 2046	-0.5 6.3 -0.3 5.5	-15 192 -9 168	12 M 0222 0910 1507 2128	0.6 5.4 0.8 4.6	18 165 24 140
13 Th 1458 2116	0.222 0.9	0.7 21	28 F 0226 0920 1516 2140	-0.5 6.3 -0.2 5.4	-15 192 -6 165	13 Su 0254 0948 1540 2207	0.6 5.3 0.9 4.5	18 165 27 137	13 Tu 0352 1049 1646 2309	-0.3 5.6 0.0 4.8	-9 171 0 146
			14 F 1531 2153	0.251 0.54 1.0	0.3 165 30	14 M 0330 1028 1617 2248	0.7 5.3 1.0 4.5	21 162 30 137	14 W 0448 1139 1742 0233	0.1 5.4 0.3 4.5	3 143 9 137
15 Sa 1012 1604 2230	0.321 0.54 1.2	0.9 27	30 Su 0411 1110 1709 2330	0.0 6.0 0.4 5.1	0 183 12 155	15 Tu 0412 1109 1701 2333	0.8 5.3 1.0 4.5	24 162 30 137	15 Th 0002 0548 1230 1838	4.7 0.5 5.1 0.5	143 155 155 15
			31 M 1206 1810	0.509 5.7	0.4 174	31 M 0509 1206 1810	0.4 5.7 0.6	12 18 18			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Canaveral (Trident Pier), Florida, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m 0508 Sa 1129 1716 2318	ft 4.2 0.2 3.0 -0.4	cm 128 6 91 -12	16 Su 1056 1641 2244	ft 3.6 0.4 2.7 -0.3	cm 110 12 82 -9	1 Tu 1248 1843	ft 3.8 0.0 2.9	cm 116 0 88	16 W 1202 1800	ft 4.0 -0.3 3.4	cm 122 -9 104
2 Su 1221 1808	0.1 3.0	17 M 1146 1733 2336	0.1 2.9 -0.6	2 W 0042 1326 ● 1926	-0.4 -0.1 3.0	17 Th 0635 1249 1853	-0.8 -0.5 3.7	16 W 0545 1741 2343	4.0 3.0 -0.1	16 W 0423 1039 2252	3.8 0.0 -0.5
	0.1 91		3		-12		-24		3.5		116 0 -15
	0.0 0		18		4.1		-30		107		122 -9 -21
	3.1 94		18		125		3		107		122 -9 -21
3 M 0009 0649 1307 1858	-0.4 4.2 0.0 3.1	18 Tu 0613 1232 1823	4.1 -0.1 3.1	3 Th 0123 0753 1400 2006	-0.3 3.7 -0.1 3.1	18 F 0059 0724 1334 ○ 1946	-0.8 4.2 -0.8 4.0	3 Th 0026 0649 1254 1904	-0.1 3.5 0.0 3.2	18 F 0607 1218 1833	4.1 -0.6 4.2
4 Tu 0055 0734 1349 ● 1944	-0.4 4.2 0.0 3.1	19 W 0026 0700 1317 ○ 1914	-0.8 4.3 -0.3 3.3	4 F 0203 0829 1434 2045	-0.3 3.6 -0.1 3.2	19 Sa 0151 0812 1420 2037	-1.0 4.2 -0.9 4.2	4 F 0106 0725 1326 ● 1941	-0.1 3.5 -0.1 3.4	19 Sa 0044 0658 1305 ○ 1926	-0.8 4.1 -0.9 4.5
5 W 0139 0816 1429 2028	-0.3 4.1 0.0 3.1	20 Th 0115 0748 1402 2005	-0.9 4.3 -0.5 3.5	5 Sa 0242 0904 1508 2123	-0.1 3.5 -0.1 3.2	20 Su 0244 0900 1507 2129	-0.9 4.1 -0.9 4.3	5 Sa 0143 0759 1358 2018	-0.1 3.4 -0.1 3.4	20 Su 0137 0748 1352 2018	-0.9 4.0 -1.0 4.6
6 Th 0222 0856 1508 2111	-0.2 3.9 0.0 3.1	21 F 0205 0834 1447 2056	-0.9 4.3 -0.6 3.7	6 Su 0322 0938 1544 2201	0.0 3.3 -0.1 3.2	21 M 0339 0948 1557 2222	-0.7 3.8 -0.9 4.2	6 Su 0221 0834 1431 2054	0.0 3.3 -0.1 3.5	21 M 0230 0838 1440 2110	-0.8 3.9 -0.9 4.7
7 F 0305 0934 1547 2152	-0.1 3.7 0.1 3.1	22 Sa 0257 0921 1534 2147	-0.8 4.2 -0.7 3.8	7 M 0405 1013 1622 2240	0.2 3.1 0.0 3.1	22 Tu 0436 1038 1649 2316	-0.5 3.5 -0.7 4.1	7 M 0259 0908 1505 2130	0.1 3.2 -0.1 3.5	22 Tu 0324 0928 1530 2202	-0.6 3.7 -0.8 4.5
8 Sa 0349 1010 1626 2233	0.1 3.5 0.1 3.0	23 Su 0352 1008 1624 2240	-0.6 4.0 -0.7 3.9	8 Tu 0450 1050 1702 2321	0.3 2.9 0.1 3.1	23 W 0537 1130 1746 2321	-0.2 3.2 -0.5 3.1	8 Tu 0339 0943 1542 2207	0.2 3.0 0.0 3.5	23 W 0421 1019 1624 2256	-0.4 3.4 -0.6 4.3
9 Su 0436 1048 1707 2317	0.3 3.3 0.2 3.0	24 M 0451 1057 1716 2337	-0.4 3.7 -0.6 3.8	9 W 0539 1129 1745	0.5 2.7 0.1	24 Th 0016 0641 1229 ○ 1845	3.9 0.1 2.9 -0.3	9 W 0422 1019 1621 2247	0.3 2.9 0.1 3.4	24 Th 0521 1112 1722 2353	-0.1 3.2 -0.3 4.0
10 M 0525 1127 1749	0.5 3.0 0.2	25 Tu 0553 1150 1811	-0.2 3.3 -0.6	10 Th 0008 0631 1215 1833	3.1 0.6 2.5 0.1	25 F 0122 0746 1337 1948	3.7 0.2 2.7 -0.2	10 Th 0508 0746 1705 2331	0.5 0.2 0.2 3.3	25 F 0622 1211 1824	0.2 3.0 0.0
11 Tu 0004 0618 1210 1832	3.0 0.6 2.8 0.2	26 W 0038 0657 1249 ○ 1908	3.8 0.0 3.0 -0.5	11 F 0101 0726 1309 ○ 1924	3.1 0.6 2.4 0.1	26 Sa 0234 0853 1450 2052	3.5 0.3 2.6 0.0	11 F 0558 1143 1754	0.6 2.6 0.2	26 Sa 0056 0725 1318 ○ 1927	3.7 0.3 2.8 0.1
12 W 0055 0712 1259 ● 1918	3.0 0.7 2.6 0.2	27 Th 0145 0803 1354 2007	3.7 0.2 2.8 -0.4	12 Sa 0202 0824 1410 2020	3.1 0.6 2.4 0.0	27 Su 0342 0958 1557 2155	3.5 0.4 2.7 0.0	12 Sa 0022 0652 1235 ○ 1849	3.3 0.6 2.5 0.2	27 Su 0205 0827 1431 2031	3.5 0.4 2.8 0.3
13 Th 0152 0808 1355 2007	3.1 0.7 2.5 0.2	28 F 0255 0912 1503 2108	3.7 0.3 2.7 -0.3	13 Su 0303 0923 1513 2118	3.3 0.5 2.5 -0.1	28 M 0439 1055 1653 2253	3.5 0.3 2.8 0.0	13 Su 0121 0749 1338 1948	3.3 0.6 2.6 0.1	28 M 0312 0926 1538 2134	3.4 0.4 2.9 0.3
14 F 0249 0905 1453 2058	3.2 0.7 2.5 0.0	29 Sa 0400 1018 1608 2209	3.7 0.3 2.7 -0.3	14 M 0401 1020 1611 2216	3.5 0.3 2.7 -0.4			14 M 0224 0847 1443 2050	3.4 0.5 2.7 0.0	29 Tu 0409 1019 1632 2232	3.3 0.4 3.0 0.3
15 Sa 0344 1002 1549 2152	3.4 0.6 2.6 -0.1	30 Su 0457 1117 1706 2307	3.7 0.2 2.8 -0.3	15 Tu 0454 1113 1707 2313	3.8 0.0 3.0 -0.6			15 Tu 0326 0944 1545 2152	3.6 0.3 3.0 -0.2	30 W 0456 1103 1718 2322	3.3 0.3 3.2 0.2
		31 M 0548 1207 1757 2357	3.8 0.1 2.9 -0.4		116 3 88 -12					31 Th 1141 1758	3.3 3.4 104

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Port Canaveral (Trident Pier), Florida, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F 0006 0.2 6 0614 3.3 101 1215 0.1 3 1836 3.5 107	16 Sa 0539 3.8 116 1148 -0.7 -21 1813 4.6 140			1 Su 0020 0.3 9 0613 3.0 91 1209 0.0 0 1842 3.8 116			16 M 0015 -0.3 -9 0609 3.4 104 1212 -0.8 -24 1849 4.8 146		1 W 0112 0.2 6 0701 2.8 85 1253 -0.2 -6 1933 4.0 122			16 Th 0146 -0.2 -6 0740 3.1 94 1335 -0.6 -18 2017 4.4 134			
	2 Sa 0045 0.1 3 0651 3.3 101 1249 0.0 0 1913 3.7 113	17 Su 0029 -0.6 -18 0632 3.8 116 1237 -0.9 -27 O 1907 4.8 146		2 M 0059 0.3 9 0653 3.0 91 1246 0.0 0 1920 3.9 119		17 Tu 0109 -0.4 -12 0703 3.4 104 1303 -0.8 -24 O 1942 4.8 146		2 Th 0153 0.1 3 0745 2.8 85 1335 -0.2 -6 2015 4.0 122		17 F 0235 -0.2 -6 0832 3.1 94 1425 -0.4 -12 2104 4.2 128					
	3 Su 0123 0.1 3 0727 3.2 98 1322 0.0 0 ● 1949 3.8 116	18 M 0123 -0.6 -18 0725 3.8 116 1326 -0.9 -27 1959 4.9 149		3 Tu 0137 0.2 6 0733 2.9 88 1323 0.0 0 ● 1959 4.0 122		18 W 0201 -0.4 -12 0758 3.3 101 1354 -0.7 -21 2034 4.7 143		3 F 0235 0.1 3 0829 2.8 85 1418 -0.2 -6 2057 4.1 125		18 Sa 0323 -0.1 -3 0922 3.1 94 1515 -0.2 -6 2149 4.0 122					
	4 M 0200 0.1 3 0804 3.1 94 1356 0.0 0 2026 3.8 116	19 Tu 0216 -0.6 -18 0817 3.7 113 1415 -0.8 -24 2051 4.8 146		4 W 0216 0.2 6 0813 2.9 88 1401 0.0 0 2038 4.0 122		19 Th 0253 -0.3 -9 0851 3.3 101 1445 -0.5 -15 2124 4.5 137		4 Sa 0318 0.1 3 0914 2.9 88 1504 -0.2 -6 2140 4.0 122		19 Su 0411 -0.1 -3 1011 3.0 91 1607 0.0 0 2232 3.7 113					
5 Tu 0237 0.2 6 0840 3.1 94 1431 0.0 0 2102 3.8 116	20 W 0309 -0.4 -12 0909 3.5 107 1507 -0.6 -18 2143 4.6 140		5 Th 0256 0.2 6 0853 2.9 88 1441 0.0 0 2118 4.0 122		20 F 0346 -0.2 -6 0943 3.2 98 1538 -0.3 -9 2214 4.2 128		5 Su 0404 0.0 0 1001 3.0 91 1555 -0.1 -3 2225 4.0 122		20 M 0457 0.0 0 1059 3.0 91 1700 0.2 6 2315 3.5 107						
	6 W 0317 0.3 9 0917 3.0 91 1508 0.1 3 2140 3.8 116	21 Th 0405 -0.2 -6 1001 3.3 101 1601 -0.4 -12 2235 4.3 131		6 F 0339 0.3 9 0934 2.8 85 1524 0.1 3 2159 3.9 119		21 Sa 0439 0.0 0 1034 3.1 94 1634 0.0 0 2302 3.9 119		6 M 0452 0.0 0 1050 3.1 94 1650 0.0 0 2311 3.8 116		21 Tu 0542 0.1 3 1148 3.0 91 1754 0.4 12 2358 3.2 98					
	7 Th 0359 0.4 12 0955 2.9 88 1549 0.2 6 2220 3.7 113	22 F 0502 0.0 0 1054 3.2 98 1659 -0.1 -3 2329 4.0 122		7 Sa 0425 0.3 9 1017 2.8 85 1611 0.1 3 2243 3.9 119		22 Su 0533 0.1 3 1128 3.0 91 1732 0.2 6 2352 3.6 110		7 Tu 0541 -0.1 -3 1144 3.2 98 1749 0.0 0		22 W 0625 0.1 3 1240 3.0 91 1848 0.6 18					
	8 F 0444 0.4 12 1035 2.8 85 1634 0.2 6 2304 3.6 110	23 Sa 0600 0.2 6 1151 3.0 91 1800 0.1 3		8 Su 0514 0.3 9 1104 2.9 88 1705 0.2 6 2331 3.8 116		23 M 0623 0.2 6 1224 2.9 88 1830 0.4 12		8 W 0001 3.7 113 0631 -0.2 -6 1242 3.4 104 O 1851 0.1 3		23 Th 0044 2.9 88 0707 0.1 3 1334 3.0 91 O 1941 0.7 21					
9 Sa 0534 0.5 15 1120 2.7 82 1726 0.3 9 2353 3.6 110	24 Su 0026 3.7 113 0658 0.3 9 1255 2.9 88 O 1901 0.4 12		9 M 0604 0.3 9 1158 2.9 88 1804 0.2 6		24 Tu 0043 3.3 101 0711 0.2 6 1325 2.9 88 O 1927 0.6 18		9 Th 0056 3.5 107 0722 -0.4 -12 1345 3.6 110 1954 0.1 3		24 F 0133 2.7 82 0749 0.1 3 1428 3.1 94 2035 0.7 21						
	10 Su 0626 0.5 15 1213 2.7 82 1823 0.3 9	25 M 0127 3.4 104 0752 0.4 12 1403 2.9 88 2003 0.5 15		10 Tu 0024 3.7 113 0656 0.1 3 1258 3.1 94 O 1905 0.2 6		25 W 0135 3.1 94 0755 0.2 6 1424 3.0 91 2023 0.7 21		10 F 0155 3.3 101 0814 -0.5 -15 1447 3.8 116 2058 0.1 3		25 Sa 0224 2.6 79 0833 0.1 3 1519 3.3 101 2130 0.7 21					
	11 M 0049 3.6 110 0721 0.5 15 1315 2.8 85 O 1924 0.2 6	26 Tu 0228 3.3 101 0843 0.4 12 1507 3.0 91 2103 0.6 18		11 W 0121 3.6 110 0748 0.0 0 1402 3.3 101 2008 0.1 3		26 Th 0228 2.9 88 0839 0.2 6 1518 3.1 94 2119 0.7 21		11 Sa 0255 3.2 98 0907 -0.6 -18 1548 4.1 125 2202 0.0 0		26 Su 0316 2.6 79 0919 0.1 3 1607 3.4 104 2223 0.6 18					
	12 Tu 0151 3.6 110 0816 0.3 9 1420 3.1 94 2027 0.1 3	27 W 0323 3.1 94 0930 0.4 12 1600 3.1 94 2200 0.6 18		12 Th 0221 3.5 107 0840 -0.2 -6 1505 3.7 113 2113 0.0 0		27 F 0318 2.8 85 0922 0.2 6 1605 3.3 101 2213 0.6 18		12 Su 0355 3.1 94 1003 -0.7 -21 1645 4.3 131 2304 -0.1 -3		27 M 0406 2.6 79 1007 0.0 0 1652 3.6 110 2313 0.5 15					
13 W 0252 3.6 110 0911 0.1 3 1524 3.4 104 2130 -0.1 -3	28 Th 0411 3.1 94 1014 0.3 9 1645 3.3 101 2252 0.5 15		13 F 0321 3.5 107 0934 -0.4 -12 1604 4.1 125 2216 -0.1 -3		28 Sa 0404 2.7 82 1005 0.1 3 1647 3.5 107 2303 0.5 15		13 M 0453 3.1 94 1058 -0.7 -21 1740 4.5 137 31 0031 0.3 9		28 Tu 0454 2.6 79 1054 -0.1 -3 1737 3.8 116 Tu 0617 2.7 82 1212 -0.1 -3 1851 3.9 119						
	14 Th 0351 3.7 113 1005 -0.2 -6 1623 3.8 116 2233 -0.3 -9	29 F 0453 3.0 91 1054 0.2 6 1725 3.5 107 2338 0.4 12		14 Sa 0418 3.5 107 1027 -0.6 -18 1700 4.4 134 2317 -0.2 -6		29 Su 0449 2.7 82 1048 0.0 0 1729 3.7 113 2349 0.4 12		14 Tu 0002 -0.1 -3 0549 3.1 94 1152 -0.8 -24 1834 4.5 137 O 1926 4.5 137		29 W 0000 0.4 12 0542 2.7 82 1141 -0.2 -6 1821 3.9 119					
	15 F 0446 3.8 116 1057 -0.5 -15 1719 4.2 128 2333 -0.4 -12	30 Sa 0533 3.0 91 1132 0.1 3 1804 3.7 113		15 Su 0514 3.5 107 1120 -0.8 -24 1755 4.6 140		30 M 0533 2.7 82 1130 -0.1 -3 1809 3.8 116		15 W 0055 -0.2 -6 0645 3.1 94 1245 -0.7 -21 O 1926 4.5 137		30 Th 0044 0.2 6 0630 2.8 85 1227 -0.3 -9 1906 4.0 122					
						31 Tu 0031 0.3 9 0617 2.7 82 1212 -0.1 -3 1851 3.9 119									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Canaveral (Trident Pier), Florida, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0127	0.1	3	16 0212	0.0	0	1 0224	-0.3	-9	1 0328	-0.3	-9
F 0718	2.9	88	Sa 0812	3.2	98	M 0833	3.8	116	Th 0955	4.8	146
1312	-0.4	-12	1406	-0.2	-6	1432	-0.4	-12	Tu 1511	0.4	12
● 1951	4.1	125	2041	4.0	122	2057	4.3	131	2126	3.7	113
2 0209	0.0	0	17 0254	0.0	0	2 0309	-0.4	-12	2 0421	-0.2	-6
Sa 0806	3.0	91	Su 0858	3.2	98	Tu 0924	4.0	122	W 0951	3.6	110
1359	-0.4	-12	1452	-0.1	-3	1526	-0.3	-9	1709	0.3	9
2035	4.2	128	2121	3.9	119	2143	4.2	128	2202	3.5	107
3 0253	-0.1	-3	18 0335	0.0	0	3 W 0357	-0.4	-12	3 0517	-0.1	-3
Su 0854	3.2	98	M 0943	3.2	98	W 1016	4.1	125	Sa 1147	4.6	140
1447	-0.4	-12	1539	0.2	6	W 1623	-0.1	-3	1812	0.5	15
2120	4.1	125	2200	3.6	110	W 2231	4.0	122	2240	3.3	101
4 0339	-0.2	-6	19 0415	0.1	3	4 Th 0448	-0.4	-12	4 0000	3.6	110
M 0943	3.3	101	Tu 1026	3.2	98	Th 1109	4.2	128	Su 0616	0.1	3
1540	-0.3	-9	1627	0.4	12	Th 1723	0.1	3	M 1251	4.4	134
2205	4.0	122	2238	3.4	104	Th 2321	3.7	113	● 1915	0.7	21
5 0426	-0.3	-9	20 0456	0.1	3	5 F 0541	-0.4	-12	5 0104	3.4	104
Tu 1034	3.5	107	W 1109	3.2	98	F 1207	4.2	128	Sa 0718	0.2	6
1637	-0.2	-6	W 1717	0.5	15	F 1826	0.2	6	M 1359	4.3	131
2251	3.9	119	2317	3.2	98	W 1821	1.0	30	2020	0.8	24
6 0515	-0.4	-12	21 0537	0.2	6	6 Sa 0016	3.4	104	6 Tu 0213	3.3	101
W 1128	3.6	110	Th 1155	3.2	98	6 Sa 0636	-0.3	-9	W 0820	0.4	12
1736	0.0	0	Th 1808	0.7	21	6 Sa 1310	4.1	125	W 1507	4.2	128
2341	3.6	110	2358	3.0	91	● 1929	0.4	12	2123	0.8	24
7 0606	-0.4	-12	22 0620	0.2	6	7 Su 0016	3.4	104	21 0119	3.2	98
Th 1226	3.7	113	F 1244	3.2	98	7 Su 0620	0.6	18	W 0729	0.8	24
1838	0.1	3	1900	0.8	24	7 Su 1249	3.5	107	W 1403	4.0	122
8 0035	3.4	104	23 0045	2.8	85	● 1913	1.1	34	2026	1.2	37
F 0658	-0.5	-15	Sa 0703	0.2	6	8 M 0223	3.1	94	7 Th 0322	3.4	104
1328	3.8	116	Sa 1337	3.2	98	8 M 0832	-0.1	-3	22 0221	3.3	101
● 1941	0.2	6	● 1952	0.9	27	8 M 1522	4.1	125	Th 0827	0.7	21
9 0134	3.2	98	24 0136	2.7	82	9 Tu 0329	3.1	94	7 W 1502	4.1	125
Sa 0751	-0.5	-15	Su 0750	0.2	6	9 Tu 0933	-0.1	-3	2120	1.0	30
1431	4.0	122	Su 1432	3.3	101	9 Tu 1622	4.2	128	2313	0.7	21
2045	0.2	6	2046	0.9	27	9 Tu 2240	0.5	15	2212	0.7	21
10 0236	3.0	91	25 0231	2.6	79	10 W 0430	3.1	94	8 Th 0422	3.5	107
Su 0847	-0.5	-15	M 0838	0.2	6	10 W 1032	-0.1	-3	23 0321	3.6	110
1534	4.1	125	M 1525	3.5	107	10 W 1716	4.2	128	W 0925	0.6	18
2149	0.2	6	2141	0.8	24	10 W 2335	0.4	12	F 1556	4.3	131
11 0338	3.0	91	26 0326	2.7	82	11 Th 0525	3.2	98	Sa 1024	0.3	9
M 0945	-0.5	-15	Tu 0929	0.1	3	11 Th 1128	-0.1	-3	Sa 1647	4.5	137
1633	4.2	128	Tu 1615	3.7	113	11 Th 1806	4.2	128	2302	0.4	12
2252	0.2	6	2235	0.7	21	11 Th 2337	0.4	12	25 0511	4.3	131
12 0438	3.0	91	27 0419	2.8	85	12 F 0022	0.3	9	Su 1121	0.1	3
Tu 1043	-0.5	-15	W 1021	0.0	0	12 F 0617	3.3	101	Su 1737	4.6	140
1728	4.3	131	W 1704	3.9	119	12 F 1218	0.0	0	2349	0.1	3
2349	0.1	3	2325	0.5	15	12 F 1851	4.2	128	26 0604	4.7	143
13 0535	3.0	91	28 0510	2.9	88	13 W 0022	0.3	9	M 1215	0.0	0
W 1138	-0.5	-15	Th 1112	-0.2	-6	13 W 0704	3.4	104	W 1827	4.6	140
1821	4.3	131	Th 1751	4.1	125	13 W 1303	0.0	0	26 0036	-0.1	-3
● 1911	4.2	128	● 1924	4.3	131	● 1933	4.1	125	W 0656	5.0	152
14 0041	0.0	0	29 0011	0.3	9	14 M 0142	0.2	6	W 1308	-0.1	-3
Th 0630	3.1	94	F 0600	3.1	94	14 M 0749	3.5	107	● 1941	4.0	122
1230	-0.5	-15	F 1202	-0.3	-9	14 M 1346	0.1	3	● 1918	4.6	140
1911	4.2	128	F 1838	4.2	128	14 M 2012	4.0	122	27 0123	-0.2	-6
15 0128	0.0	0	30 0056	0.1	3	15 M 0218	0.2	6	W 0749	5.2	158
F 0722	3.1	94	Sa 0651	3.3	101	15 M 0831	3.6	110	1401	-0.1	-3
1319	-0.4	-12	Sa 1251	-0.4	-12	15 M 1428	0.3	9	2008	4.5	137
● 1957	4.2	128	● 1924	4.3	131	15 M 2050	3.8	116	2151	4.2	128
16 0140	0.1	-3	31 0140	-0.1	-3	16 W 0239	-0.3	-9	29 0211	-0.3	-9
Su 0742	3.5	107	Su 1341	-0.5	-15	16 W 0903	4.7	143	W 0842	5.3	162
1341	4.4	134	2011	4.4	134	16 W 1511	-0.1	-3	Th 1455	0.1	3

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port Canaveral (Trident Pier), Florida, 2011

Times and Heights of High and Low Waters

October			November			December						
Time	Height		Time	Height		Time	Height		Time	Height		
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 Sa 0355 1030 1652 2245	0.0	0	16 Su 0332 1006 1628 2219	0.8	24	1 Tu 0534 1202 1833	0.5	15	16 W 0440 1108 1739 2331	0.7	21	
	5.1	155		4.3	131		1202	4.4	134		1222	3.8
	0.5	15		1.2	37		1833	0.8	24		1850	0.5
	3.9	119		3.4	104							
2 Su 0454 1127 1755 2344	0.2	6	17 M 0417 1048 1717 2303	0.9	27	2 W 0028 0638 1303 ● 1931	3.6	110	17 Th 0536 1157 1829	0.7	21	
	4.8	146		4.2	128		0638	0.8	24		0101	3.3
	0.7	21		1.2	37		1303	4.2	128		0708	0.8
	3.7	113		3.3	101		● 1931	0.8	24		1317	3.5
3 M 1229 1858 ●	0.4	12	18 Tu 0507 1135 1808 2353	1.0	30	3 Th 0138 0742 1406 2024	3.5	107	18 F 0028 0636 1251 ● 1920	3.4	104	
	4.6	140		4.1	125		0742	0.9	27		0808	0.9
	0.9	27		1.2	37		1406	3.9	119		1413	3.2
				3.3	101		2024	0.9	27		2025	0.5
4 Tu 0049 0701 1336 ●	3.6	110	19 W 0602 1228 1900	1.0	30	4 F 0246 0844 1505 2113	3.6	110	19 Sa 0131 0739 1350 2012	3.6	110	
	0.6	18		4.1	125		0844	1.0	30		0907	1.0
	4.3	131		1.2	37		1505	3.8	116		1506	3.1
	1.0	30					2113	0.8	24		2110	0.5
5 W 0201 0805 1444 2059	3.6	110	20 Th 0051 0700	3.4	104	5 Sa 0344 0943 1555 2158	3.8	116	20 Su 0234 0842 1450 2104	4.0	122	
	0.8	24		0.9	27		0943	1.0	30		0355	3.6
	4.2	128		4.1	125		1555	3.7	113		1004	0.9
	1.0	30		1.0	30		2158	0.8	24		1555	3.0
6 Th 0310 0909 1543 2153	3.6	110	21 F 0155 0801 1425 2045	3.6	110	6 Su 0431 1037 1638 2239	3.9	119	21 M 0334 0945 1548 2158	4.3	131	
	0.8	24		0.8	24		1037	1.0	30		1055	0.9
	4.1	125		4.1	125		1638	3.6	110		1640	3.0
	0.9	27					2239	0.7	21		2238	0.4
7 F 1008 1632 2240	3.8	116	22 Sa 0257 0902 1522 2137	3.9	119	7 M 0512 1124 1719 2317	4.1	125	22 Tu 0431 1047 1644 2251	4.7	143	
	0.9	27		0.7	21		1124	0.9	27		1140	0.7
	4.1	125		4.2	128		1719	3.6	110		1724	3.0
	0.9	27		0.5	15		2317	0.6	18		2320	0.3
8 Sa 1101 1715 2320	3.9	119	23 Su 0355 1003 1616 2228	4.3	131	8 Tu 0551 1206 1758 2354	4.2	128	23 W 0526 1145 1738 2344	5.0	152	
	0.9	27		0.5	15		1206	0.9	27		1221	0.6
	4.0	122		4.3	131		1758	3.5	107		1806	3.0
	0.8	24		0.2	6		2354	0.5	15		91	
9 Su 1147 1754 2356	4.1	125	24 M 0450 1103 1709 2318	4.7	143	9 W 0628 1245 1837	4.3	131	24 Th 0620 1240 1833	5.2	158	
	0.8	24		0.3	9		1245	0.8	24		0001	0.2
	4.0	122		4.4	134		1837	3.5	107		0640	4.1
	0.7	21		0.0	0					1259	0.5	
10 M 1228 1832	4.2	128	25 Tu 0543 1159 1801	5.1	155	10 F 0031 0706 1322 ● 1916	0.5	15	25 Th 0036 0714 1322 ● 1928	-0.6	-18	
	0.8	24		0.1	3		0706	4.4	134		0719	4.2
	3.9	119		4.4	134		1322	0.8	24		1338	0.4
							● 1916	3.5	107		1930	3.1
11 Tu 0656 1306 ●	0.6	18	26 W 0008 0637 1253 ● 1853	-0.2	-6	11 F 0108 0744 1400 1956	0.5	15	26 Sa 0128 0807 1424 2021	-0.5	-15	
	4.3	131		5.3	162		0744	4.4	134		0759	4.2
	0.8	24		0.0	0		1400	0.8	24		1417	0.4
	3.8	116		4.4	134		1956	3.4	104		2011	3.1
12 W 1344 1946	0.6	18	27 Th 0057 0730 1346 1946	-0.4	-12	12 Sa 0145 0822 1439 2035	0.5	15	27 M 0219 0859 1516 2115	-0.4	-12	
	4.4	134		5.5	168		0822	4.4	134		0839	4.2
	0.8	24		0.0	0		1439	0.8	24		1457	0.4
	3.8	116		4.3	131		2035	3.4	104		2053	3.1
13 Th 0810 1422 2023	0.6	18	28 F 0147 0823 1440 2039	-0.3	-9	13 Su 0224 0901 1520 2115	0.5	15	28 M 0313 0949 1610 2208	-0.2	-6	
	4.4	134		5.5	168		0901	4.4	134		0919	4.2
	0.9	27		0.1	3		1520	0.8	24		1539	0.3
	3.7	113		4.2	128		2115	3.3	101		2136	3.2
14 F 0848 1501 2101	0.7	21	29 Sa 0238 0916 1535 2133	-0.2	-6	14 M 0305 0941 1603 2157	0.6	18	29 Tu 0409 1039 1705 2302	0.1	3	
	4.4	134		5.3	162		0941	4.3	131		1043	4.0
	1.0	30		0.3	9		1603	0.9	27		1043	4.0
	3.6	110		4.0	122		2157	3.3	101		2222	3.2
15 Sa 0926 1543 2139	0.8	24	30 Su 0333 1010 1633 2227	0.0	0	15 Tu 0349 1023 1650 2241	0.6	18	30 W 0507 1130 1759 2359	0.4	12	
	4.4	134		5.1	155		1023	4.2	128		0420	0.2
	1.1	34		0.5	15		1650	0.9	27		1043	4.0
	3.5	107		3.9	119		2241	3.3	101		2312	3.3
31 M 1105 1733 2325	0.3	9	31 M 0432 1105 1733 2325	0.4	146					31 Sa 0016 0628 1224 1847	3.1	94
	4.8	146		0.7	21						0628	0.6
	0.7	21		3.7	113						1224	3.0
	3.7	113									1847	0.2

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Miami, Government Cut, Florida, 2011

Times and Heights of High and Low Waters

January				February				March															
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height												
h m	ft	cm		h m	ft	cm		h m	ft	cm													
1 Sa	0608 1147 1813	2.5 0.2 2.3	76 6 70	16 Su	0535 1116 1736 2335	2.1 0.3 2.0 -0.3	64 9 61 -9	1 Tu	0043 0729 1310 1937	-0.4 2.3 -0.1 2.2	-12 70 -3 67	16 W	0001 0650 1230 1904	-0.4 2.3 -0.2 2.4	-12 70 -6 73	1 Tu	0621 1204 1833	2.1 0.1 2.1	64 3 64	16 W	0527 1111 1747 2338	2.3 0.0 2.3 -0.3	70 0 70 -9
2 Su	0008 0700 1238 1905	-0.4 2.5 0.1 2.4	-12 76 3 73	17 M	0628 1206 1831	2.2 0.1 2.1	67 3 64	2 W	0127 0809 1352 ● 2019	-0.4 2.3 -0.1 2.2	-12 70 -3 67	17 Th	0053 0738 1319 1957	-0.6 2.5 -0.4 2.5	-18 76 -12 76	2 W	0024 0704 1248 1917	-0.2 2.2 0.0 2.2	-6 67 0 67	17 Th	0620 1205 1845	2.4 -0.3 2.6	73 -9 79
3 M	0057 0747 1326 1953	-0.4 2.5 0.0 2.4	-12 76 0 73	18 Tu	0024 0717 1255 1924	-0.4 2.4 0.0 2.3	67 73 0 70	3 Th	0208 0846 1432 2058	-0.4 2.3 -0.2 2.2	-12 70 -6 67	18 F	0142 0825 1408 ○ 2047	-0.7 2.6 -0.6 2.7	-21 79 -18 82	3 Th	0107 0741 1328 1957	-0.2 2.2 -0.1 2.3	-6 67 -3 70	18 F	0032 0710 1256 1938	-0.4 2.6 -0.5 2.8	-12 79 -15 85
4 Tu	0143 0830 1411 ● 2037	-0.4 2.5 0.0 2.4	-12 76 0 73	19 W	0113 0804 1342 ○ 2014	-0.6 2.5 -0.2 2.4	18 76 -6 73	4 F	0247 0920 1509 2135	-0.3 2.3 -0.2 2.2	-9 70 -6 67	19 Sa	0232 0910 1456 2137	-0.7 2.7 -0.8 2.8	-21 82 -24 85	4 F	0146 0816 1404 ● 2034	-0.2 2.3 -0.2 2.3	-6 70 -6 70	19 Sa	0123 0759 1345 ○ 2029	-0.5 2.7 -0.7 2.9	-15 82 -21 88
5 W	0227 0911 1454 2119	-0.3 2.5 0.0 2.3	-9 76 0 70	20 Th	0201 0849 1429 2104	-0.6 2.6 -0.4 2.5	18 79 -12 76	5 Sa	0324 0954 1544 2212	-0.2 2.2 -0.2 2.2	-6 67 -6 67	20 Su	0321 0956 1545 2227	-0.6 2.7 -0.8 2.7	-18 82 -24 82	5 Sa	0222 0850 1439 2110	-0.2 2.3 -0.2 2.3	-6 70 -6 70	20 Su	0212 0846 1434 2119	-0.5 2.8 -0.8 3.0	-15 85 -24 91
6 Th	0309 0949 1536 2200	-0.3 2.4 0.0 2.3	-9 73 0 70	21 F	0249 0934 1517 2154	-0.7 2.7 -0.5 2.6	-21 82 -15 79	6 Su	0359 1027 1619 2249	-0.1 2.2 -0.2 2.1	-3 67 -6 64	21 M	0411 1043 1636 2319	-0.5 2.6 -0.8 2.6	-15 79 -24 79	6 Su	0257 0923 1512 2145	-0.1 2.3 -0.2 2.3	-3 70 -6 70	21 M	0302 0933 1523 2209	-0.5 2.8 -0.8 2.9	-15 85 -24 88
7 F	0350 1025 1616 2240	-0.2 2.4 0.0 2.2	-6 73 0 67	22 Sa	0337 1020 1606 2245	-0.6 2.6 -0.6 2.6	-18 79 -18 79	7 M	0434 1101 1654 2328	0.0 2.1 -0.1 2.0	0 64 -3 61	22 Tu	0503 1132 1729	-0.3 2.5 -0.6	-9 76 -18	7 M	0330 0956 1544 2221	0.0 2.2 -0.2 2.3	0 67 -6 70	22 Tu	0352 1021 1614 2300	-0.4 2.7 -0.7 2.8	-12 82 -21 85
8 Sa	0430 1101 1656 2321	0.0 2.3 0.0 2.1	0 70 0 64	23 Su	0428 1106 1657 2338	-0.5 2.6 -0.6 2.5	-15 79 -18 76	8 Tu	0510 1136 1731	0.1 2.0 -0.1	3 61 -3	23 W	0013 0558 1225 1827	2.5 -0.1 2.3 -0.5	76 70 70 15	8 Tu	0403 1029 1617 2259	0.0 2.2 -0.1 2.2	0 67 -3 67	23 W	0444 1111 1707 2352	-0.2 2.6 -0.5 2.6	-6 79 -15 79
9 Su	0510 1138 1737	0.1 2.1 0.1	3 64 3	24 M	0521 1155 1751	-0.3 2.5 -0.5	-9 76 -15	9 W	0009 0548 1213 1812	1.9 0.2 1.9 0.0	58 6 58 0	24 Th	0111 0659 1322 1930	2.3 0.0 2.2 -0.3	70 0 67 64	9 W	0436 1103 1652 2338	0.1 2.1 -0.1 2.1	3 64 -3 64	24 Th	0538 1204 1804	0.0 2.4 -0.3	0 73 -9
10 M	0003 0551 1216 1820	2.0 0.2 2.0 0.1	61 6 61 -15	25 Tu	0034 0618 1247 1850	2.4 -0.2 2.3 -0.5	73 -6 70 -15	10 F	0055 0634 1256 1902	1.9 0.3 1.8 0.0	58 9 55 0	25 Th	0215 0804 1426 2036	2.1 0.2 2.0 -0.2	64 6 61 -6	25 F	0048 0638 1301 1906	2.4 0.2 2.2 -0.1	73 6 67 -3				
11 Tu	0048 0637 1257 1906	1.9 0.4 1.9 0.2	58 12 58 6	26 W	0134 0720 1345 ● 1952	2.3 0.0 2.2 -0.4	70 0 67 -12	11 F	0149 0729 1348 ● 2001	1.8 0.4 1.7 0.0	55 12 52 0	26 Sa	0323 0912 1535 2142	2.0 0.3 1.9 -0.1	61 9 58 -3	26 O	0149 0742 1403 2012	2.2 0.3 2.1 0.1	67 9 64 3				
12 W	0139 0728 1343 ● 1958	1.9 0.4 1.9 0.2	58 12 58 6	27 Th	0238 0826 1448 2057	2.2 0.1 2.1 -0.3	67 3 64 -9	12 Sa	0251 0834 1451 2105	1.8 0.4 1.7 0.0	55 12 52 0	27 Su	0430 1017 1643 2243	2.0 0.2 2.0 -0.1	61 6 61 -3	12 Sa	0115 0651 1314 1920	1.9 0.4 1.9 0.1	58 12 58 3				
13 Th	0235 0825 1436 2053	1.8 0.5 1.8 0.1	55 15 55 3	28 F	0346 0932 1555 2201	2.1 0.2 2.0 -0.3	64 6 61 -9	13 Su	0358 0941 1600 2208	1.8 0.4 1.8 -0.1	55 12 55 -3	28 M	0530 1114 1742 2337	2.1 0.2 2.0 -0.1	64 6 61 -3	13 Su	0215 0757 1420 2029	1.9 0.5 1.9 0.1	58 15 58 3				
14 F	0336 0925 1535 2149	1.9 0.5 1.8 0.0	58 15 55 0	29 Sa	0453 1035 1700 2300	2.1 0.2 2.0 -0.3	64 6 61 -9	14 M	0502 1043 1708 2307	2.0 0.2 1.9 -0.3	61 6 58 -9	29 Tu	0322 0907 1426 2137	2.0 0.4 2.1 0.0	61 12 64 0	14 M	0048 0607 1304 2311	2.1 0.3 2.1 0.2	64 9 64 6				
15 Sa	0437 1022 1637 2243	1.9 0.4 1.9 -0.1	58 12 58 -3	30 Su	0552 1133 1759 2354	2.2 0.1 2.1 -0.3	67 3 64 -9	15 Tu	0559 1139 1809	2.2 0.0 2.1	67 0 64	30 W	0427 1013 1644 2240	2.1 0.2 2.1 -0.1	64 6 64 -3	15 Tu	0545 1136 1807 2358	2.1 0.2 2.2 0.1	64 6 67 3				
				31 M	0644 1224 1851	2.2 0.0 2.1	67 0 64					31 Th	0628 1218 1850	2.2 0.1 2.3	67 3 70								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Miami, Government Cut, Florida, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0040	0.1	3	16	0009	-0.2	-6	1	0046	0.3	9	16	0042	-0.1	-3
	0706	2.3	70	Sa	0642	2.7	82	Su	0705	2.3	70	M	0710	2.6	79
	1257	0.0	0		1232	-0.5	-15		1258	0.0	0		1302	-0.6	-18
	1930	2.4	73		1919	2.9	88		1938	2.4	73		1953	2.9	88
2 Sa	0118	0.1	3	17	0102	-0.3	-9	2	0124	0.3	9	17	0134	-0.1	-3
	0742	2.3	70	Su	0733	2.8	85	M	0744	2.3	70	Tu	0802	2.7	82
	1333	-0.1	-3		1322	-0.7	-21		1335	-0.1	-3		1353	-0.6	-18
	2007	2.4	73	O	2011	3.0	91		2017	2.5	76	O	2044	2.9	88
3 Su	0154	0.1	3	18	0153	-0.3	-9	3	0200	0.2	6	18	0224	-0.1	-3
	0817	2.3	70	M	0822	2.8	85	Tu	0822	2.3	70	W	0852	2.7	82
	1407	-0.1	-3		1412	-0.7	-21		1410	-0.1	-3		1443	-0.6	-18
	2044	2.5	76		2101	3.0	91	●	2057	2.5	76		2133	2.9	88
4 M	0229	0.1	3	19	0243	-0.3	-9	4	0236	0.2	6	19	0315	-0.1	-3
	0852	2.3	70	Tu	0912	2.8	85	W	0901	2.3	70	Th	0942	2.6	79
	1440	-0.1	-3		1503	-0.7	-21		1446	-0.1	-3		1534	-0.5	-15
	2120	2.5	76		2151	3.0	91		2136	2.5	76		2221	2.8	85
5 Tu	0302	0.1	3	20	0333	-0.2	-6	5	0312	0.3	9	20	0406	0.0	0
	0927	2.3	70	W	1001	2.7	82	Th	0939	2.3	70	F	1032	2.5	76
	1513	-0.1	-3		1554	-0.6	-18		1523	-0.1	-3		1625	-0.3	-9
	2157	2.4	73		2241	2.8	85		2217	2.5	76		2309	2.6	79
6 W	0336	0.2	6	21	0425	0.0	0	6	0351	0.3	9	21	0458	0.1	3
	1002	2.2	67	Th	1051	2.6	79	F	1020	2.2	67	Sa	1122	2.4	73
	1547	-0.1	-3		1646	-0.4	-12		1603	-0.1	-3		1717	-0.1	-3
	2236	2.4	73		2332	2.7	82		2259	2.4	73		2357	2.5	76
7 Th	0411	0.3	9	22	0519	0.1	3	7	0433	0.3	9	22	0551	0.2	6
	1038	2.2	67	F	1143	2.4	73	Sa	1103	2.2	67	Su	1213	2.3	70
	1623	0.0	0		1742	-0.2	-6		1647	0.0	0		1811	0.1	3
	2316	2.3	70						2344	2.4	73				
8 F	0449	0.3	9	23	0024	2.5	76	8	0520	0.3	9	23	0044	2.3	70
	1117	2.1	64	Sa	0616	0.2	6	Su	1152	2.2	67	M	0646	0.3	9
	1705	0.0	0		1238	2.3	70		1738	0.0	0		1306	2.1	64
					1841	0.0	0						1907	0.3	9
9 Sa	0001	2.2	67	24	0119	2.3	70	9	0032	2.3	70	24	0133	2.2	67
	0534	0.4	12	Su	0717	0.3	9	M	0614	0.3	9	Tu	0742	0.3	9
	1202	2.1	64		1337	2.2	67		1247	2.2	67		1401	2.1	64
	1755	0.1	3	O	1943	0.2	6		1836	0.1	3	O	2004	0.4	12
10 Su	0051	2.2	67	25	0216	2.2	67	10	0125	2.3	70	25	0222	2.1	64
	0629	0.4	12	M	0819	0.4	12	Tu	0715	0.3	9	W	0836	0.3	9
	1257	2.0	61		1439	2.1	64		1349	2.2	67		1457	2.0	61
	1854	0.1	3		2045	0.3	9	O	1941	0.2	6		2100	0.4	12
11 M	0148	2.1	64	26	0313	2.1	64	11	0221	2.3	70	26	0312	2.0	61
	0733	0.4	12	Tu	0918	0.4	12	W	0818	0.1	3	Th	0927	0.3	9
	1402	2.0	61		1542	2.1	64		1456	2.3	70		1553	2.0	61
	2002	0.2	6		2143	0.4	12		2047	0.2	6		2152	0.5	15
12 Tu	0250	2.2	67	27	0408	2.1	64	12	0321	2.3	70	27	0403	2.0	61
	0841	0.3	9	W	1011	0.3	9	Th	0921	0.0	0	F	1015	0.2	6
	1513	2.1	64		1640	2.1	64		1603	2.4	73		1647	2.1	64
	2111	0.1	3		2236	0.4	12		2152	0.1	3		2242	0.5	15
13 W	0353	2.2	67	28	0458	2.1	64	13	0421	2.4	73	28	0452	2.0	61
	0945	0.1	3	Th	1059	0.2	6	M	1020	-0.2	-6	Sa	1100	0.1	3
	1622	2.3	70		1731	2.2	67		1706	2.6	79		1737	2.2	67
	2215	0.0	0		2323	0.4	12		2252	0.1	3		2327	0.4	12
14 Th	0453	2.4	73	29	0543	2.1	64	14	0520	2.5	76	29	0540	2.1	64
	1044	-0.1	-3	F	1141	0.1	3	Sa	1116	-0.4	-12	Su	1142	0.0	0
	1726	2.5	76		1816	2.3	70		1805	2.7	82		1823	2.3	70
	2314	-0.1	-3						2348	0.0	0				
15 F	0549	2.5	76	30	0006	0.3	9	15	0616	2.6	79	30	0010	0.4	12
	1139	-0.3	-9	Sa	0625	2.2	67	M	1901	2.8	85	W	0626	2.1	64
	1825	2.7	82		1221	0.0	0					1223	0.0	0	
					1858	2.4	73					1908	2.3	70	
												31	0052	0.3	9
												Tu	0710	2.2	67
												1303	-0.1	-3	
												1951	2.4	73	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Miami, Government Cut, Florida, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0146 0.2 6 0814 2.3 70 1400 -0.3 -9 ● 2054 2.5 76	16 Sa 0236 0.0 0 0905 2.5 76 1453 -0.2 -6 2135 2.6 79	1 M 0252 -0.2 -6 0931 2.7 82 1512 -0.3 -9 2156 2.8 85	16 Tu 0329 0.1 3 1000 2.6 79 1547 0.2 6 2214 2.6 79	1 Th 0406 -0.3 -9 1052 3.1 94 1634 0.1 3 2305 3.0 91	16 F 0404 0.4 12 1044 2.7 82 1624 0.7 21 2250 2.6 79						
2 Sa 0230 0.1 3 0901 2.4 73 1444 -0.3 -9 2137 2.6 79	17 Su 0320 0.0 0 0948 2.4 73 1537 -0.1 -3 2213 2.5 76	2 Tu 0339 -0.3 -9 1020 2.8 85 1601 -0.2 -6 2241 2.8 85	17 W 0406 0.2 6 1038 2.5 76 1624 0.4 12 2249 2.5 76	2 F 0459 -0.2 -6 1146 3.0 91 1729 0.3 9 2358 2.9 88	17 Sa 0439 0.5 15 1125 2.6 79 1702 0.9 27 2328 2.5 76						
3 Su 0314 0.0 0 0949 2.4 73 1530 -0.3 -9 2221 2.6 79	18 M 0403 0.0 0 1030 2.4 73 1619 0.0 0 2251 2.4 73	3 W 0428 -0.3 -9 1112 2.8 85 1653 -0.1 -3 2328 2.7 82	18 Th 0443 0.3 9 1117 2.4 73 1701 0.5 15 2325 2.4 73	3 Sa 0556 0.0 0 1244 2.9 88 1829 0.5 15	18 Su 0519 0.6 18 1209 2.6 79 1745 1.0 30						
4 M 0401 -0.1 -3 1038 2.5 76 1618 -0.3 -9 2305 2.6 79	19 Tu 0445 0.1 3 1111 2.3 70 1701 0.1 3 2327 2.3 70	4 Th 0521 -0.3 -9 1205 2.7 82 1747 0.1 3	19 F 0522 0.3 9 1158 2.4 73 1741 0.6 18	4 Su 0055 2.7 82 0659 0.1 3 1345 2.7 82 ● 1934 0.6 18	19 M 0011 2.4 73 0606 0.7 21 1300 2.5 76 1837 1.0 30						
5 Tu 0449 -0.2 -6 1129 2.5 76 1710 -0.2 -6 2351 2.5 76	20 W 0527 0.1 3 1153 2.2 67 1743 0.3 9	5 F 0018 2.6 79 0617 -0.2 -6 1302 2.6 79 1847 0.2 6	20 Sa 0003 2.3 70 0603 0.4 12 1243 2.3 70 1825 0.7 21	5 M 0158 2.6 79 0805 0.3 9 1452 2.7 82 2042 0.7 21	20 Tu 0102 2.4 73 0703 0.7 21 1357 2.5 76 ● 1940 1.1 34						
6 W 0542 -0.2 -6 1223 2.4 73 1805 0.0 0	21 Th 0005 2.2 67 0609 0.2 6 1237 2.1 64 1828 0.4 12	6 Sa 0113 2.5 76 0718 -0.2 -6 1404 2.5 76 ● 1950 0.4 12	21 Su 0046 2.2 67 0651 0.5 15 1334 2.2 67 ● 1918 0.8 24	6 Tu 0305 2.6 79 0912 0.3 9 1558 2.6 79 2148 0.7 21	21 W 0204 2.4 73 0809 0.7 21 1459 2.5 76 2047 1.0 30						
7 Th 0040 2.5 76 0638 -0.2 -6 1320 2.4 73 1905 0.1 3	22 F 0045 2.1 64 0655 0.2 6 1324 2.1 64 1916 0.5 15	7 Su 0213 2.4 73 0822 -0.1 -3 1510 2.5 76 2056 0.4 12	22 M 0135 2.2 67 0747 0.5 15 1432 2.2 67 2019 0.9 27	7 W 0413 2.6 79 1015 0.4 12 1700 2.7 82 2247 0.6 18	22 Th 0311 2.5 76 0915 0.7 21 1601 2.6 79 2150 0.8 24						
8 F 0133 2.4 73 0737 -0.3 -9 1422 2.4 73 ● 2008 0.2 6	23 Sa 0128 2.0 61 0744 0.3 9 1416 2.0 61 ● 2010 0.6 18	8 M 0319 2.4 73 0926 0.0 0 1616 2.5 76 2201 0.4 12	23 Tu 0234 2.2 67 0848 0.5 15 1535 2.2 67 2123 0.8 24	8 Th 0515 2.6 79 1111 0.4 12 1753 2.7 82 2338 0.5 15	23 F 0418 2.6 79 1016 0.5 15 1658 2.8 85 2246 0.6 18						
9 Sa 0231 2.3 70 0839 -0.3 -9 1526 2.4 73 2112 0.2 6	24 Su 0217 2.0 61 0837 0.3 9 1513 2.0 61 2106 0.7 21	9 Tu 0425 2.4 73 1028 0.0 0 1719 2.5 76 2301 0.4 12	24 W 0339 2.2 67 0948 0.4 12 1636 2.4 73 2222 0.7 21	9 F 0609 2.7 82 1200 0.3 9 1839 2.8 85	24 Sa 0519 2.8 85 1111 0.4 12 1751 2.9 88 2337 0.4 12						
10 Su 0334 2.3 70 0941 -0.3 -9 1632 2.4 73 2214 0.2 6	25 M 0313 2.0 61 0931 0.2 6 1613 2.1 64 2203 0.6 18	10 W 0528 2.4 73 1125 0.0 0 1815 2.6 79 2355 0.3 9	25 Th 0443 2.3 70 1045 0.3 9 1733 2.5 76 2315 0.6 18	10 Sa 0024 0.5 15 0656 2.8 85 1245 0.3 9 1920 2.8 85	25 Su 0616 3.1 94 1203 0.3 9 1840 3.1 94						
11 M 0438 2.3 70 1040 -0.3 -9 1734 2.5 76 2313 0.2 6	26 Tu 0413 2.0 61 1025 0.2 6 1712 2.2 67 2256 0.5 15	11 Th 0625 2.5 76 1217 0.0 0 1904 2.6 79	26 F 0543 2.5 76 1137 0.1 3 1824 2.7 82	11 Su 0105 0.4 12 0738 2.8 85 1325 0.4 12 1957 2.8 85	26 M 0027 0.1 3 0709 3.3 101 1254 0.2 6 1928 3.2 98						
12 Tu 0540 2.3 70 1137 -0.4 -12 1831 2.5 76	27 W 0513 2.1 64 1116 0.0 0 1806 2.3 70 2346 0.4 12	12 F 0045 0.3 9 0715 2.6 79 1305 0.0 0 1948 2.7 82	27 Sa 0005 0.3 9 0638 2.7 82 1227 0.0 0 1912 2.9 88	12 M 0144 0.3 9 0817 2.9 88 1404 0.4 12 ● 2032 2.8 85	27 Tu 0115 -0.1 -3 0800 3.4 104 1343 0.1 3 ● 2016 3.3 101						
13 W 0009 0.1 3 0637 2.4 73 1231 -0.4 -12 1923 2.6 79	28 Th 0609 2.2 67 1204 -0.1 -3 1856 2.5 76	13 Sa 0130 0.2 6 0801 2.6 79 1348 0.0 0 ● 2028 2.7 82	28 Tu 0053 0.1 3 0730 2.9 88 1316 -0.1 -3 ● 1958 3.0 91	13 Tu 0220 0.3 9 0854 2.9 88 1440 0.4 12 2106 2.8 85	28 W 0203 -0.2 -6 0850 3.5 107 1432 0.1 3 2104 3.3 101						
14 Th 0101 0.1 3 0730 2.4 73 1321 -0.4 -12 2010 2.6 79	29 F 0034 0.3 9 0702 2.4 73 1251 -0.2 -6 1942 2.6 79	14 Su 0212 0.1 3 0842 2.6 79 1430 0.0 0 2105 2.7 82	29 M 0140 -0.1 -3 0821 3.1 94 1404 -0.1 -3 2043 3.1 94	14 W 0255 0.3 9 0930 2.9 88 1515 0.5 15 2139 2.7 82	29 Th 0253 -0.2 -6 0941 3.5 107 1522 0.2 6 2153 3.3 101						
15 F 0150 0.0 0 0819 2.5 76 1408 -0.3 -9 ● 2054 2.6 79	30 Sa 0120 0.1 3 0752 2.5 76 1338 -0.3 -9 ● 2027 2.7 82	15 M 0251 0.1 3 0922 2.6 79 1509 0.1 3 2140 2.6 79	30 Tu 0227 -0.2 -6 0910 3.2 98 1452 -0.1 -3 2129 3.1 94	15 Th 0329 0.4 12 1007 2.8 85 1550 0.6 18 2214 2.7 82	30 F 0344 -0.2 -6 1033 3.4 104 1614 0.4 12 2244 3.2 98						
		31 Su 0206 0.0 0 0842 2.6 79 1425 -0.3 -9 2111 2.8 85	31 W 0316 -0.3 -9 1001 3.2 98 1542 0.0 0 2216 3.1 94								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Miami, Government Cut, Florida, 2011

Times and Heights of High and Low Waters

October					November					December								
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height				
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm				
1 Sa	0438	0.0 0		16 Su	0406 1059	0.6 2.8	18			16 Tu	0017 0615	2.8 0.4	85 12	15 W	0511 1208	0.5 2.6	15 79	
	1126	3.2 98			1633	0.9	27				1327	2.9	88		1315	2.5	76	
	1710	0.5 15			2301	2.6	79				1854	0.7	21		1921	0.5	15	
	2338	3.0 91												16 Th	0047 0645	2.5 0.4	76 12	
2 Su	0536	0.2 6		17 M	0446 1143	0.6 2.7	18	2 W	0118 0720	2.7 0.6	82 18	17 Th	0022 0606	2.5 0.6	76 18			
	1223	3.1 94			1716	1.0	30		1355	2.7	82		1258	2.6	79			
	1810	0.7 21			2346	2.5	76		○ 1958	0.8	24		1845	0.7	21			
														2 ○	0145 2018	2.4 0.5	73 15	
3 M	0037	2.9 88		18 Tu	0534 1232	0.7 2.7	21	3 Th	0221 0824	2.6 0.7	79 21	18 F	0122 0709	2.5 0.6	76 18			
	0639	0.4 12			1808	1.0	30		1454	2.7	82		1352	2.6	79			
	1324	2.9 88							2059	0.8	24		○ 1948	0.6	18			
	○ 1916	0.8 24												3 Sa	0243 0843	2.3 0.7	70 70	
4 Tu	0140	2.8 85		19 W	0039 0630	2.5 0.8	76	4 F	0325 0925	2.6 0.8	79	19 Sa	0226 0815	2.5 0.6	76 18			
	0746	0.5 15			1326	2.6	79		1550	2.6	79		1449	2.6	79			
	1428	2.8 85			○ 1910	1.0	30		2154	0.7	21		2050	0.4	12			
	2024	0.9 27												4 Su	0341 0938	2.3 0.7	70 12	
5 W	0248	2.7 82		20 Th	0141 0736	2.5 0.8	76	5 Sa	0424 1019	2.6 0.8	79	20 Su	0332 0921	2.7 0.6	82 18			
	0853	0.6 18			1425	2.6	79		1641	2.6	79		1548	2.7	82			
	1532	2.7 82			2016	0.9	27		2242	0.6	18		2150	0.2	6			
	2129	0.8 24												5 M	0435 1029	2.3 0.7	70 21	
6 Th	0355	2.7 82		21 F	0248 0844	2.6 0.7	79	6 Su	0516 1107	2.7 0.8	82	21 M	0435 1021	2.4 0.5	73 15			
	0955	0.7 21			1524	2.7	82		1726	2.6	79		1647	2.8	85			
	1631	2.7 82			2119	0.7	21		2325	0.5	15		2246	0.0	0			
	2225	0.8 24												6 Tu	0525 1116	2.4 0.6	73 18	
7 F	0455	2.7 82		22 Sa	0355 0948	2.8 0.7	85	7 M	0601 1150	2.8 0.7	85	22 Tu	0535 1118	3.0 0.4	91			
	1050	0.7 21			1622	2.8	85		1808	2.7	82		1744	2.9	88			
	1722	2.8 85			2217	0.5	15		2340	-0.2	-6		2340	-0.2	-6			
	2314	0.7 21												7 W	0611 1159	2.5 0.6	76 18	
8 Sa	0547	2.8 85		23 Su	0457 1046	3.0 0.5	91	8 Tu	0005 0642	0.4 2.8	12	23 W	0631 1212	3.1 0.3	94			
	1137	0.7 21			1717	3.0	91		1230	0.7	21		1838	3.0	91			
	1807	2.8 85			2310	0.2	6		1847	2.7	82				8 Th	0012 0654	0.2 2.5	6 76
	2357	0.6 18												23 F	0018 0711	-0.5 2.8	-15 85	
9 Su	0632	2.9 88		24 M	0554 1140	3.2 0.4	98	9 W	0043 0722	0.4 2.9	12	24 Th	0033 0724	-0.3 3.2	-9			
	1220	0.6 18			1810	3.1	94		1308	0.7	21		1305	0.2	6			
	1846	2.8 85							1926	2.7	82		1932	3.0	91			
														9 F	0051 0736	0.1 2.6	3 79	
10 M	0037	0.5 15		25 Tu	0002 0649	0.0 3.4	0	10 F	0119 0800	0.3 2.9	9	25 Sa	0124 0816	-0.4 3.3	-12			
	0712	3.0 91			1232	0.3	9		1345	0.7	21		1356	0.1	3			
	1259	0.6 18			○ 1901	3.2	98		○ 2004	2.7	82		● 2024	3.0	91			
	1923	2.9 88												10 O	0129 0817	0.0 2.6	0 79	
11 Tu	0114	0.4 12		26 W	0052 0741	-0.2 3.5	-6	11 F	0154 0838	0.3 2.9	9	26 Sa	0216 0906	-0.4 3.2	-12			
	0749	3.0 91			1322	0.2	6		1420	0.7	21		1447	0.2	6			
	1336	0.6 18			2041	3.3	101		2042	2.7	82		2115	3.0	91			
	○ 1958	2.9 88												11 Su	0207 0857	0.0 2.7	0 82	
12 W	0149	0.4 12		27 Th	0142 0832	-0.2 3.5	-6	12 Sa	0229 0917	0.3 2.9	9	27 M	0307 0956	-0.3 3.1	-9			
	0826	3.0 91			1413	0.2	6		1456	0.7	21		1539	0.2	6			
	1412	0.7 21							2120	2.6	79		2207	2.9	88			
	2033	2.9 88												12 ○	0245 2019	0.0 2.4	0 73	
13 Th	0223	0.4 12		28 F	0233 0923	-0.2 3.5	-6	13 Su	0305 0957	0.3 2.8	9	28 M	0359 1045	-0.1 3.0	-3			
	0902	3.0 91			1504	0.3	9		1532	0.7	21		1632	0.3	9			
	1446	0.7 21			2132	3.2	98		2200	2.6	79		2259	2.8	85			
	2108	2.8 85												13 Tu	0325 1019	0.0 2.6	0 79	
14 F	0256	0.5 15		29 Sa	0324 1014	-0.1 3.4	-3	14 M	0343 1038	0.4 2.8	12	29 W	0452 1135	0.1 2.8	3			
	0940	3.0 91			1556	0.4	12		1612	0.7	21		1726	0.4	12			
	1520	0.8 24			2225	3.1	94		2242	2.5	76		2352	2.6	79			
	2144	2.8 85												14 Th	0407 1100	0.0 2.6	0 79	
15 Sa	0330	0.5 15		30 Su	0418 1107	0.0 3.2	0	15 Tu	0424 1122	0.4 2.7	12	30 W	0547 1224	0.3 2.7	9			
	1018	2.9 88			1651	0.5	15		1656	0.8	24		1823	0.4	12			
	1555	0.9 27			2319	3.0	91		2329	2.5	76				15 Th	0454 1144	0.1 2.5	3 76
	2221	2.7 82												30 F	0012 0605	2.2 0.2	67 6	
31 M	0515	0.2 6		31 M	0515 1201	0.2 3.1	6								31 Sa	0101 0657	2.1 0.3	64 9
	1201	3.1 94			1750	0.6	18								31 Sa	01314 1314	2.1 2.1	64 64
															31 Sa	01928 1928	0.2 0.2	6 6

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Vaca Key, Florida Bay, Florida, 2011

Times and Heights of High and Low Waters

January					February					March						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa	0701	-0.2	-6	16 Su	0652	-0.3	-9	1 Tu	0845	-0.3	-9	16 W	0501	-0.3	-9	
	1330	0.5	15	2200	0.7	21	1429	0.4	12	1421	0.5	15	1315	0.3	9	
	1521	0.4	12		1652	0.2	6	1637	0.3	9	1555	0.1	3			
	2147	0.9	27										1305	0.4	12	
2 Su	0810	-0.2	-6	17 M	0756	-0.3	-9	2 W	0043	0.7	21	17 Th	0024	0.8	24	
	2259	0.9	27	2304	0.8	24	0918	-0.1	-3	0543	-0.2	-6	0746	-0.2	-6	
					1503	0.4	12	1446	0.5	15	1350	0.3	9	1631	0.2	6
					● 1740	0.2	6	1731	0.3	9	1647	0.1	3			
3 M	0905	-0.2	-6	18 Tu	0525	-0.3	-9	3 Th	0131	0.7	21	18 F	0133	0.8	24	
	1458	0.6	18	1501	0.6	18	0634	-0.1	-3	0623	0.0	0	0530	-0.1	-3	
	1703	0.5	15	1650	0.5	15	1533	0.5	15	1506	0.6	18	1421	0.4	12	
					1826	0.2	6	1824	0.2	6	1733	0.1	3	1725	0.1	3
4 Tu	0011	0.9	27	19 W	0010	0.9	27	4 F	0209	0.7	21	19 Sa	0234	0.9	27	
	0620	-0.2	-6	0608	-0.2	-6	0711	0.0	0	0703	0.1	3	0604	0.0	0	
	1537	0.6	18	1531	0.6	18	1555	0.5	15	1520	0.7	21	1444	0.5	15	
	● 1751	0.5	15	○ 1740	0.5	15	1911	0.2	6	1917	0.1	3	● 1815	0.1	3	
5 W	0105	1.0	30	20 Th	0111	1.0	30	5 Sa	0246	0.7	21	20 Su	0332	0.8	24	
	0658	-0.1	-3	0650	-0.1	-3	0748	0.0	0	0742	0.2	6	0233	0.6	18	
	1612	0.6	18	1557	0.7	21	1600	0.6	18	1529	0.8	24	0640	0.1	3	
	1838	0.5	15	1832	0.5	15	1956	0.2	6	2011	0.0	0	1455	0.5	15	
6 Th	0150	1.0	30	21 F	0208	1.0	30	6 Su	0323	0.7	21	21 M	0431	0.7	21	
	0737	0.0	0	0732	0.0	0	0826	0.1	3	0822	0.2	6	0313	0.6	18	
	1643	0.7	21	1618	0.7	21	1552	0.6	18	1543	0.9	27	0716	0.1	3	
	1925	0.5	15	1925	0.4	12	2043	0.1	3	2106	-0.1	-3	1445	0.6	18	
7 F	0234	1.0	30	22 Sa	0304	1.0	30	7 M	0405	0.6	18	22 Tu	0536	0.6	18	
	0817	0.0	0	0813	0.0	0	0905	0.1	3	0903	0.3	9	0752	0.2	6	
	1705	0.7	21	1633	0.8	24	1611	0.7	21	1609	0.9	27	1458	0.7	21	
	2014	0.4	12	2022	0.3	9	2131	0.0	0	2202	-0.2	-6	2019	-0.1	-3	
8 Sa	0318	0.9	27	23 Su	0402	0.9	27	8 Tu	0451	0.5	15	23 W	0652	0.4	12	
	0857	0.1	3	0855	0.1	3	0944	0.1	3	0945	0.3	9	0830	0.2	6	
	1705	0.7	21	1644	0.8	24	1645	0.7	21	1646	0.9	27	1530	0.7	21	
	2105	0.4	12	2120	0.2	6	2222	-0.1	-3	2301	-0.3	-9	2103	-0.2	-6	
9 Su	0404	0.8	24	24 M	0504	0.7	21	9 W	0543	0.4	12	24 Th	0823	0.3	9	
	0938	0.1	3	0937	0.2	6	1024	0.1	3	1030	0.2	6	0907	0.2	6	
	1659	0.7	21	1700	0.9	27	1724	0.6	18	1728	0.9	27	1609	0.7	21	
	2200	0.3	9	2222	0.0	0	2317	-0.2	-6	● 2151	-0.3	-9	2151	-0.3	-9	
10 M	0452	0.7	21	25 Tu	0623	0.6	18	10 Th	0817	0.2	6	25 F	0004	-0.3	-9	
	1021	0.1	3	1019	0.2	6	1105	0.1	3	1816	0.8	24	0616	0.4	12	
	1724	0.7	21	1727	0.9	27	1806	0.6	18				0945	0.3	9	
	2258	0.2	6	2328	-0.1	-3							1650	0.7	21	
11 Tu	0545	0.5	15	26 W	0822	0.4	12	11 F	0017	-0.3	-9	26 Sa	0821	0.3	9	
	1105	0.2	6	1105	0.2	6	1852	0.6	18	1908	0.7	21	1022	0.2	6	
	1800	0.7	21	1802	0.9	27	○						1734	0.7	21	
													2340	-0.4	-12	
12 W	0000	0.0	0	27 Th	0037	-0.2	-6	12 Sa	0120	-0.4	-12	12 Sa	1821	0.6	18	
	0649	0.3	9	1006	0.3	9	1940	0.6	18	1152	0.2	6	1845	0.6	18	
	1152	0.2	6	1155	0.2	6				1344	0.1	3				
	● 1841	0.7	21	1844	0.8	24				2007	0.6	18	○			
13 Th	0106	-0.1	-3	28 F	0421	-0.3	-9	13 Su	0521	-0.4	-12	13 M	0042	-0.4	-12	
	1925	0.6	18	1932	0.7	21	2034	0.6	18	1236	0.2	6	1911	0.6	18	
										1454	0.1	3				
										2125	0.5	15				
14 F	0439	-0.2	-6	29 Sa	0536	-0.4	-12	14 M	0630	-0.4	-12	14 M	0147	-0.4	-12	
	2012	0.6	18	2027	0.7	21	2137	0.6	18				2008	0.6	18	
													2236	0.4	12	
15 Sa	0545	-0.3	-9	30 Su	0651	-0.4	-12	15 Tu	0733	-0.3	-9	15 Tu	0248	-0.4	-12	
	2103	0.7	21	1309	0.3	9	1353	0.4	12	1431	0.3	9	1944	0.5	15	
				1502	0.2	6	1543	0.3	9	2257	0.7	21				
				2134	0.6	18										
31 M	0758	-0.4	-12	31 M	1350	0.3	9						31 Th	0005	0.4	12
				1600	0.2	6							0416	0.0	0	
				2329	0.6	18							1304	0.4	12	
													1647	0.0	0	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Vaca Key, Florida Bay, Florida, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm	
1 F	0105	0.5 15		16	0113	0.6 18	1	0157	0.5 15	16	0218	0.6 18	1	0324	0.6 18
	0454	0.1 3		Sa	0432	0.3 9	Su	0451	0.3 9	M	0437	0.5 15	W	0526	0.5 15
	1329	0.5 15		1245	0.7 21	1159	0.6 18	1125	0.9 27	1226	0.9 27	●	1831	-0.2 -6	
	1725	0.0 0		1717	-0.1 -3	1741	-0.1 -3	1753	-0.3 -9				16	0345	0.6 18
2 Sa	0157	0.5 15		17	0214	0.7 21	2	0244	0.6 18	17	0311	0.7 21	2	0407	0.6 18
	0529	0.2 6		Su	0513	0.4 12	M	0528	0.4 12	Tu	0520	0.5 15	Th	0604	0.5 15
	1344	0.5 15		1252	0.8 24	1221	0.7 21	1209	1.0 30	1913	-0.2 -6		1313	1.0 30	
	1800	0.0 0	O	1806	-0.2 -6	1814	-0.2 -6	○	1838	-0.3 -9		1945	-0.1 -3		
3 Su	0243	0.6 18		18	0310	0.7 21	3	0329	0.6 18	18	0400	0.7 21	3	0447	0.7 21
	0605	0.2 6		M	0554	0.5 15	Tu	0604	0.4 12	W	0604	0.5 15	F	0644	0.6 18
	1334	0.6 18		1302	0.9 27	1259	0.8 24	1259	1.1 34	1922	-0.3 -9		1400	1.1 34	
	●	1836	-0.1 -3	1853	-0.3 -9	●	1852	-0.2 -6					1956	-0.2 -6	
4 M	0327	0.6 18		19	0403	0.7 21	4	0413	0.6 18	19	0447	0.6 18	4	0526	0.7 21
	0641	0.3 9		Tu	0635	0.5 15	W	0640	0.5 15	Th	0649	0.5 15	Sa	0727	0.6 18
	1344	0.7 21		1332	1.1 34	1340	0.9 27	1349	1.1 34	2007	-0.2 -6		1447	1.1 34	
	1914	-0.1 -3		1940	-0.3 -9	1933	-0.2 -6	2007	-0.2 -6		2042	-0.2 -6		2111	0.0 0
5 Tu	0409	0.6 18		20	0455	0.7 21	5	0457	0.6 18	20	0532	0.6 18	5	0601	0.7 21
	0717	0.4 12		Su	0716	0.5 15	Th	0716	0.5 15	F	0735	0.5 15	Su	0816	0.6 18
	1415	0.8 24		1413	1.1 34	1423	1.0 30	1439	1.1 34	2052	-0.2 -6		1536	1.1 34	
	1955	-0.2 -6		2027	-0.3 -9	2016	-0.3 -9	2129	-0.1 -3				2129	-0.1 -3	
6 W	0452	0.6 18		21	0547	0.6 18	6	0543	0.6 18	21	0616	0.6 18	6	0634	0.7 21
	0753	0.4 12		Th	0800	0.5 15	F	0755	0.5 15	Sa	0825	0.5 15	M	0913	0.6 18
	1454	0.9 27		1500	1.1 34	1508	1.0 30	1527	1.1 34	2139	-0.1 -3		1626	1.0 30	
	2038	-0.3 -9		2116	-0.3 -9	2103	-0.3 -9	2217	-0.1 -3		2241	0.1 3			
7 Th	0541	0.6 18		22	0642	0.5 15	7	0633	0.6 18	22	0700	0.6 18	7	0702	0.7 21
	0830	0.4 12		F	0847	0.4 12	Sa	0836	0.5 15	Su	0921	0.5 15	Tu	1017	0.5 15
	1536	0.9 27		1548	1.1 34	1554	1.0 30	1616	1.0 30	2227	-0.1 -3		1721	0.8 24	
	2125	-0.3 -9		2206	-0.2 -6	2152	-0.3 -9	2227	-0.1 -3		2307	0.0 0		2329	0.1 3
8 F	0643	0.5 15		23	0740	0.5 15	8	1302	0.8 24	23	0744	0.5 15	8	0724	0.7 21
	0907	0.4 12		Sa	0939	0.4 12	Su	1401	0.8 24	M	1025	0.4 12	W	1130	0.4 12
	1620	0.9 27		1637	1.0 30	1641	0.9 27	1706	0.8 24	2318	0.0 0		1825	0.7 21	
	2216	-0.3 -9		2259	-0.2 -6	2245	-0.2 -6	2318	0.0 0	●	2357	0.1 3			
9 Sa	1705	0.8 24		24	0839	0.4 12	9	0821	0.6 18	24	0825	0.5 15	9	0741	0.7 21
	2311	-0.3 -9		Su	1042	0.3 9	M	1025	0.5 15	Tu	1140	0.3 9	Th	2035	0.5 15
	●	2355	-0.1 -3	2355	-0.1 -3	2339	-0.2 -6	2339	-0.2 -6	○	2357	0.1 3			
10 Su	1754	0.8 24		25	0933	0.4 12	10	0907	0.6 18	25	0011	0.0 0	10	0047	0.2 6
				M	1159	0.3 18	Tu	1139	0.4 12	W	0903	0.5 15	F	0801	0.7 21
				1821	0.6 18	1829	0.7 21	1854	0.4 12	1641	0.1 3		1642	-0.1 -3	
							●			2300	0.4 12		2348	0.3 9	
11 M	0010	-0.3 -9		26	0054	-0.1 -3	11	0035	-0.1 -3	26	0105	0.1 3	11	0138	0.3 9
	1505	0.6 18		Tu	1021	0.4 12	W	0945	0.5 15	Th	0759	0.5 15	Sa	0829	0.8 24
	1554	0.6 18		1332	0.2 6	1300	0.3 9	1608	0.1 3	2237	0.3 9		1511	-0.1 -3	
	●	1846	0.7 21	1919	0.5 15	1942	0.6 18						26	0204	0.2 6
12 Tu	0111	-0.2 -6		27	0153	0.0 0	12	0129	0.0 0	27	0159	0.1 3	12	0018	0.4 12
	1105	0.4 12		W	1101	0.4 12	Th	1017	0.6 18	F	0828	0.5 15	Su	0228	0.3 9
	1308	0.3 9		1557	0.1 3	1417	0.2 6	1703	0.0 0	2357	0.3 9		0905	0.8 24	
	1949	0.6 18		2242	0.4 12	2245	0.5 15	1841	-0.2 -6		1848	-0.2 -6			
13 W	0210	-0.1 -3		28	0246	0.0 0	13	0221	0.2 6	28	0248	0.2 6	13	0120	0.5 15
	1136	0.5 15		Th	1136	0.4 12	F	1041	0.6 18	Sa	0911	0.5 15	M	0318	0.4 12
	1424	0.3 9		1700	0.0 0	1523	0.0 0	1754	-0.1 -3		0950	0.9 27			
	2137	0.5 15									1955	-0.3 -9			
14 Th	0303	0.0 0		29	0003	0.4 12	14	0014	0.5 15	29	0059	0.4 12	14	0213	0.5 15
	1204	0.5 15		F	0333	0.1 3	Sa	0308	0.3 9	W	0332	0.2 6	Tu	0406	0.4 12
	1529	0.2 6		1204	0.5 15	1054	0.7 21	1648	-0.2 -6		1046	0.9 27		1109	0.8 24
				1651	0.0 0	1618	-0.1 -3	1739	-0.4 -12		1731	-0.3 -9			
15 F	0001	0.6 18		30	0104	0.4 12	15	0121	0.6 18	30	0152	0.4 12	15	0301	0.6 18
	0350	0.1 3		Sa	0414	0.2 6	Su	0354	0.4 12	M	0412	0.3 9	W	0453	0.5 15
	1228	0.6 18		1219	0.5 15	1056	0.8 24	1717	-0.2 -6		1149	1.0 30		1204	0.9 27
	1626	0.0 0		1711	-0.1 -3	1707	-0.2 -6	31	0240	0.5 15	○	1821	-0.3 -9		1811	-0.2 -6

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Vaca Key, Florida Bay, Florida, 2011

Times and Heights of High and Low Waters

July			August			September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m 1 F 0348 1257 1853	ft cm 0.6 18 1.0 30 -0.2 -6	h m 16 Sa 0354 0615 1346 1921	ft cm 0.6 18 0.5 15 1.0 30 0.0 0	h m 1 M 0357 0701 1449 1952	ft cm 0.8 24 0.6 18 1.2 37 0.3 9	h m 16 Tu 0347 0737 1526 2009	ft cm 0.9 27 0.4 12 1.0 30 0.4 12	h m 1 Th 0319 0838 1715 2040	ft cm 1.3 40 0.3 9 1.1 34 0.8 24
●									
2 Sa 0420 0621 1348 1936	0.7 21 0.6 18 1.1 34 -0.1 -3	17 Su 0425 0704 1428 2001	0.7 21 0.5 15 1.0 30 0.1 3	2 Tu 0412 0755 1545 2033	0.9 27 0.5 15 1.1 34 0.4 12	17 W 0336 0823 1601 2048	0.9 27 0.4 12 1.0 30 0.5 15	2 F 0347 0932 1824 2122	1.4 43 0.2 6 1.0 30 0.8 24
3 Su 0449 0711 1439 2019	0.7 21 0.6 18 1.1 34 0.0 0	18 M 0449 0753 1509 2041	0.7 21 0.5 15 1.0 30 0.2 6	3 W 0423 0852 1645 2114	1.0 30 0.4 12 1.0 30 0.4 12	18 Th 0350 0910 1640 2128	1.0 30 0.3 9 0.9 27 0.5 15	3 Sa 0425 1030 1947 2206	1.4 43 0.2 6 0.8 24 0.7 21
4 M 0512 0805 1531 2103	0.8 24 0.6 18 1.1 34 0.0 0	19 Tu 0458 0845 1552 2122	0.7 21 0.4 12 0.9 27 0.2 6	4 Th 0440 0951 1756 2156	1.1 34 0.2 6 0.8 24 0.5 15	19 F 0424 0959 1726 2209	1.0 30 0.2 6 0.8 24 0.5 15	4 Su 0508 1131	1.3 40 0.1 3
5 Tu 0530 0903 1625 2147	0.8 24 0.5 15 1.0 30 0.1 3	20 W 0448 0938 1637 2205	0.8 24 0.3 9 0.8 24 0.2 6	5 F 0508 1053 1938 2240	1.1 34 0.1 3 0.7 21 0.5 15	20 Sa 0504 1052 1826 2251	1.0 30 0.2 6 0.6 18 0.5 15	5 M 0557 1236	1.3 40 0.1 3
6 W 0544 1006 1726 2232	0.8 24 0.4 12 0.8 24 0.2 6	21 Th 0507 1034 1726 2249	0.8 24 0.2 6 0.6 18 0.3 9	6 Sa 0544 1200 2127 2328	1.1 34 0.0 0 0.6 18 0.5 15	21 Su 0548 1150	1.0 30 0.1 3	6 Tu 0650 1638 2323	1.2 37 0.2 6 0.7 21
7 Th 0603 1114 1847 2318	0.9 27 0.2 6 0.6 18 0.3 9	22 F 0541 1135 1821 2335	0.8 24 0.1 3 0.5 15 0.3 9	7 Su 0626 1311 2252	1.1 34 -0.1 -3 0.5 15	22 M 0635 1253	0.9 27 0.1 3	7 W 0115 0751 1742	0.6 18 1.1 34 0.2 6
8 F 0630 1227 2124	0.9 27 0.1 3 0.5 15	23 Sa 0622 1239 2212	0.8 24 0.0 0 0.4 12	8 M 0024 0714 1711	0.5 15 1.0 30 -0.1 -3	23 Tu 0725 1658	0.9 27 0.1 3	8 Th 0008 0229 0917 1840	0.7 21 0.6 18 1.0 30 0.3 9
9 Sa 0006 0703 1341 2302	0.3 9 0.9 27 -0.1 -3 0.4 12	24 Su 0025 0707 1345	0.3 9 0.7 21 -0.1 -3	9 Tu 0809 1828	1.0 30 -0.1 -3	24 W 0820 1805	0.9 27 0.1 3	9 F 0048 0333 1145 1926	0.8 24 0.6 18 1.0 30 0.3 9
10 Su 0058 0743 1727	0.3 9 0.9 27 -0.2 -6	25 M 0756 1724	0.7 21 -0.1 -3	10 W 0917 1940	0.9 27 -0.1 -3	25 Th 0923 1908	1.0 30 0.1 3	10 Sa 0124 0428 1248 1711	0.8 24 0.5 15 1.1 34 0.4 12
11 M 0831 1844	0.9 27 -0.3 -9	26 Tu 0848 1834	0.8 24 -0.1 -3	11 Th 0127 0334 1117 2035	0.6 18 0.5 15 1.0 30 0.0 0	26 F 1042 2006	1.0 30 0.2 6	11 Su 0156 0515 1341 1747	0.9 27 0.5 15 1.1 34 0.5 15
12 Tu 0927 1958	0.9 27 -0.3 -9	27 W 0946 1939	0.8 24 -0.1 -3	12 F 0205 0428 1235 2113	0.6 18 0.5 15 1.0 30 0.1 3	27 Sa 0158 0418 1210 1723	0.8 24 0.7 21 1.1 34 0.3 9	12 M 0222 0557 1428 1822	0.9 27 0.5 15 1.1 34 0.6 18
13 W 0156 0344 1039 2058	0.5 15 0.4 12 0.9 27 -0.2 -6	28 Th 1050 2036	0.9 27 -0.1 -3	13 Sa 0241 0519 1328 1817	0.7 21 0.5 15 1.0 30 0.2 6	28 Su 0223 0510 1319 1802	0.9 27 0.6 18 1.2 37 0.4 12	13 Tu 0236 0638 1511 1859	1.0 30 0.5 15 1.1 34 0.7 21
14 Th 0239 0436 1159 2144	0.5 15 0.4 12 1.0 30 -0.1 -3	29 F 1155 1750	1.0 30 0.0 0	14 Su 0312 0606 1412 1854	0.8 24 0.5 15 1.1 34 0.3 9	29 M 0243 0601 1419 1841	1.0 30 0.6 18 1.3 40 0.5 15	14 W 0224 0718 1551 1936	1.1 34 0.4 12 1.1 34 0.7 21
15 F 0318 0526 1300 1842	0.6 18 0.5 15 1.0 30 -0.1 -3	30 Sa 0312 0519 1257 1831	0.7 21 0.6 18 1.1 34 0.1 3	15 M 0336 0652 1451 1931	0.8 24 0.5 15 1.1 34 0.4 12	30 Tu 0256 0652 1516 1920	1.1 34 0.5 15 1.3 40 0.6 18	15 Th 0234 0759 1629 2013	1.2 37 0.4 12 1.1 34 0.8 24
●		31 Su 0337 0609 1353 1911	0.8 24 0.6 18 1.2 37 0.2 6	31 W 0304 0744 1614 2000	1.2 37 0.4 12 1.2 37 0.7 21	31 Th 0225 0821 1728 2007	1.5 46 0.3 9 1.2 37 1.0 30		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Vaca Key, Florida Bay, Florida, 2011

Times and Heights of High and Low Waters

October				November				December					
	Time	Height			Time	Height			Time	Height			
	h m	ft cm		h m	ft cm			h m	ft cm				
1 Sa	0305	1.6 49		16 Su	0314	1.4 43		1 Tu	0417	1.5 46			
	0912	0.2 6		0902	0.3 9		1031	0.4 12	16 W	0423	1.4 43		
	1828	1.1 34		1817	1.1 34		2002	1.0 30	1017	0.2 6	1050	1.2 37	
	2050	1.0 30		2052	1.0 30		2218	0.9 27	1933	1.0 30	1939	0.9 27	
2 Su	0351	1.6 49		17 M	0400	1.4 43		2 W	0509	1.4 43			
	1005	0.3 9		0950	0.3 9		1125	0.4 12	17 Th	0514	1.3 40		
	1935	1.0 30		1924	1.0 30		2055	1.0 30	1109	0.3 9	1140	1.0 30	
	2138	0.9 27		2133	0.9 27		2333	0.8 24	2016	1.0 30	1944	0.9 27	
3 M	0440	1.5 46		18 Tu	0447	1.4 43		3 Th	0604	1.2 37			
	1101	0.3 9		1043	0.3 9		1222	0.5 27	18 F	0610	1.1 34		
	1201	0.3 9		0141	1.1 34		2143	0.9 27	1203	0.4 12	0640	0.8 24	
	2147	0.9 27		0245	1.1 34		1322	0.5 15	2051	1.0 30	1234	0.4 12	
4 Tu	0532	1.4 43		19 W	0141	1.1 34		4 F	0102	0.7 21			
	1201	0.3 9		0536	1.3 40		0705	1.0 30	1932	0.7 21	0344	0.4 12	
	2345	0.8 24		1140	0.3 9		2226	0.9 27	0721	1.0 30	1022	0.6 18	
	0109	0.8 24		20 Th	0227	1.1 34		5 Sa	0338	0.6 18			
5 W	1305	0.4 12		0336	1.1 34		1027	0.9 27	0149	0.5 15	0438	0.2 6	
	2239	0.9 27		0630	1.2 37		1419	0.6 18	1017	0.9 27	1143	0.6 18	
	1241	0.4 12		1241	0.4 12		2304	0.9 27	1351	0.6 18	1425	0.5 15	
	2230	1.0 30		2230	1.0 30		2124	1.0 30	2116	0.8 24	2034	0.8 24	
6 Th	0109	0.8 24		21 F	0046	0.9 27		6 Su	0440	0.5 15			
	0729	1.1 34		0732	1.1 34		1149	0.9 27	0256	0.4 12	0527	0.1 3	
	1410	0.4 12		1341	0.4 12		1510	0.6 18	M	1154	0.7 21	0337	-0.1 -3
	2323	0.9 27		2304	1.0 30		2334	1.0 30	1442	0.7 21	1245	0.5 15	
7 F	0233	0.7 21		22 Sa	0202	0.8 24		7 M	0452	0.4 12			
	1022	1.0 30		0908	1.0 30		1251	0.9 27	0353	0.2 6	0442	0.1 3	
	1507	0.5 15		1436	0.6 18		1555	0.7 21	Tu	1302	1.0 30	0429	-0.2 -6
	2332	1.0 30		2332	1.0 30		2349	1.0 30	1529	0.8 24	1337	0.7 21	
8 Sa	0002	0.9 27		23 Su	0308	0.7 21		8 Tu	0501	0.3 9			
	0342	0.6 18		1141	1.1 34		1344	1.0 30	0443	0.1 3	0505	0.0 0	
	1150	1.0 30		1525	0.7 21		1636	0.8 24	1400	1.0 30	1424	0.8 24	
	1554	0.6 18		2354	1.1 34		2311	1.1 34	1614	0.9 27	1638	0.6 18	
9 Su	0036	1.0 30		24 M	0404	0.5 15		9 W	0528	0.3 9			
	0432	0.5 15		1255	1.2 37		1432	1.0 30	0530	0.0 0	0538	0.0 0	
	1252	1.1 34		1609	0.8 24		1714	0.8 24	Th	1452	1.0 30	0600	-0.2 -6
	1634	0.7 21		2349	1.1 34		2349	1.1 34	1658	0.9 27	1508	0.8 24	
10 M	0104	1.0 30		25 Tu	0007	1.2 37		10 Th	0559	0.3 9			
	0510	0.5 15		0454	0.4 12		1516	1.1 34	0615	0.0 0	0005	1.1 34	
	1345	1.1 34		1356	1.2 37		1750	0.9 27	F	1540	1.1 34	0026	1.2 37
	1712	0.7 21		1651	0.9 27		1731	1.0 30	1742	0.9 27	0642	-0.1 -3	
11 Tu	0121	1.1 34		26 W	0009	1.3 40		11 Sa	0033	1.2 37			
	0545	0.5 15		0542	0.3 9		0635	0.2 6	0659	0.0 0	0654	0.0 0	
	1433	1.1 34		1451	1.3 40		1559	1.1 34	Sa	1625	1.0 30	0626	1.2 37
	O	1749	0.8 24	●	1731	1.0 30		1826	0.9 27	1828	0.9 27	0724	0.0 0
12 W	0108	1.1 34		27 Th	0026	1.4 43		12 Sa	0117	1.3 40			
	0620	0.4 12		0629	0.2 6		0714	0.2 6	0126	1.5 46	0142	1.2 37	
	1518	1.2 37		1544	1.3 40		1640	1.1 34	0744	0.1 3	0215	1.2 37	
	1825	0.9 27		1812	1.1 34		1903	1.0 30	1708	1.0 30	0806	0.1 3	
13 Th	0115	1.2 37		28 F	0102	1.6 49		13 Su	0202	1.4 43			
	0657	0.4 12		0716	0.2 6		0755	0.2 6	0219	1.5 46	0230	1.3 40	
	1600	1.2 37		1634	1.2 37		1721	1.1 34	M	0829	0.2 6	0302	1.1 34
	1901	0.9 27		1854	1.1 34		1941	1.0 30	1749	1.0 30	0819	0.1 3	
14 F	0150	1.3 40		29 Sa	0147	1.6 49		14 M	0248	1.4 43			
	0735	0.3 9		0803	0.2 6		0840	0.2 6	0309	1.4 43	0318	1.3 40	
	1642	1.2 37		1724	1.2 37		1804	1.1 34	Tu	0915	0.2 6	0904	0.1 3
	1938	1.0 30		1938	1.1 34		2022	1.0 30	1828	0.9 27	1757	0.9 27	
15 Sa	0231	1.4 43		30 Su	0236	1.7 52		15 Tu	0335	1.4 43			
	0818	0.3 9		0851	0.2 6		0927	0.2 6	0359	1.3 40	0408	1.2 37	
	1725	1.1 34		1815	1.1 34		1848	1.0 30	1001	0.3 9	0950	0.2 6	
	2015	1.0 30		2025	1.0 30		2109	0.9 27	1905	0.9 27	1817	0.9 27	
31 Sa	0326	1.6 49		31 M	0940	0.3 9		16 O	0449	1.2 37			
	1908	1.0 30		1908	1.0 30		2217	0.9 27	1050	1.0 30	1100	0.2 6	
	2117	0.9 27		2117	0.9 27				1037	0.2 6	1754	0.8 24	
									1834	0.9 27	2359	0.2 6	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Key West, Florida, 2011

Times and Heights of High and Low Waters

January			February			March		
Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0130	-0.3	-9	16 Su 0112	-0.2	-6	1 Tu 0252	-0.3	-9
0822	0.9	27	0800	0.8	24	0927	0.9	27
1222	0.4	12	1156	0.4	12	1359	0.1	3
1925	1.9	58	1851	1.7	52	2055	1.7	52
2 Su 0220	-0.4	-12	17 M 0157	-0.4	-12	2 W 0326	-0.3	-9
0908	0.9	27	0843	0.8	24	0957	1.0	30
1314	0.3	9	1249	0.3	9	1446	0.1	3
2015	2.0	61	1944	1.8	55	● 2133	1.7	52
3 M 0305	-0.4	-12	18 Tu 0239	-0.5	-15	3 Th 0357	-0.3	-9
0947	0.9	27	0921	0.9	27	1024	1.1	34
1404	0.3	9	1340	0.2	6	1530	0.0	0
2100	1.9	58	2034	1.9	58	2208	1.6	49
4 Tu 0345	-0.4	-12	19 W 0319	-0.5	-15	4 F 0427	-0.2	-6
1023	1.0	30	0958	1.0	30	1050	1.2	37
1451	0.2	6	1431	0.1	3	1612	0.0	0
● 2142	1.9	58	○ 2122	2.0	61	2243	1.6	49
5 W 0423	-0.3	-9	20 Th 0357	-0.5	-15	5 Sa 0456	-0.2	-6
1056	1.0	30	1034	1.1	34	1116	1.2	37
1537	0.2	6	1522	0.0	0	1653	0.0	0
2220	1.8	55	2211	2.0	61	2319	1.4	43
6 Th 0459	-0.2	-6	21 F 0435	-0.5	-15	6 Su 0524	-0.1	-3
1127	1.1	34	1110	1.2	37	1143	1.3	40
1623	0.2	6	1616	-0.1	-3	1735	0.0	0
2258	1.8	55	2301	1.9	58	2357	1.3	40
7 F 0533	-0.2	-6	22 Sa 0513	-0.4	-12	7 M 0551	0.0	0
1158	1.2	37	1146	1.4	43	1212	1.3	40
1709	0.3	9	1712	-0.1	-3	1819	0.0	0
2337	1.6	49	2352	1.7	52	1905	-0.4	-12
8 Sa 0607	-0.1	-3	23 Su 0551	-0.2	-6	8 Tu 0038	1.1	34
1230	1.2	37	1225	1.5	46	0617	0.1	3
1757	0.3	9	1812	-0.2	-6	1244	1.3	40
9 Su 0017	1.5	46	24 M 0047	1.4	43	1908	0.0	0
0640	0.1	3	0631	-0.1	-3	9 W 0124	1.0	30
1303	1.3	40	1306	1.5	46	0645	0.2	6
1850	0.3	9	1918	-0.2	-6	1320	1.3	40
10 M 0102	1.3	40	24 F 0220	0.8	24	2005	0.0	0
0712	0.2	6	0712	0.1	3	9 Th 0249	0.8	24
1338	1.3	40	1353	1.6	49	0721	0.2	6
1950	0.3	9	2031	-0.2	-6	1414	1.6	49
11 Tu 0154	1.1	34	26 W 0301	0.9	27	● 2131	-0.2	-6
0746	0.3	9	0757	0.2	6	11 F 0335	0.6	18
1418	1.3	40	1448	1.6	49	0758	0.4	12
2059	0.2	6	○ 2151	-0.2	-6	1457	1.3	40
12 W 0258	0.9	27	27 Th 0432	0.7	21	○ 2231	-0.1	-3
0823	0.4	12	0851	0.3	9	12 Sa 0515	0.6	18
1504	1.3	40	1554	1.6	49	0858	0.4	12
● 2212	0.1	3	2312	-0.2	-6	1605	1.4	43
13 Th 0420	0.8	24	28 F 0607	0.6	18	2343	-0.1	-3
0907	0.4	12	0954	0.3	9	13 Su 0640	0.6	18
1556	1.4	43	1708	1.6	49	1015	0.4	12
2321	0.0	0	1820	1.6	49	1720	1.5	46
14 F 0553	0.7	21	29 Sa 0025	-0.3	-9	1829	1.6	49
1001	0.5	15	0720	0.7	21	14 M 0042	-0.2	-6
1655	1.4	43	1103	0.3	9	0734	0.7	21
			1820	1.6	49	1128	0.4	12
15 Sa 0021	-0.1	-3	30 M 0125	-0.3	-9	1829	1.6	49
0707	0.7	21	0812	0.7	21	15 Tu 0130	-0.3	-9
1100	0.5	15	1209	0.3	9	0814	0.8	24
1754	1.5	46	1921	1.7	52	1232	0.2	6
			31 M 0213	-0.3	-9	1930	1.7	52
			0853	0.8	24			
			1307	0.2	6			
			2012	1.7	52			

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Key West, Florida, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0211	0.2	6	16	0130	0.1	3	1	0150	0.4	12	16	0209	0.4	12
	0836	1.4	43	Sa	0802	1.8	55	Su	0815	1.7	52	W	0850	1.9	58
	1429	0.0	0	Sa	1412	-0.4	-12	M	1450	-0.2	-6	W	1545	-0.4	-12
	2106	1.4	43		2103	1.5	46		2126	1.2	37	●	2230	1.0	30
2 Sa	0239	0.2	6	17	0210	0.2	6	2	0220	0.4	12	17	0246	0.4	12
	0900	1.5	46	Su	0841	2.0	61	M	0845	1.7	52	Th	0928	1.9	58
	1507	-0.1	-3	Su	1505	-0.6	-18	Tu	1525	-0.3	-9	F	1623	-0.4	-12
	2141	1.4	43	○	2156	1.4	43		2204	1.2	37		2310	1.0	30
3 Su	0306	0.2	6	18	0249	0.2	6	3	0249	0.4	12	18	0300	0.3	9
	0925	1.6	49	M	0921	2.1	64	Tu	0917	1.8	55	W	0944	2.2	67
	1543	-0.2	-6	M	1556	-0.7	-21		1601	-0.3	-9		1638	-0.6	-18
	●	2216	1.3	40		2246	1.3	40	●	2242	1.2	37		2325	1.1	34
4 M	0332	0.3	9	19	0330	0.2	6	4	0319	0.4	12	19	0346	0.3	9
	0952	1.7	52	Tu	1004	2.1	64	W	0950	1.8	55	Th	1031	2.1	64
	1618	-0.2	-6	Tu	1648	-0.7	-21		1637	-0.3	-9		1727	-0.5	-15
	2253	1.3	40		2335	1.2	37		2322	1.1	34				
5 Tu	0358	0.3	9	20	0411	0.2	6	5	0351	0.4	12	20	0011	1.0	30
	1020	1.7	52	W	1048	2.1	64	Th	1025	1.8	55	W	0434	0.3	9
	1653	-0.3	-9	W	1740	-0.6	-18		1716	-0.3	-9		1119	2.0	61
	2330	1.2	37									1816	-0.3	-9	
6 W	0425	0.3	9	21	0024	1.1	34	6	0004	1.1	34	21	0057	1.0	30
	1051	1.7	52	Th	0454	0.3	9	W	0425	0.5	15	Th	0525	0.4	12
	1731	-0.3	-9	Th	1135	2.0	61		1102	1.8	55		1208	1.9	58
					1834	-0.4	-12		1759	-0.3	-9		1906	-0.2	-6
7 Th	0011	1.1	34	22	0116	1.0	30	7	0050	1.0	30	22	0146	1.0	30
	0454	0.4	12	F	0542	0.3	9	Sa	0505	0.5	15	Tu	0623	0.5	15
	1124	1.7	52	F	1227	1.9	58		1144	1.8	55		1259	1.7	52
	1814	-0.2	-6	F	1933	-0.2	-6		1846	-0.2	-6		1957	0.0	0
8 F	0057	1.0	30	23	0214	0.9	27	8	0141	1.0	30	23	0237	1.1	34
	0526	0.4	12	Sa	0637	0.4	12	Su	0554	0.5	15	W	0732	0.5	15
	1202	1.6	49	Sa	1323	1.7	52		1232	1.7	52	M	1355	1.5	46
	1903	-0.2	-6	Sa	2035	-0.1	-3		1938	-0.1	-3		2047	0.1	3
9 Sa	0151	0.9	27	24	0320	0.9	27	9	0235	1.0	30	24	0329	1.2	37
	0605	0.5	15	Sa	0747	0.5	15	M	0655	0.6	18	Th	0851	0.5	15
	1247	1.6	49	Sa	1430	1.5	46		1331	1.6	49		1500	1.3	40
	2001	-0.1	-3	○	2138	0.1	3		2034	0.0	0		2137	0.2	6
10 Su	0256	0.8	24	25	0429	1.0	30	10	0331	1.1	34	25	0418	1.3	40
	0657	0.5	15	M	0912	0.6	18	Tu	0814	0.6	18	W	1011	0.5	15
	1344	1.6	49	M	1548	1.4	43		1444	1.5	46		1615	1.2	37
	2108	0.0	0	M	2237	0.2	6	○	2130	0.1	3		2223	0.3	9
11 M	0409	0.9	27	26	0528	1.1	34	11	0424	1.2	37	26	0503	1.4	43
	0812	0.6	18	Tu	1037	0.5	15	W	0940	0.4	12	Th	1121	0.4	12
	1459	1.5	46	Tu	1710	1.3	40		1610	1.4	43		1735	1.1	34
	●	2215	0.0	0		2328	0.3	9		2224	0.2	6		2307	0.4
12 Tu	0514	1.0	30	27	0613	1.2	37	12	0512	1.4	43	27	0610	1.9	58
	0943	0.5	15	W	1148	0.4	12	Th	1101	0.2	6	W	1220	0.2	6
	1627	1.5	46	W	1822	1.3	40		1738	1.3	40		1844	1.1	34
	2314	0.1	3									2347	0.5	15	
13 W	0604	1.1	34	28	0010	0.3	9	13	0558	1.6	49	28	0621	1.6	49
	1106	0.4	12	Th	0648	1.4	43	W	1210	0.0	0	M	0702	2.0	61
	1752	1.5	46	Th	1245	0.3	9		1855	1.3	40		1400	-0.5	-15
				Th	1919	1.3	40					2054	1.0	30	
14 Th	0004	0.1	3	29	0047	0.4	12	14	0001	0.3	9	29	0024	0.5	15
	0646	1.3	40	F	0718	1.5	46	Th	0642	1.8	55	F	0657	1.6	49
	1216	0.1	3	F	1332	0.1	3		1310	-0.3	-9		1351	-0.1	-3
	1904	1.6	49	F	2006	1.3	40		2001	1.3	40		2028	1.0	30
15 F	0049	0.1	3	30	0120	0.4	12	15	0047	0.3	9	30	0059	0.5	15
	0724	1.6	49	Sa	0747	1.6	49	Su	0727	2.0	61	W	0734	1.7	52
	1317	-0.1	-3	Sa	1413	0.0	0		1406	-0.5	-15	M	1431	-0.2	-6
	2007	1.6	49	Sa	2048	1.3	40		2059	1.2	37		2110	1.0	30
												31	0134	0.5	15
												Tu	0812	1.8	55
												Tu	1508	-0.3	-9
												Tu	2150	1.0	30

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Key West, Florida, 2011

Times and Heights of High and Low Waters

July				August				September									
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height						
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm						
1 F 0223 0914 1605 ● 2248	0.4 2.0 -0.4 1.1	12	16 Sa 0319 1008 1644 2317	0.3 2.0 -0.2 1.2	9 61 -6 37	1 M 0352 1038 1650 2324	0.2 2.1 -0.1 1.6	6 64 -3 49	16 Tu 0440 1107 1708 2329	0.3 1.8 0.3 1.7	9 55 9 52	1 Th 0535 1216 1727	0.0 1.7 0.5	0 52 15	16 F 0539 1206 1717 2344	0.4 1.6 0.8 2.0	12 49 24 61
2 Sa 0309 0959 1643 2326	0.4 2.0 -0.4 1.2	12	17 Su 0408 1048 1719 2349	0.3 1.9 -0.1 1.3	9 58 -3 40	2 Tu 0447 1128 1726	0.1 1.9 0.0	3 58 0	17 W 0523 1145 1737 2359	0.3 1.7 0.4 1.7	9 52 12 52	2 F 0002 0635 1313 1808	2.2 0.0 1.5 0.6	67 0 46 18	17 Sa 0623 1250 1745	0.4 1.5 0.8	12 46 24
3 Su 0358 1044 1721	0.3 2.0 -0.3	9	18 M 0457 1127 1753	0.3 1.8 0.0	9 55 0	3 W 0001 0545 1221 1804	1.7 0.1 1.7 0.2	52 3 52 6	18 Th 0608 1225 1805	0.4 1.5 0.5	12 46 15	3 Sa 0050 0742 1419 1853	2.2 0.1 1.3 0.7	67 3 40 21	18 Su 0021 0714 1342 1817	2.0 0.5 1.3 0.9	61 15 40 27
4 M 0004 0452 1133 1800	1.3 0.3 1.9 -0.2	40	19 Tu 0020 0547 1207 1826	1.4 0.4 1.6 0.1	43 12 49 3	4 Th 0040 0647 1319 1843	1.8 0.1 1.5 0.3	55 3 46 9	19 F 0031 0658 1310 1834	1.7 0.4 1.4 0.6	52 12 43 18	4 Su 0147 0858 1539 1949	2.2 0.2 1.1 0.8	67 6 34 24	19 M 0106 0817 1450 1900	1.9 0.5 1.2 1.0	58 15 37 30
5 Tu 0042 0550 1225 1840	1.4 0.3 1.7 -0.1	43	20 W 0052 0641 1250 1859	1.4 0.4 1.4 0.3	43 12 43 9	5 F 0125 0756 1425 1926	1.9 0.1 1.2 0.4	58 3 37 12	20 Sa 0108 0754 1403 1905	1.7 0.4 1.2 0.7	52 12 37 21	5 M 0256 1019 1709 2100	2.1 0.3 1.1 0.8	64 9 34 24	20 Tu 0202 0931 1614 2004	1.9 0.6 1.2 1.0	58 18 37 30
6 W 0122 0655 1323 1921	1.5 0.2 1.5 0.1	46	21 Th 0126 0739 1339 1932	1.5 0.4 1.3 0.4	46 12 40 12	6 Sa 0216 0913 1546 ● 2016	2.0 0.1 1.0 0.5	61 3 30 15	21 Su 0152 0902 1512 ● 1944	1.7 0.4 1.1 0.8	52 12 34 24	6 Tu 0418 1135 1824 2220	2.1 0.3 1.2 0.8	64 9 37 24	21 W 0312 1043 1732 2130	1.9 0.5 1.3 1.0	58 15 40 30
7 Th 0205 0808 1430 2005	1.6 0.2 1.3 0.2	49	22 F 0204 0844 1436 2007	1.5 0.4 1.1 0.5	46 12 34 15	7 Su 0317 1033 1719 2116	2.0 0.1 0.9 0.6	61 3 27 18	22 M 0246 1018 1642 2040	1.7 0.4 1.0 0.8	52 12 30 24	7 W 0539 1236 1917 2335	2.1 0.3 1.3 0.8	64 9 40 24	22 Th 0431 1142 1826 2252	2.0 0.5 1.4 1.0	61 15 43 30
8 F 0253 0925 1551 ● 2053	1.7 0.1 1.1 0.3	52	23 Sa 0247 0954 1548 ● 2047	1.5 0.3 0.9 0.6	46 9 27 18	8 M 0429 1150 1841 2224	2.0 0.0 0.9 0.6	61 0 27 18	23 Tu 0351 1129 1810 2153	1.8 0.4 1.0 0.8	55 12 30 24	8 Th 0646 1322 1958	2.1 0.4 1.4	64 12 43	23 F 0545 1228 1906	2.1 0.5 1.6	64 15 49
9 Sa 0346 1043 1723 2146	1.8 0.0 0.9 0.4	55	24 Su 0338 1104 1718 2136	1.6 0.2 0.9 0.6	49 6 27 18	9 Tu 0543 1255 1941 2333	2.0 0.0 1.0 0.6	61 0 30 18	24 W 0502 1226 1908 2306	1.9 0.3 1.1 0.8	58 12 34 24	9 F 0039 0740 1359 2031	0.7 2.1 0.4 1.6	21 64 12 49	24 Sa 0000 0650 1309 1941	0.8 2.2 0.5 1.8	24 67 15 55
10 Su 0447 1156 1847 2243	1.9 -0.2 0.9 0.4	58	25 M 0435 1207 1842 2233	1.6 0.1 0.9 0.6	49 3 27 18	10 W 0650 1347 2027	2.0 0.0 1.1	61 0 34	25 Th 0608 1312 1950	2.0 0.2 1.2	61 6 37	10 Sa 0133 0825 1431 2100	0.6 2.1 0.4 1.7	18 64 52 52	25 Su 0059 0748 1346 2015	0.6 2.2 0.5 2.0	18 67 15 61
11 M 0550 1300 1953 2343	2.0 -0.3 0.9 0.4	61	26 Tu 0535 1300 1941 2331	1.7 0.0 0.9 0.6	52 0 27 18	11 Th 0036 0747 1429 2105	0.5 2.1 0.0 1.2	15 64 0 37	26 F 0010 0707 1351 2025	0.7 2.1 0.2 1.4	21 64 6 43	11 Su 0220 0904 1500 2125	0.5 2.1 0.5 1.8	15 64 55 55	26 M 0153 0842 1422 2049	0.3 2.2 0.5 2.2	9 67 15 67
12 Tu 0652 1356 2045	2.0 -0.3 0.9	61	27 W 0633 1346 2025	1.8 -0.1 1.0	55 -3 30	12 F 0133 0835 1505 2138	0.5 2.1 0.0 1.3	15 64 0 40	27 Sa 0107 0801 1427 2059	0.6 2.2 0.1 1.6	18 67 3 49	12 M 0302 0940 1529 2150	0.5 2.0 0.5 1.9	15 61 15 58	27 Tu 0245 0934 1459 ● 2125	0.1 2.2 0.5 2.3	3 67 15 70
13 W 0041 0749 1445 2129	0.4 2.1 -0.3 1.0	12	28 Th 0026 0725 1425 2104	0.6 1.9 -0.1 1.1	18 58 -3 34	13 Sa 0224 0917 1538 ● 2208	0.4 2.1 0.1 1.4	12 64 3 43	28 Su 0201 0852 1503 ● 2132	0.4 2.3 0.1 1.7	12 70 3 52	13 M 0342 1014 1556 2215	0.4 1.9 0.6 2.0	12 58 18 61	28 W 0337 1025 1536 2203	0.0 2.1 0.6 2.5	0 64 18 76
14 Th 0136 0840 1528 2208	0.4 2.1 -0.3 1.0	12	29 F 0118 0815 1502 2139	0.5 2.1 -0.2 1.2	15 64 -6 37	14 Su 0311 0955 1609 2235	0.4 2.0 0.2 1.5	12 61 6 46	29 M 0253 0942 1538 2206	0.2 2.2 0.2 1.9	6 67 6 58	14 W 0420 1049 1623 2241	0.4 1.8 0.6 2.1	12 55 18 61	29 Th 0429 1116 1614 2245	-0.1 1.9 0.6 2.5	-3 58 18 76
15 F 0228 0926 1607 ● 2243	0.3 2.1 -0.3 1.1	9	30 F 0209 0903 1538 ● 2214	0.4 2.1 -0.2 1.3	12 64 -6 40	15 M 0356 1031 1639 2302	0.4 1.9 0.2 1.6	12 64 6 49	30 Tu 0345 1032 1613 2241	0.1 2.1 0.3 2.1	3 64 9 64	15 Th 0459 1126 1650 2311	0.3 1.7 0.7 2.0	9 52 21 61	30 F 0524 1208 1654 2332	-0.1 1.7 0.7 2.5	-3 52 21 76
			31 Su 0300 0950 1614 2249	0.3 2.1 -0.2 1.5	9 64 -6 46				31 W 0439 1123 1649 2320	0.0 2.0 0.4 2.2	0 61 12 67						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Key West, Florida, 2011

Times and Heights of High and Low Waters

October			November			December					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0622	0.0	0	16 Su 0557	0.4	12	1 Tu 0104	2.2	67	16 Th 0013	2.0	61
1304	1.5	46	1237	1.5	46	0810	0.4	12	0712	0.3	9
1738	0.8	24	1708	0.9	27	1453	1.4	43	1405	1.4	43
			2347	2.1	64	1921	0.9	27	1828	0.9	27
2 Su 0024	2.4	73	17 M 0645	0.4	12	2 W 0212	2.1	64	17 Th 0108	2.0	61
0726	0.2	6	1329	1.4	43	0914	0.5	15	0805	0.4	12
1408	1.4	43	1746	1.0	30	1600	1.4	43	1459	1.4	43
1828	0.8	24				2046	0.9	27	1943	0.9	27
3 M 0124	2.3	70	18 Tu 0032	2.1	64	3 Th 0330	1.9	58	18 F 0216	1.8	55
0838	0.4	12	0742	0.5	15	1014	0.6	18	0900	0.5	15
1523	1.3	40	1432	1.4	43	1701	1.6	49	1551	1.5	46
● 1932	0.9	27	1836	1.1	34	2214	0.9	27	2109	0.8	24
4 Tu 0237	2.2	67	19 W 0128	2.0	61	4 F 0452	1.8	55	19 Sa 0338	1.7	52
0954	0.5	15	0847	0.6	18	1106	0.7	21	0954	0.5	15
1644	1.3	40	1541	1.4	43	1750	1.7	52	1640	1.7	52
2054	1.0	30	● 1948	1.1	34	2328	0.8	24	2230	0.6	18
5 W 0402	2.1	64	20 Th 0239	2.0	61	5 Sa 0605	1.7	52	20 Su 0505	1.6	49
1103	0.6	18	0952	0.6	18	1150	0.7	21	1045	0.6	18
1751	1.4	43	1645	1.5	46	1829	1.8	55	1726	1.9	58
2222	1.0	30	2118	1.1	34				2341	0.4	12
6 Th 0524	2.0	61	21 F 0402	2.0	61	6 Su 0027	0.6	18	21 M 0624	1.6	49
1159	0.6	18	1049	0.6	18	0704	1.7	52	1133	0.6	18
1840	1.6	49	1735	1.6	49	1228	0.8	24	1811	2.1	64
2337	0.9	27	2242	0.9	27	1901	1.9	58			
7 F 0631	2.0	61	22 Sa 0524	2.0	61	7 M 0115	0.5	15	22 Tu 0042	0.1	3
1241	0.7	21	1138	0.6	18	0752	1.7	52	0732	1.6	49
1918	1.7	52	1816	1.8	55	1302	0.8	24	1219	0.6	18
			2351	0.7	21	1931	2.0	61	1857	2.2	67
8 Sa 0038	0.8	24	23 Su 0636	2.0	61	8 Tu 0157	0.4	12	23 W 0138	-0.2	-6
0725	2.0	61	1221	0.6	18	0833	1.6	49	0831	1.5	46
1317	0.7	21	1854	2.0	61	1334	0.8	24	1304	0.6	18
1949	1.9	58				1959	2.1	64	1943	2.4	73
9 Su 0128	0.6	18	24 M 0050	0.4	12	9 W 0234	0.2	6	24 Th 0230	-0.3	-9
0810	2.0	61	0738	2.0	61	0911	1.6	49	0923	1.5	46
1348	0.7	21	1302	0.7	21	1404	0.8	24	1349	0.6	18
2016	2.0	61	1932	2.2	67	2029	2.1	64	2031	2.5	76
10 M 0211	0.5	15	25 Tu 0145	0.1	3	10 F 0310	0.2	6	25 F 0321	-0.4	-12
0849	1.9	58	0835	2.0	61	0947	1.6	49	1011	1.4	43
1418	0.7	21	1341	0.7	21	1434	0.8	24	1435	0.5	15
2041	2.1	64	2011	2.4	73	● 2101	2.2	67	● 2119	2.5	76
11 Tu 0249	0.4	12	26 W 0237	-0.1	-3	11 F 0345	0.1	3	26 Sa 0411	-0.4	-12
0925	1.9	58	0928	1.9	58	1023	1.5	46	1058	1.3	40
1446	0.8	24	1421	0.7	21	1504	0.8	24	1521	0.5	15
○ 2106	2.1	64	● 2052	2.6	79	2134	2.2	67	2208	2.5	76
12 W 0326	0.3	9	27 Th 0328	-0.2	-6	12 Sa 0421	0.1	3	27 Su 0501	-0.3	-9
1000	1.8	55	1018	1.8	55	1101	1.5	46	1143	1.3	40
1513	0.8	24	1501	0.7	21	1535	0.8	24	1610	0.5	15
2133	2.2	67	2135	2.6	79	2209	2.2	67	2258	2.4	73
13 Th 0402	0.3	9	28 F 0420	-0.2	-6	13 Su 0459	0.1	3	28 M 0551	-0.1	-3
1035	1.8	55	1108	1.7	52	1141	1.4	43	1230	1.3	40
1541	0.8	24	1543	0.7	21	1608	0.8	24	1702	0.6	18
2202	2.2	67	2222	2.6	79	2246	2.1	64	2349	2.2	67
14 F 0438	0.3	9	29 Sa 0513	-0.1	-3	14 M 0539	0.2	6	29 Tu 0641	0.0	0
1112	1.7	52	1158	1.5	46	1225	1.4	43	1318	1.3	40
1608	0.8	24	1627	0.7	21	1646	0.8	24	1800	0.6	18
2234	2.2	67	2311	2.6	79	2327	2.1	64			
15 Sa 0516	0.3	9	30 Su 0608	0.0	0	15 Tu 0624	0.2	6	30 W 0042	2.0	61
1152	1.6	49	1251	1.4	43	1313	1.4	43	0732	0.2	6
1637	0.9	27	1716	0.8	24	1731	0.9	27	0641	0.0	0
2308	2.2	67							1409	1.3	40
			31 M 0005	2.4	73				1907	0.7	21
			0707	0.2	6						
			1348	1.4	43						
			1811	0.8	24						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Naples, Florida, 2011

Times and Heights of High and Low Waters

January				February				March				
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	
h m	ft	cm		h m	ft	cm		h m	ft	cm		
1 Sa 0358	-0.7	-21		16 Su 0347	-0.5	-15		1 Tu 0516	-0.7	-21		
1139	2.1	64		1056	2.0	61		16 W 0450	-0.9	-27		
1551	1.5	46		1528	1.5	46		1 Tu 1209	2.0	70		
2136	3.0	91		2121	2.8	85		16 W 1129	2.3	70		
								1 Tu 1649	0.8	24		
								16 W 2242	3.1	94		
2 Su 0447	-0.8	-24		17 M 0432	-0.8	-24		2 W 0554	-0.6	-18		
1211	2.1	64		1130	2.1	64		17 Th 0532	-0.9	-27		
1642	1.4	43		1618	1.4	43		2 W 1223	2.1	64		
2222	3.1	94		2205	3.0	91		17 Th 1757	0.8	24		
								2 W 2339	2.8	85		
3 M 0532	-0.8	-24		18 Tu 0515	-1.0	-30		3 Th 0629	-0.5	-15		
1234	2.2	67		1203	2.2	67		18 F 1227	0.8	24		
1728	1.3	40		1705	1.2	37		18 F 1822	0.1	3		
2304	3.1	94		2246	3.1	94		O				
4 Tu 0614	-0.8	-24		19 W 0556	-1.1	-34		4 F 0015	2.7	82		
1257	2.2	67		1236	2.3	70		19 Sa 0016	3.0	91		
1812	1.1	34		1751	0.9	27		19 Sa 0653	-0.6	-18		
● 2343	3.0	91		O 2329	3.2	98		19 F 1258	2.7	82		
								19 F 1909	-0.2	-6		
5 W 0652	-0.7	-21		20 Th 0637	-1.1	-34		5 Sa 0051	2.6	79		
1323	2.2	67		1309	2.4	73		20 Su 0107	2.9	88		
1852	1.0	30		1837	0.7	21		5 Sa 0732	-0.2	-6		
								20 Su 0732	-0.3	-9		
								5 Sa 1330	2.8	85		
								5 Sa 1946	0.4	12		
									20 Su 1958	-0.4	-12	
6 Th 0022	2.9	88		21 F 0014	3.1	94		6 Su 0129	2.4	73		
0729	-0.5	-15		0717	-0.9	-27		21 M 0203	2.6	79		
1352	2.3	70		1344	2.5	76		6 Su 0800	0.1	3		
1932	0.9	27		1924	0.5	15		21 M 1406	2.4	73		
								21 M 2024	0.3	9		
								6 Su 0810	0.1	3		
								6 Su 1405	2.8	85		
								6 Su 2051	-0.4	-12		
7 F 0102	2.7	82		22 Sa 0104	2.9	88		7 M 0212	2.2	67		
0804	-0.3	-9		0757	-0.7	-21		22 Tu 0307	2.2	67		
1425	2.3	70		1419	2.6	79		7 M 0825	0.3	9		
2013	0.9	27		2014	0.3	9		22 Tu 1436	2.4	73		
								7 M 2107	0.3	9		
								7 M 2144	2.8	85		
								7 M 2149	-0.4	-12		
8 Sa 0146	2.5	76		23 Su 0201	2.7	82		8 Tu 0302	2.0	61		
0838	-0.1	-3		0838	-0.3	-9		23 W 0844	0.6	18		
1501	2.4	73		1455	2.6	79		8 Tu 1505	2.4	73		
2056	0.8	24		2109	0.1	3		23 W 2158	0.3	9		
								23 W 2257	-0.3	-9		
9 Su 0235	2.3	70		24 M 0307	2.3	70		9 W 0405	1.7	52		
0910	0.3	9		0920	0.2	6		24 Th 0856	0.9	27		
1538	2.4	73		1534	2.7	82		24 Th 1534	2.4	73		
2147	0.8	24		2211	0.0	0		24 Th 2302	0.3	9		
10 M 0334	2.0	61		25 Tu 0423	2.0	61		10 Th 0523	1.5	46		
0941	0.6	18		1005	0.6	18		25 F 0908	1.1	34		
1617	2.4	73		1618	2.7	82		25 F 1610	2.3	70		
2249	0.7	21		2322	-0.1	-3		25 F 1753	2.5	76		
								25 F 1753	2.5	76		
11 Tu 0444	1.8	55		26 W 0551	1.7	52		11 F 0016	0.2	6		
1009	0.9	27		1100	1.1	34		26 F 0658	1.5	46		
1658	2.4	73		1711	2.6	79		26 F 0927	1.3	40		
2359	0.5	15						26 F 1706	2.3	70		
12 W 0604	1.6	49		27 Th 0037	-0.2	-6		12 Su 0126	-0.2	-6		
1033	1.2	37		0748	1.6	49		12 Su 1100	1.9	58		
1744	2.4	73		1214	1.3	40		12 Su 1436	1.4	43		
●				1816	2.6	79		12 Su 2035	2.5	76		
								12 Su 2035	2.5	76		
13 Th 0106	0.3	9		28 F 0148	-0.3	-9		13 M 0226	-0.3	-9		
0735	1.6	49		1031	1.7	52		28 M 1001	1.7	52		
1134	1.4	43		1333	1.5	46		28 M 1403	1.6	49		
1838	2.4	73		1930	2.6	79		28 M 2003	2.5	76		
								28 M 2133	2.6	79		
14 F 0206	0.1	3		29 Sa 0251	-0.5	-15		14 M 0318	-0.5	-15		
0909	1.7	52		1120	1.9	58		14 M 1031	1.9	58		
1325	1.5	46		1443	1.5	46		14 M 1507	1.4	43		
1937	2.5	76		2039	2.7	82		14 M 2104	2.7	82		
15 Sa 0259	-0.2	-6		30 Su 0346	-0.6	-18		15 Tu 0406	-0.7	-21		
1016	1.8	55		1150	2.0	61		15 Tu 1100	2.1	64		
1432	1.6	49		1542	1.3	40		15 Tu 1600	1.1	34		
2032	2.6	79		2136	2.8	85		15 Tu 2155	2.9	88		
31 M 0434	-0.6	-18										
1204	2.0	61										
1633	1.2	37										
2222	2.8	85										

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Naples, Florida, 2011

Times and Heights of High and Low Waters

April				May				June							
	Time	Height			Time	Height			Time	Height					
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm				
1 <i>F</i>	0456	0.4	12	16	0432	0.3	9	1	0452	1.0	30	16	0018	2.3	70
	1054	2.5	76	<i>Sa</i>	1030	3.0	91	<i>Su</i>	1038	2.9	88	<i>W</i>	0525	1.5	46
	1716	0.3	9		1702	-0.4	-12		1728	-0.1	-3	<i>M</i>	1028	3.4	104
	2319	2.5	76		2322	2.8	85		2345	2.4	73		1737	-0.9	-27
2 <i>Sa</i>	0528	0.5	15	17	0516	0.5	15	2	0524	1.1	34	2	0100	2.3	70
	1118	2.7	82	<i>Su</i>	1101	3.2	98	<i>M</i>	1104	3.0	91	<i>Th</i>	0601	1.5	46
	1751	0.1	3		1750	-0.8	-24		1804	-0.3	-9		1129	3.2	98
	2354	2.5	76	<i>O</i>									1825	-1.0	-30
3 <i>Su</i>	0558	0.6	18	18	0014	2.8	85	3	0023	2.4	73	18	0106	2.5	76
	1142	2.8	85	<i>M</i>	0558	0.7	21	<i>Tu</i>	0554	1.2	37	3	0144	2.3	70
	1825	-0.1	-3		1134	3.3	101		1127	3.0	91	<i>F</i>	0618	1.3	40
	<i>O</i>				1838	-0.9	-27	<i>O</i>	1840	-0.4	-12		1147	3.5	107
4 <i>M</i>	0029	2.5	76	19	0106	2.6	79	4	0104	2.3	70	4	0231	2.3	70
	0626	0.7	21	<i>Tu</i>	0640	0.9	27	<i>W</i>	0623	1.3	40	<i>Sa</i>	0718	1.5	46
	1204	2.8	85		1209	3.4	104		1148	3.1	94		1230	3.4	104
	1859	-0.2	-6		1927	-1.0	-30		1918	-0.4	-12		1959	-0.8	-24
5 <i>Tu</i>	0108	2.4	73	20	0201	2.4	73	5	0150	2.3	70	5	0318	2.4	73
	0651	0.9	27	<i>W</i>	0721	1.1	34	<i>Th</i>	0651	1.4	43	<i>Su</i>	0805	1.5	46
	1224	2.8	85		1248	3.3	101		1211	3.1	94		1318	3.2	98
	1935	-0.3	-9		2016	-0.8	-24		1958	-0.4	-12		2047	-0.5	-15
6 <i>W</i>	0150	2.3	70	21	0301	2.3	70	6	0241	2.2	67	6	0404	2.4	73
	0714	1.1	34	<i>Th</i>	0804	1.3	40	<i>F</i>	0722	1.5	46	<i>M</i>	0900	1.4	43
	1243	2.8	85		1334	3.2	98		1241	3.0	91		1416	2.8	85
	2014	-0.3	-9		2108	-0.6	-18		2041	-0.4	-12		2155	-0.1	-3
7 <i>Th</i>	0241	2.1	64	22	0403	2.1	64	7	0338	2.2	67	7	0449	2.5	76
	0734	1.2	37	<i>F</i>	0851	1.4	43	<i>Sa</i>	0759	1.5	46	<i>Tu</i>	1008	1.3	40
	1307	2.8	85		1431	2.9	88		1319	2.9	88		1533	2.6	79
	2059	-0.2	-6		2206	-0.3	-9		2129	-0.3	-9		2247	0.2	6
8 <i>F</i>	0342	2.0	61	23	0507	2.0	61	8	0435	2.2	67	8	0533	2.5	76
	0757	1.4	43	<i>Sa</i>	0954	1.6	49	<i>Su</i>	0849	1.6	49	<i>M</i>	1048	1.4	43
	1339	2.8	85		1547	2.7	82		1410	2.8	85		1636	2.4	73
	2151	-0.1	-3		2309	0.0	0		2224	-0.1	-3		2326	0.4	12
9 <i>Sa</i>	0451	1.9	58	24	0614	2.0	61	9	0531	2.2	67	9	0617	2.7	82
	0829	1.5	46	<i>W</i>	1120	1.6	49	<i>M</i>	1008	1.6	49	<i>F</i>	1242	0.8	24
	1423	2.7	82		1710	2.4	73		1749	2.2	67		1842	2.2	67
	2254	0.0	0	<i>O</i>								<i>O</i>	2345	0.5	15
10 <i>Su</i>	0604	1.9	58	25	0015	0.3	9	10	0624	2.3	70	10	0044	0.8	24
	0923	1.6	49	<i>M</i>	0720	2.0	61	<i>Tu</i>	1146	1.5	46	<i>Sa</i>	0703	2.8	85
	1526	2.5	76		1247	1.4	43		1711	2.4	73		1348	0.3	9
					1832	2.3	70	<i>O</i>				2013	2.2	67	
11 <i>M</i>	0003	0.0	0	26	0117	0.4	12	11	0026	0.2	6	11	0143	1.1	34
	0714	2.0	61	<i>Tu</i>	0810	2.2	67	<i>W</i>	0712	2.4	73	<i>Su</i>	0750	3.0	91
	1155	1.7	52		1357	1.2	37		1304	1.1	34		1448	-0.1	-3
	<i>O</i>	1716	2.4	73	1948	2.3	70		1855	2.4	73		2133	2.2	67
12 <i>Tu</i>	0108	0.0	0	27	0211	0.6	18	12	0125	0.4	12	12	0239	1.3	40
	0811	2.1	64	<i>W</i>	0844	2.3	70	<i>Th</i>	0756	2.6	79	<i>M</i>	0838	3.1	94
	1325	1.4	43		1450	0.9	27		1408	0.7	21		1543	-0.4	-12
	1913	2.5	76		2054	2.3	70		2019	2.4	73		2239	2.3	70
13 <i>W</i>	0206	0.0	0	28	0258	0.7	21	13	0220	0.6	18	13	0333	1.4	43
	0853	2.3	70	<i>Th</i>	0914	2.5	76	<i>F</i>	0836	2.8	85	<i>M</i>	0925	3.3	101
	1428	1.0	30		1535	0.6	18		1504	0.2	6		1636	-0.7	-21
	2032	2.6	79		2146	2.3	70		2129	2.5	76		2334	2.3	70
14 <i>Th</i>	0258	0.1	3	29	0339	0.8	24	14	0311	0.8	24	14	0425	1.4	43
	0927	2.5	76	<i>F</i>	0942	2.6	79	<i>Sa</i>	0914	3.0	91	<i>Tu</i>	1010	3.4	104
	1523	0.5	15		1615	0.3	9		1557	-0.3	-9		1626	0.0	0
	2135	2.7	82		2229	2.4	73		2230	2.6	79		2257	2.2	67
15 <i>F</i>	0346	0.2	6	30	0417	0.9	27	15	0400	1.0	30	15	0020	2.3	70
	0959	2.8	85	<i>Sa</i>	1011	2.8	85	<i>Su</i>	0951	3.2	98	<i>W</i>	0514	1.4	43
	1613	0.0	0		1652	0.1	3		1648	-0.6	-18		1706	-0.2	-6
	2231	2.8	85		2307	2.4	73		2324	2.6	79		2338	2.3	70
31	0450	1.5	46	31	0450	1.5	46	16	0134	3.1	94	30	0007	2.3	70
				<i>Tu</i>	1034	-0.4	-12	<i>W</i>	1744	-0.4	-12	<i>Th</i>	1048	3.3	101
													1804	-0.6	-18

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Naples, Florida, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0044	2.4	73	16 Sa 0107	2.4	73	1 M 0118	2.7	82	1 Th 0114	2.7	82
0544	1.5	46	0632	1.2	37	0658	0.8	24	0729	0.7	21
1122	3.3	101	1215	3.3	101	1245	3.4	104	1320	3.0	91
● 1843	-0.7	-21	1917	-0.3	-9	1937	-0.2	-6	1952	0.6	18
2 Sa 0123	2.4	73	17 Su 0136	2.4	73	2 Tu 0151	2.8	85	17 W 0144	2.8	85
0627	1.4	43	0714	1.1	34	0746	0.6	18	0807	0.7	21
1158	3.3	101	1256	3.1	94	1336	3.2	98	1401	2.8	85
1922	-0.6	-18	1953	-0.1	-3	2016	0.1	3	2020	0.8	24
3 Su 0202	2.5	76	18 M 0208	2.5	76	3 W 0226	2.9	88	18 Th 0215	2.8	85
0711	1.2	37	0755	1.0	30	0837	0.4	12	0848	0.7	21
1240	3.3	101	1339	2.9	88	1436	2.9	88	1450	2.6	79
2002	-0.5	-15	2029	0.2	6	2056	0.5	15	2044	1.1	34
4 M 0241	2.6	79	19 M 0243	2.6	79	4 Th 0304	3.0	91	19 F 0248	2.8	85
0759	1.1	34	0838	1.0	30	0935	0.4	12	0936	0.7	21
1329	3.1	94	1426	2.7	82	1546	2.6	79	1547	2.3	70
2043	-0.3	-9	2103	0.5	15	2139	0.9	27	2100	1.4	43
5 Tu 0320	2.6	79	20 W 0320	2.6	79	5 F 0347	3.0	91	20 Sa 0324	2.7	82
0852	1.0	30	0926	0.9	27	1042	0.3	9	20 M 0326	3.0	91
1429	2.9	88	1519	2.5	76	1705	2.3	70	1036	0.8	24
2125	0.1	3	2136	0.8	24	2229	1.3	40	1657	2.1	64
6 W 0359	2.7	82	21 Th 0400	2.6	79	6 Sa 0439	3.0	91	21 Tu 0410	2.7	82
0954	0.8	24	1023	0.9	27	1156	0.3	9	21 M 0415	2.7	82
1542	2.6	79	1620	2.2	67	1838	2.1	64	1821	2.0	61
2212	0.5	15	2208	1.1	34	● 2336	1.6	49	● 2128	1.8	55
7 Th 0440	2.8	85	22 F 0442	2.6	79	7 Su 0544	3.0	91	7 W 0521	2.7	82
1104	0.7	21	1130	0.9	27	1311	0.2	6	7 M 0521	2.7	82
1706	2.3	70	1731	2.0	61	2053	2.0	61	7 Th 0521	2.7	82
2305	0.9	27	2240	1.4	43	2214	1.9	58	7 W 0521	2.7	82
8 F 0525	2.9	88	23 Sa 0531	2.6	79	8 M 0055	1.8	55	8 Th 0647	2.7	82
1219	0.4	12	1241	0.7	21	0700	3.0	91	8 Tu 0647	2.7	82
1837	2.1	64	1853	1.9	58	1419	0.0	0	2115	2.1	64
●	●	●	● 2338	1.6	49	2234	2.2	67	2244	2.5	76
9 Sa 0006	1.2	37	24 W 0627	2.7	82	9 Tu 0208	1.8	55	9 Th 0347	1.3	40
0617	2.9	88	1346	0.6	18	0815	3.1	94	9 W 0449	1.9	58
1329	0.2	6	2025	1.9	58	1519	-0.1	-3	1005	3.2	98
2018	2.0	61	2311	2.3	70	2311	2.3	70	1500	0.3	9
10 Su 0112	1.5	46	25 M 0107	1.8	55	10 W 0310	1.6	49	10 Th 0248	1.8	55
0716	3.0	91	0728	2.7	82	0917	3.2	98	10 Tu 0438	1.0	30
1433	-0.1	-3	1442	0.3	9	1611	-0.1	-3	10 M 0405	3.2	98
2159	2.1	64	2145	2.0	61	2331	2.3	70	10 Sa 1045	3.2	98
11 M 0217	1.6	49	26 Tu 0214	1.8	55	11 Th 0404	1.5	46	11 W 1045	3.2	98
0818	3.2	98	0826	2.9	88	1008	3.3	101	11 M 1120	3.2	98
1531	-0.3	-9	1533	0.1	3	1657	-0.1	-3	11 Th 1631	0.5	15
2305	2.2	67	2233	2.1	64	2344	2.4	73	11 Su 1745	0.6	18
12 Tu 0317	1.6	49	27 W 0309	1.7	52	12 F 0451	1.3	40	12 W 2331	2.7	82
0915	3.3	101	0916	3.1	94	1051	3.3	101	12 M 0553	0.7	21
1625	-0.5	-15	1618	-0.1	-3	1737	-0.1	-3	12 Th 1712	-0.1	-3
2346	2.2	67	2308	2.3	70	2330	2.8	85	12 Tu 2359	2.9	88
13 W 0412	1.5	46	28 Th 0358	1.6	49	13 Sa 0000	2.5	76	13 W 0425	1.2	37
1006	3.4	104	0959	3.2	98	0534	1.1	34	13 M 0511	0.9	27
1713	-0.6	-18	1700	-0.3	-9	1129	3.3	101	13 Tu 1228	3.1	94
●	●	●	2341	2.4	73	● 1814	0.0	0	13 M 1752	-0.1	-3
14 Th 0015	2.3	70	29 F 0444	1.5	46	14 Su 0022	2.6	79	14 W 0556	0.5	15
0502	1.4	43	1039	3.4	104	0614	0.9	27	14 M 0703	0.4	12
1052	3.4	104	1741	-0.5	-15	1205	3.3	101	14 W 1304	3.0	91
1758	-0.6	-18	● 1820	-0.5	-15	1849	0.2	6	14 W 1915	1.1	34
15 F 0041	2.3	70	30 Su 0013	2.5	76	15 M 0047	2.7	82	15 Th 0023	3.0	91
0548	1.3	40	0528	1.3	40	0652	0.8	24	15 W 0739	0.4	12
1134	3.4	104	1119	3.5	107	1242	3.1	94	15 W 1344	2.8	85
● 1839	-0.5	-15	● 1820	-0.5	-15	1921	0.3	9	15 W 1940	1.3	40
16	17	18	19	20	21	22	23	24	25	26	27
28	29	30	31	32	33	34	35	36	37	38	39
W	F	Sa	Su	Th	M	W	Th	F	W	Th	F
1000	1004	1008	1012	1016	1020	1024	1028	1032	1036	1040	1044
1006	1010	1014	1018	1022	1026	1030	1034	1038	1042	1046	1050
1012	1016	1020	1024	1028	1032	1036	1040	1044	1048	1052	1056
1018	1022	1026	1030	1034	1038	1042	1046	1050	1054	1058	1062
1024	1028	1032	1036	1040	1044	1048	1052	1056	1060	1064	1068
1030	1034	1038	1042	1046	1050	1054	1058	1062	1066	1070	1074
1036	1040	1044	1048	1052	1056	1060	1064	1068	1072	1076	1080
1042	1046	1050	1054	1058	1062	1066	1070	1074	1078	1082	1086
1048	1052	1056	1060	1064	1068	1072	1076	1080	1084	1088	1092
1054	1058	1062	1066	1070	1074	1078	1082	1086	1090	1094	1098
1060	1064	1068	1072	1076	1080	1084	1088	1092	1096	1100	1104
1066	1070	1074	1078	1082	1086	1090	1094	1098	1102	1106	1110
1072	1076	1080	1084	1088	1092	1096	1100	1104	1108	1112	1116
1078	1082	1086	1090	1094	1098	1102	1106	1110	1114	1118	1122
1084	1088	1092	1096	1100	1104	1108	1112	1116	1120	1124	1128
1090	1094	1098	1102	1106	1110	1114	1118	1122	1126	1130	1134
1096	1100	1104	1108	1112	1116	1120	1124	1128	1132	1136	1140
1102	1106	1110	1114	1118	1122	1126	1130	1134	1138	1142	1146
1108	1112	1116	1120	1124	1128	1132	1136	1140	1144	1148	1152
1114	1118	1122	1126	1130	1134	1138	1142	1146	1150	1154	1158
1120	1124	1128	1132	1136	1140	1144	1148	1152	1156	1160	1164
1126	1130	1134	1138	1142	1146	1150	1154	1158	1162	1166	1170
1132	1136	1140	1144	1148	1152	1156	1160	1164	1168	1172	1176
1138	1142	1146	1150	1154	1158	1162	1166	1170	1174	1178	1182
1144	1148	1152	1156	1160	1164	1168	1172	1176	1180	1184	1188
1150	1154	1158	1162	1166	1170	1174	1178	1182	1186	1190	1194
1156	1160	1164	1168	1172	1176	1180	1184	1188	1192	1196	1200
1162	1166	1170	1174	1178	1182	1186	1190	1194	1198	1202	1206
1168	1172	1176	1180	1184	1188	1192	1196	1200	1204	1208	1212
1174	1178	1182	1186	1190	1194	1198	1202	1206	1210	1214	1218
1180	1184	1188	1192	1196	1200	1204	1208	1212	1216	1220	1224
1186	1190	1194	1198	1202	1206	1210	1214	1218	1222	1226	1230
1192	1196	1200	1204	1208	1212	1216	1220	1224	1228	1232	1236
1198	1202	1206	1210	1214	1218	1222	1226	1230	1234	1238	1242
1204	1208	1212	1216	1220	1224	1228	1232	1236	1240	1244	1248
1210	1214	1218	1222	1226	1230	1234	1238	1242	1246	1250	1254
1216	1220	1224	1228	1232	1236	12					

Naples, Florida, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0128 3.5 107 0858 -0.2 -6 1546 2.6 79 2049 1.7 52	16 Su 0045 3.1 94 0836 0.3 9 1520 2.5 76 1954 1.8 55	1 Tu 0321 3.0 91 1038 0.3 9 1739 2.4 73 2256 1.8 55	16 W 0143 2.9 88 0951 0.2 6 1657 2.5 76 2150 1.8 55	1 Th 0417 2.5 76 1056 0.5 15 1731 2.5 76 2343 1.2 37	16 F 0254 2.5 76 1007 0.2 6 1653 2.6 79 2253 1.0 30						
2 Su 0220 3.3 101 0959 0.0 0 1659 2.4 73 2148 1.9 58	17 M 0116 3.0 91 0925 0.4 12 1625 2.4 73 2028 1.9 58	2 W 0451 2.8 85 1144 0.6 18 1838 2.5 76 ●	17 Th 0249 2.7 82 1047 0.4 12 1747 2.5 76 2319 1.6 49	2 F 0534 2.3 70 1154 0.8 24 1817 2.5 76 ●	17 Sa 0429 2.2 67 1100 0.5 15 1735 2.6 79 ●						
3 M 0338 3.1 94 1108 0.3 9 1823 2.3 70 ● 2312 2.0 61	18 Tu 0159 2.9 88 1024 0.5 15 1732 2.4 73 2130 2.0 61	3 Th 0021 1.6 49 0615 2.6 79 1248 0.8 24 1929 2.5 76	18 F 0440 2.5 76 1149 0.6 18 1835 2.6 79 ●	3 Sa 0055 1.0 30 0653 2.1 64 1253 1.1 34 1903 2.6 79	18 Su 0008 0.7 21 0609 2.1 64 1201 0.9 27 1819 2.7 82						
4 Tu 0513 2.9 88 1222 0.5 15 2002 2.4 73	19 W 0302 2.8 85 1132 0.6 18 1836 2.4 73 ● 2340 2.0 61	4 F 0133 1.3 40 0736 2.5 76 1346 1.0 30 2010 2.6 79	19 Sa 0037 1.3 40 0630 2.4 73 1250 0.8 24 1919 2.8 85	4 Su 0156 0.7 21 0814 2.1 64 1348 1.3 40 1948 2.7 82	19 M 0117 0.3 9 0745 2.0 61 1305 1.1 34 1908 2.9 88						
5 W 0043 1.9 58 0643 2.9 88 1330 0.6 18 2100 2.5 76	20 Th 0509 2.7 82 1238 0.6 18 1932 2.6 79	5 Sa 0229 1.0 30 0847 2.6 79 1437 1.1 34 2045 2.8 85	20 Su 0142 0.8 24 0756 2.5 76 1348 0.9 27 2000 2.9 88	5 M 0246 0.4 12 0926 2.1 64 1438 1.4 43 2030 2.8 85	20 Tu 0219 -0.2 -6 0913 2.1 64 1407 1.3 40 2000 3.0 91						
6 Th 0156 1.6 49 0803 2.9 88 1429 0.7 21 2125 2.6 79	21 F 0105 1.7 52 0658 2.7 82 1337 0.6 18 2017 2.7 82	6 Su 0316 0.7 21 0942 2.6 79 1521 1.2 37 2117 2.9 88	21 M 0238 0.3 9 0909 2.6 79 1441 1.1 34 2040 3.1 94	6 Tu 0331 0.2 6 1019 2.2 67 1523 1.5 46 2109 2.8 85	21 W 0315 -0.5 -15 1023 2.2 67 1505 1.4 43 2052 3.2 98						
7 F 0252 1.3 40 0907 2.9 88 1517 0.8 24 2145 2.7 82	22 Sa 0206 1.3 40 0814 2.8 85 1430 0.7 21 2054 2.9 88	7 M 0356 0.5 15 1025 2.6 79 1601 1.3 40 2147 3.0 91	22 Tu 0330 -0.2 -6 1011 2.7 82 1532 1.3 40 2119 3.3 101	7 W 0412 0.0 0 1058 2.3 70 1605 1.6 49 2145 2.9 88	22 Th 0409 -0.9 -27 1117 2.3 70 1601 1.5 46 2142 3.3 101						
8 Sa 0339 1.0 30 0956 3.0 91 1600 0.9 27 2206 2.8 85	23 Su 0258 0.8 24 0917 3.0 91 1519 0.8 24 2127 3.1 94	8 Tu 0434 0.2 6 1102 2.7 82 1638 1.4 43 2215 3.1 94	23 W 0421 -0.6 -18 1105 2.8 85 1621 1.4 43 2158 3.5 107	8 Th 0451 -0.2 -6 1133 2.3 70 1643 1.6 49 2219 3.0 91	23 F 0500 -1.0 -30 1203 2.4 73 1653 1.4 43 2230 3.4 104						
9 Su 0419 0.8 24 1035 3.0 91 1638 1.0 30 2228 3.0 91	24 M 0347 0.4 12 1012 3.1 94 1605 0.9 27 2158 3.3 101	9 W 0511 0.1 3 1136 2.7 82 1712 1.5 46 2243 3.2 98	24 Th 0510 -0.9 -27 1156 2.8 85 1709 1.4 43 2238 3.6 110	9 F 0529 -0.4 -12 1208 2.4 73 1720 1.6 49 2249 3.1 94	24 Sa 0548 -1.1 -34 1242 2.4 73 1743 1.3 40 ● 2316 3.4 104						
10 M 0456 0.6 18 1110 3.0 91 1712 1.1 34 2252 3.1 94	25 Tu 0435 -0.1 -3 1103 3.2 98 1650 1.0 30 2230 3.5 107	10 Th 0547 -0.1 -3 1212 2.7 82 1744 1.6 49 ● 2308 3.2 98	25 F 0559 -1.0 -30 1245 2.7 82 1756 1.5 46 ● 2320 3.6 110	10 Sa 0606 -0.5 -15 1245 2.4 73 1755 1.6 49 ● 2317 3.1 94	25 Su 0634 -1.1 -34 1320 2.4 73 1830 1.2 37						
11 Tu 0532 0.4 12 1144 3.0 91 1745 1.2 37 ● 2317 3.1 94	26 W 0523 -0.5 -15 1153 3.2 98 1733 1.2 37 ● 2303 3.7 113	11 F 0623 -0.2 -6 1250 2.7 82 1815 1.6 49 2330 3.2 98	26 Sa 0647 -1.0 -30 1334 2.6 79 1843 1.5 46	11 Su 0643 -0.6 -18 1324 2.4 73 1831 1.5 46 2345 3.1 94	26 M 0002 3.3 101 0717 -0.9 -27 1356 2.3 70 1917 1.1 34						
12 W 0606 0.2 6 1218 2.9 88 1814 1.3 40 2340 3.2 98	27 Th 0611 -0.7 -21 1244 3.1 94 1817 1.4 43 2338 3.7 113	12 Sa 0659 -0.2 -6 1332 2.6 79 1844 1.7 52 2353 3.2 98	27 Su 0005 3.6 110 0734 -0.8 -24 1423 2.5 76 1931 1.5 46	12 M 0721 -0.6 -18 1406 2.4 73 1909 1.5 46	27 Tu 0049 3.1 94 0759 -0.6 -18 1433 2.4 73 2004 1.0 30						
13 Th 0641 0.2 6 1254 2.9 88 1842 1.5 46	28 F 0700 -0.8 -24 1338 2.9 88 1900 1.5 46	13 Su 0737 -0.2 -6 1419 2.6 79 1915 1.7 52	28 M 0054 3.4 104 0822 -0.6 -18 1512 2.5 76 2021 1.5 46	13 Tu 0017 3.0 91 0759 -0.5 -15 1448 2.4 73 1951 1.4 43	28 W 0140 2.8 85 0840 -0.3 -9 1510 2.4 73 2054 0.9 27						
14 F 0001 3.2 98 0716 0.1 3 1335 2.8 85 1907 1.6 49	29 Sa 0018 3.7 113 0749 -0.6 -18 1436 2.8 85 1945 1.6 49	14 M 0021 3.1 94 0818 -0.1 -3 1511 2.5 76 1952 1.8 55	29 Tu 0151 3.1 94 0910 -0.2 -6 1600 2.4 73 2118 1.4 43	14 W 0056 2.9 88 0838 -0.3 -9 1531 2.5 76 2040 1.3 40	29 Th 0236 2.5 76 0921 0.1 3 1549 2.4 73 2150 0.9 27						
15 Sa 0021 3.2 98 0754 0.2 6 1423 2.6 79 1929 1.7 52	30 Su 0103 3.5 107 0841 -0.4 -12 1537 2.6 79 2035 1.7 52	15 Tu 0057 3.0 91 0902 0.0 0 1605 2.5 76 2040 1.8 55	30 W 0301 2.8 85 1001 0.2 6 1646 2.4 73 2227 1.4 43	15 Th 0146 2.7 82 0921 -0.1 -3 1612 2.5 76 2141 1.2 37	30 F 0338 2.2 67 1003 0.4 12 1629 2.4 73 2254 0.8 24						
	31 M 0201 3.3 101 0936 -0.1 -3 1638 2.5 76 2136 1.8 55				31 Sa 0446 1.9 58 1049 0.8 24 1712 2.4 73						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Petersburg, Florida, 2011

Times and Heights of High and Low Waters

January					February					March													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm									
1 Sa	0629 2257	-0.7 2.3	-21 70	16 Su	0608 2232	-0.6 2.2	-18 67	1 Tu	0740 1449 1825	-0.6 1.1 0.9	-18 34 27	16 W	0710 1404 1803	-0.7 1.2 0.8	-21 37 24	1 Tu	0638 1340 1755	-0.4 1.3 0.9	-12 40 27	16 W	0552 1245 1712 2321	-0.4 1.4 0.8 2.1	-12 43 24 64
2 Su	0715 2345	-0.8 2.3	-24 70	17 M	0653 1443 1647 2326	-0.8 1.1 1.0 2.3	-24 34 30 70	2 W	0039 0809 1459 ● 1912	2.0 -0.6 1.2 0.7	61 -18 37 21	17 Th	0020 0746 1418 1859	2.2 -0.7 1.3 0.5	67 -21 40 15	2 W	0001 0708 1350 1841	1.9 -0.3 1.4 0.7	58 -9 43 21	17 Th	0632 1259 1810	-0.3 1.5 0.5	-9 46 15
3 M	0756 1534 1756	-0.8 1.1 1.0	-24 34 30	18 Tu	0735 1500 1748	-0.9 1.1 1.0	-27 34 30	3 Th	0119 0834 1508 1955	2.0 -0.5 1.2 0.6	61 -15 37 18	18 F	0114 0819 1434 ○ 1952	2.2 -0.5 1.4 0.3	67 -15 43 9	3 Th	0045 0733 1359 1920	1.9 -0.2 1.4 0.5	58 -6 43 15	18 F	0023 0707 1315 1903	2.1 -0.1 1.6 0.2	64 -3 49 6
4 Tu	0030 0831 1552 ● 1849	2.3 -0.7 1.1 1.0	70 -21 34 30	19 W	0017 0814 1517 ○ 1845	2.3 -0.9 1.1 0.8	70 -27 34 24	4 F	0157 0857 1518 2036	1.9 -0.3 1.3 0.4	58 -9 40 12	19 Sa	0207 0850 1453 2046	2.1 -0.3 1.6 0.1	64 -9 49 3	4 F	0124 0755 1408 ● 1955	1.8 0.0 1.5 0.3	55 0 46 9	19 O	0121 0738 1335 1953	2.0 0.1 1.8 -0.1	61 3 55 -3
5 W	0111 0903 1607 1940	2.2 -0.6 1.1 0.9	67 -18 34 27	20 Th	0107 0850 1534 1941	2.3 -0.8 1.1 0.7	70 -24 34 21	5 Sa	0234 0918 1531 2119	1.7 -0.2 1.5 0.3	52 -6 46 9	20 Su	0301 0918 1516 2142	1.9 0.0 1.7 -0.1	58 0 52 -3	5 Sa	0201 0814 1417 2029	1.7 0.1 1.7 0.2	52 3 52 6	20 Su	0216 0805 1357 2044	1.9 0.3 2.1 -0.3	58 9 64 -9
6 Th	0152 0932 1621 2032	2.1 -0.5 1.2 0.8	64 -15 37 24	21 F	0158 0925 1553 2040	2.3 -0.7 1.2 0.5	70 -21 37 15	6 Su	0313 0939 1549 2204	1.6 0.0 1.6 0.2	49 0 49 6	21 M	0358 0943 1544 2242	1.6 0.3 1.9 -0.2	49 9 58 -6	6 Su	0236 0832 1431 2105	1.6 0.3 1.8 0.0	49 9 55 0	21 M	0312 0829 1424 2136	1.7 0.6 2.2 -0.4	52 18 67 -12
7 F	0233 1000 1638 2126	1.9 -0.4 1.3 0.7	58 -12 40 21	22 Sa	0251 0959 1616 2142	2.1 -0.4 1.4 0.3	64 -12 43 9	7 M	0356 1001 1612 2253	1.4 0.2 1.7 0.1	43 6 52 3	22 Tu	0502 1005 1617 2350	1.3 0.5 2.1 -0.3	40 15 64 -9	7 M	0313 0850 1450 2143	1.5 0.4 1.9 -0.1	46 12 58 -3	22 Tu	0411 0850 1456 2232	1.5 0.8 2.4 -0.4	46 24 73 -12
8 Sa	0316 1028 1658 2224	1.8 -0.2 1.4 0.6	55 -6 43 18	23 Su	0347 1031 1643 2250	1.8 -0.2 1.5 0.2	55 -6 46 6	8 Tu	0445 1023 1640 2350	1.2 0.3 1.8 0.0	37 9 55 0	23 Tu	0626 1020 1656 2226	1.0 0.7 2.1 -0.1	30 21 64 -3	8 Tu	0353 0908 1514 2235	1.4 0.5 2.1 -0.1	43 15 64 -3	23 W	0520 0906 1532 2335	1.2 0.9 2.4 -0.4	37 27 73 -12
9 Su	0404 1056 1723 2327	1.5 0.0 1.5 0.5	46 0 46 15	24 M	0451 1101 1714	1.5 0.1 1.7	46 3 52	9 W	0546 1043 1714	1.0 0.5 1.9	30 15 58	24 Th	0110 1745	-0.3 2.1	-9 64	9 W	0439 0927 1544 2316	1.2 0.6 2.1 -0.1	37 30 64 -3	24 Th	0700 0907 1613	1.1 1.0 2.4	34 30 73
10 M	0500 1124 1752	1.3 0.2 1.6	40 6 49	25 Tu	0005 0610 1127 1752	0.0 1.1 0.4 1.9	0 34 12 58	10 Th	0057 0713 1058 1755	0.0 0.8 0.7 1.9	0 24 21 58	25 F	0239 1850	-0.3 2.0	-9 61	10 Th	0537 0944 1619	1.1 0.8 2.1	34 24 64	25 F	0048 1704	-0.3 2.2	-9 67
11 Tu	0036 0611 1153 1826	0.4 1.1 0.4 1.7	12 34 12 52	26 W	0130 0806 1148 ● 1838	-0.1 0.9 0.7 2.0	-3 27 21 61	11 F	0216 1846	-0.1 1.9	-3 58	26 Sa	0404 2020	-0.4 1.9	-12 58	11 F	0018 0706 0951 1703	-0.1 0.9 0.8 2.1	-3 27 24 64	26 O	0208 1815	-0.2 2.0	-6 61
12 W	0152 0749 1221 ● 1905	0.2 0.9 0.6 1.8	6 27 18 55	27 Th	0301 1934	-0.3 2.0	-9 61	12 Sa	0337 1951	-0.2 1.9	-6 58	27 Su	0510 2153	-0.4 1.9	-12 58	12 Sa	0134 1758	-0.1 2.1	-3 64	27 O	0325 2001	-0.1 1.9	-3 58
13 Th	0308 1010 1247 1950	0.0 0.8 0.7 1.9	0 24 21 58	28 F	0424 2042	-0.4 2.0	-12 61	13 Su	0447 2106	-0.4 2.0	-12 61	28 M	0559 1330 1652 2306	-0.4 1.2 1.1 1.9	-12 37 34 58	13 Su	0255 1913	-0.2 2.0	-6 61	28 M	0427 1213 1547 2145	-0.1 1.4 1.2 1.8	-3 43 37 55
14 F	0418 2042	-0.2 1.9	-6 58	29 Sa	0530 2154	-0.6 2.0	-18 61	14 M	0543 2219	-0.6 2.1	-18 64	14 M	0407 2044	-0.3 2.0	-9 61	29 Tu	0514 1221 1706 2300	0.0 1.5 1.0 1.8	0 46 30 55				
15 Sa	0517 2137	-0.4 2.0	-12 61	30 Su	0623 2259	-0.7 2.1	-21 64	15 Tu	0629 1353 1700 2323	-0.7 1.1 1.0 2.2	-21 34 30 67	15 Tu	0505 1557 2210	-0.4 1.1 2.1	-12 34 64	30 W	0551 1234 1758 2357	0.1 1.6 0.7 1.8	3 49 21 55	31 Th	0621 1246 1838	0.2 1.7 0.5	6 52 15
	31 M	0705 1437 1728 2353	-0.7 1.1 1.0 2.0		-21 34 30 61																		

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Petersburg, Florida, 2011

Times and Heights of High and Low Waters

April					May					June				
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm
1 F	0045	1.7 52	16 Sa	0029	1.9 58	1 Su	0131	1.6 49	16 M	0152	1.5 46	1 W	0319	1.4 43
	0646	0.3 9		0617	0.5 15		0610	0.9 27		0548	1.1 34		0551	1.3 40
	1257	1.8 55		1217	2.1 64		1212	2.2 67		1202	2.7 82		1226	2.6 79
	1913	0.3 9		1902	-0.1 -3		1933	-0.1 -3		1950	-0.5 -15		2035	-0.3 -9
2 Sa	0127	1.7 52	17 Su	0131	1.8 55	2 M	0215	1.5 46	17 Tu	0257	1.5 46	2 Th	0401	1.4 43
	0707	0.5 15		0647	0.7 21		0629	1.0 30		0614	1.2 37		0617	1.3 40
	1308	1.9 58		1242	2.3 70		1231	2.4 73		1238	2.8 85		1303	2.7 82
	1946	0.1 3	O	1951	-0.4 -12		2007	-0.2 -6	O	2039	-0.6 -18		2114	-0.4 -12
3 Su	0205	1.6 49	18 M	0230	1.7 52	3 Tu	0255	1.4 43	18 W	0358	1.4 43	3 F	0439	1.3 40
	0725	0.6 18		0712	0.9 27		0647	1.1 34		0638	1.3 40		0650	1.2 37
	1321	2.1 64		1311	2.5 76		1255	2.5 76		1317	2.8 85		1343	2.7 82
●	2018	-0.1 -3		2040	-0.5 -15	●	2042	-0.3 -9		2127	-0.5 -15		2154	-0.4 -12
4 M	0242	1.5 46	19 Tu	0330	1.5 46	4 W	0335	1.4 43	19 Th	0500	1.3 40	4 Sa	0515	1.3 40
	0741	0.7 21		0734	1.0 30		0704	1.2 37		0703	1.2 37		0736	1.2 37
	1338	2.2 67		1344	2.6 79		1324	2.6 79		1358	2.8 85		1427	2.7 82
	2051	-0.2 -6		2131	-0.5 -15		2119	-0.3 -9		2214	-0.4 -12		2237	-0.3 -9
5 Tu	0318	1.4 43	20 W	0433	1.4 43	5 Th	0418	1.3 40	20 F	1442	2.7 82	5 Su	0550	1.4 43
	0758	0.8 24		0754	1.1 34		0725	1.2 37		2301	-0.3 -9		0835	1.3 40
	1401	2.3 70		1420	2.7 82		1358	2.6 79		2201	-0.3 -9		1516	2.6 79
	2128	-0.2 -6		2224	-0.5 -15								2321	-0.2 -6
6 W	0358	1.3 40	21 Th	0548	1.2 37	6 F	0508	1.3 40	21 Sa	1529	2.5 76	6 M	0626	1.5 46
	0816	0.9 27		0808	1.1 34		0749	1.2 37		2349	-0.1 -3		0951	1.3 40
	1429	2.4 73		1500	2.6 79		1437	2.6 79		2248	-0.3 -9		1612	2.4 73
	2209	-0.2 -6		2321	-0.4 -12								21	0631
7 Th	0446	1.3 40	22 F	1545	2.5 76	7 Sa	0611	1.3 40	22 Su	0740	1.4 43	7 Tu	0005	-0.1 -3
	0834	1.0 30					0820	1.2 37		0948	1.3 40		0701	1.6 49
	1503	2.4 73					1521	2.6 79		1622	2.2 67		1121	1.2 37
	2258	-0.2 -6					2341	-0.2 -6					1718	2.2 67
8 F	0548	1.2 37	23 Sa	0022	-0.2 -6	8 Su	1614	2.4 73	23 M	0036	0.0 0	8 W	0051	0.1 3
	0852	1.0 30		1638	2.3 70					0813	1.5 46		0737	1.7 52
	1542	2.4 73					1138	1.4 43		1728	2.0 61		1259	1.0 30
	2356	-0.2 -6					1728	2.0 61					1840	1.9 58
9 Sa	1629	2.3 70	24 Su	0126	-0.1 -3	9 M	0037	-0.2 -6	24 Tu	0122	0.2 6	9 Th	0135	0.4 12
				1749	2.0 61		0822	1.4 43		0843	1.6 49		0813	1.9 58
							1042	1.3 40		1332	1.2 37		1434	0.8 24
			O				1718	2.3 70	O	1854	1.7 52		2020	1.6 49
10 Su	0104	-0.1 -3	25 M	0227	0.1 3	10 Tu	0134	-0.1 -3	25 W	0207	0.4 12	10 F	0219	0.6 18
	1730	2.2 67		1033	1.5 46		0900	1.5 46		0912	1.8 55		0850	2.1 64
				1348	1.4 43		1248	1.3 40		1508	1.0 30		1557	0.4 12
				1931	1.8 55		1841	2.0 61		2036	1.5 46		2209	1.5 46
11 M	0215	-0.1 -3	26 Tu	0322	0.2 6	11 W	0229	0.1 3	26 Th	0250	0.6 18	11 Sa	0300	0.9 27
	1851	2.1 64		1047	1.6 49		0930	1.6 49		0939	1.9 58		0929	2.3 70
●				1543	1.1 34		1439	1.1 34		1619	0.7 21		1706	0.1 3
				2118	1.7 52		2021	1.8 55		2212	1.4 43		2351	1.4 43
12 Tu	0320	-0.1 -3	27 W	0408	0.3 9	12 Th	0320	0.3 9	27 F	0331	0.8 24	12 Su	0338	1.1 34
	1100	1.4 43		1105	1.7 52		0958	1.8 55		1006	2.0 61		1011	2.5 76
	1429	1.2 37		1652	0.9 27		1604	0.7 21		1713	0.4 12		1807	-0.2 -6
	2030	2.0 61		2241	1.6 49		2200	1.7 52		2333	1.4 43			
13 W	0416	0.0 0	28 Th	0447	0.5 15	13 F	0405	0.5 15	28 Sa	0407	1.0 30	13 M	0118	1.4 43
	1115	1.5 46		1122	1.9 58		1027	2.0 61		1031	2.2 67		0413	1.3 40
	1606	1.0 30		1742	0.6 18		1711	0.3 9		1759	0.2 6		1053	2.7 82
	2203	1.9 58		2346	1.6 49		2328	1.7 52					1901	-0.4 -12
14 Th	0503	0.1 3	29 F	0520	0.6 18	14 Sa	0444	0.8 24	29 Su	0042	1.4 43	14 Tu	0232	1.4 43
	1134	1.7 52		1139	2.0 61		1056	2.3 70		0439	1.1 34		0446	1.3 40
	1714	0.6 18		1822	0.3 9		1808	0.0 0		1057	2.3 70		1137	2.8 85
	2321	1.9 58								1841	0.0 0		1951	-0.5 -15
15 F	0543	0.3 9	30 Sa	0042	1.6 49	15 Su	0044	1.6 49	30 M	0141	1.4 43	15 W	1222	2.8 85
	1154	1.9 58		0547	0.8 24		0518	1.0 30		0505	1.2 37		2036	-0.5 -15
	1810	0.2 6		1155	2.1 64		1128	2.5 76		1124	2.4 73		1197	-0.3 -9
				1859	0.1 3		1900	-0.3 -9		1919	-0.2 -6		O	
													31	0233
													Tu	0529
													1154	2.5 76
													1957	-0.3 -9

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Petersburg, Florida, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0351	1.4	43	16 0352	1.5	46	1 0326	1.7	52	16 0309	2.0	61
F 0605	1.3	40	Sa 0720	1.2	37	M 0814	1.0	30	Tu 0900	0.8	24
1256	2.8	85	1352	2.6	79	1436	2.7	82	1511	2.3	70
● 2101	-0.3	-9	2128	0.0	0	2142	0.2	6	2131	0.7	21
2 0410	1.4	43	17 0406	1.6	49	2 0347	1.8	55	17 W 0327	2.1	64
Sa 0659	1.3	40	Su 0814	1.2	37	Tu 0912	0.8	24	2 F 0347	2.6	79
1341	2.8	85	1433	2.5	76	1529	2.5	76	1112	0.3	9
2138	-0.3	-9	2155	0.1	3	2213	0.4	12	1754	1.8	55
3 0430	1.5	46	18 0421	1.7	52	3 W 0413	2.0	61	17 0319	2.6	79
Su 0758	1.2	37	M 0908	1.1	34	1014	0.7	21	Sa 1052	0.4	12
1429	2.7	82	1516	2.3	70	1627	2.2	67	1728	1.7	52
2215	-0.2	-6	2222	0.3	9	2243	0.7	21	2140	1.4	43
4 0453	1.5	46	19 0441	1.8	55	4 Th 0445	2.2	67	18 0356	2.6	79
M 0902	1.1	34	Tu 1003	1.0	30	1123	0.6	18	Sa 1151	0.5	15
1521	2.6	79	1601	2.1	64	1735	1.9	58	1844	1.6	49
2251	0.0	0	2248	0.5	15	2312	1.0	30	2201	1.5	46
5 0520	1.7	52	20 0505	1.9	58	5 F 0522	2.4	73	4 0519	2.7	82
Tu 1012	1.0	30	W 1101	0.9	27	1241	0.5	15	Su 1302	0.5	15
1618	2.3	70	1652	1.9	58	1904	1.6	49	● 0441	2.6	79
2328	0.2	6	2316	0.7	21	2338	1.2	37	19 0540	2.5	76
6 0550	1.8	55	21 0533	2.0	61	6 Sa 0608	2.5	76	5 M 0626	2.6	79
W 1129	0.9	27	Th 1206	0.8	24	1409	0.4	12	1523	0.3	9
1724	2.0	61	1753	1.7	52	2119	1.4	43	20 Tu 0540	2.5	76
			2345	0.9	27	● 2358	1.3	40	● 1423	0.5	15
7 0004	0.5	15	22 0607	2.1	64	7 Su 0704	2.6	79	6 Tu 0759	2.5	76
Th 0626	2.0	61	F 1317	0.7	21	1539	0.3	9	21 W 1637	0.3	9
1253	0.7	21	1913	1.5	46	● 2322	1.4	43	21 0659	2.4	73
1846	1.7	52							W 1536	0.5	15
8 0039	0.8	24	23 0014	1.0	30	8 M 0814	2.6	79	20 1724	0.4	12
F 0706	2.2	67	Sa 0647	2.2	67	1657	0.1	3	● 0424	1.5	46
1422	0.5	15	1435	0.6	18	● 2051	1.5	46	23 0957	2.5	76
● 2034	1.4	43	● 2107	1.4	43	● 2358	1.3	40	F 1724	0.4	12
9 0113	1.0	30	24 0042	1.2	37	9 Tu 0932	2.6	79	8 Th 0046	1.8	55
Sa 0752	2.4	73	Su 0734	2.3	70	1759	0.0	0	0424	1.5	46
1548	0.3	9	Su 1552	0.5	15	● 2057	0.3	9	1052	2.5	76
2245	1.3	40				● 2322	1.4	43	1815	0.4	12
10 0146	1.2	37	25 0828	2.4	73	10 W 1043	2.7	82	7 W 0037	1.7	52
Su 0845	2.5	76	M 1700	0.3	9	1847	0.0	0	0242	1.6	49
1703	0.0	0				● 2358	1.3	40	Th 1635	0.4	12
11 0941	2.6	79	26 0927	2.5	76	11 Th 0206	1.6	49	22 1733	0.3	9
M 1807	-0.1	-3	Tu 1756	0.1	3	0457	1.5	46	● 2057	0.9	27
						1143	2.7	82	● 1941	1.0	30
						1926	0.1	3	● 2057	0.9	27
12 1039	2.7	82	27 1025	2.6	79	12 F 0220	1.6	49	12 0137	2.1	64
Tu 1900	-0.3	-9	W 1843	0.0	0	0600	1.4	43	Sa 0736	0.8	24
						1233	2.7	82	1357	2.4	73
						1958	0.1	3	● 2057	0.9	27
13 1133	2.8	85	28 0222	1.5	46	13 Th 0233	1.7	52	13 0149	2.2	67
W 1946	-0.3	-9	0425	1.4	43	0650	1.2	37	Su 0810	0.6	18
			1119	2.7	82	1315	2.6	79	1433	2.2	67
			1924	-0.1	-3	● 2024	0.3	9	2018	1.0	30
14 0320	1.4	43	29 0238	1.5	46	14 Su 0244	1.8	55	14 0204	2.4	73
Th 0524	1.3	40	F 0527	1.4	43	0735	1.1	34	0845	0.5	15
1223	2.8	85	1209	2.8	85	1354	2.5	76	1510	2.1	64
2025	-0.2	-6	2001	-0.1	-3	2048	0.4	12	2037	1.1	34
15 0337	1.5	46	30 0253	1.5	46	15 M 0255	1.9	58	15 0223	2.5	76
F 0625	1.3	40	Sa 0624	1.3	40	0818	0.9	27	0923	0.4	12
1309	2.7	82	1257	2.8	85	1432	2.4	73	1549	2.0	61
○ 2058	-0.1	-3	● 2036	-0.1	-3	2109	0.6	18	2057	1.3	46
			31 0308	1.6	49				31 0244	2.3	70
			Su 0718	1.1	34				W 0910	0.4	12
			1346	2.8	85				1538	2.3	70
			2109	0.0	0				2125	1.0	30

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Petersburg, Florida, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0302 0.1 1102 1.7 1827 1.6	2.9 0.1 1.7 1.6	ft 88 3 52 49	16 Su 0236 1032 1735 2046	2.7 0.2 1.6 1.5	ft 82 6 49 46	1 Tu 0418 1255	2.5 0.2	ft 76 6	16 W 0347 1200 1924 2248	2.4 0.0 1.5 1.4	ft 73 0 46 43
2 Su 0346 1.2 1213 0.2	2.8 0.2	ft 85 6	17 M 0316 1127 1854 2116	2.6 0.2 1.6 1.5	ft 79 6 49 46	2 W 0535 1357 2139	2.2 0.3 1.7	ft 67 9 52	2 Th 0123 1255 2006	1.0 0.1 1.6	ft 30 3 49
3 M 0441 1.3 1332 0.3	2.7 0.3	ft 82 9	18 Tu 0405 1231	2.6 0.3	ft 79 9	3 Th 0144 0724 1453 2202	1.5 2.0 0.5 1.8	ft 46 61 15 55	18 F 0037 0613 1349 2042	1.3 2.0 0.3 1.7	ft 40 9 52
4 Tu 0558 1.4 1450 0.4	2.5 0.4	ft 76 12	19 W 0506 1339 2133	2.4 0.3 1.7	ft 73 9 52	4 F 0327 0912 1540 2225	1.2 1.8 0.6 2.0	ft 37 55 18 61	19 Sa 0218 0755 1441 2114	1.0 1.8 0.4 1.9	ft 30 55 12 58
5 W 0748 1.5 1555 0.5	2.3 0.5	ft 70 15	20 Th 0021 0630 1444 2203	1.6 2.3 0.4 1.8	ft 49 70 55	5 Sa 0434 1036 1621 2247	0.9 1.8 0.8 2.1	ft 27 55 24 64	20 Su 0338 0938 1528 2146	0.7 1.7 0.7 2.1	ft 21 52 21 64
6 Th 0326 1.6 0933 2.3	1.6 2.3	ft 49 70	21 F 0222 0811 1541 2227	1.5 2.2 0.4 1.9	ft 46 67 58	6 Su 0523 1143 1656 2307	0.6 1.8 1.0 2.2	ft 18 55 30 67	21 M 0442 1107 1611 2218	0.3 1.6 0.9 2.3	ft 9 49 27 70
7 F 0442 1.0 1049 2.2	1.3 2.2	ft 40 67	22 Sa 0346 0944 1629 2251	1.2 2.2 0.6 2.0	ft 37 55 18 61	7 M 0604 1239 1726 2325	0.3 1.8 1.1 2.3	ft 9 55 34 70	22 W 0539 1225 1649 2252	-0.1 1.6 1.1 2.5	ft -3 49 34 76
8 Sa 0535 1.1 1149 2.2	1.0 2.2	ft 30 67	23 Su 0449 1102 1711 2314	0.8 2.2 0.7 2.2	ft 24 67 21 67	8 Tu 0641 1329 1751 2344	0.1 1.7 1.2 2.4	ft 3 52 37 73	23 F 0631 1334 1722 2328	-0.4 1.6 1.2 2.7	ft -12 49 37 82
9 Su 0010 0.6 0617 0.8	2.1 0.8	ft 64 24	24 M 0543 1210 1748 2339	0.5 2.2 0.9 2.4	ft 15 67 27 73	9 W 0715 1414 1813	0.0 1.7 1.3	ft 0 52 40	24 Th 0721 1438 1752	-0.6 1.5 1.3	ft -18 46 40
10 M 0024 0.6 0654 0.6	2.2 0.6	ft 67 18	25 Tu 0633 1312 1819	0.1 2.1 1.1	ft 3 64 34	10 Th 0005 0748 1455 1832	2.5 -0.1 1.6 1.4	ft 76 49 46 43	25 F 0007 0811 1539 1821	2.8 -0.7 1.5 1.3	ft 85 -21 40
11 Tu 0037 0.4 0727 0.4	2.4 0.4	ft 73 12	26 W 0007 0722 1412	2.6 -0.2 2.0	ft 79 6 61	11 F 0030 0822 1533	2.6 -0.2 1.6	ft 79 49 43	26 O 0049 0859 1636	2.8 -0.7 1.4	ft 85 43 40
12 W 0051 0.3 0759 2.0	2.5 0.3	ft 76 9	27 Th 0037 0811 1512	2.8 -0.3 1.9	ft 85 -9 58	12 Sa 0059 0858 1611	2.6 -0.2 1.5	ft 79 46 43	27 M 0133 0947 1729	2.8 -0.6 1.3	ft 85 -18 40
13 Th 0110 0.2 0832 1.9	2.6 0.2	ft 79 6	28 F 0111 0902 1614	2.9 -0.4 1.7	ft 88 -12 58	13 Su 0133 0937 1653	2.6 -0.2 1.5	ft 79 46 43	28 Tu 0133 1034 1814	2.6 -0.4 1.3	ft 79 40 40
14 F 0133 0.1 0907 1.8	2.6 0.1	ft 79 3	29 Sa 0150 0955 1726	2.9 -0.3 1.6	ft 88 -9 49	14 M 0211 1020 1741	2.6 -0.2 1.5	ft 79 46 43	29 W 0309 1121 1853	2.4 -0.2 1.4	ft 73 64 43
15 Sa 0202 0.1 0946 1.7	2.7 0.1	ft 82 3	30 Su 0232 1052	2.9 -0.2	ft 88 -6	15 Tu 0255 1108 1834	2.5 -0.1 1.5	ft 76 46 43	30 Th 0405 1207 1927	2.1 0.0 1.5	ft 64 0 46
16 Sa 0202 0.1 0946 1.7	2.7 0.1	ft 82 3	31 M 0320 1152	2.7 0.0	ft 82 0	16 Tu 0219 1034 1913	2.6 1.4	ft 79 43 43	31 F 0344 1126 2336	2.1 -0.3 1.2	ft 64 27 27

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cedar Key, Florida, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa 0553	-0.6	-18		16 Su 0529	-0.4	-12		1 Tu 0714	-0.6	-18	
1243	2.7	82	Su 1222	2.6	79	Tu 1345	2.9	88	16 W 0643	-0.8	-24
1725	1.5	46	1700	1.6	49	1857	1.0	30	1 Tu 1313	3.0	91
2305	3.7	113	2243	3.5	107				W 1836	0.9	27
2 Su 0643	-0.8	-24	17 M 0620	-0.7	-21	2 W 0039	3.6	110	16 Th 0023	3.9	119
1328	2.8	85	1307	2.8	85	W 0747	-0.6	-18	17 W 0724	-0.9	-27
1819	1.4	43	1759	1.5	46	Th 1410	3.0	91	2 W 0649	-0.2	-6
2356	3.8	116	2338	3.7	113	● 1937	0.8	24	17 M 1307	3.0	91
3 M 0726	-0.8	-24	18 Tu 0705	-1.0	-30	3 Th 0121	3.6	110	2 W 1843	0.7	21
1406	2.9	88	1345	2.9	88	W 0816	-0.5	-15	18 F 0115	4.0	122
1906	1.3	40	1850	1.3	40	Th 1433	3.1	94	3 Th 0033	3.5	107
4 Tu 0042	3.8	116	19 W 0029	3.9	119	W 1412	3.4	104	18 F 0017	3.8	116
0804	-0.8	-24	0746	-1.1	-34	O 2014	0.6	18	3 Th 0719	-0.2	-6
1438	3.0	91	1419	3.1	94	● 2008	0.1	3	18 F 0655	-0.4	-12
● 1949	1.2	37	O 1937	1.0	30	1923	0.5	15	18 M 1259	3.4	104
5 W 0125	3.8	116	20 Th 0118	4.0	122	5 Sa 0236	3.5	107	18 O 1906	0.0	0
0838	-0.7	-21	0825	-1.1	-34	W 0907	-0.2	-6	5 Sa 0149	3.5	107
1507	3.0	91	1450	3.2	98	Sa 1517	3.3	101	20 W 0201	3.8	116
2029	1.0	30	2022	0.7	21	2123	0.3	9	20 Su 0811	0.1	3
6 Th 0206	3.7	113	21 F 0207	4.0	122	5 Su 0254	3.8	116	20 Su 1400	3.9	119
0909	-0.5	-15	0903	-0.9	-27	W 0914	-0.2	-6	20 Su 2036	-0.7	-21
1534	3.0	91	1521	3.3	101	Sa 1511	3.7	113	21 M 0249	3.6	110
2108	0.9	27	2108	0.5	15	2138	-0.4	-12	21 M 0846	0.4	12
7 F 0246	3.5	107	22 Sa 0256	3.8	116	6 Su 0312	3.3	101	21 M 1432	4.0	122
0938	-0.4	-12	0940	-0.6	-18	W 0932	0.0	0	21 W 2121	-0.8	-24
1600	3.1	94	1551	3.4	104	Su 1539	3.4	104	22 M 0259	3.4	104
2146	0.8	24	2155	0.2	6	2158	0.2	6	22 M 0834	0.2	6
8 Sa 0326	3.4	104	23 Su 0346	3.6	110	21 M 0343	3.5	107	22 M 1432	3.5	107
1006	-0.1	-3	1016	-0.3	-9	W 1023	0.0	0	22 M 2059	-0.1	-3
1626	3.2	98	1623	3.5	107	M 1603	3.5	107	22 F 0259	3.3	101
2226	0.7	21	2244	0.1	3	2234	0.1	3	22 F 0858	0.3	9
9 Su 0408	3.1	94	24 M 0440	3.2	98	7 Tu 0350	3.1	94	22 M 1050	4.1	125
1034	0.1	3	1053	0.2	6	W 0957	0.2	6	22 M 2207	-0.7	-21
1653	3.2	98	1657	3.6	110	Tu 1616	3.8	116	22 F 0259	3.3	101
2308	0.6	18	2338	0.0	0	2316	-0.4	-12	23 M 0338	3.4	104
10 M 0454	2.9	88	25 Tu 0540	2.8	85	8 Tu 0430	2.9	88	23 F 0921	0.7	21
1104	0.4	12	1131	0.6	18	W 1024	0.4	12	23 M 1505	4.1	125
1723	3.3	101	1736	3.6	110	Tu 1629	3.5	107	23 W 2207	-0.7	-21
2355	0.5	15				2315	0.1	3	23 M 0412	2.9	88
11 Tu 0549	2.6	79	26 W 0040	0.0	0	23 W 0516	2.6	79	23 W 0956	1.0	30
1138	0.7	21	0655	2.3	70	W 1700	0.7	21	23 W 1542	4.0	122
1758	3.3	101	1213	1.1	34	Tu 1742	3.6	110	23 W 2256	-0.5	-15
● 1823	3.5	107	O 1823	3.5	107	● 1742	3.6	110	23 F 0522	2.6	79
12 W 0051	0.4	12	27 Th 0156	0.0	0	9 W 0516	2.6	79	23 M 1032	1.2	37
0657	2.3	70	0832	2.1	64	W 1054	0.7	21	23 M 1622	3.8	116
1218	1.0	30	1309	1.4	43	Tu 1700	3.5	107	23 M 2352	-0.2	-6
● 1841	3.3	101	1923	3.4	104	● 1742	3.6	110	23 F 0412	2.9	88
13 Th 0159	0.4	12	28 F 0324	-0.1	-3	9 M 0015	-0.2	-6	24 M 0522	2.6	79
0824	2.1	64	1031	2.1	64	W 1054	0.7	21	24 F 1032	1.2	37
1312	1.3	40	1428	1.7	52	Tu 1137	1.3	40	24 M 1622	3.8	116
1934	3.2	98	2035	3.3	101	● 1742	3.6	110	24 M 2352	-0.2	-6
14 F 0316	0.2	6	29 M 0446	-0.2	-6	9 M 0137	1.3	40	24 F 0522	2.6	79
0959	2.1	64	1154	2.3	70	W 1700	0.7	21	24 M 1041	2.4	73
1426	1.6	49	1559	1.7	52	Tu 1742	3.6	110	24 M 1529	1.6	49
2038	3.3	101	2150	3.4	104	● 1742	3.6	110	24 M 2122	3.0	91
15 Sa 0429	-0.1	-3	30 Su 0548	-0.4	-12	14 M 0503	-0.3	-9	15 M 0312	0.1	3
1122	2.3	70	1242	2.5	76	W 1559	2.5	76	15 M 1019	2.3	70
1548	1.7	52	1714	1.5	46	Tu 1539	1.6	49	15 M 1453	1.7	52
2143	3.4	104	2257	3.4	104	2224	3.5	107	15 M 2045	3.2	98
31 M 0635	-0.6	-18							15 M 1746	1.2	37
1316	2.7	82							15 M 2239	3.1	94
1811	1.3	40							15 M 1946	3.0	91
2353	3.5	107							15 M 1946	3.0	91

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Cedar Key, Florida, 2011

Times and Heights of High and Low Waters

April				May				June						
	Time	Height		Time	Height		Time	Height		Time	Height			
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm			
1 F	0021	3.3 101	16 Sa	0011	3.7 113	1 Su	0046	3.3 101	16 M	0103	3.5 107	1 W	0155	3.2 98
	0640	0.4 12		0621	0.4 12		0627	1.1 34		0631	1.3 40		0704	1.7 52
	1240	3.4 104		1213	3.8 116		1217	3.8 116		1212	4.3 131		1244	4.2 128
	1858	0.1 3		1850	-0.4 -12		1909	-0.2 -6		1923	-0.8 -24		2002	-0.4 -12
2 Sa	0101	3.4 104	17 Su	0105	3.7 113	2 M	0125	3.3 101	17 Tu	0154	3.5 107	2 Th	0234	3.3 101
	0708	0.5 15		0702	0.5 15		0659	1.2 37		0714	1.4 43		0742	1.7 52
	1303	3.5 107		1247	4.0 122		1244	3.9 119		1252	4.4 134		1319	4.3 131
	1932	-0.1 -3		O 1936	-0.8 -24		1943	-0.3 -9		O 2009	-0.8 -24		2040	-0.4 -12
3 Su	0137	3.4 104	18 M	0156	3.7 113	3 Tu	0203	3.3 101	18 W	0242	3.4 104	3 F	0313	3.3 101
	0734	0.6 18		0741	0.8 24		0730	1.2 37		0755	1.5 46		0821	1.7 49
	1327	3.7 113		1322	4.2 128		1312	4.0 122		1333	4.4 134		1356	4.3 131
	● 2005	-0.2 -6		2021	-0.9 -27		● 2017	-0.4 -12		2054	-0.8 -24		2117	-0.4 -12
4 M	0213	3.3 101	19 Tu	0245	3.5 107	4 W	0240	3.2 98	19 Th	0328	3.2 98	4 Sa	0351	3.3 101
	0801	0.7 21		0819	1.0 30		0802	1.3 40		0836	1.5 46		0903	1.7 52
	1350	3.8 116		1358	4.3 131		1341	4.0 122		1414	4.4 134		1437	4.2 128
	2036	-0.3 -9		2106	-0.9 -27		2052	-0.4 -12		2138	-0.5 -15		2157	-0.3 -9
5 Tu	0247	3.2 98	20 W	0333	3.3 101	5 Th	0317	3.1 94	20 F	0412	3.1 94	5 Su	0429	3.3 101
	0828	0.8 24		0856	1.2 37		0835	1.4 43		0918	1.6 49		0947	1.6 49
	1414	3.8 116		1435	4.3 131		1412	4.1 125		1457	4.2 128		1522	4.1 125
	2108	-0.4 -12		2152	-0.7 -21		2128	-0.4 -12		2220	-0.3 -9		2238	-0.2 -6
6 W	0323	3.1 94	21 Th	0421	3.0 91	6 F	0357	3.1 94	21 Sa	0455	3.0 91	6 M	0510	3.3 101
	0856	0.9 27		0934	1.3 40		0911	1.5 46		1002	1.6 49		1033	1.5 46
	1440	3.9 119		1515	4.1 125		1447	4.1 125		1542	4.0 122		1614	3.9 119
	2143	-0.3 -9		2239	-0.4 -12		2208	-0.3 -9		2303	0.1 3		2322	0.1 3
7 Th	0401	2.9 88	22 F	0512	2.8 85	7 Sa	0440	3.0 91	22 Su	0539	2.9 88	7 Tu	0553	3.3 101
	0927	1.1 34		1015	1.5 46		0951	1.6 49		1051	1.6 49		1137	1.5 46
	1510	3.9 119		1559	3.9 119		1528	4.0 122		1632	3.7 113		1716	3.6 110
	2221	-0.3 -9		2329	-0.1 -3		2252	-0.2 -6		2346	0.4 12		2407	3.1 94
8 F	0444	2.8 85	23 Sa	0609	2.6 79	8 Su	0530	2.9 88	23 M	0624	2.9 88	8 W	0011	0.4 12
	1000	1.3 40		1103	1.6 49		1039	1.6 49		1149	1.6 49		0640	3.4 104
	1545	3.8 116		1649	3.6 110		1616	3.8 116		1731	3.3 101		1245	1.3 40
	2306	-0.2 -6		2342	0.0 0		2342	0.0 0		● 1833	3.3 101		● 1921	2.9 88
9 Sa	0538	2.6 79	24 Su	0025	0.3 9	9 M	0626	2.9 88	24 Tu	0032	0.7 21	9 Th	0106	0.8 24
	1041	1.5 46		0714	2.5 76		1141	1.7 52		0713	3.0 91		0731	3.6 110
	1628	3.7 113		1205	1.7 52		1717	3.6 110		1257	1.5 46		1402	1.1 34
	● 1754	3.3 101		● 1754	3.3 101		● 1754	3.3 101		● 1844	3.0 91		2004	3.1 94
10 Su	0001	0.0 0	25 M	0130	0.6 18	10 Tu	0041	0.2 6	25 W	0124	1.0 30	10 F	0207	1.2 37
	0647	2.5 76		0823	2.5 76		0727	2.9 88		0802	3.1 94		0825	3.7 113
	1138	1.6 49		1327	1.7 52		1257	1.6 49		1414	1.4 43		1521	0.7 21
	1725	3.5 107		1919	3.0 91		● 1840	3.3 101		2008	2.9 88		2137	3.0 91
11 M	0110	0.1 3	26 Tu	0241	0.8 24	11 W	0147	0.5 15	26 Th	0221	1.3 40	11 Sa	0312	1.4 43
	0809	2.5 76		0923	2.7 82		0826	3.1 94		0851	3.2 98		0918	3.9 119
	1301	1.7 52		1459	1.5 46		1423	1.3 40		1529	1.1 34		1632	0.2 6
	● 1848	3.3 101		2051	2.9 88		2016	3.1 94		2131	2.8 85		2259	3.1 94
12 Tu	0229	0.2 6	27 W	0345	0.9 27	12 Th	0255	0.7 21	27 F	0319	1.4 43	12 Sa	0416	1.6 49
	0924	2.6 79		1009	2.9 88		0920	3.3 101		0937	3.4 104		1010	4.1 125
	1439	1.6 49		1614	1.1 34		1542	0.9 27		1632	0.7 21		1733	-0.2 -6
	2029	3.2 98		2211	2.9 88		2146	3.2 98		2243	2.9 88		● 1827	-0.4 -12
13 W	0343	0.2 6	28 Th	0437	0.9 27	13 F	0359	0.8 24	28 Sa	0414	1.5 46	13 M	0008	3.2 98
	1019	2.9 88		1046	3.2 98		1007	3.6 110		1019	3.6 110		0514	1.7 52
	1603	1.2 37		1710	0.7 21		1648	0.3 9		1723	0.3 9		1100	4.3 131
	2158	3.3 101		2313	3.1 94		2302	3.3 101		2341	3.0 91		1827	-0.4 -12
14 Th	0445	0.2 6	29 F	0518	1.0 30	14 Sa	0456	1.0 30	29 Su	0502	1.6 49	14 Tu	0104	3.3 101
	1101	3.2 98		1118	3.4 104		1050	3.9 119		1057	3.8 116		0606	1.7 52
	1707	0.6 18		1754	0.3 9		1745	-0.2 -6		1807	0.1 3		1148	4.5 137
	2310	3.5 107		2310	3.5 107		● 1847	-0.2 -6		1847	-0.2 -6		1915	-0.6 -18
15 F	0536	0.2 6	30 Sa	0003	3.2 98	15 Su	0007	3.4 104	30 M	0031	3.1 94	15 W	0153	3.4 104
	1138	3.5 107		0554	1.0 30		0545	1.1 34		0545	1.6 49		0653	1.7 52
	1801	0.0 0		1148	3.6 110		1132	4.1 125		1134	4.0 122		1233	4.5 137
	● 1833	0.0 0		1833	0.0 0		1836	-0.6 -18		1847	-0.2 -6		● 2000	-0.6 -18
31 0115 3.2 98 Tu 0625 1.6 49 1209 4.1 125 1925 -0.3 -9														

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Cedar Key, Florida, 2011

Times and Heights of High and Low Waters

July				August				September							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm				
1 0222	3.4	104	16 0249	3.5	107	1 0254	3.8	116	1 0313	4.3	131	16 0257	4.0	122	
F 0727	1.8	55	Sa 0808	1.5	46	M 0841	1.1	34	Th 0957	0.1	3	F 0945	0.4	12	
1307	4.4	134	Sa 1353	4.4	134	M 1432	4.5	137	Tu 1458	4.0	122	F 1558	3.4	104	
● 2025	-0.4	-12	Sa 2058	0.0	0	M 2117	0.1	3	Tu 2119	0.7	21	Th 2202	1.2	37	
2 0257	3.4	104	17 0317	3.5	107	2 0324	3.9	119	2 0349	4.3	131	17 0325	4.0	122	
Sa 0810	1.7	52	Su 0849	1.4	43	Tu 0926	0.8	24	W 0939	0.8	24	Sa 1023	0.4	12	
1350	4.5	137	Su 1433	4.3	131	Tu 1521	4.3	131	F 1705	3.4	104	Sa 1640	3.2	98	
2103	-0.3	-9	Su 2127	0.2	6	Tu 2153	0.4	12	W 2239	1.5	46	Th 2210	1.5	46	
3 0330	3.5	107	18 0343	3.6	110	3 W 0355	4.0	122	18 0344	3.9	119	3 Su 0429	4.3	131	
Su 0854	1.5	46	M 0928	1.3	40	W 1014	0.7	21	Th 1015	0.7	21	Su 1107	0.5	15	
1434	4.4	134	M 1514	4.1	125	W 1612	3.9	119	Th 1616	3.6	110	Su 1733	3.0	91	
2140	-0.2	-6	M 2156	0.4	12	W 2230	0.8	24	Th 2212	1.2	37	Su 2248	1.7	52	
4 0403	3.6	110	19 0409	3.6	110	4 Th 0429	4.1	125	19 F 0411	4.0	122	4 Su 0519	4.1	125	
M 0940	1.4	43	Tu 1008	1.2	37	Th 1106	0.6	18	F 1056	0.8	24	M 1204	0.7	21	
1522	4.2	128	Tu 1555	3.8	116	Th 1710	3.5	107	F 1702	3.3	101	Su 1845	2.8	85	
2218	0.0	0	Tu 2224	0.7	21	Th 2308	1.2	37	F 2243	1.4	43	○ 2339	1.9	58	
5 0436	3.7	113	20 0436	3.7	113	5 F 0508	4.2	128	20 Sa 0443	3.9	119	5 M 0019	2.1	64	
Tu 1029	1.2	37	W 1049	1.1	34	F 1206	0.6	18	Sa 1143	0.8	24	20 Tu 1318	0.8	24	
1614	4.0	122	W 1640	3.5	107	F 1819	3.1	94	Sa 1758	3.0	91	M 1426	0.7	21	
2258	0.4	12	W 2253	1.0	30	F 2351	1.6	49	Sa 2319	1.7	52	○ 2130	2.7	82	
6 0513	3.8	116	21 0506	3.8	116	6 Sa 0555	4.1	125	21 Su 0523	3.9	119	6 Tu 0141	2.2	67	
W 1124	1.1	34	Th 1136	1.1	34	Sa 1318	0.7	21	Su 1244	0.9	27	W 0748	3.8	116	
1714	3.6	110	Th 1731	3.2	98	Sa 1947	2.8	85	○ 1915	2.7	82	W 1556	0.6	18	
2339	0.8	24	○ 2325	1.3	40	○ 2249	2.8	85	○ 2249	2.8	85	W 1442	0.7	21	
7 0553	3.9	119	22 0541	3.8	116	7 Su 0044	1.9	58	22 M 0006	1.9	58	22 Th 0317	2.1	64	
Th 1227	1.0	30	F 1230	1.1	34	Su 0655	4.1	125	M 0618	3.8	116	22 W 0828	3.6	110	
1826	3.2	98	F 1835	2.9	88	M 1445	0.6	15	M 1403	0.9	27	Th 1557	0.6	18	
2338	0.8	24	○ 1957	2.7	82	M 2136	2.7	82	W 2052	2.7	82	W 2236	3.1	94	
8 0026	1.2	37	23 0004	1.6	49	8 M 0157	2.2	67	23 Tu 0119	2.2	67	8 Th 0435	1.8	55	
F 0640	3.9	119	Sa 0624	3.8	116	M 0808	4.0	122	Tu 0733	3.7	113	Th 1033	3.9	119	
1340	0.8	24	Sa 1336	1.0	30	M 1612	0.5	15	Tu 1529	0.8	24	F 1750	0.4	12	
○ 1954	2.9	88	○ 1957	2.7	82	M 2309	2.9	88	Tu 2223	2.8	85	○ 2318	3.3	101	
9 0122	1.6	49	24 0054	1.9	58	9 Tu 0324	2.2	67	24 W 0253	2.2	67	9 F 0008	3.3	101	
Sa 0736	4.0	122	Su 0718	3.8	116	Tu 0926	4.0	122	W 0856	3.8	116	24 Sa 1057	4.0	122	
1502	0.6	18	Su 1455	0.9	27	Tu 1721	0.3	9	W 1640	0.5	15	Sa 1744	0.3	9	
2133	2.8	85	Su 2130	2.7	82	Tu 2324	3.0	91	W 2324	3.0	91	○ 2353	3.6	110	
10 0230	1.9	58	25 0203	2.1	64	10 W 0006	3.1	94	25 Th 0414	2.1	64	10 Sa 0036	3.5	107	
Su 0838	4.1	125	M 0823	3.8	116	W 0442	2.0	61	Th 1009	4.0	122	W 0618	1.1	34	
1621	0.3	9	M 1611	0.7	21	W 1036	4.2	128	Th 1735	0.2	6	W 1216	4.1	125	
2305	2.9	88	M 2254	2.8	85	W 1812	0.1	3	W 1859	0.5	15	W 1906	0.4	12	
11 0343	2.0	61	26 0324	2.2	67	11 Th 0045	3.3	101	26 F 0007	3.3	101	11 Su 0101	3.6	110	
M 0942	4.2	128	Tu 0930	3.9	119	Th 0542	1.8	55	M 0517	1.8	55	26 M 0637	0.3	9	
1727	0.0	0	Tu 1714	0.4	12	Th 1133	4.3	131	F 1110	4.2	128	W 1246	4.3	131	
2356	3.0	91	Tu 2356	3.0	91	Th 1854	0.0	0	W 1819	0.0	0	W 1906	0.4	12	
12 0013	3.1	94	27 0437	2.1	64	12 F 0117	3.4	104	27 Sa 0041	3.5	107	12 M 0124	3.8	116	
Tu 0452	2.0	61	W 1030	4.1	125	F 0631	1.5	46	W 0609	1.4	43	27 Tu 0722	-0.1	-3	
1042	4.3	131	W 1804	0.1	3	F 1222	4.3	131	W 1203	4.4	134	27 M 1336	4.3	131	
1821	-0.2	-6	W 1821	-0.2	-6	F 1929	0.1	3	W 1900	-0.1	-3	○ 1953	0.7	21	
13 0103	3.2	98	28 0042	3.2	98	13 Th 0145	3.5	107	28 F 0112	3.7	113	13 M 0146	3.9	119	
W 0550	1.9	58	Th 0536	2.0	61	Sa 0714	1.3	40	W 0655	1.0	30	28 W 0807	-0.3	-9	
1136	4.4	134	Th 1124	4.3	131	Sa 1305	4.4	134	W 1253	4.5	137	W 1425	4.1	125	
1908	-0.3	-9	Th 1847	-0.1	-3	○ 2000	0.2	6	○ 1938	0.0	0	W 2022	0.9	27	
14 0144	3.3	101	29 0120	3.4	104	14 Su 0210	3.6	110	29 M 0141	3.9	119	14 W 0209	3.9	119	
Th 0641	1.8	55	F 0626	1.8	55	Su 0752	1.1	34	W 0740	0.7	21	29 Th 0853	-0.4	-12	
1225	4.5	137	F 1213	4.5	137	Su 1344	4.3	131	W 1341	4.5	137	Th 1515	3.9	119	
1949	-0.3	-9	F 1927	-0.3	-9	Su 2027	0.3	9	W 2014	0.2	6	W 2059	1.2	37	
15 0218	3.4	104	30 0153	3.5	107	15 M 0233	3.7	113	30 Tu 0211	4.0	122	15 F 0232	4.0	122	
F 0726	1.6	49	Sa 0712	1.6	49	M 0829	1.0	30	W 0824	0.4	12	30 F 0941	-0.4	-12	
1310	4.5	137	Sa 1300	4.6	140	M 1421	4.2	128	W 1429	4.4	134	W 1606	3.5	107	
○ 2025	-0.2	-6	○ 2005	-0.3	-9	M 2053	0.5	15	W 2050	0.5	15	W 2136	1.4	43	
31 0224	3.7	113	31 Su 0757	1.3	40	31 W 0909	0.2	6	31 W 1518	4.1	125				
				1346	4.6	140				31 W 2126	0.8	24			
				2041	-0.2	-6									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Cedar Key, Florida, 2011

Times and Heights of High and Low Waters

October				November				December															
	Time	Height			Time	Height			Time	Height													
1 Sa 1031 1701 2217	h m 0316 -0.2 3.2 1.7	ft 4.4 -6 98 52	cm 134 -6 94 49	16 Su 1001 1629 2149	h m 0250 0.1 3.1 1.6	ft 4.0 0.1 94 49	cm 122 3 94 49	1 Tu 1204 1850 2356	h m 0434 0.3 2.7 1.7	ft 3.7 9 82 52	cm 113 9 91 46	16 Th 1210 1756 2324	h m 0518 0.5 3.0 1.5	ft 3.1 15 88	cm 94 15 88	16 F 1136 1801	h m 0449 0.0	ft 3.2 0	cm 98 98				
	0359 1128 1806 2304	4.2 0.1 2.9 1.8	128 3 88 55	17 M 1044 1720 2232	0326 2.9 1.7	3.9 88 52	119	2 W 1305 1951	0541 2.8	3.4 85	104	17 Th 1207 1849	0454 3.0	3.4 91	104	2 F 1258 1930	0041 3.0	1.2 91	37	17 Sa 1225 1847	0013 3.3	0.8 101	24
	0452 1234 1926	3.9 0.4 2.7	119	18 Tu 1136 1822 2329	0409 2.8 1.8	3.8 85 55	116	3 Th 0704 1412 2047	0113 0.9 2.9	1.6 27 88	49	18 F 0610 1307 1944	0032 0.4 3.1	1.4 12 94	43	3 Sa 0749 1351 2017	0152 1.1 3.1	1.0 34 94	30	18 Su 0723 1321 1938	0122 0.8 3.4	0.6 24 104	18
	0007 0600 1354 2053	2.0 3.6 0.7 2.7	61	19 W 1240 1935	0506 2.8	3.6 85	110	4 F 1516 2135	0237 3.1	1.4 94	43	19 Sa 1413 2037	0149 3.3	1.2 101	37	4 Su 0914 1449 2104	0305 1.3 3.2	0.7 40 98	21	19 M 1426 2033	0238 3.5	0.3 107	9
5 W 0731 1517 2159	0132 3.4 0.8 2.8	2.0 104 24 85	61	20 Th 0627	0045 3.4	1.9 104	58	5 Sa 0955 1610 2215	0350 1.1 3.3	1.0 34 101	30	20 Su 0913 1519 2127	0306 0.9 3.5	0.8 27 107	24	5 M 1030 1548 2150	0410 1.5 3.3	0.4 46 101	12	20 Tu 1028 1536 2130	0353 1.4 3.7	-0.1 43 113	-3
6 Th 0905 1623 2243	0305 3.4 0.8	1.8 104 24	55	21 F 0804 1506 2139	0213 0.6	1.7 101	52	6 Su 1058 1655 2250	0448 1.2 3.5	0.6 37 107	18	21 M 1033 1620 2213	0414 1.0 3.7	0.2 113	6	6 Tu 1132 1642 2233	0505 1.5 3.5	0.1 107	3	21 W 1145 1642 2226	0501 1.5 3.8	-0.5 46 116	-15
	0420 1021 1711 2317	1.4 3.5 0.8 3.3	43	22 F 0932 1610 2223	0332 0.6	1.3 104	40	7 M 1149 1734 2322	0534 1.2 3.6	0.2 37 110	6	22 Tu 1141 1714 2258	0513 1.2 4.0	-0.3 122	-9	7 W 1223 1729 2313	0551 1.5 3.6	-0.2 46 110	-6	22 Th 1246 1741 2319	0600 1.5 4.0	-0.8 46 122	-24
	0515 1119 1748 2346	1.0 3.6 0.8 3.5	30	23 Sa 1044	0436 3.6	0.8 110	24	8 Tu 1233 1809 2353	0614 1.3 3.8	0.0 40 116	0	23 W 1240 1804 2341	0607 1.3 4.1	-0.7 104 125	-21	8 Th 1307 1813 2352	0633 1.5 3.7	-0.4 46 113	-12	23 F 1337 1835	0652 1.4	-1.1 43	-34
	0559 1205 1820	0.6 3.7 0.9	18	24 Su 1145	0530 3.8	0.2 116	6	9 W 1751 1843	0651 1.3	-0.2 40	-6	24 Th 1313 1851	0657 1.4	-1.0 43	-30	9 F 1347 1853	0711 1.5	-0.6 46	-18	24 Sa 1421 1923	0010 1.3	4.1 40	125
10 M 0637 1245 1849	0012 3.7 0.9	113	25	25 Tu 1241 1834	0620 0.9	-0.3 27	-9	10 F 1351 1916	0023 1.4	3.8 43	116	25 Sa 1424 1935	0025 1.4	4.3 43	131	10 O 1424 1933	0029 1.4	3.7 43	113	25 Su 0823 1500 2009	0059 3.0 1.2	4.1 91 37	125
11 Tu 1322 O 1917	0037 3.7 1.1	116	26 W 0707	0015 -0.7	4.2 -21	128	11 F 1333 1915	0053 1.1	3.9 34	119	26 Sa 0832 1949	0109 1.4	4.3 43	131	11 O 1511 1949	0105 1.4	3.8 43	116	26 M 1535 2012	0146 1.4	4.0 43	122	
	0102 0745 1358	3.9 0.0 3.6	119	27 W 0754 1423 1955	0051 3.7	4.3 113	131	12 Sa 0835 1504 2023	0123 3.2	3.9 46	119	27 Su 0917 1555 2105	0154 3.1 1.4	4.2 94	128	12 M 1534 2052	0143 1.3	3.8 40	116	27 Tu 0940 1607 2138	0232 3.0 0.9	3.9 46 27	119
	0127 0817 1433	4.0 -0.1 3.5	122	28 Th 0841 1513 2036	0129 3.5	4.4 143	134	13 F 0910 1542 2100	0155 3.1	3.9 46	119	28 M 1001 1638 2151	0240 3.0 1.4	4.1 43	125	13 Tu 0935 1638 2151	0222 3.2	3.8 43	116	28 W 1014 1637 2223	0318 3.0 0.8	3.6 91 24	110
	0152 0850 1509	4.0 -0.1 3.4	122	29 Sa 0928 1603 2117	0210 3.3	4.4 101	134	14 M 0948 1623 2140	0230 3.0	3.9 46	119	29 Tu 1044 1719 2241	0328 2.9 1.3	3.8 40	116	14 W 1013 1643 2221	0305 3.1 1.1	3.7 34	113	29 Th 1047 1708 2309	0404 3.1 0.8	3.3 94	101
15 Sa 1547 2114	0220 0924 1547	4.0 0.0 3.3	122	30 Su 1017 1655 2202	0253 3.0	4.2 91	128	15 Tu 1029 1707 2227	0309 3.0	3.8 46	116	30 W 1127 1800 2337	0420 2.9 1.3	3.5 40	107	15 Th 1053 1721 2313	0353 3.2 1.0	3.5 30	107	30 F 1119 1740 2313	0454 3.1 1.0	3.0 94	91
				31 M 1108 1750 2254	0340 2.8	4.0 85	122									31 Sa 1153 1816	0000 3.1	0.7 94	21				

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Marks River Entrance, Florida, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0607 0.9 -27	16 Su 0557 -0.6 -18	1 Tu 0030 3.1 94	16 W 0658 -1.0 -30	1 Tu 0629 -0.3 -9	16 W 0544 -0.4 -12						
1249 2.6 79	Su 1243 2.6 79	Tu 0725 -0.8 -24	1330 3.1 94	Tu 1250 2.7 82	1219 3.1 94						
1734 1.5 46	1727 1.5 46	1345 2.8 85	1853 0.8 24	1825 1.0 30	1749 0.9 27						
2337 3.3 101	2307 2.9 88	1910 0.9 27			2345 3.3 101						
2 Su 0655 -1.0 -30	17 M 0640 -0.9 -27	2 W 0111 3.2 98	17 Th 0045 3.5 107	2 W 0028 3.0 91	17 Th 0628 -0.4 -12						
1330 2.8 85	1322 2.8 85	0757 -0.7 -21	0736 -1.0 -30	0702 -0.3 -9	1252 3.3 101						
1827 1.4 43	1818 1.3 40	1413 2.9 88	1400 3.3 101	1315 2.9 88	1838 0.4 12						
	2359 3.2 98	● 1947 0.6 18	1937 0.3 9	1903 0.7 21							
3 M 0027 3.3 101	18 Tu 0720 -1.1 -34	3 Th 0148 3.2 98	18 F 0134 3.6 110	3 Th 0106 3.1 94	18 F 0041 3.6 110						
0738 -1.0 -30	1358 3.0 91	0826 -0.6 -18	0811 -0.8 -24	0730 -0.2 -6	0707 -0.3 -9						
1406 2.8 85	1903 1.1 34	1438 3.0 91	1429 3.4 104	1340 3.1 94	1322 3.5 107						
1912 1.2 37		2023 0.4 12	○ 2020 -0.1 -3	1937 0.4 12	1923 -0.1 -3						
4 Tu 0111 3.4 104	19 W 0048 3.4 104	4 F 0222 3.2 98	19 Sa 0222 3.6 110	4 F 0141 3.2 98	19 Sa 0132 3.7 113						
0817 -1.0 -30	0758 -1.2 -37	0851 -0.5 -15	0844 -0.6 -18	0755 -0.2 -6	0743 -0.1 -3						
1439 2.9 88	1431 3.1 94	1503 3.1 94	1456 3.5 107	1403 3.3 101	1350 3.7 113						
● 1953 1.0 30	○ 1947 0.8 24	2057 0.3 9	2103 -0.4 -12	● 2009 0.1 3	○ 2007 -0.6 -18						
5 W 0151 3.3 101	20 Th 0134 3.6 110	5 Sa 0255 3.1 94	20 Su 0310 3.5 107	5 Sa 0213 3.2 98	20 Su 0221 3.7 113						
0851 -0.8 -24	0834 -1.2 -37	0914 -0.3 -9	0915 -0.2 -6	0818 0.0 0	0816 0.2 6						
1509 2.9 88	1502 3.2 98	1526 3.2 98	1523 3.5 107	1425 3.4 104	1418 3.8 116						
2032 0.8 24	2030 0.5 15	2131 0.1 3	2148 -0.6 -18	2040 0.0 0	2051 -0.9 -27						
6 Th 0228 3.2 98	21 F 0221 3.6 110	6 Su 0329 2.9 88	21 M 0358 3.2 98	6 Su 0244 3.2 98	21 M 0308 3.5 107						
0921 -0.6 -18	0908 -1.0 -30	0937 -0.1 -9	0943 0.3 9	0840 0.1 3	0847 0.5 15						
1538 2.9 88	1532 3.2 98	1548 3.2 98	1549 3.6 110	1445 3.4 104	1446 3.9 119						
2110 0.7 21	2114 0.2 6	2205 0.1 3	2236 -0.7 -21	2110 -0.2 -6	2135 -0.9 -27						
7 F 0304 3.1 94	22 Sa 0308 3.5 107	7 M 0405 2.8 85	22 Tu 0449 2.8 85	7 M 0317 3.1 94	22 Tu 0355 3.2 98						
0949 -0.4 -12	0941 -0.7 -21	1001 0.1 3	1011 0.7 21	0903 0.2 6	0915 0.9 27						
1605 2.9 88	1601 3.3 101	1609 3.1 94	1616 3.5 107	1506 3.5 107	1514 3.9 119						
2149 0.6 18	2201 0.0 0	2241 0.1 3	2329 -0.5 -15	2140 -0.2 -6	2222 -0.8 -24						
8 Sa 0341 2.9 88	23 Su 0358 3.2 98	8 Tu 0445 2.5 76	23 W 0547 2.4 73	8 Tu 0351 3.0 91	23 W 0444 2.9 88						
1015 -0.1 -3	1013 -0.2 -6	1028 0.4 12	1037 1.1 34	0928 0.4 12	0942 1.2 37						
1632 2.9 88	1630 3.3 101	1633 3.1 94	1646 3.4 104	1527 3.4 104	1542 3.8 116						
2229 0.6 18	2251 0.2 -6	2322 0.1 3	2212 -0.2 -6	2212 -0.2 -6	2313 -0.6 -18						
9 Su 0421 2.7 82	24 M 0452 2.8 85	9 W 0535 2.3 70	24 Th 0034 -0.3 -9	9 W 0429 2.8 85	24 Th 0537 2.5 76						
1042 0.1 3	1045 0.2 6	1059 0.7 21	0703 2.0 61	0956 0.7 21	1009 1.4 43						
1658 2.9 88	1700 3.2 98	1659 3.0 91	1105 1.4 43	1551 3.4 104	1613 3.6 110						
2314 0.5 15	2349 -0.2 -6	2322 0.1 3	● 1721 3.1 94	2249 -0.1 -3							
10 M 0507 2.4 73	25 Tu 0555 2.4 73	10 Th 0015 0.2 6	25 F 0158 -0.1 -3	10 Th 0515 2.5 76	25 F 0012 -0.2 -6						
1111 0.5 15	1118 0.7 21	0644 2.0 61	0904 1.8 55	1028 0.9 27	0645 2.1 64						
1726 2.8 85	1734 3.2 98	1137 1.1 34	1140 1.7 52	1619 3.3 101	1037 1.6 49						
	91 3.0 91	1733 2.8 85	1813 2.8 85	2336 0.0 0	1647 3.3 101						
11 Tu 0007 0.5 15	26 W 0058 -0.2 -6	11 Sa 0131 0.3 9	26 Sa 0334 -0.1 -3	11 F 0617 2.3 70	26 Sa 0129 0.1 3						
0606 2.1 64	0718 2.0 61	0832 1.9 58	1112 2.0 61	1106 1.3 40	0829 2.0 61						
1145 0.8 24	1155 1.2 37	1233 1.5 46	1322 1.9 58	1653 3.2 98	1118 1.9 58						
1758 2.7 82	● 1815 3.0 91	● 1820 2.7 82	2026 2.6 79		● 1736 2.9 88						
12 W 0115 0.5 15	27 Th 0222 -0.2 -6	12 Sa 0308 0.1 3	27 Su 0452 -0.2 -6	12 F 0042 0.1 3	27 Su 0300 0.3 9						
0734 1.9 58	0914 1.8 55	1027 2.0 61	1156 2.2 67	0750 2.1 64	1025 2.1 64						
1232 1.1 34	1246 1.5 46	1404 1.7 52	1615 1.8 55	1200 1.6 49	1316 2.0 61						
● 1838 2.6 79	1916 2.9 88	1937 2.6 79	2236 2.7 82	● 1740 3.0 91	2003 2.5 76						
13 Th 0239 0.4 12	28 F 0351 -0.3 -9	13 Su 0430 -0.2 -6	28 M 0547 -0.3 -9	13 M 0213 0.1 3	28 M 0419 0.4 12						
0928 1.9 58	1103 2.0 61	1136 2.4 73	1224 2.5 76	0942 2.2 67	1114 2.4 73						
1337 1.4 43	1416 1.8 55	1550 1.7 52	1738 1.4 43	1331 1.8 55	1617 1.8 55						
1934 2.6 79	2055 2.8 85	2125 2.7 82	2342 2.9 88	1857 2.8 85	2228 2.6 79						
14 F 0401 0.1 3	29 Sa 0505 -0.5 -15	14 M 0530 -0.5 -15	14 Th 0344 0.0 0	14 M 0515 0.4 12							
1058 2.1 64	1205 2.2 67	1221 2.6 79	1056 2.5 76	1145 2.6 79							
1502 1.6 49	1611 1.7 52	1709 1.5 46	1525 1.8 55								
2048 2.6 79	2232 2.8 85	2250 2.9 88	2058 2.8 85								
15 Sa 0505 -0.2 -6	30 Su 0602 -0.7 -21	15 Tu 0617 -0.8 -24	15 M 0452 -0.2 -6	15 Tu 0556 0.4 12							
1158 2.4 73	1244 2.4 73	1257 2.9 88	1143 2.8 85	1211 2.9 88							
1623 1.6 49	1732 1.5 46	1805 1.2 37	1650 1.4 43	1812 0.9 27							
2204 2.7 82	2339 3.0 91	2352 3.2 98	2236 3.0 91								
	31 M 0647 -0.8 -24	M 1316 2.6 79									
	1827 1.2 37	1827 1.2 37									

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Marks River Entrance, Florida, 2011

Times and Heights of High and Low Waters

April				May				June						
	Time	Height			Time	Height			Time	Height				
	h m	ft cm		h m	ft cm			h m	ft cm					
1 <i>F</i>	0055	3.1 94		16 <i>Sa</i>	0035	3.5 107		1 <i>Su</i>	0116	3.1 94		16 <i>W</i>	0217	3.2 98
	0655	0.4 12			0633	0.5 15			0641	1.1 34			0715	1.6 49
	1301	3.3 101			1240	3.8 116			1243	3.6 110			1306	3.8 116
	1920	0.2 6			1909	-0.5 -15			1934	0.0 0			2025	-0.4 -12
2 <i>Sa</i>	0129	3.2 98		17 <i>Su</i>	0129	3.7 113		2 <i>M</i>	0150	3.2 98		2 <i>Tu</i>	0253	3.3 101
	0720	0.5 15			0711	0.7 21			0710	1.2 37			0751	1.5 46
	1324	3.5 107			1312	4.0 122			1308	3.7 113			1318	4.2 128
	1951	0.0 0			1954	-0.9 -27			2005	-0.2 -6			2031	-1.0 -30
3 <i>Su</i>	0201	3.2 98		18 <i>M</i>	0218	3.6 110		3 <i>Tu</i>	0224	3.3 101		3 <i>W</i>	0330	3.3 101
	0744	0.6 18			0747	1.0 30			0739	1.2 37			0758	1.6 49
	1346	3.6 110			1344	4.1 125			1333	3.8 116			1356	4.2 128
	2021	-0.2 -6			2039	-1.0 -30			2036	-0.3 -9			2115	-0.9 -27
4 <i>M</i>	0233	3.2 98		19 <i>Tu</i>	0305	3.5 107		4 <i>W</i>	0259	3.3 101		4 <i>Th</i>	0406	3.4 104
	0808	0.6 18			0820	1.2 37			0809	1.2 37			0908	1.5 46
	1407	3.7 113			1416	4.1 125			1359	3.9 119			1433	4.1 125
	2051	-0.3 -9			2125	-1.0 -30			2108	-0.4 -12			2159	-0.7 -21
5 <i>Tu</i>	0306	3.2 98		20 <i>W</i>	0351	3.3 101		5 <i>Th</i>	0336	3.3 101		5 <i>F</i>	0425	3.1 94
	0834	0.7 21			0851	1.4 43			0842	1.3 40			0912	1.6 49
	1429	3.7 113			1448	4.1 125			1428	3.9 119			1511	3.9 119
	2121	-0.3 -9			2210	-0.8 -24			2141	-0.4 -12			2241	-0.3 -9
6 <i>W</i>	0341	3.1 94		21 <i>Th</i>	0437	3.0 91		6 <i>F</i>	0415	3.2 98		6 <i>Sa</i>	0506	2.9 88
	0902	0.9 27			0922	1.5 46			0917	1.4 43			0952	1.5 46
	1453	3.7 113			1521	3.9 119			1501	3.9 119			1535	4.0 122
	2152	-0.3 -9			2258	-0.5 -15			2218	-0.4 -12			2245	-0.3 -9
7 <i>Th</i>	0420	3.0 91		22 <i>F</i>	0525	2.7 82		7 <i>Sa</i>	0458	3.1 94		7 <i>Tu</i>	0607	3.3 101
	0932	1.0 30			0955	1.6 49			0957	1.5 46			1142	1.3 40
	1520	3.7 113			1555	3.7 113			1538	3.9 119			1631	3.4 104
	2229	-0.2 -6			2351	-0.1 -3			2300	-0.3 -9			1723	3.5 107
8 <i>F</i>	0505	2.8 85		23 <i>Sa</i>	0621	2.5 76		8 <i>Su</i>	0548	3.0 91		8 <i>M</i>	0007	0.4 12
	1007	1.3 40			1034	1.8 55			1045	1.6 49			0635	2.7 82
	1552	3.6 110			1634	3.3 101			1623	3.7 113			1137	1.8 55
	2314	-0.1 -3							2350	-0.1 -3			1724	3.0 91
9 <i>Sa</i>	0602	2.7 82		24 <i>Su</i>	0051	0.3 9		9 <i>M</i>	0645	3.0 91		9 <i>Th</i>	0054	0.8 24
	1050	1.5 46			0732	2.3 70			1147	1.7 52			0728	2.7 82
	1631	3.5 107			1131	1.9 58			1721	3.4 104			1259	1.7 52
					1727	2.9 88							1845	2.6 79
10 <i>Su</i>	0012	0.0 0		25 <i>M</i>	0202	0.7 21		10 <i>Tu</i>	0049	0.2 6		10 <i>W</i>	0147	1.1 34
	0717	2.5 76			0856	2.4 73			0749	3.0 91			0827	2.8 85
	1149	1.7 52			1320	2.0 61			1308	1.6 49			1444	1.6 49
	1723	3.2 98			1925	2.5 76			1841	3.1 94			2049	2.4 73
11 <i>M</i>	0127	0.1 3		26 <i>Tu</i>	0315	0.9 27		11 <i>W</i>	0155	0.4 12		11 <i>Th</i>	0245	1.4 43
	0846	2.6 79			1002	2.6 79			0852	3.1 94			0924	2.9 88
	1318	1.9 58			1542	1.7 52			1440	1.4 43			1613	1.2 37
	1844	3.0 91			2154	2.5 76			2028	2.9 88			2227	2.5 76
12 <i>Tu</i>	0250	0.2 6		27 <i>W</i>	0416	1.0 30		12 <i>Th</i>	0304	0.7 21		12 <i>Sa</i>	0416	1.7 52
	0959	2.8 85			1046	2.8 85			0948	3.3 101			0842	3.5 107
	1503	1.7 52			1701	1.3 40			1602	0.9 27			1537	0.5 15
	2041	2.9 88			2308	2.7 82			2209	3.0 91			2157	2.8 85
13 <i>W</i>	0402	0.2 6		28 <i>Th</i>	0503	1.0 30		13 <i>F</i>	0408	0.9 27		13 <i>Sa</i>	0435	1.6 49
	1050	3.0 91			1120	3.0 91			1036	3.5 107			0517	1.8 55
	1627	1.2 37			1748	0.9 27			1708	0.3 9			1128	3.9 119
	2223	3.1 94			2359	2.8 85			2327	3.2 98			1847	-0.6 -18
14 <i>Th</i>	0501	0.2 6		29 <i>F</i>	0540	1.1 34		14 <i>Sa</i>	0505	1.1 34		14 <i>Tu</i>	0121	3.2 98
	1131	3.3 101			1150	3.2 98			1119	3.7 113			0521	1.6 49
	1729	0.6 18			1826	0.5 15			1805	-0.2 -6			1130	3.4 104
	2336	3.3 101											1840	0.2 6
15 <i>F</i>	0550	0.3 9		30 <i>Sa</i>	0039	3.0 91		15 <i>Su</i>	0030	3.4 104		15 <i>M</i>	0102	3.0 91
	1206	3.6 110			0612	1.1 34			0554	1.3 40			0601	1.6 49
	1821	0.0 0			1217	3.4 104			1200	3.9 119			1203	3.5 107
					1901	0.2 6			1856	-0.7 -21			1917	0.0 0
31 <i>Tu</i>	0140	3.1 94		31 <i>Tu</i>	0638	1.6 49		31 <i>Th</i>	0140	3.1 94		31 <i>W</i>	0207	3.3 101
	0638	1.6 49			1235	3.7 113			1235	3.7 113			0659	1.8 55
	1235	3.7 113											1304	4.1 125
	1951	-0.2 -6											2022	-0.8 -24

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Marks River Entrance, Florida, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0241	3.4	104	16 Sa 0301	3.4	104	1 M 0315	3.7	113	16 Tu 0314	3.7	113
0738	1.6	49	0818	1.4	43	0851	0.9	27	0916	0.8	24
1328	4.1	125	1423	4.0	122	1452	4.3	131	1522	3.8	116
● 2045	-0.5	-15	2118	-0.2	-6	2127	0.0	0	2134	0.6	18
2 Sa 0315	3.5	107	17 Su 0331	3.4	104	2 Tu 0343	3.8	116	17 W 0337	3.7	113
0819	1.5	46	0857	1.2	37	0936	0.6	18	0950	0.7	21
1409	4.2	128	1500	3.9	119	1538	4.1	125	1557	3.6	110
2118	-0.5	-15	2147	0.1	3	2159	0.3	9	2158	0.8	24
3 Su 0347	3.5	107	18 M 0358	3.4	104	3 W 0411	3.9	119	18 Th 0400	3.7	113
0902	1.3	40	0936	1.1	34	1023	0.4	15	1026	0.8	24
1452	4.2	128	1536	3.7	113	1628	3.8	116	1635	3.4	104
2151	-0.4	-12	2213	0.3	9	2230	0.7	21	2224	1.1	34
4 M 0419	3.6	110	19 Tu 0424	3.4	104	4 Th 0441	3.9	119	19 F 0424	3.6	110
0947	1.1	34	1015	1.1	34	1116	0.4	12	1105	0.9	27
1537	4.1	125	1614	3.5	107	1723	3.4	104	1719	3.1	94
2225	-0.2	-6	2238	0.6	18	2303	1.1	34	2255	1.3	40
5 Tu 0451	3.6	110	20 W 0449	3.4	104	5 F 0514	3.9	119	20 Sa 0451	3.5	107
1036	1.0	30	1057	1.1	34	1218	0.4	12	1153	1.0	30
1627	3.8	116	1654	3.2	98	1829	3.0	91	1815	2.8	85
2300	0.2	6	2304	0.9	27	2340	1.5	46	2331	1.6	49
6 W 0525	3.6	110	21 Th 0516	3.4	104	6 Sa 0554	3.8	116	21 Su 0524	3.4	104
1131	0.8	24	1144	1.1	34	1333	0.5	15	1302	1.1	34
1725	3.5	107	1743	2.9	88	1957	2.6	79	1939	2.6	79
2338	0.6	18	2335	1.2	37	●			●		
7 Th 0602	3.6	110	22 F 0545	3.3	101	7 Su 0024	1.9	58	22 M 0020	1.9	58
1236	0.7	21	1243	1.2	37	0648	3.7	113	0611	3.3	101
1835	3.0	91	1848	2.6	79	1502	0.5	15	1438	1.1	34
						2146	2.5	76	2130	2.6	79
8 F 0020	1.1	34	23 Sa 0645	3.6	110	8 M 0129	2.1	64	23 Th 0723	3.2	98
1353	0.6	18	0621	3.2	98	0811	3.5	107	1608	0.9	27
● 2005	2.7	82	1402	1.2	37	1628	0.3	9	2257	2.8	85
			● 2024	2.4	73	2316	2.7	82			
9 Sa 0111	1.5	46	24 Su 0740	1.0	55	9 Tu 0306	2.2	67	24 W 0908	2.2	67
1517	0.4	12	0711	3.2	98	0955	3.6	110	1713	0.5	15
2149	2.6	79	1536	1.0	30	1736	0.1	3	2352	3.0	91
			2214	2.5	76				1844	0.5	15
10 Su 0215	1.9	58	25 M 0849	2.0	61	10 W 0213	2.9	88	25 F 0442	2.1	64
1637	0.1	3	0824	3.2	98	0442	2.1	64	1114	3.7	113
2318	2.7	82	1654	0.8	24	1114	3.7	113	1828	0.0	0
			2332	2.7	82	1828	0.0	0			
11 M 0332	2.1	64	26 Tu 1004	2.1	64	11 Th 0948	2.1	64	26 Sa 1048	2.1	64
1744	-0.2	-6	0948	3.3	101	0553	3.1	94	0551	1.8	55
			Tu 1751	0.4	12	0551	1.8	55	1212	3.9	107
						1212	3.9	119	1136	3.8	116
						1911	0.0	0	1843	0.1	3
12 Tu 0023	2.9	88	27 W 0449	2.9	88	12 F 0225	3.2	98	27 Sa 0643	1.6	49
1113	2.1	64	0453	2.1	64	0225	3.2	98	0624	1.4	43
1840	-0.4	-12	1056	3.5	107	1258	4.0	122	1228	4.1	125
			1835	0.1	3	1947	0.0	0	1920	0.0	0
13 W 0112	3.1	94	28 Th 0554	1.9	58	13 Sa 0552	3.4	104	28 Su 0726	1.3	40
1211	4.0	122	0552	1.9	58	0552	3.4	104	1338	4.0	122
1928	-0.5	-15	1150	3.7	113	● 2018	0.1	3	● 1955	0.1	3
			1914	-0.1	-3						
14 Th 0153	3.2	98	29 F 0649	1.7	52	14 Su 0641	2.25	107	29 M 0805	1.1	34
1300	4.1	125	1237	4.0	122	0805	1.1	34	0753	0.6	18
2009	-0.5	-15	1950	-0.3	-9	1414	4.0	122	1403	4.4	134
						2045	0.3	9	2028	0.2	6
15 F 0229	3.3	101	30 Sa 0735	3.5	107	15 M 0215	3.6	110	30 W 0725	1.5	46
1344	1.6	49	0725	1.5	46	0250	3.6	110	0841	0.9	27
● 2046	4.1	125	1322	4.2	128	0234	3.9	119	0837	0.3	9
● 2046	-0.4	-12	● 2024	-0.3	-9	2110	0.4	12	1450	4.3	131
									2059	0.5	15
31 Su 0246	3.6	110	31 W 0808	1.2	37	31 Su 0301	4.0	122	31 W 1407	4.3	131
			1407	4.3	131	0922	0.0	0	1537	4.1	125
			2056	-0.3	-9	1537	0.9	27	2130	0.9	27

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

St. Marks River Entrance, Florida, 2011

Times and Heights of High and Low Waters

October				November				December															
	Time	Height			Time	Height			Time	Height													
1 Sa	0324	4.1	125	16 Su	0305	3.7	113	1 Tu	0431	3.4	104	16 Th	0526	2.7	82	16 F	0501	3.0	91				
	1047	-0.2	-6		1010	0.3	9		1227	0.4	12		1230	0.7	21		1137	0.1	3				
	1715	3.2	98		1648	3.3	101		1858	2.6	79		1812	3.0	91		1813	3.0	91				
	2206	1.8	55		2202	1.6	49		2342	1.9	58		2334	1.5	46								
2 Su	0401	4.0	122	17 M	0339	3.7	113	2 W	0538	3.0	91	17 Th	0505	3.2	98	2 F	0054	1.3	40	17 Sa	0026	0.7	21
	1146	0.2	6		1053	0.4	12		1335	0.8	24		1216	0.3	9		0614	2.7	82		1227	0.5	15
	1816	2.9	88		1739	3.1	94		2007	2.6	79		1908	3.0	91		1900	3.0	91				
	2244	2.0	61		2246	1.7	52	O															
3 M	0444	3.7	113	18 Tu	0419	3.5	107	3 Th	0119	1.8	55	18 F	0048	1.4	43	3 Sa	0226	1.1	34	18 Su	0142	0.4	12
	1257	0.5	15		1147	0.5	15		0739	2.7	82		0623	2.9	88		0747	2.5	76		1327	0.9	27
	1934	2.6	79		1844	3.0	91		1445	1.1	34		1319	0.5	15		1953	3.1	94				
O	2339	2.1	64		2344	1.9	58		2112	2.7	82		2007	3.0	91								
4 Tu	0547	3.3	101	19 W	0513	3.3	101	4 F	0308	1.6	49	19 Sa	0210	1.1	34	4 Su	0348	0.8	24	19 M	0300	0.0	0
	1421	0.8	24		1257	0.6	18		0940	2.7	82		0803	2.8	85		0929	2.4	73		1435	1.2	37
	2106	2.6	79		2001	2.9	88		1548	1.2	37		1428	0.8	24		2052	3.1	94				
			O						2203	2.9	88		2103	3.1	94								
5 W	0116	2.2	67	20 Th	0103	1.9	58	5 Sa	0425	1.2	37	20 Su	0326	0.6	18	5 M	0449	0.4	12	20 Tu	0413	-0.4	-12
	0757	3.1	94		0632	3.1	94		1053	2.8	85		0942	2.9	88		1055	2.6	79		1547	1.4	43
	1542	0.9	27		1415	0.7	21		1639	1.3	40		1534	1.0	30		2222	2.9	88		2153	3.3	101
	2216	2.7	82		2112	3.0	91		2243	3.0	91		2153	3.3	101								
6 Th	0323	2.0	61	21 F	0234	1.7	52	6 Su	0517	0.7	21	21 M	0432	0.1	3	6 Tu	0537	0.1	3	21 W	0517	-0.8	-24
	1002	3.1	94		0821	3.1	94		1144	3.0	91		1100	3.1	94		1202	2.8	85		1653	1.5	46
	1645	0.9	27		1528	0.7	21		1719	1.3	40		1633	1.2	37		1707	1.5	46		2251	3.4	104
	2301	2.9	88		2208	3.2	98		2317	3.2	98		2239	3.5	107		2304	3.0	91				
7 F	0445	1.6	49	22 Sa	0352	1.3	40	7 M	0558	0.4	12	22 Tu	0529	-0.4	-12	7 W	0618	-0.2	-6	22 Th	0614	-1.1	-34
	1110	3.3	101		0958	3.3	101		1225	3.1	94		1204	3.3	101		1250	2.8	85		1751	1.5	46
	1731	0.9	27		1628	0.7	21		1753	1.4	43		1726	1.3	40		1749	1.5	46		2346	3.5	107
	2335	3.2	98		2252	3.4	104		2348	3.4	104		2322	3.7	113		2341	3.1	94				
8 Sa	0537	1.2	37	23 Su	0453	0.8	24	8 Tu	0635	0.1	3	23 W	0622	-0.9	-27	8 Th	0656	-0.3	-9	23 F	0705	-1.3	-40
	1159	3.4	104		1110	3.6	110		1301	3.2	98		1259	3.5	107		1326	2.9	88		1842	1.4	43
	1807	1.0	30		1720	0.8	24		1824	1.4	43		1814	1.4	43		1828	1.4	43				
9 Su	0005	3.4	104	24 M	0546	0.2	6	9 W	0017	3.5	107	24 Th	0005	3.8	116	9 F	0015	3.2	98	24 Sa	0036	3.6	110
	0618	0.8	24		1210	3.8	116		0710	-0.1	-3		0712	-1.1	-34		0731	-0.5	-15		1426	3.1	94
	1239	3.6	110		1805	0.9	27		1336	3.3	101		1349	3.5	107		1401	3.0	91		1929	1.3	40
	1837	1.0	30						1855	1.3	40		1858	1.5	46		1904	1.3	40				
10 M	0032	3.5	107	25 Tu	0004	3.8	116	10 Th	0044	3.5	107	25 F	0047	3.9	119	10 Sa	0049	3.3	101	25 Su	0124	3.6	110
	0654	0.5	15		0635	-0.3	-9		0743	-0.2	-6		0800	-1.2	-37		0804	-0.6	-18		0836	-1.2	-37
	1314	3.6	110		1303	3.9	119		1409	3.3	101		1436	3.4	104		1435	3.1	94		1504	3.1	94
	1904	1.1	34		1846	1.1	34	O	1926	1.3	40		1940	1.5	46	O	1941	1.2	37		2013	1.1	34
11 Tu	0058	3.7	113	26 W	0039	4.0	122	11 F	0112	3.6	110	26 Sa	0129	3.9	119	11 Su	0122	3.4	104	26 M	0208	3.6	110
	0728	0.3	9		0722	-0.7	-21		0815	-0.2	-6		0847	-1.1	-34		0836	-0.6	-18		0916	-1.0	-30
	1348	3.7	113		1354	4.0	122		1443	3.4	104		1521	3.3	101		1509	3.1	94		1540	3.0	91
	1930	1.1	34	O	1924	1.3	40		1957	1.3	40		2020	1.5	46		2018	1.2	37		2056	1.0	30
12 W	0123	3.7	113	27 Th	0113	4.1	125	12 Sa	0140	3.6	110	27 Su	0211	3.9	119	12 M	0157	3.5	107	27 Tu	0251	3.4	104
	0800	0.2	6		0809	-0.9	-27		0847	-0.2	-6		0933	-0.9	-27		0907	-0.7	-21		0953	-0.7	-21
	1420	3.7	113		1442	3.9	119		1519	3.3	101		1603	3.1	94		1543	3.1	94		1612	2.9	88
	1956	1.2	37		2001	1.5	46		2031	1.3	40		2102	1.4	43		2057	1.1	34		2139	0.9	27
13 Th	0147	3.8	116	28 F	0148	4.1	125	13 Su	0210	3.6	110	28 M	0254	3.7	113	13 Tu	0235	3.5	107	28 W	0333	3.2	98
	0831	0.1	3		0856	-0.9	-27		0920	-0.2	-6		1017	-0.6	-18		0940	-0.6	-18		1026	-0.3	-9
	1453	3.6	110		1529	3.6	110		1556	3.3	101		1644	2.9	88		1618	3.1	94		1643	2.9	88
	2023	1.2	37		2036	1.6	49		2107	1.4	43		2145	1.4	43		2139	1.0	30		2224	0.8	24
14 F	0211	3.8	116	29 Sa	0224	4.1	125	14 M	0244	3.6	110	29 Tu	0338	3.4	104	14 W	0316	3.4	104	29 Th	0417	2.8	85
	0902	0.1	3		0944	-0.7	-21		0955	-0.2	-6		1101	-0.2	-6		1015	-0.5	-15		1056	0.1	3
	1528	3.5	107		1616	3.4	104		1636	3.2	98		1725	2.8	85		1654	3.1	94		1713	2.8	85
	2053	1.3	40		2112	1.7	52		2148	1.4	43		2235	1.4	43		2226	0.9	27		2313	0.7	21
15 Sa	0237	3.8	116	30 Su	0302	4.0	122	15 Tu	0322	3.5	107	30 W	0426	3.1	94	15 Th	0404	3.2	98	30 F	0506	2.5	76
	0934	0.2	6		1034	-0.4	-12		1035	-0.1	-3		1721	3.1	94		1053	-0.3	-9		1126	0.5	15
	1605	3.4	104		1705	3.1	94		2235	1.5	46		1808	2.7	82		1732	3.1	94		1743	2.7	82
	2125	1.4	43		2151	1.8	55					2335											

Apalachicola, Florida, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0828 1648 1912	-0.6 1.1 1.0	-18 34 30	16 Su 0806 1619 1852 2343	-0.6 1.1 1.0 1.4	-18 34 30 43	1 Tu 0109 0944 1647 2105	1.3 -0.5 1.0 0.7	-40 -15 30 21	16 W 0045 0909 1610 2035	1.4 -0.5 1.1 0.8	-43 -15 34 24
2 Su 0001 0916 1711 2017	1.4 -0.7 1.1 1.0	43 -21 34 30	17 M 0851 1642 1957	-0.7 1.1 1.0	-21 34 30	2 W 0207 1017 1700 2146	1.3 -0.4 1.0 0.6	-40 -12 30 18	17 Th 0153 0948 1626 2121	1.5 -0.5 1.1 0.6	-46 -15 34 18
3 M 0057 0959 1733 2108	1.4 -0.7 1.1 1.0	43 -21 34 30	18 Tu 0044 0933 1706 2047	1.4 -0.7 1.1 0.9	43 -21 34 27	3 Th 0257 1043 1711 2224	1.2 -0.3 1.0 0.5	-37 -9 30 15	18 F 0256 1023 1641 2206	1.5 -0.3 1.1 0.4	-46 -15 34 12
4 Tu 0152 1036 1753 2152	1.4 -0.6 1.1 0.9	43 -18 34 27	19 W 0144 1012 1727 2131	1.5 -0.8 1.1 0.8	46 -24 34 24	4 F 0343 1104 1721 2300	1.2 -0.2 1.1 0.4	-37 -6 34 12	19 Sa 0356 1055 1656 2253	1.4 -0.1 1.2 0.2	-43 -3 37 6
5 W 0243 1108 1809 2234	1.3 -0.5 1.1 0.8	40 -15 34 24	20 Th 0242 1048 1746 2217	1.5 -0.7 1.1 0.7	46 -21 34 21	5 Sa 0428 1120 1732 2337	1.1 -0.1 1.1 0.3	-34 -3 34 9	20 Su 0457 1124 1713 2344	1.4 0.1 1.2 0.0	-43 3 37 0
6 Th 0331 1135 1823 2316	1.3 -0.4 1.1 0.6	40 -12 34 18	21 F 0339 1122 1803 2305	1.5 -0.6 1.1 0.5	46 -18 34 15	6 Su 0514 1134 1746	1.1 0.1 1.2 0.3	-34 3 37	21 M 0601 1150 1734	1.2 0.3 1.3 0.3	-37 9 40 40
7 F 0419 1157 1838	1.2 -0.3 1.1	37 -9 34	22 Sa 0438 1154 1820 2357	1.4 -0.3 1.1 0.3	43 -9 34 9	7 M 0015 0605 1151 1805	0.2 1.0 0.2 1.3	6 30 34 40	22 Tu 0039 0711 1213 1759	-0.1 1.1 0.6 1.4	-3 34 43 43
8 Sa 0001 0509 1217 1854	0.5 1.1 -0.1 1.1	15 34 -3 34	23 Su 0540 1224 1839	1.2 -0.1 1.1	37 34	8 Tu 0057 0703 1210 1828	0.1 0.9 0.4 1.3	3 27 12 40	23 W 0144 0837 1232 1831	-0.2 0.9 0.7 1.5	-6 27 46 46
9 Su 0049 0602 1235 1913	0.4 1.0 0.0 1.2	12 30 0 37	24 M 0057 0649 1250 1901	0.2 1.0 0.2 1.2	6 30 6 37	9 W 0146 0814 1233 1856	0.0 0.8 0.5 1.3	0 24 15 40	24 Th 0303 0710 1115 1729	-0.2 1.1 0.6 1.5	-6 34 37 49
10 M 0144 0704 1256 1936	0.3 0.8 0.2 1.2	9 24 6 37	25 Tu 0207 0813 1313 1927	0.0 0.8 0.4 1.3	0 24 12 40	10 Th 0248 0950 1254 1930	0.0 0.7 0.6 1.4	0 21 21 43	25 F 0432 2001 1254 1801	-0.2 1.4 1.0 1.5	-6 43 30 46
11 Tu 0247 0822 1318 2002	0.2 0.7 0.3 1.3	6 21 9 40	26 W 0330 1012 1323 2000	-0.1 0.7 0.6 1.3	-3 21 18 40	11 F 0410 2012 1202 2000	-0.1 1.4 1.3 1.4	-3 43 40 43	26 Sa 0554 2112 1234 1840	-0.2 1.3 0.9 1.5	-6 30 27 46
12 W 0358 1005 1339 2032	0.0 0.6 0.5 1.3	0 18 15 40	27 Th 0458 2041	-0.3 1.4	-9 43	12 Sa 0534 2105	-0.2 1.3	-6 40	27 Su 0701 1457 1759 2244	-0.2 1.1 1.0 1.3	-6 34 30 40
13 Th 0512 2108	-0.1 1.3	-3 40	28 F 0618 2135	-0.4 1.3	-12 40	13 Su 0643 2214	-0.3 1.3	-9 40	28 M 0754 1510 1917	-0.2 1.1 0.9	-6 34 27
14 F 0618 2152	-0.3 1.3	-9 40	29 M 0724 2244	-0.5 1.3	-15 40	14 M 0739 1533 1841 2331	-0.4 1.1 1.0 1.4	-12 34 30 43	14 Tu 0558 1354 1712 2200	-0.1 1.2 1.1 1.4	-3 37 34 43
15 Sa 0716 2244	-0.4 1.3	-12 40	30 Su 0819 1618 1915	-0.5 1.0 0.9	-15 30 27	15 Tu 0827 1552 1945	-0.5 1.1 0.9	-15 34 27	15 Tu 0700 1418 1836 2332	-0.2 1.2 1.0 1.4	-6 37 37 43
			31 M 0000 0905 1632 2017	1.3 -0.5 1.0 0.9	40 -15 30 27						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Apalachicola, Florida, 2011

Times and Heights of High and Low Waters

April				May				June								
	Time	Height			Time	Height			Time	Height						
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm					
1 F	0242	1.3 40		16 Sa	0232	1.4 0833	43	1 Su	0352	1.3 0833	40	16 W	0423	1.4 0825	43	
	0900	0.5 15				1.0 30		M	1320	1.7 2146	52		0541	1.5 -0.4	46	
	1434	1.3 40			1356	1.4 2102	43		1344	1.7 2228	52		0900	1.3 -0.3	40	
	2117	0.2 6			0.0 0	-0.1 -3			2146	-0.4 -12	-9		1423	1.8 -9	55	
2 Sa	0331	1.3 40		17 Su	0342	1.5 0911	46	2 M	0440	1.4 0901	43	2 Th	0617	1.5 0939	46	
	0925	0.6 18			0.8 24			Tu	1356	1.6 2206	49		1019	1.4 -0.3	40	
	1446	1.4 43			1.5 -6			O	2233	-0.2 -6	-12		1514	1.7 -9	52	
	2151	0.1 3							2302	-0.3 -9	-9		2350	-0.2 -6	-6	
3 Su	0417	1.3 40		18 M	0447	1.5 0945	46	3 Tu	0525	1.4 1444	43	3 F	0651	1.5 1437	46	
	0945	0.7 21			1.0 30				1422	1.7 2237	52		1018	1.3 -0.4	40	
	1500	1.4 43			1.6 -9				2319	-0.4 -6	-12		1509	1.8 -9	55	
	● 2222	0.0 0							2337	-0.3 -9	-9		2337	-0.3 -9	-9	
4 M	0501	1.3 40		19 Tu	0549	1.5 1016	46	4 W	0607	1.4 0957	43	4 Sa	0723	1.5 1028	46	
	1003	0.8 24			1.1 34			Th	1453	1.7 2308	52		1103	1.3 -0.2	40	
	1518	1.5 46			1.7 -9				1522	1.8 -0.2	-6		1557	1.7 -6	49	
	2251	-0.1 -3											1204	1.1 -6	49	
5 Tu	0545	1.3 40		20 W	0649	1.4 1047	43	5 Th	0650	1.4 1028	43	5 Su	0005	-0.3 0742	-9	
	1023	0.9 27			1.2 37				1528	1.7 2342	52		0753	1.5 1115	46	
	1541	1.6 49			1.7 -6				1610	1.7 -0.2	-6		1155	1.2 -6	37	
	2320	-0.1 -3											1649	1.7 -6	43	
6 W	0632	1.3 40		21 Th	0014	-0.3 0749	-9	6 F	0735	1.4 1106	43	6 M	0052	-0.2 0818	-6	
	1047	1.0 30			1.4 37			Sa	1608	1.7 -0.2	-6		0821	1.5 1212	46	
	1608	1.6 49							1703	1.6 -0.2	-6		1258	1.1 -6	46	
	2352	-0.1 -3											1750	1.5 -6	37	
7 Th	0724	1.3 40		22 F	0109	-0.2 0849	-6	7 Sa	0022	-0.2 0821	-6	7 Tu	0132	0.0 0850	0	
	1116	1.1 34			1.2 37				1321	1.1 1654	46		0848	1.5 1802	46	
	1641	1.6 49			1.6 49				1802	1.5 -0.2	-6		1520	0.7 1902	21	
8 F	0031	-0.1 -3		23 Sa	0208	-0.1 0946	-3	8 Su	0108	-0.1 0907	-3	8 W	0214	0.2 0915	6	
	0824	1.3 40			1.3 40				1440	1.0 1748	37		0915	1.5 1535	49	
	1151	1.1 34			1.2 46				1912	1.3 1854	46		1632	0.5 2038	15	
	1719	1.6 49								1.3 1.5	34		○ 2202	1.0 1.1	30	
9 Sa	0122	-0.1 -3		24 Su	0311	0.1 1034	3	9 M	0200	-0.1 0950	-3	9 Th	0258	0.5 0948	15	
	0934	1.3 40			1.3 37				1414	1.2 1414	37		0942	1.5 1656	46	
	1238	1.2 37							1854	1.5 1.5	46		1738	0.3 2238	9	
	1805	1.6 49											● 2038	1.1 34		
10 Su	0229	0.0 0		25 M	0414	0.2 1114	6	10 Tu	0259	0.1 1027	3	10 W	0342	0.5 1016	15	
	1045	1.3 40			1.3 30				1547	1.0 2021	30		1011	1.6 2225	21	
	1349	1.2 37			1.0 37				1.3 1.3	40			1808	0.2 1.0	49	
	1903	1.5 46											○ 2021	1.0 30		
11 M	0347	0.0 0		26 Tu	0512	0.3 1146	9	11 W	0400	0.2 1059	6	11 Sa	0426	0.7 1042	21	
	1143	1.3 40			1.3 40				1711	0.8 2207	24		0435	1.0 1.0	30	
	1538	1.2 37							2207	1.2 1.2	37		1042	1.7 0.0	52	
	● 2020	1.4 43											1910	0.0 0	0	
12 Tu	0502	0.1 3		27 W	0603	0.5 1212	15	12 Th	0501	0.4 1127	12	12 Su	0251	1.2 0534	37	
	1223	1.3 40			1.3 18				1819	0.5 2037	15		1118	1.7 -0.1	34	
	1718	1.0 30							1108	1.5 -0.1	6		2058	-0.4 -3	-12	
	2158	1.3 40							1908	0.2 -0.1	-6		2007	-0.2 -6	-6	
13 W	0607	0.1 3		28 Th	0030	1.2 0648	37	13 F	0000	1.2 0558	37	13 M	0414	1.4 0640	43	
	1252	1.3 40			0.6 18				1153	1.5 1917	46		1158	1.8 1955	40	
	1829	0.8 24							1917	0.2 0.2	6		2059	-0.3 -9	-9	
	2340	1.3 40											● 2037	0.1 3		
14 Th	0702	0.3 9		29 F	0153	1.2 0728	37	14 Sa	0145	1.3 0652	40	14 Tu	0508	1.4 0649	46	
	1315	1.3 40			0.7 21				1220	1.6 2009	49		0743	1.3 0.0	43	
	1925	0.5 15							2009	0.0 0.0	0		1244	1.8 2037	55	
													2147	-0.4 -12	-9	
15 F	0112	1.4 43		30 Sa	0258	1.3 0802	40	15 Su	0311	1.4 0741	43	15 W	0417	1.3 0736	46	
	0750	0.4 12			0.9 27				1248	1.6 2058	49		0839	1.4 -0.2	43	
	1336	1.4 43							2058	-0.2 -6	-6		1333	1.8 2153	55	
	2015	0.3 9											● 2232	-0.4 -9	-12	
													31	0502	1.4 0819	43
													Tu	1307	1.7 1307	52
														2153	-0.3 -9	-9

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Apalachicola, Florida, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0557	1.5	46	16 Sa 0558	1.4	43	1 M 0538	1.5	46	1 Th 0511	1.6	49
0926	1.4	43	1013	1.2	37	1042	1.0	30	1119	0.8	24
1417	1.8	55	1520	1.7	52	1617	1.8	55	1705	1.6	49
● 2250	-0.3	-9	2325	0.0	0	2330	0.2	6	2324	0.7	21
2 Sa 0620	1.5	46	17 Su 0611	1.4	43	2 Tu 0554	1.6	49	17 W 0524	1.7	52
1009	1.3	40	1058	1.0	30	1132	0.8	24	1157	0.7	21
1509	1.8	55	1609	1.7	52	1717	1.7	52	1756	1.5	46
2323	-0.3	-9	2349	0.1	3	2359	0.4	12	2340	0.8	24
3 Su 0641	1.5	46	18 M 0623	1.5	46	3 W 0612	1.6	49	18 Th 0543	1.7	52
1055	1.2	37	1144	0.9	27	1227	0.6	18	1239	0.6	18
1602	1.8	55	1659	1.6	49	1823	1.5	46	1852	1.4	43
2356	-0.2	-6							2359	0.9	27
4 M 0701	1.5	46	19 Tu 0009	0.3	9	4 Th 0026	0.6	18	19 F 0606	1.8	55
1147	1.1	34	0637	1.5	46	0634	1.7	52	1327	0.5	15
1700	1.7	52	1232	0.8	24	1332	0.5	15	2001	1.3	40
			1753	1.4	43	1942	1.4	43			
5 Tu 0028	0.0	0	20 W 0027	0.4	12	5 F 0050	0.9	27	20 Sa 0022	1.1	34
0720	1.5	46	0654	1.6	49	0700	1.8	55	0635	1.8	55
1246	0.9	27	1325	0.7	21	1450	0.4	12	1429	0.5	15
1804	1.5	46	1853	1.3	40	2125	1.2	37	2130	1.3	40
6 W 0100	0.2	6	21 Th 0046	0.6	18	6 Sa 0107	1.1	34	21 Tu 0047	1.2	37
0741	1.5	46	0715	1.6	49	0734	1.9	58	0710	1.8	55
1355	0.7	21	1426	0.6	18	1619	0.3	9	1549	0.4	12
1919	1.3	40	2007	1.2	37	●			●		
7 Th 0131	0.5	15	22 F 0106	0.8	24	7 Su 0816	1.9	58	22 M 0754	1.8	55
0805	1.6	49	0741	1.7	52	1744	0.1	3	1713	0.4	12
1514	0.5	15	1535	0.5	15				7 W 0225	1.5	46
2054	1.1	34	2143	1.1	34				0521	1.4	43
8 F 0200	0.7	21	23 Sa 0127	1.0	30	8 M 0910	1.9	58	22 Th 0942	1.8	55
0833	1.7	52	0812	1.7	52	1856	0.0	0	1930	0.3	9
1638	0.3	9	1650	0.4	12				1831	0.3	9
● 2307	1.1	34	●								
9 Sa 0221	1.0	30	24 Su 0849	1.8	55	9 Tu 1019	1.8	55	9 W 0241	1.5	46
0907	1.8	55	1800	0.2	6	1954	0.0	0	0646	1.3	40
1757	0.1	3							1159	1.8	55
10 Su 0947	1.8	55	25 M 0933	1.8	55	10 W 0400	1.5	46	2017	0.3	9
1905	-0.1	-3	1900	0.1	3	0629	1.4	43	1822	0.3	9
						1137	1.8	55			
						2044	0.0	0			
11 M 1036	1.8	55	26 Tu 1026	1.8	55	11 Th 0412	1.5	46	10 W 0321	1.6	49
2004	-0.2	-6	1952	0.0	0	0743	1.4	43	0623	1.5	46
						1251	1.8	55	1115	1.8	55
						2125	0.0	0	2005	0.1	3
12 Tu 1134	1.8	55	27 W 0403	1.5	46	12 F 0427	1.5	46	10 Sa 0314	1.6	49
2056	-0.3	-9	0623	1.4	43	0837	1.2	37	0831	1.0	30
			1126	1.8	55	1353	1.8	55	1414	1.8	55
			2037	-0.1	-3	2200	0.1	3	1414	0.5	15
13 W 0507	1.5	46	28 Th 0424	1.5	46	13 Sa 0440	1.5	46	10 W 0326	1.6	49
0732	1.4	43	0735	1.4	43	0922	1.1	34	0912	0.9	27
1235	1.8	55	1227	1.8	55	1445	1.8	55	1504	1.8	55
2142	-0.3	-9	2117	-0.2	-6	● 2229	0.2	6	2152	0.7	21
14 Th 0525	1.5	46	29 F 0446	1.6	49	12 F 0427	1.5	46	12 W 0336	1.6	49
0835	1.4	43	0827	1.4	43	0837	1.2	37	0949	0.7	21
1334	1.8	55	1327	1.9	58	1353	1.8	55	1549	1.7	52
2222	-0.2	-6	2154	-0.2	-6	2252	0.4	12	● 2212	0.8	24
15 F 0542	1.5	46	30 Sa 0506	1.6	49	14 Su 0451	1.5	46	14 W 0358	1.8	55
0927	1.3	40	0912	1.3	40	1003	1.0	30	0942	0.9	27
1429	1.8	55	1424	1.9	58	1533	1.8	55	1054	0.5	15
● 2256	-0.1	-3	● 2228	-0.1	-3	2252	0.4	12	1718	1.7	52
16 Su 0523	1.5	46	31 Su 0523	1.5	46	2309	0.5	15	2243	1.0	30
0956	1.1	34	1520	1.9	58				1126	0.5	15
			2300	0.0	0				1636	1.9	58
									2259	0.7	21
									2302	1.1	34
									31 W 0444	1.7	52
									1116	0.5	15
									1738	1.8	55
									2326	0.9	27

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Apalachicola, Florida, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
	h m	ft cm		h m	ft cm			h m	ft cm		
1 Sa	0441	2.0 61		16 Su	0418	1.9 58		1 Tu	0049	1.3 40	
	1257	0.1 3		1212	0.2 6		0554	1.7 52	16 W	0036	1.2 37
	2030	1.6 49		2004	1.5 46		1447	0.2 6	0526	1.6 49	
	2349	1.5 46		2340	1.4 43		2208	1.4 43	1327	0.0 0	
2 Su	0522	2.0 61		17 M	0457	1.8 55		2 W	0220	1.2 37	
	1408	0.2 6		1258	0.2 6		0704	1.5 46	17 Th	0150	1.1 34
	2202	1.5 46		2106	1.5 46		1549	0.3 9	0628	1.4 43	
							●	2247	1.4 43	1419	0.1 3
3 M	0027	1.4 43		18 Tu	0029	1.4 43		3 Th	0358	1.1 34	
	0612	1.9 58		0542	1.8 55		0835	1.4 43	18 F	0317	1.0 30
	1528	0.3 9		1359	0.3 9		1648	0.5 15	0749	1.3 40	
	●	2332	1.5 46	2209	1.5 46		2318	1.4 43	1516	0.2 6	
4 Tu	0149	1.4 43		19 W	0143	1.4 43		4 F	0520	0.9 27	
	0716	1.8 55		0639	1.7 52		1028	1.3 40	19 Sa	0441	0.8 24
	1646	0.4 12		1511	0.3 9		1740	0.6 18	0932	1.2 37	
							●	2303	1.5 46	1615	0.4 12
5 W	0021	1.5 46		20 Th	0325	1.4 43		5 Sa	0624	0.6 18	
	0357	1.4 43		0755	1.6 49		1220	1.3 40	20 Su	0551	0.5 15
	0844	1.7 52		1625	0.4 12		1827	0.7 21	1127	1.1 34	
	1752	0.4 12		2344	1.5 46			1716	0.6 18	1743	0.9 27
6 Th	0052	1.5 46		21 F	0459	1.2 37		6 Su	0008	1.5 46	
	0534	1.2 37		0932	1.5 46		0716	0.4 12	21 M	0650	0.2 6
	1033	1.6 49		1730	0.4 12		1346	1.3 40	1317	1.2 37	
	1847	0.5 15					1909	0.9 27	1814	0.8 24	
7 F	0116	1.5 46		22 Sa	0015	1.6 49		7 M	0030	1.5 46	
	0642	1.0 30		0607	1.0 30		0801	0.2 6	22 Tu	0743	-0.1 -3
	1215	1.6 49		1115	1.5 46		1452	1.4 43	1447	1.3 40	
	1932	0.6 18		1827	0.5 15		1946	1.0 30	1909	1.0 30	
8 Sa	0136	1.6 49		23 Su	0040	1.6 49		8 Tu	0050	1.6 49	
	0734	0.8 24		0702	0.7 21		0842	0.1 3	23 W	0019	-0.3 -9
	1332	1.6 49		1248	1.5 46		1546	1.4 43	0833	-0.3 -9	
	2010	0.7 21		1917	0.7 21		2019	1.1 34	1600	1.4 43	
9 Su	0153	1.6 49		24 M	0102	1.6 49		9 W	0111	1.6 49	
	0819	0.6 18		0751	0.5 15		0919	-0.1 -3	24 Th	0054	1.7 52
	1432	1.6 49		1408	1.6 49		1633	1.5 46	0923	-0.5 -15	
	2042	0.9 27		2001	0.9 27		2049	1.2 37	1701	1.4 43	
10 M	0207	1.6 49		25 Tu	0124	1.7 52		10 F	0135	1.7 52	
	0858	0.5 15		0837	0.2 6		0953	-0.1 -3	25 Sa	0133	1.7 52
	1523	1.6 49		1520	1.7 52		1715	1.5 46	1011	-0.6 -18	
	2108	1.0 30		2041	1.0 30		●	2118	1.3 40	1753	1.3 40
11 Tu	0220	1.7 52		26 W	0148	1.8 55		11 F	0203	1.7 52	
	0934	0.4 12		0923	0.0 0		1025	-0.2 -6	26 Sa	0217	1.8 55
	1609	1.6 49		1625	1.7 52		1754	1.5 46	1049	-0.5 -15	
	●	2130	1.1 34	●	2117	1.2 37	2147	1.3 40	1839	1.4 43	
12 W	0235	1.7 52		27 Th	0216	1.8 55		12 Sa	0234	1.7 52	
	1006	0.3 9		1010	-0.2 -6		1055	-0.2 -6	27 Su	0304	1.7 52
	1653	1.6 49		1728	1.7 52		1833	1.5 46	1145	-0.5 -15	
	2149	1.2 37		2151	1.3 40		2219	1.3 40	1918	1.3 40	
13 Th	0254	1.8 55		28 F	0248	1.9 58		13 Su	0310	1.7 52	
	1036	0.2 6		1059	-0.2 -6		1127	-0.2 -6	28 M	0355	1.7 52
	1736	1.6 49		1828	1.6 49		1913	1.5 46	1230	-0.4 -12	
	2209	1.3 40		2223	1.4 43		2255	1.3 40	1953	1.3 40	
14 F	0317	1.8 55		29 Sa	0325	1.9 58		14 M	0350	1.7 52	
	1105	0.2 6		1150	-0.2 -6		1201	-0.1 -3	29 Tu	0448	1.6 49
	1821	1.6 49		1928	1.6 49		1953	1.4 43	1314	-0.2 -6	
	2233	1.3 40		2259	1.4 43		2340	1.3 40	2024	1.2 37	
15 Sa	0345	1.9 58		30 Su	0408	1.9 58		15 Tu	0434	1.6 49	
	1135	0.2 6		1246	-0.1 -3		2034	1.4 43	0553	1.0 30	
	1910	1.6 49		2026	1.5 46				0547	1.4 43	
	2303	1.4 43		2344	1.4 43				1356	0.0 0	
31 Sa	0457	1.8 55		31 M	1345	1.8 55		15 W	0503	1.0 30	
				2121	0.0 0			0547	1.4 43	0528	1.3 40
								2052	1.2 37	1258	-0.2 -6
								2011	1.2 37	1258	1.3 40

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Pensacola, Florida, 2011

Times and Heights of High and Low Waters

January				February				March					
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height		
h m 0642 Sa 2013	ft -0.8 1.4	cm -24 43	16 Su 2001	ft -0.7 1.3	cm -21 40	1 Tu 2149	ft -0.7 1.1	cm -21 34	16 W 2143	ft -0.7 1.2	cm -21 37		
0737 Su 2105	-0.8 1.4	-24 43	17 M 2053	-0.8 1.4	-24 43	2 W 2225	-0.5 1.0	-15 30	17 Th 2246	-0.5 1.1	-15 34		
0826 M 2151	-0.8 1.4	-24 43	18 Tu 2143	-0.9 1.4	-27 43	3 Th 2259	-0.4 0.8	-12 24	18 F 2358	-0.3 0.8	-9 24		
0905 Tu 2232	-0.7 1.3	-21 40	19 W 2232	-0.9 1.3	-27 40	4 F 2334	-0.2 0.6	-6 18	19 Sa 1328	0.0 0.2	0 6		
0932 W 2305	-0.6 1.1	-18 34	20 Th 2322	-0.8 1.2	-24 37	5 Sa 0809	-0.1 -3	-3	20 Su 0737	0.6 0.3	18 9		
0948 Th 2333	-0.5 1.0	-15 30	21 F 0939	-0.6 -0.6	-18	6 Su 0015	0.4 0.0	12 0	21 M 1252	0.7 -0.2	21 -6		
0952 F 2354	-0.4 0.8	-12 24	22 Sa 0016	0.9 -0.3	27 -9	7 M 0112	0.2 0.1	6 3	22 Tu 1329	1.0 0.0	30		
0944 Sa	-0.2	-6	23 Su 0120	0.6 0.0	18 0	8 Tu 1431	0.7 -1.1	21 -34	23 W 0013	-0.3 -1.1	-9 34		
0003 Su 1813	0.5 -0.1	15 12	24 M 0300	0.3 0.1	9 3	9 W 0053	-0.1 0.8	-3 24	24 Th 0201	-0.5 1.2	-15 37		
0837 M 1659	0.0 0.5	0 15	25 Tu 0023	-0.1 0.8	-3	10 Th 0224	-0.2 0.9	-6 27	25 F 0330	-0.5 1.2	-15 37		
0703 Tu 1647	0.0 0.6	0 18	26 W 0221	-0.4 1.0	-12 30	11 F 0334	-0.4 1.0	-12 30	10 Th 1347	1.1 -0.1	34		
0415 W 1701	-0.1 0.8	-3 24	27 Th 0343	-0.5 1.1	-15 34	12 Sa 0433	-0.5 1.1	-15 34	25 F 0144	-0.4 1.4	-12 43		
0419 Th 1733	-0.3 0.9	-9 27	28 F 0452	-0.7 1.2	-21 37	13 Su 0524	-0.6 1.2	-18 37	11 F 0128	-0.2 1.2	-6 37		
0457 F 1817	-0.5 1.0	-15 30	29 Sa 0554	-0.7 1.2	-21 37	14 M 0609	-0.7 1.3	-21 40	26 Sa 0300	-0.4 0.6	-12 40		
0544 Sa 1908	-0.6 1.2	-18 37	30 Su 0647	-0.8 1.2	-24 37	15 Tu 0649	-0.8 1.3	-24 40	27 Su 0249	-0.3 1.2	-9 37		
			31 M 0730	-0.7 1.2	-21 37				28 M 0433	-0.2 1.1	-6 34		
									29 Tu 0454	0.0 1.0	0 30		
									30 W 0516	-0.4 1.3	-12 40		
									31 Th 0442	0.3 0.6	9 18		
										30 W 0457	0.1 0.8	3 24	
										31 Th 1115	0.3 0.5	9 15	
											31 Th 1633	0.6 0.6	18 18

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Pensacola, Florida, 2011

Times and Heights of High and Low Waters

April						May						June											
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height						
1 F	0405 1030 1751	0.4 0.8 0.3	12 24 9	16 Sa	0019 0239 0911 1753	0.7 0.6 1.0 0.0	21 18 30 0	1 Su	0903 1901	1.3 0.0	40 0	16 M	0852 1936	1.7 -0.4	52 -12	1 W	0938 2053	1.7 -0.3	52 -9	16 Th	1026 2151	1.9 -0.5	58 -15
2 Sa	0030 0244 1017 1843	0.5 0.4 0.9 0.2	15 12 27 6	17 Su	0920 1902	1.3 -0.2	40 -6	2 M	0924 1942	1.4 -0.1	43 -3	17 Tu	0936 2042	1.8 -0.5	55 -15	2 Th	1021 2142	1.8 -0.4	55 -12	17 F	1110 2229	1.8 -0.4	55 -12
3 Su	1020 1928	1.0 0.1	30 3	18 M	0951 2011	1.5 -0.3	46 -9	3 Tu	0954 2031	1.5 -0.2	46 -6	18 W	1025 2149	1.9 -0.5	58 -15	3 F	1103 2226	1.8 -0.4	55 -12	18 Sa	1148 2254	1.6 -0.2	49 -6
●																							
4 M	1035 2014	1.2 0.0	37 0	19 Tu	1034 2126	1.6 -0.4	49 -12	4 W	1030 2130	1.6 -0.2	49 -6	19 Th	1116 2251	1.8 -0.4	55 -12	4 Sa	1145 2303	1.8 -0.4	55 -12	19 Su	1218 2303	1.4 0.0	43 0
5 Tu	1100 2108	1.3 -0.1	40 -3	20 W	1124 2247	1.7 -0.4	52 -12	5 Th	1112 2232	1.6 -0.2	49 -6	20 F	1204 2342	1.7 -0.3	52 -9	5 Su	1225 2334	1.7 -0.3	52 -9	20 M	1235 2257	1.2 0.1	37 3
6 W	1134 2217	1.3 -0.1	40 -3	21 Th	1219	1.7	52	6 F	1157 2330	1.7 -0.3	52 -9	21 Sa	1247	1.6	49	6 M	1305 2355	1.5 -0.1	46 -3	21 Tu	1210 2230	1.0 0.3	30 9
7 Th	1217 2339	1.4 -0.2	43 -6	22 F	0006 1315	-0.3 1.6	-9 49	7 Sa	1242	1.7	52	22 Su	0018 1322	-0.2 1.4	-6 43	7 Tu	1344	1.2	37	22 W	0737 2134	0.9 0.4	27 12
8 F	1307	1.4	43	23 Sa	0112 1409	-0.3 1.5	-9 46	8 Su	0019 1329	-0.3 1.6	-9 49	23 M	0037 1340	0.0 1.2	0 37	8 W	0001 1406 2338	0.1 0.9 0.4	3 27	23 Th	0627 1920	1.0 0.4	30 12
9 Sa	0056 1402	-0.2 1.5	-6 46	24 Su	0201 1501	-0.2 1.3	-6 40	9 M	0059 1417	-0.2 1.5	-6 46	24 Tu	0038 1246	0.1 1.0	3 30	9 Th	0725 1551 1815 2140	0.9 0.4 0.5 0.4	27 15	24 F	0611 1711	1.1 0.2	34 6
10 Su	0157 1502	-0.3 1.5	-9 46	25 M	0231 1548	0.0 1.1	0 34	10 Tu	0130 1512	-0.1 1.2	-3 37	25 W	0015 0907 2318	0.3 0.9 0.4	9 27	10 F	0645 1619	1.1 0.2	34 6	25 Sa	0620 1720	1.3 0.1	40 -3
11 M	0245 1608	-0.3 1.4	-9 43	26 Tu	0243 1635	0.1 0.9	3 27	11 W	0150 1642	0.1 1.0	3 30	26 Th	0759 1821	1.0 0.4	30 12	11 Sa	0649 1709	1.4 -0.1	43 -3	26 Su	0645 1753	1.4 -0.1	43 -3
●																							
12 Tu	0324 1728	-0.2 1.3	-6 40	27 W	0233 1042 1634 1841	0.3 0.8 0.6 0.7	9 24 18 21	12 Th	0148 0911 1521 2009	0.3 0.8 0.6 0.7	9 24 18 21	27 F	0738 1740	1.2 0.2	37 6	12 Su	0716 1805	1.6 -0.3	49 -9	27 M	0720 1837	1.5 -0.2	46 -6
13 W	0354 1910	0.0 1.1	0 34	28 Th	0155 0923 1720	0.5 0.9 0.5	15 27 15	13 F	0057 0809 1636	0.6 1.0 0.3	18 30 9	28 Sa	0740 1759	1.3 0.0	40 0	13 M	0757 1905	1.7 -0.4	52 -12	28 Tu	0803 1924	1.6 -0.3	49 -9
14 Th	0411 1125 1419 2117	0.2 0.6 0.5 0.9	6 18 15 27	29 F	0857 1753	1.0 0.3	30 9	14 Sa	0759 1734	1.3 0.0	40 0	29 Su	0756 1831	1.4 -0.1	43 -3	14 Tu	0846 2006	1.8 -0.5	55 -15	29 W	0848 2010	1.7 -0.4	52 -12
15 F	0403 0938 1634	0.5 0.7 0.3	15 21 9	30 Sa	0853 1825	1.2 0.1	37 3	15 Su	0817 1833	1.5 -0.3	46 -9	30 M	0823 1913	1.5 -0.2	46 -6	15 W	0937 2103	1.9 -0.5	58 -15	30 Th	0933 2051	1.8 -0.4	55 -12

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Pensacola, Florida, 2011

Times and Heights of High and Low Waters

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Pensacola, Florida, 2011

Times and Heights of High and Low Waters

October					November					December													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm								
1 Sa	0011 1138	1.9 0.1	58 3	16 Su	1120 1337	0.2 0.0	6	1 Tu	0149 1337	1.7 0.0	52 0	16 W	0058 1226	1.6 -0.2	49 -6	1 Th	0130 1215	1.1 0.1	34 3	16 F	0112 1124	0.9 -0.1	27 -3
2 Su	0113 1312	2.0 0.1	61 3	17 M	0041 1231	1.8 0.1	55 3	2 W	0240 1407	1.5 0.1	46 3	17 Th	0140 1253	1.5 -0.1	46 -3	2 F	0015 1143	0.8 0.2	24 6	17 Sa	0127 1851	0.6 0.6	18 18
3 M	0221 1429	1.9 0.1	58 3	18 Tu	0132 1327	1.8 0.1	55 3	3 Th	0327 1416	1.3 0.3	40 9	18 F	0225 1309	1.2 0.1	37 3	3 Sa	1018 1919	0.3 0.9	9 27	18 Su	0908 1812	0.2 0.8	6 24
●																							
4 Tu	0334 1526	1.8 0.1	55 3	19 W	0227 1411	1.7 0.1	52 3	4 F	0412 1359	1.0 0.5	30 15	19 Sa	0331 1306	0.9 0.4	27 12	4 Su	0530 1906	0.2 1.0	6 30	19 M	0353 1818	-0.1 1.0	-3 30
●																							
5 W	0449 1605	1.7 0.3	52 9	20 Th	0327 1445	1.7 0.2	52 6	5 Sa	0437 0703	0.7 0.8	21 24	20 Su	0319 0729	0.5 0.6	15 18	5 M	0523 1915	0.0 1.2	0 37	20 Tu	0442 1848	-0.4 1.3	-12 40
6 Th	0605 1626	1.5 0.4	46 12	21 F	0443 1512	1.5 0.3	46 9	6 Su	0513 2024	0.5 1.2	15 37	21 M	0417 1933	0.2 1.2	6 37	6 Tu	0547 1936	-0.2 1.3	-6 40	21 W	0539 1932	-0.6 1.4	-18 43
7 F	0724 1625	1.3 0.6	40 18	22 Sa	0631 1526	1.3 0.5	40 15	7 M	0545 2027	0.3 1.4	9 43	22 Tu	0512 1952	-0.1 1.5	-3 46	7 W	0622 2007	-0.3 1.4	-9 43	22 Th	0640 2025	-0.7 1.5	-21 46
8 Sa	0014 0217 0853 1601 2217	1.0 0.9 1.2 0.8 1.1	30 27 37 34 34	23 Su	0236 0852 1513 2106	0.8 1.1 0.8 1.1	24 34 24 34	8 Tu	0617 2042	0.2 1.5	6 46	23 W	0610 2028	-0.3 1.7	-9 52	8 Th	0704 2044	-0.4 1.4	-12 43	23 F	0742 2119	-0.8 1.6	-24 49
9 Su	0443 1044 1503 2146	0.8 1.0 0.9 1.2	24 24 27 37	24 M	0422 2043	0.6 1.3	18 40	9 W	0652 2105	0.0 1.6	0 49	24 Th	0713 2115	-0.5 1.8	-15 55	9 F	0752 2125	-0.4 1.5	-12 46	24 Sa	0840 2211	-0.9 1.6	-27 49
10 M	0550 2142	0.6 1.4	18 43	25 Tu	0533 2053	0.3 1.6	9 49	10 Th	0733 2136	0.0 1.6	0 49	25 F	0820 2206	-0.6 1.8	-18 55	10 Sa	0840 2206	-0.5 1.5	-15 46	25 Su	0930 2258	-0.8 1.5	-24 46
11 Tu	0638 2151	0.5 1.5	15 46	26 W	0639 2125	0.0 1.8	0 55	11 F	0822 2213	-0.1 1.7	-3 52	26 Sa	0928 2259	-0.6 1.8	-18 55	11 Su	0925 2246	-0.6 1.5	-18 46	26 M	1010 2339	-0.7 1.3	-21 40
●																							
12 W	0720 2209	0.4 1.6	12 49	27 Th	0748 2209	-0.1 1.9	-3 58	12 Sa	0918 2253	-0.1 1.7	-3 52	27 Su	1031 2349	-0.5 1.7	-15 52	12 M	1003 2324	-0.6 1.5	-18 46	27 Tu	1036 2339	-0.5 1.3	-15
13 Th	0804 2236	0.3 1.7	9 52	28 F	0903 2301	-0.2 2.0	-6 61	13 Su	1016 2335	-0.2 1.7	-6 52	28 M	1123	-0.5	-15	13 Tu	1036	-0.6	-18	28 W	0013 1045	1.1 -0.4	34 -12
14 F	0857 2311	0.3 1.7	9 52	29 Sa	1024 2356	-0.2 2.0	-6 61	14 M	1108	-0.2	-6	29 Tu	0034 1159	1.6 -0.3	49 -9	14 W	0001 1101	1.4 -0.5	43 -15	29 Th	0035 1033	0.8 -0.2	24 -6
15 Sa	1003 2353	0.2 1.8	6 55	30 Su	1142	-0.2	-6	15 Tu	0017 1151	1.7 -0.2	52 -6	30 W	0110 1218	1.3 -0.1	40 -3	15 Th	0037 1119	1.2 -0.3	37 -9	30 F	0021 0954	0.5 0.0	15 0
				31 M	0053 1248	1.9 -0.1	58 -3								31 Sa	0835 1734	0.1 0.6	3 18					

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Dauphin Island, Alabama, 2011

Times and Heights of High and Low Waters

January					February					March													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm								
1 Sa	0705 1953	-0.6 1.3	-18 40	16 Su	0630 1931	-0.7 1.2	-21 37	1 Tu	0855 2121	-0.6 1.0	-18 30	16 W	0757 2101	-0.6 1.1	-18 34	1 Tu	0748 2033	-0.3 0.9	-9 27	16 W	0621 1959	-0.3 1.0	-9 30
2 Su	0801 2039	-0.7 1.3	-21 40	17 M	0723 2018	-0.8 1.3	-24 40	2 W	0931 2159	-0.5 0.9	-15 27	17 Th	0847 2157	-0.5 1.0	-15 30	2 W	0826 2120	-0.2 0.8	-6 24	17 Th	0709 2116	-0.1 0.9	-3 27
3 M	0855 2123	-0.6 1.3	-18 40	18 Tu	0816 2104	-0.8 1.3	-24 40	3 Th	0950 2231	-0.3 0.7	-9 21	18 F	0935 2258	-0.3 0.7	-9 21	3 Th	0842 2207	0.0 0.6	0 18	18 F	0752 2256	0.2 0.7	6 21
4 Tu	0943 2203	-0.6 1.2	-18 37	19 W	0906 2151	-0.8 1.2	-24 37	4 F	0939 2259	-0.2 0.6	-6 18	19 Sa	1010 2300	0.0 0.5	0 15	4 F	0730 1056 1418	0.1 0.2 0.1	3 6 3	19 Sa	0612 0857 1706	0.4 0.5 0.1	12 15 3
●				○									●	2300	0.5	15	○						
5 W	1020 2238	-0.5 1.1	-15 34	20 Th	0952 2236	-0.7 1.1	-21 34	5 Sa	0843 2319	0.0 0.4	0 12	20 Su	0013 0710 1129 1932	0.5 0.2 0.3 0.1	15 6 9 3	5 Sa	0548 1049 1737	0.3 0.4 0.2	9 12 6	20 Su	0942 1929	0.7 0.0	21 0
6 Th	1043 2307	-0.4 0.9	-12 27	21 F	1030 2319	-0.5 0.8	-15 24	6 Su	0726 1440 2031 2250	0.1 0.2 0.1 0.2	3 6 3 6	21 M	1218 2325	0.6 -0.1	18 -3	6 Su	0020 0401 1111 1955	0.3 0.2 0.5 0.1	9 6 15 3	21 M	1032 2125	-1.0 -0.1	30 -3
7 F	1046 2326	-0.3 0.7	-9 21	22 Sa	1046 2356	-0.3 0.6	-9 18	7 M	0553 1417	0.1 0.4	3 12	22 Tu	1314	0.8	24	7 M	1139 2143	0.7 0.0	21 0	22 Tu	1126 2308	-1.2 -0.2	37 -6
8 Sa	1021 2321	-0.1 0.5	-3 15	23 Su	0950 2343	0.0 0.2	0 6	8 Tu	0322 1433	0.0 0.6	0 18	23 W	0121 1414	-0.3 -1.0	-9 30	8 Tu	1211 2308	0.8 -0.1	24 -3	23 W	1223	1.3	40
9 Su	0926 2043	0.0 0.4	0 12	24 M	0708 1521	0.1 0.4	3 12	9 W	0221 1503	-0.1 0.7	-3 21	24 Th	0241 1518	-0.4 1.1	-12 34	9 W	1248	0.9	27	24 Th	0042 1325	-0.3 1.3	-9 40
10 M	0807 1724	0.0 0.4	0 12	25 Tu	0341 1534	-0.1 0.7	-3 21	10 Th	0247 1543	-0.3 0.8	-9 24	25 F	0353 1627	-0.5 1.1	-15 34	10 Th	0022 1334	-0.2 1.0	-6 30	25 F	0206 1432	-0.3 1.3	-9 40
11 Tu	0613 1659	0.0 0.6	0 18	26 W	0337 1615	-0.3 0.9	-9 27	11 F	0331 1630	-0.4 0.9	-12 27	26 Sa	0500 1735	-0.5 1.1	-15 34	11 F	0132 1428	-0.2 1.0	-6 30	26 Sa	0320 1544	-0.3 1.2	-9 37
○				○									○										
12 W	0440 1708	-0.2 0.7	-6 21	27 Th	0422 1705	-0.5 1.0	-15 30	12 Sa	0422 1723	-0.5 1.0	-15 30	27 Su	0603 1841	-0.5 1.1	-15 34	12 Sa	0238 1530	-0.3 1.1	-9 34	27 Su	0423 1658	-0.2 1.1	-6 34
○				○									○										
13 Th	0434 1733	-0.3 0.9	-9 27	28 F	0517 1800	-0.6 1.1	-18 34	13 Su	0517 1818	-0.6 1.1	-18 34	28 M	0700 1940	-0.4 1.0	-12 30	13 Su	0340 1635	-0.4 1.2	-12 37	28 M	0515 1811	-0.1 1.0	-3 30
14 F	0500 1807	-0.4 1.0	-12 30	29 Sa	0616 1855	-0.7 1.1	-21 34	14 M	0612 1913	-0.7 1.2	-21 37					14 M	0437 1742	-0.4 1.2	-12 37	29 Tu	0554 1921	0.0 0.9	0 27
15 Sa	0541 1847	-0.6 1.1	-18 34	30 Su	0714 1948	-0.7 1.1	-21 34	15 Tu	0705 2007	-0.7 1.2	-21 37					15 Tu	0531 1850	-0.4 1.2	-12 37	30 W	0608 2032	0.2 0.7	6 21
				31 M	0809 2037	-0.6 1.1	-18 34									31 Th	0511 1414 2200	0.3 0.3 0.6	9 9 18				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Dauphin Island, Alabama, 2011

Times and Heights of High and Low Waters

April						May						June							
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0326 0855 1648	0.5 0.6 0.3	15 18 9	16 Sa	0819 1748	0.9 0.1	27 3	1 Su	0832 1859	1.2 0.0	37 0	16 M	0829 1950	1.6 -0.3	49 -9	1 W	0905 2040	1.6 -0.3	49 -9
2 Sa	0913 1820	0.8 0.2	24 6	17 Su	0844 1911	1.1 -0.1	34 -3	2 M	0858 1942	1.3 -0.1	40 -3	17 Tu	0912 2054	1.7 -0.3	52 -9	2 Th	0944 2133	1.6 -0.3	49 -9
3 Su	0937 1928	0.9 0.1	27 3	18 M	0924 2027	1.4 -0.2	43 -6	3 Tu	0927 2030	1.4 -0.1	43 -3	18 W	0958 2202	1.7 -0.3	52 -9	3 F	1023 2225	1.6 -0.3	49 -9
●																18 Sa	1116 2331	1.4 -0.1	43 -3
4 M	1004 2026	1.1 0.0	34 0	19 Tu	1010 2145	1.5 -0.3	46 -9	4 W	1001 2125	1.5 -0.2	46 -6	19 Th	1046 2308	1.7 -0.3	52 -9	4 Sa	1104 2310	1.6 -0.3	49 -9
5 Tu	1035 2124	1.2 -0.1	37 -3	20 W	1100 2306	1.6 -0.3	49 -9	5 Th	1039 2225	1.5 -0.2	46 -6	20 F	1134 2305	1.6 -0.3	49 -9	5 Su	1144 2348	1.5 -0.2	46 -6
6 W	1110 2229	1.2 -0.1	37 -3	21 Th	1154	1.5	46	6 F	1121 2326	1.5 -0.2	46 -6	21 Sa	0005 1220	-0.2 1.4	-6 43	6 M	1220	1.3	40
7 Th	1151 2340	1.3 -0.2	40 -6	22 F	0024 1250	-0.2 1.5	-6 46	7 Sa	1206	1.5	46	22 Su	0048 1300	-0.1 1.3	-3 40	7 Tu	0012 1245	-0.1 1.1	-3 34
8 F	1239	1.3	40	23 Sa	0133 1348	-0.2 1.3	-6 40	8 Su	0021 1253	-0.2 1.4	-6 43	23 M	0111 1330	0.1 1.1	3 34	8 W	0010 1202 2312	0.2 0.8 0.4	6 24 12
9 Sa	0050 1333	-0.2 1.3	-6 40	24 Su	0228 1447	-0.1 1.2	-3 37	9 M	0108 1341	-0.2 1.3	-6 40	24 Tu	0104 1328	0.2 0.8	6 24	9 Th	0749 1958	0.8 0.4	24 12
10 Su	0153 1434	-0.2 1.3	-6 40	25 M	0307 1547	0.1 1.0	3 30	10 Tu	0144 1429	0.0 1.1	0 34	25 W	0011 0917 2222	0.4 0.7 0.5	12 21 15	10 F	0633 1717	1.0 0.2	30 6
●																25 Sa	0602 1714	1.2 0.0	37 0
11 M	0249 1540	-0.2 1.3	-6 40	26 Tu	0321 1656	0.2 0.8	6 24	11 W	0203 1515	0.1 0.9	3 27	26 Th	0719 1803	0.8 0.4	24 12	11 Sa	0633 1739	1.2 -0.1	37 -3
●																26 Su	0626 1742	1.3 -0.1	40 -3
12 Tu	0337 1654	-0.1 1.1	-3 34	27 W	0249 1847	0.4 0.6	12 18	12 Th	0142 0940 2341	0.4 0.7 0.5	12 21 15	27 F	0701 1736	1.0 0.2	30 6	12 Su	0659 1823	1.5 -0.3	46 -9
13 W	0415 1823	0.0 1.0	0 30	28 Th	0120 0813 1625	0.5 0.7 0.4	15 21 12	13 F	0743 1704	0.9 0.3	27 9	28 Sa	0711 1756	1.2 0.0	37 0	13 M	0737 1917	1.6 -0.4	49 -12
14 Th	0434 2024	0.2 0.8	6 24	29 F	0758 1731	0.9 0.3	27 9	14 Sa	0731 1755	1.1 0.0	34 0	29 Su	0732 1827	1.3 -0.1	40 -3	14 Tu	0820 2017	1.7 -0.4	52 -12
15 F	0350 0846 1554	0.5 0.6 0.3	15 18 9	30 Sa	0810 1818	1.1 0.1	34 3	15 Su	0753 1850	1.4 -0.2	43 -6	30 M	0759 1905	1.4 -0.2	43 -6	15 W	0907 2117	1.7 -0.4	52 -12
																30 O	0852 2046	1.6 -0.4	49 -12

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Dauphin Island, Alabama, 2011

Times and Heights of High and Low Waters

July					August					September					
Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	
1 F ●	0933 0.4 -12	1.6 49	16 Sa	1028 2231 0.0 0	1.4 43	1 M	1056 2157 0.3 9	1.2 37	16 Tu	0142 0351 0.6 18	0.7 21	1 Th	1044 0036 0.4 12	0.4 12	16 F
2 Sa	1014 2213 -0.3 -9	1.6 49	17 Su	1100 2233 0.1 3	1.2 37	2 Tu	1138 2053 0.5 15	1.0 30	17 W	0055 0915 0.6 18	0.9 27	2 F	0036 1232 0.2 46	1.5 46	17 Sa
3 Su	1053 2245 -0.2 -6	1.5 46	18 M	1124 2155 0.3 9	1.0 30	3 W	1155 1804 0.6 18	0.7 21	18 Th	0113 1224 0.5 15	1.0 30	3 Sa	0134 1356 0.1 3	1.6 49	18 Su
4 M	1128 2300 0.0 0	1.3 40	19 Tu	1125 2037 0.4 12	0.8 24	4 Th	0223 1413 0.4 12	0.9 27	19 F	0143 1316 0.4 12	1.2 37	4 Su	0239 1511 0.1 3	1.7 52	19 M
5 Tu	1152 2236 0.2 6	1.0 30	20 W	0549 1855 0.5 15	0.7 21	5 F	0247 1445 0.2 6	1.2 37	20 Sa	0221 1405 0.3 9	1.3 40	5 M	0347 1621 0.0 0	1.7 52	20 Tu
6 W	1051 2058 0.4 12	0.7 21	21 Th	0404 1639 0.4 12	0.8 24	6 Sa	0332 1539 0.0 0	1.4 43	21 Su	0306 1457 0.2 6	1.4 43	6 Tu	0458 1726 0.1 3	1.7 52	21 W
7 Th	0538 1738 0.3 9	0.8 24	22 F	0405 1546 0.2 6	1.0 30	7 Su	0426 1640 -0.1 -3	1.5 46	22 M	0357 1551 0.1 3	1.5 46	7 W	0607 1823 0.2 6	1.6 49	22 Th
8 F	0458 1628 0.1 3	1.0 30	23 Sa	0428 1601 0.1 3	1.2 37	8 M	0525 1743 -0.2 -6	1.6 49	23 Tu	0451 1646 0.0 0	1.5 46	8 Th	0710 1911 0.3 9	1.6 49	23 F
9 Sa	0516 1656 -0.1 -3	1.3 40	24 Su	0501 1636 0.0 0	1.3 40	9 Tu	0625 1844 -0.2 -6	1.7 52	24 W	0548 1738 0.0 0	1.6 49	9 F	0808 1949 0.5 15	1.4 43	24 Sa
10 Su	0553 1743 -0.3 -9	1.5 46	25 M	0540 1720 -0.1 -3	1.4 43	10 W	0722 1941 -0.1 -3	1.6 49	25 Th	0643 1827 0.0 0	1.6 49	10 Sa	0902 1951 0.6 18	1.3 40	25 Su
11 M	0639 1839 -0.3 -9	1.6 49	26 Tu	0624 1809 -0.2 -6	1.5 46	11 Th	0816 2031 0.0 0	1.6 49	26 F	0737 1914 0.1 3	1.6 49	11 Su	0959 1806 0.7 24	1.1 34	26 M
12 Tu	0728 1938 -0.4 -12	1.7 52	27 W	0710 1859 -0.2 -6	1.6 49	12 F	0903 2111 0.1 3	1.5 46	27 Sa	0832 1958 0.2 6	1.6 49	12 M	0346 1114 1.0 27	0.7 30	27 Tu
13 W	0818 2035 -0.3 -9	1.7 52	28 Th	0756 1948 -0.3 -9	1.6 49	13 Sa	0946 2135 0.3 9	1.4 43	28 Su	0930 2035 0.4 12	1.4 43	13 Tu	0619 2237 1.2 37	0.7 21	28 W
14 Th	0906 2125 -0.3 -9	1.6 49	29 F	0841 2033 -0.2 -6	1.6 49	14 Su	1024 2118 0.5 15	1.2 37	29 M	1037 2020 0.6 21	1.2 37	14 W	0809 2307 1.3 40	0.6 18	29 Th
15 F	0949 2205 -0.2 -6	1.5 46	30 Sa	0927 2114 -0.1 -3	1.6 49	15 M	1101 1951 0.6 18	1.0 30	30 Tu	0325 1214 1.0 27	0.6 18	15 Th	0932 2340 1.4 43	0.5 15	30 F
●			●						31 W	0753 2344 1.2 37	0.6 18				
31 Su	1011 2148 0.0 0	1.5 46													

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Dauphin Island, Alabama, 2011

Times and Heights of High and Low Waters

October					November					December													
Time	Height		Time	Height	Time	Height		Time	Height	Time	Height		Time	Height									
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm									
1 Sa	1211	0.1	3	16 Su	1120	0.2	6	1 Tu	0123	1.7	52	16 W	0021	1.5	46	1 Th	0112	1.1	34	16 F	0008	0.9	27
2 Su	0054	1.9	58	17 M	0013	1.7	52	2 W	0216	1.5	46	17 ○	0059	1.4	43	2 F	0103	0.8	24	17 ○	1045	0.1	3
3 M	1332	0.1	3	18 Tu	1221	0.2	6	3 Th	0307	1.3	40	18 F	0130	1.2	37	3 Sa	0950	0.4	12	18 ○	0813	0.2	6
4 ○	1443	1.8	55	19 W	0100	1.7	52	4 F	0355	1.1	34	19 ○	0124	1.0	30	4 Su	0621	0.3	9	19 M	0520	0.0	0
5 Tu	1544	0.2	6	20 W	1452	0.2	6	5 F	0455	0.6	18	20 Th	0248	1.6	49	5 M	0542	0.1	3	20 ○	0529	-0.3	-9
6 W	1633	0.3	9	21 F	1405	0.2	6	6 Sa	0455	0.7	21	21 ○	1445	0.2	6	6 Tu	0542	0.1	34	21 W	1842	-1.2	-37
7 Th	1705	1.5	46	22 F	0349	1.4	43	7 Sa	1220	0.7	21	22 ○	1946	0.6	18	7 Tu	0559	-0.1	-3	21 W	0611	-0.5	-15
8 F	1701	0.5	15	23 Sa	0510	0.4	12	8 M	2000	1.0	30	23 ○	1946	1.2	37	6 W	1922	0.3	9	21 W	1920	-1.4	-43
9 Sa	1802	1.3	40	24 ○	0528	1.2	37	9 M	1520	0.6	18	24 ○	1958	0.4	12	6 Tu	0559	-0.1	-3	21 W	0706	-0.6	-18
10 Su	1548	0.8	24	25 Tu	0720	1.0	30	8 F	2049	0.8	24	25 ○	2020	0.2	6	7 W	0630	-0.2	-6	21 W	0705	-1.5	-46
11 ○	2056	0.9	27	26 W	0742	0.7	21	9 W	1428	0.8	24	26 ○	2047	0.1	3	7 W	1950	-0.2	-6	21 W	0807	-0.7	-21
12 M	0959	1.0	30	27 M	0742	0.7	21	10 F	2015	1.3	40	27 ○	2117	0.0	0	8 W	0643	-0.2	-6	21 W	0909	-0.7	-21
13 ○	1345	0.9	27	28 Tu	0745	0.4	12	11 F	2117	0.0	0	28 ○	2117	0.6	49	9 F	0752	-0.4	-12	21 W	0909	-0.7	-21
14 W	2040	1.1	34	29 W	0558	0.4	12	12 F	2031	1.5	46	29 ○	2117	0.0	0	10 F	0846	-0.4	-12	21 W	1006	-0.7	-21
15 Tu	0520	0.7	21	30 F	0558	0.4	12	13 W	2031	1.5	46	29 ○	2117	1.6	49	11 F	0839	-0.4	-12	21 W	1054	-0.6	-18
16 ○	2056	1.3	40	31 W	0745	0.4	12	14 M	2107	1.7	52	30 ○	2117	0.0	0	12 M	0839	-0.4	-12	21 W	1128	-0.4	-12
17 W	0637	0.5	15	26 W	0709	0.2	6	15 F	2107	1.7	52	30 ○	2150	0.6	49	13 F	0930	-0.4	-12	21 W	1128	-0.4	-12
18 Tu	2120	1.5	46	27 W	0709	0.2	6	16 F	2150	0.6	49	30 ○	2225	-0.1	-3	12 M	1059	-0.4	-12	21 W	1128	-0.4	-12
19 ○	0637	0.5	15	28 W	0819	0.0	0	17 F	2151	1.9	58	31 ○	0921	-0.1	-3	13 M	1059	-0.4	-12	21 W	1143	-0.2	-6
20 W	2147	0.4	12	29 F	0934	-0.1	-3	18 F	2240	1.9	58	31 ○	0921	-0.1	-3	14 M	1054	-0.4	-12	21 W	1143	-0.2	-6
21 M	0735	0.4	12	30 F	0934	-0.1	-3	19 F	2333	-0.1	-3	31 ○	0934	-0.1	-3	15 F	1154	-0.3	-9	21 W	1143	-0.2	-6
22 W	2147	1.6	49	31 W	0934	-0.1	-3	20 F	2333	-0.1	-3	31 ○	0934	-0.1	-3	16 M	1154	-0.3	-9	21 W	1143	-0.2	-6
23 F	0826	0.3	9	28 W	1051	-0.1	-3	21 F	2342	-0.1	-3	31 ○	1015	-0.1	-3	17 M	1154	-0.3	-9	21 W	1143	-0.2	-6
24 W	2217	1.6	49	29 W	1051	-0.1	-3	22 F	2342	-0.1	-3	31 ○	1015	-0.1	-3	18 M	1154	-0.3	-9	21 W	1143	-0.2	-6
25 F	0919	0.3	9	30 F	1205	-0.1	-3	23 F	1106	-0.1	-3	31 ○	1153	-0.1	-3	19 M	1154	-0.3	-9	21 W	1143	-0.2	-6
26 F	2251	1.7	52	31 M	0028	1.8	55	24 F	1236	-0.2	-6	31 ○	1310	0.0	0	20 M	1154	-0.3	-9	21 W	1143	-0.2	-6
27 F	1017	0.2	6	30 F	1205	-0.1	-3	25 F	1153	-0.1	-3	31 ○	1310	1.8	55	21 M	1154	-0.3	-9	21 W	1143	-0.2	-6
28 F	2330	1.7	52	31 M	0028	1.8	55	26 F	1258	1.3	40	31 ○	1310	0.0	0	22 M	1154	-0.3	-9	21 W	1143	-0.2	-6
29 F	1017	0.2	6	30 F	1205	-0.1	-3	27 F	1258	1.3	40	31 ○	1310	0.0	0	23 M	1154	-0.3	-9	21 W	1143	-0.2	-6
30 F	2330	1.7	52	31 M	0028	1.8	55	28 F	1258	1.3	40	31 ○	1310	0.0	0	24 M	1154	-0.3	-9	21 W	1143	-0.2	-6
31 F	1017	0.2	6	31 M	0028	1.8	55	29 F	1258	1.3	40	31 ○	1310	0.0	0	25 M	1154	-0.3	-9	21 W	1143	-0.2	-6
32 F	2330	1.7	52	31 M	0028	1.8	55	30 F	1258	1.3	40	31 ○	1310	0.0	0	26 M	1154	-0.3	-9	21 W	1143	-0.2	-6
33 F	1017	0.2	6	31 M	0028	1.8	55	31 F	1258	1.3	40	31 ○	1310	0.0	0	27 M	1154	-0.3	-9	21 W	1143	-0.2	-6
34 F	2330	1.7	52	31 M	0028	1.8	55	32 F	1258	1.3	40	31 ○	1310	0.0	0	28 M	1154	-0.3	-9	21 W	1143	-0.2	-6
35 F	1017	0.2	6	31 M	0028	1.8	55	33 F	1258	1.3	40	31 ○	1310	0.0	0	29 M	1154	-0.3	-9	21 W	1143	-0.2	-6
36 F	2330	1.7	52	31 M	0028	1.8	55	34 F	1258	1.3	40	31 ○	1310	0.0	0	30 M	1154	-0.3	-9	21 W	1143	-0.2	-6
37 F	1017	0.2	6	31 M	0028	1.8	55	35 F	1258	1.3	40	31 ○	1310	0.0	0	31 M	1154	-0.3	-9	21 W	1143	-0.2	-6
38 F	2330	1.7	52	31 M	0028	1.8	55	36 F	1258	1.3	40	31 ○	1310	0.0	0	32 M	1154	-0.3	-9	21 W	1143	-0.2	-6
39 F	1017	0.2	6	31 M	0028	1.8	55	37 F	1258	1.3	40	31 ○	1310	0.0	0	33 M	1154	-0.3	-9	21 W	1143	-0.2	-6
40 F	2330	1.7	52	31 M	0028	1.8	55	38 F	1258	1.3	40	31 ○	1310	0.0	0	34 M	1154	-0.3	-9	21 W	1143	-0.2	-6
41 F	1017	0.2	6	31 M	0028	1.8	55	39 F	1258	1.3	40	31 ○	1310	0.0	0	35 M	1154	-0.3	-9	21 W	1143	-0.2	-6
42 F	2330	1.7	52	31 M	0028	1.8	55	40 F	1258	1.3	40	31 ○	1310	0.0	0	36 M	1154	-0.3	-9	21 W	1143	-0.2	-6
43 F	1017	0.2	6	31 M	0028	1.8	55	41 F	1258	1.3	40	31 ○	1310	0.0	0	37 M	1154	-0.3	-9	21 W	1143	-0.2	-6
44 F	2330	1.7	52	31 M	0028	1.8	55	42 F	1258	1.3	40	31 ○	1310	0.0	0	38 M	1154	-0.3	-9	21 W	1143	-0.2	-6
45 F	1017	0.2	6	31 M	0028	1.8	55	43 F	1258	1.3	40	31 ○	1310	0.0	0	39 M							

Mobile, Alabama, 2011

Times and Heights of High and Low Waters

January					February					March													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm								
1 Sa	0852 2128	-0.7 1.6	-21 49	16 Su	0832 2105	-0.7 1.5	-21 46	1 Tu	0945 2303	-0.6 1.3	-18 40	16 W	0911 2239	-0.7 1.4	-21 43	1 Tu	0835 2157	-0.3 1.3	-9 40	16 W	0751 2119	-0.3 1.4	-9 43
2 Su	0934 2221	-0.7 1.6	-21 49	17 M	0910 2158	-0.8 1.6	-24 49	2 W	1009 2351	-0.5 1.2	-15 37	17 Th	0938 2343	-0.5 1.2	-15 37	2 W	0858 2259	-0.2 1.1	-6 34	17 Th	0816 2250	-0.1 1.2	-3 37
3 M	1012 2310	-0.7 1.6	-21 49	18 Tu	0945 2249	-0.9 1.6	-27 49	3 Th	1022	-0.3	-9	18 F	0947	-0.2	-6	3 Th	0907	0.0	0	18 F	0814 1521 1825	0.2 0.7 0.6	6 21 18
4 Tu	1046 2356	-0.6 1.5	-18 46	19 W	1018 2339	-0.9 1.5	-27 46	4 F	0037 1015	1.0 -0.2	30 -6	19 Sa	0051 0922 1642 2029	1.0 0.1 0.5 0.4	30 3 15 12	4 F	0005 0849 1540 1904	1.0 0.2 0.6 0.5	30 6 18 15	19 Sa	0053 0729 1409 2019	0.9 0.5 0.8 0.4	27 15 24 12
●				○																			
5 W	1113	-0.5	-15	20 Th	1046	-0.7	-21	5 Sa	0125 0949 1731 2055	0.9 0.0 0.5 0.4	27 0 15 12	20 Su	0213 0838 1533 2231	0.7 0.3 0.7 0.2	21 9 21 6	5 Sa	0120 0814 1508 2026	0.8 0.3 0.7 0.4	24 9 21 12	20 Su	0337 0627 1317 2158	0.7 0.6 1.1 0.2	21 18 34 6
6 Th	0039 1131	1.4 -0.4	43 -12	21 F	0029 1100	1.4 -0.5	43 -15	6 Su	0215 0929 1650 2227	0.6 0.2 0.6 0.3	18 6 18 9	21 M	1509	1.0	30	6 Su	0251 0754 1429 2137	0.7 0.5 0.8 0.3	21 15 24 9	21 M	1326 2349	1.4 0.0	43 0
7 F	0119 1130	1.2 -0.2	37 -6	22 Sa	0116 1046	1.1 -0.2	34 -6	7 M	0313 0908 1610	0.4 0.2 0.8	12 6 24	22 Tu	0148 1532	0.0 1.3	0	7 M	0501 0727 1416 2249	0.6 0.5 1.0 0.2	18 15 30 6	22 Tu	1401	1.6	49
8 Sa	0156 1108	1.0 -0.1	30 -3	23 Su	0157 1013 1813 2327	0.8 0.0 0.6 0.3	24 0 18 9	8 Tu	0010 1610	0.2 0.9	6 27	23 W	0351 1612	-0.2 1.5	-6 46	8 Tu	1433	1.2	37	23 W	0142 1446	-0.1 1.8	-3 55
9 Su	0228 1047 1909 2349	0.8 0.1 0.6 0.4	24 3 18 12	24 M	0206 0922 1715	0.4 0.2 0.8	12 6 24	9 W	0421 1635	0.0 1.1	0 34	24 Th	0500 1701	-0.4 1.6	-12 49	9 W	0034 1504	0.1 1.3	3 40	24 Th	0311 1536	-0.2 1.8	-6 55
10 M	0241 1022 1820	0.5 0.2 0.7	15 6 21	25 Tu	0545 1712	0.0 1.1	0 34	10 Th	0515 1712	-0.2 1.2	-6 37	25 F	0558 1756	-0.5 1.6	-15 49	10 Th	0306 1543	0.0 1.4	0 43	25 F	0421 1628	-0.2 1.8	-6 55
11 Tu	0721 1754	0.2 0.9	6 27	26 W	0548 1743	-0.3 1.3	-9 40	11 F	0602 1757	-0.3 1.3	-9 40	26 Sa	0647 1854	-0.5 1.5	-15 46	11 F	0420 1626	-0.1 1.5	-3 46	26 Sa	0517 1722	-0.2 1.7	-6 52
○								○							○								
12 W	0615 1808	0.0 1.1	0 34	27 Th	0629 1828	-0.5 1.4	-15 43	12 Sa	0645 1847	-0.5 1.4	-15 43	27 Su	0730 1955	-0.5 1.4	-15 43	12 Sa	0514 1714	-0.3 1.6	-9 49	27 Su	0603 1816	-0.2 1.6	-6 49
○															○								
13 Th	0639 1842	-0.2 1.2	-6 37	28 F	0714 1921	-0.6 1.5	-18 46	13 Su	0725 1942	-0.6 1.5	-18 46	28 M	0805 2056	-0.4 1.4	-12 43	13 Su	0559 1806	-0.4 1.6	-12 49	28 M	0641 1913	-0.1 1.4	-3 43
14 F	0714 1925	-0.4 1.3	-12 40	29 Sa	0758 2019	-0.7 1.5	-21 46	14 M	0803 2040	-0.7 1.5	-21 46					14 M	0640 1903	-0.4 1.6	-12 49	29 Tu	0711 2018	0.0 1.3	0 40
15 Sa	0753 2013	-0.6 1.4	-18 43	30 Su	0839 2117	-0.7 1.4	-21 43	15 Tu	0838 2139	-0.8 1.5	-24 46					15 Tu	0718 2006	-0.4 1.6	-12 49	30 W	0732 2143	0.2 1.1	6 34
				31 M	0914 2212	-0.7 1.4	-21 43									31 Th	0729 1401 1720 2340	0.4 0.8 0.7 1.0	12 24 21 30				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Mobile, Alabama, 2011

Times and Heights of High and Low Waters

April						May						June											
Time		Height		Time		Height		Time		Height		Time		Height		Time		Height					
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 F	0640	0.6	18	16 Sa	0136 0443 1156 2026	0.9 0.8 1.2 0.4	27 24 37 12	1 Su	1056 2108	1.5 0.3	46 9	16 M	1048 2222	1.9 -0.2	58 -6	1 W	1132 2310	1.8 -0.2	55 -6	16 Th	1218 0000	2.0 -0.3	61 -9
	1331	0.9	27													●							
	1857	0.6	18																				
2 Sa	0142	0.8	24	17 Su	1135 2144	1.5 0.1	46 3	2 M	1120 2203	1.6 0.1	49 3	17 Tu	1135 2320	2.1 -0.3	64 -9	2 Th	1214 2352	1.9 -0.2	58 -6	17 F	0000 1304	-0.3 2.0	-9 61
	0604	0.7	21													○							
	1256	1.0	30																				
3 Su	2009	0.4	12																				
	1231	1.2	37	18 M	1201 2301	1.8 -0.1	55 -3	3 Tu	1155 2301	1.7 0.1	52 3	18 W	1225	2.1	64	3 F	1255	2.0	61	18 Sa	0037 1347	-0.2 1.8	-6 55
	2111	0.3	9													●							
4 M	1241	1.4	43	19 Tu	1243	1.9	58	4 W	1234	1.8	55	19 Th	0018 1314	-0.3 2.1	-9 64	4 Sa	0030 1335	-0.3 2.0	-9 61	19 Su	0107 1425	-0.1 1.7	-3 52
	2214	0.2	6																				
	1308	1.5	46	20 W	0018 1330	-0.1 2.0	-3 61	5 Th	0000 1314	0.0 1.9	0 58	20 F	0111 1401	-0.2 2.0	-6 61	5 Su	0104 1413	-0.3 1.9	-9 58	20 M	0124 1501	0.1 1.5	3 46
6 W	1343	1.6	49	21 Th	0132 1419	-0.2 2.0	-6 61	6 F	0056 1354	-0.1 1.9	-3 58	21 Sa	0157 1444	-0.2 1.9	-6 58	6 M	0132 1450	-0.2 1.8	-6 55	21 Tu	0112 1534	0.3 1.2	9 37
	1422	0.1	3	22 F	0238 1509	-0.2 2.0	-6 61	7 Sa	0146 1435	-0.1 2.0	-3 61	22 Su	0236 1524	0.0 1.7	0 52	7 Tu	0147 1524	0.0 1.5	0 46	22 W	0032 0920 1127 1557	0.4 0.9 0.8 1.0	12 27 24 30
	1422	1.7	52																				
8 F	0224	0.0	0	23 Sa	0334 1556	-0.1 1.9	-3 58	8 Su	0230 1515	-0.2 1.9	-6 58	23 M	0305 1600	0.1 1.5	3 46	8 W	0138 1543	0.2 1.2	6 37	23 Th	0002 0819 2303	0.6 1.0 0.6	18 30 18
	1504	1.8	55													○							
	0326	-0.1	-3	24 Sa	0421 1641	0.0 1.7	0 52	9 M	0309 1555	-0.1 1.8	-3 55	24 Tu	0314 1632	0.3 1.3	9 40	9 Th	0108 1008 2357	0.5 1.0 0.6	15 30 18	24 F	0725 1913	1.1 0.5	34 15
10 Su	0416	-0.2	-6	25 M	0458 1725	0.1 1.5	3 46	10 Tu	0340 1634	0.0 1.6	0 49	25 W	0229 1651	0.5 1.0	15 30	10 F	0853 1956	1.2 0.4	37 12	25 Sa	0727 1935	1.3 0.2	40 6
	1633	1.8	55													○							
	0500	-0.2	-6	26 Tu	0526 1811	0.3 1.3	9 40	11 W	0354 1708	0.2 1.3	6 40	26 Th	0142 1022	0.6 1.1	18 34	11 Sa	0827 2011	1.5 0.1	46 3	26 Su	0801 2014	1.5 0.1	46 3
11 M	1721	-0.2	-6	27 W	0531 1909	0.5 1.1	15 34	12 Th	0333 1214	0.5 1.1	15 34	27 F	0040 0939 1947	0.7 1.2 0.5	21 37 15	12 Su	0854 2052	1.7 -0.2	52 -6	27 M	0848 2056	1.6 -0.1	49 -3
	1815	-0.1	-3																				
	0538	-0.1	-49																				
13 W	0610	0.0	0	28 Th	0431 1207 1727 2313	0.7 1.0 0.8 0.9	21 30 24 27	13 F	0243 1102 2012	0.7 1.2 0.6	21 37 18	28 Sa	0914 2013	1.4 0.3	43 9	13 M	0940 2140	1.9 -0.3	58 -9	28 Tu	0939 2137	1.7 -0.2	52 -6
	1920	1.4	43																				
	1727	0.8	24																				
14 Th	0622	0.3	9	29 F	0338 1134 1916	0.8 1.1 0.6	24 34 18	14 Sa	1006 2037	1.4 0.2	43 6	29 Su	0931 2053	1.5 0.1	46 3	14 Tu	1033 2230	2.0 -0.4	61 -12	29 W	1029 2216	1.8 -0.3	55 -9
	2116	1.1	34																				
	0548	0.6	18	30 Sa	1058 2015	1.3 0.4	40 12	15 Su	1012 2126	1.7 0.0	52 0	30 M	1006 2139	1.7 0.0	52 0	15 W	1126 2317	2.0 -0.4	61 -12	30 Th	1116 2252	1.9 -0.4	58 -12
15 F	1304	1.0	30																				
	1849	0.7	21																				
	1126	1.8	12	31 Tu	1048 2225	1.8 -0.1	55 -3									○							

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Mobile, Alabama, 2011

Times and Heights of High and Low Waters

July					August					September										
Time		Height			Time		Height			Time		Height			Time		Height			
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 F	1200 2325	1.9 -0.4	58 -12		16 Sa	1259 2351	1.7 0.0	52 0	1 M	1336 2301	1.5 0.3	46 9	16 Tu	0422 0815	0.9 0.7	27 21	1 Th	0156 1104	1.5 0.5	46 15
●																				
2 Sa	1243 2354	1.9 -0.3	58 -9		17 Su	1341	1.6	49	2 Tu	1435 2226	1.3 0.6	40 18	17 W	0313 0927	1.0 0.7	30 21	2 F	0234 1338	1.8 0.4	55 12
3 Su	1324	1.8	55		18 M	0002 1424	0.2 1.4	6 43	3 W	0525 0958	0.9 0.7	27 21	18 Th	0246 1036	1.2 0.6	37 18	3 Sa	0323 1558	1.9 0.2	58 6
4 M	0015 1405	-0.2 1.6	-6 49		19 Tu	1508 2308	1.2 0.5	37 15	4 Th	0411 1211	1.1 0.6	34 18	19 F	0308 1155	1.3 0.6	40 18	4 Su	0419 1719	2.0 0.2	61 6
5 Tu	0018 1443	0.0 1.4	0 43		20 W	0633 1016	0.8 0.7	24 21	5 F	0420 1647	1.4 0.3	43 9	20 Sa	0347 1606	1.5 0.5	46 15	5 M	0522 1822	2.0 0.1	61 3
6 W	1509 2322	1.0 0.5	30 15		21 Th	0520 1201	1.0 0.6	30 21	6 Sa	0501 1755	1.7 0.1	52 3	21 Su	0435 1735	1.6 0.4	49 12	6 Tu	0630 1913	1.9 0.1	58 3
7 Th	0724 2138	1.0 0.6	30 18		22 F	0506 1734	1.2 0.5	37 15	7 Su	0555 1853	1.8 0.0	55 0	22 M	0530 1831	1.6 0.3	49 9	7 W	0744 1955	1.9 0.2	58 6
8 F	0628 1850	1.2 0.3	37 9		23 Sa	0535 1823	1.3 0.3	40 9	8 M	0659 1946	1.9 -0.1	58 -3	23 Tu	0631 1917	1.7 0.1	52 3	8 Th	0902 2030	1.8 0.3	55 9
9 Sa	0645 1918	1.5 0.0	46 0		24 Su	0620 1911	1.4 0.2	43 6	9 Tu	0809 2032	1.9 -0.2	58 -6	24 W	0735 1956	1.8 0.0	55 0	9 F	1021 2059	1.7 0.5	52 15
10 Su	0730 2002	1.7 -0.2	52 -6		25 M	0715 1955	1.6 0.0	49 0	10 W	0920 2113	1.9 -0.1	58 -3	25 Th	0841 2032	1.8 0.0	55 0	10 Sa	1139 2118	1.5 0.7	46 21
11 M	0826 2050	1.8 -0.3	55 -9		26 Tu	0815 2036	1.6 -0.1	49 -3	11 Th	1026 2148	1.8 0.0	55 0	26 F	0947 2105	1.8 0.1	55 3	11 Su	0251 0527	1.0 0.9	30 27
12 Tu	0928 2136	1.9 -0.4	58 -12		27 W	0915 2114	1.7 -0.2	52 -6	12 F	1125 2217	1.7 0.1	52 3	27 Sa	1055 2135	1.8 0.2	55 6	12 M	0219 0652	1.0 0.8	30 24
13 W	1029 2218	1.9 -0.4	58 -12		28 Th	1010 2148	1.8 -0.3	55 -9	13 Sa	1218 2239	1.7 0.3	52 9	28 Su	1208 2153	1.6 0.5	49 15	13 Tu	0123 0756	1.2 0.7	37 21
14 Th	1125 2255	1.9 -0.3	58 -9		29 F	1102 2220	1.9 -0.3	58 -9	14 Su	1312 2246	1.5 0.5	46 15	29 M	1332 2131	1.5 0.8	46 24	14 W	0040 0852	1.3 0.6	40 18
15 F	1214 2327	1.8 -0.2	55 -6		30 Sa	1152 2248	1.8 -0.2	55 -6	15 M	1409 2214	1.4 0.7	43 21	30 Tu	0329 0757	1.0 0.8	30 24	15 Th	0057 0945	1.5 0.5	46 15
○					31 Su	1243 2306	1.7 0.0	52 0		31 W	0157 0928	1.2 0.6	37 18							

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Mobile, Alabama, 2011

Times and Heights of High and Low Waters

October						November						December											
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height						
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 Sa	0156 1354	2.2 0.2	67 6	16 Su	0137 1253	1.9 0.4	58 12	1 Tu	0318 1532	2.0 0.2	61 6	16 W	0229 1347	1.8 0.1	55 3	1 Th	0316 1315	1.3 0.3	40 9	16 F	0222 1212 2200	1.2 0.0 0.9	37 0 27
2 Su	0251 1525	2.2 0.2	67 6	17 M	0222 1416	2.0 0.3	61 9	2 W	0404 1609	1.8 0.4	55 12	17 Th	0303 1405	1.7 0.2	52 6	2 F	0335 1233 2136	1.1 0.4 1.0	34 12 30	17 Sa	1149 2050	0.2 0.9	6 27
3 M	0349 1636	2.1 0.3	64 9	18 Tu	0307 1518	1.9 0.3	58 9	3 Th	0445 1625	1.5 0.6	46 18	18 F	0331 1407	1.5 0.4	46 12	3 Sa	1150 2057	0.5 1.1	15 34	18 Su	0851 1940	0.3 1.1	9 34
●																							
4 Tu	0447 1731	2.0 0.3	61 9	19 W	0351 1605	1.9 0.3	58 9	4 F	0525 1518 2314	1.3 0.8 1.2	40 24 37	19 Sa	0003 1351 2250	1.2 0.6 1.1	37 18 34	4 Su	0738 2011	0.4 1.2	12 37	19 M	0714 1930	0.0 1.4	0 43
5 W	0547 1816	1.9 0.5	58 15	20 Th	0437 1643	1.8 0.4	55 12	5 Sa	0357 0610 1409 2242	0.9 1.0 0.9 1.2	27 30 27 37	20 Su	0923 2135	0.7 1.3	21 40	5 M	0716 2009	0.2 1.4	6 43	20 Tu	0731 2001	-0.3 1.6	-9 49
6 Th	0652 1851	1.7 0.6	52 18	21 F	0528 1710	1.7 0.5	52 15	6 Su	0624 2153	0.8 1.4	24 43	21 M	0731 2050	0.4 1.5	12 46	6 Tu	0741 2036	0.0 1.5	0 46	21 W	0812 2049	-0.6 1.8	-18 55
7 F	0819 1914	1.5 0.8	46 24	22 Sa	0637 1708	1.4 0.8	43 24	7 M	0706 2129	0.5 1.5	15 46	22 Tu	0756 2111	0.1 1.8	3 55	7 W	0819 2117	-0.1 1.6	-3 49	22 Th	0859 2143	-0.7 1.9	-21 58
8 Sa	0107 0346 1045 1904	1.1 1.0 1.3 1.0	34 30 40 30	23 Su	0045 0512 1111 1627	1.2 1.1 1.2 1.0	37 34 37 30	8 Tu	0746 2148	0.3 1.7	9 52	23 W	0842 2154	-0.2 2.0	-6 61	8 Th	0902 2202	-0.3 1.7	-9 52	23 F	0948 2239	-0.8 1.9	-24 58
9 Su	0035 0537 1303 1732 2356	1.2 0.9 1.3 1.2 1.3	37 27 40 37 40	24 M	0645 2214	0.8 1.5	24 46	9 W	0829 2223	0.2 1.8	6 55	24 Th	0936 2245	-0.4 2.1	-12 64	9 F	0947 2249	-0.3 1.7	-9 52	24 Sa	1035 2334	-0.8 1.8	-24 55
10 M	0649 2300	0.8 1.5	24 46	25 Tu	0751 2222	0.4 1.8	12 55	10 Th	0917 2304	0.1 1.9	3 58	25 F	1033 2338	-0.5 2.1	-15 64	10 Sa	1029 2334	-0.4 1.7	-12 52	25 Su	1116	-0.7	-21
○																							
11 Tu	0743 2303	0.6 1.6	18 49	26 W	0855 2301	0.2 2.1	6 64	11 F	1008 2348	0.1 1.9	3 58	26 Sa	1129	-0.5	-15	11 Su	1106	-0.4	-12	26 M	0023 1150	1.7 -0.6	52 -18
●																							
12 W	0832 2332	0.5 1.8	15 55	27 Th	1002 2350	0.0 2.2	0 67	12 Sa	1102	0.0	0	27 Su	0031 1221	2.1 -0.4	64 -12	12 M	0016 1136	1.7 -0.4	52 -12	27 Tu	0106 1210	1.5 -0.4	46 -12
13 Th	0920	0.4	12	28 F	1115	-0.1	-3	13 Su	0032 1153	1.9 0.0	58 0	28 M	0121 1306	2.0 -0.3	61 -9	13 Tu	0053 1159	1.7 -0.4	52 -12	28 W	0144 1207	1.3 -0.2	40 -6
14 F	0010 1015	1.9 0.4	58 12	29 Sa	0042 1229	2.3 -0.1	70 -3	14 M	0114 1239	1.9 0.0	58 0	29 Tu	0206 1338	1.8 -0.1	55 -3	14 W	0128 1213	1.6 -0.3	49 -9	29 Th	0216 1136	1.1 0.0	34 0
15 Sa	0053 1124	1.9 0.4	58 12	30 Su	0136 1340	2.3 0.0	70 0	15 Tu	0153 1318	1.9 0.0	58 0	30 W	0244 1350	1.6 0.1	49 3	15 Th	0159 1218	1.4 -0.2	43 -6	30 F	0239 1109 1948	0.8 0.1 0.7	24 3 21
				31 M	0228 1442	2.1 0.1	64 3									31 Sa	1038 1901	0.2 0.8	6 24				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

South Pass, Louisiana, 2011

Times and Heights of High and Low Waters

January					February					March													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm								
1 Sa	0432 1802	-0.8 1.2	-24 37	16 Su	0407 1743	-0.8 1.1	-24 34	1 Tu	0538 1935	-0.7 0.8	-21 24	16 W	0503 1932	-0.7 1.0	-21 30	1 Tu	0430 1851	-0.4 0.8	-12 24	16 W	0338 1832	-0.3 1.0	-9 30
2 Su	0516 1850	-0.8 1.2	-24 37	17 M	0447 1834	-0.9 1.1	-27 34	2 W	0605 2016	-0.6 0.7	-18 21	17 Th	0543 2037	-0.5 0.8	-15 24	2 W	0454 1945	-0.2 0.7	-6 21	17 Th	0418 2004	-0.1 0.9	-3 27
3 M	0557 1935	-0.8 1.2	-24 37	18 Tu	0529 1925	-0.9 1.1	-27 34	3 Th	0624 2053	-0.4 0.6	-12 18	18 F	0616 2149	-0.3 0.6	-9 18	3 Th	0506 2037	-0.1 0.6	-3 18	18 F	0445 1013 1345 2150	0.1 0.3 0.2 0.7	3 9 6 21
4 Tu	0635 2015	-0.7 1.1	-21 34	19 W	0610 2016	-0.8 1.1	-24 34	4 F	0631 2128	-0.3 0.5	-9 15	19 Sa	0627 1135 1522 2321	-0.1 0.1 0.0 0.4	-3 3 0 12	4 F	0500 1110 1401 2131	0.1 0.2 0.1 0.5	3 6 3 15	19 Sa	0435 0845 1604	0.4 0.5 0.1	12 15 3
●				O											O								
5 W	0708 2051	-0.6 0.9	-18 27	20 Th	0650 2107	-0.7 0.9	-21 27	5 Sa	0620 2201	-0.2 0.3	-6 9	20 Su	0538 1032 1818	0.2 0.3 -0.1	6 9 -3	5 Sa	0430 1000 1603 2239	0.2 0.3 0.2 0.4	6 9 6 12	20 Su	0834 1746	0.8 -0.1	24 -3
6 Th	0733 2122	-0.5 0.8	-15 24	21 F	0725 2200	-0.6 0.7	-18 21	6 Su	0545 1218 1719 2233	0.0 0.1 0.0 0.2	0 3 0 6	21 M	1041 2050	0.6 -0.3	18 -9	6 Su	0330 0945 1733	0.3 0.5 0.1	9 15 3	21 M	0901 1920	1.0 -0.2	30 -6
7 F	0749 2148	-0.3 0.6	-9 18	22 Sa	0745 2255	-0.3 0.4	-9 12	7 M	0439 1158	0.0 0.3	0 9	22 Tu	1119 2251	0.8 -0.4	24 -12	7 M	0954 1900	0.6 0.0	18 0	22 Tu	0943 2052	1.2 -0.3	37 -9
8 Sa	0749 2202	-0.2 0.5	-6 15	23 Su	0725 1401 1839	-0.1 0.1 0.0	-3 3 0	8 Tu	0233 1211	0.0 0.4	0 12	23 W	1210	0.9	27	8 Tu	1017 2032	0.7 -0.1	21 -3	23 W	1032 2218	1.3 -0.4	40 -12
9 Su	0723 2123	-0.1 0.3	-3 9	24 M	0011 0519 1305 2350	0.1 0.0 0.3 -0.2	3 0 9 -6	9 W	0024 1241	-0.2 0.6	-6 18	24 Th	0017 1308	-0.6 1.0	-18 30	9 W	1049 2204	0.9 -0.2	27 -6	24 Th	1125 2335	1.4 -0.4	43 -12
10 M	0618 1454	0.0 0.3	0 9	25 Tu	1321	0.6	18	10 Th	0052 1323	-0.3 0.7	-9 21	25 F	0124 1415	-0.6 1.0	-18 30	10 Th	1129 2320	1.0 -0.2	30 -6	25 F	1223	1.3	40
11 Tu	0420 1431	0.0 0.4	0 12	26 W	0102 1404	-0.5 0.8	-15 24	11 F	0130 1415	-0.5 0.8	-15 24	26 Sa	0222 1527	-0.6 1.0	-18 30	11 F	1218	1.0	30	26 Sa	0042 1326	-0.3 1.2	-9 37
○								○							○								
12 W	0241 1447	-0.2 0.6	-6 18	27 Th	0157 1458	-0.7 0.9	-21 27	12 Sa	0212 1516	-0.6 0.9	-18 27	27 Su	0312 1641	-0.6 1.0	-18 30	12 Sa	0022 1316	-0.3 1.1	-9 34	27 Su	0138 1438	-0.2 1.1	-6 34
○															○								
13 Th	0234 1521	-0.4 0.7	-12 21	28 F	0249 1558	-0.8 1.0	-24 30	13 Su	0254 1620	-0.7 1.0	-21 30	28 M	0355 1750	-0.5 0.9	-15 27	13 Su	0117 1424	-0.4 1.1	-12 34	28 M	0224 1602	-0.1 1.0	-3 30
14 F	0257 1605	-0.5 0.9	-15 27	29 Sa	0337 1659	-0.9 1.0	-27 30	14 M	0337 1724	-0.8 1.0	-24 30					14 M	0207 1542	-0.4 1.1	-12 34	29 Tu	0257 1736	0.1 0.8	3 24
15 Sa	0330 1653	-0.7 1.0	-21 30	30 Su	0422 1757	-0.8 1.0	-24 30	15 Tu	0420 1828	-0.8 1.0	-24 30					15 Tu	0254 1706	-0.4 1.1	-12 34	30 W	0317 1909	0.2 0.7	6 21
				31 M	0503 1849	-0.8 0.9	-24 27									31 Th	0315 1410 2045	0.4 0.4 0.6	12 12 18				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

South Pass, Louisiana, 2011

Times and Heights of High and Low Waters

April						May						June											
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height						
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm						
1 F	0240 0823 1534	0.5 0.6 0.4	15 18 12	16 Sa	0100 0709 1604	0.7 0.9 0.1	21 27 3	1 Su	0656 1711	1.2 0.1	37 3	16 M	0647 1741	1.6 -0.3	49 -9	1 W	0726 1827	1.6 -0.3	49 -9	16 Th	0806 1921	1.7 -0.4	52 -12
2 Sa	0804 1635	0.8 0.3	24 9	17 Su	0716 1716	1.2 -0.1	37 -3	2 M	0719 1749	1.4 0.0	43 0	17 Tu	0728 1836	1.8 -0.4	55 -12	2 Th	0803 1906	1.6 -0.3	49 -9	17 F	0849 2001	1.6 -0.3	49 -9
3 Su	0808 1728	0.9 0.2	27 6	18 M	0747 1824	1.4 -0.2	43 -6	3 Tu	0747 1829	1.5 -0.1	46 -3	18 W	0813 1931	1.8 -0.4	55 -12	3 F	0841 1947	1.6 -0.3	49 -9	18 Sa	0926 2033	1.4 -0.2	43 -6
●																							
4 M	0826 1820	1.1 0.1	34 3	19 Tu	0828 1933	1.6 -0.3	49 -9	4 W	0819 1913	1.5 -0.1	46 -3	19 Th	0858 2025	1.8 -0.3	55 -9	4 Sa	0920 2027	1.6 -0.3	49 -9	19 Su	0956 2053	1.3 0.0	40 0
5 Tu	0852 1914	1.2 0.0	37 0	20 W	0914 2041	1.7 -0.3	52 -9	5 Th	0855 2001	1.6 -0.1	49 -3	20 F	0942 2114	1.7 -0.2	52 -6	5 Su	0958 2105	1.5 -0.2	46 -6	20 M	1014 2054	1.1 0.2	34 6
6 W	0924 2013	1.3 -0.1	40 -3	21 Th	1002 2148	1.7 -0.3	52 -9	6 F	0933 2050	1.6 -0.1	49 -3	21 Sa	1021 2157	1.5 -0.1	46 -3	6 M	1035 2136	1.3 0.0	40 0	21 Tu	0959 2023	0.9 0.3	27 9
7 Th	1001 2117	1.3 -0.1	40 -3	22 F	1051 2250	1.6 -0.2	49 -6	7 Sa	1014 2141	1.6 -0.1	49 -3	22 Su	1054 2227	1.3 0.1	40 3	7 Tu	1102 2152	1.1 0.2	34 6	22 W	0714 1900	0.7 0.4	21 12
8 F	1043 2221	1.4 -0.1	43 -3	23 Sa	1138 2344	1.4 0.0	43 0	8 Su	1057 2229	1.5 -0.1	46 -3	23 M	1111 2239	1.1 0.3	34 9	8 W	1009 2127	0.9 0.4	27 12	23 Th	0447 1635	0.8 0.3	24 9
9 Sa	1130 2321	1.4 -0.2	43 -6	24 Su	1223	1.3	40	9 M	1141 2313	1.4 0.0	43 0	24 Tu	1037 2218	0.9 0.4	27 12	9 Th	0557 1632	0.8 0.5	24 15	24 F	0413 1532	0.9 0.2	27 6
●																							
10 Su	1225	1.4	43	25 M	0026 1303	0.1 1.1	3	10 Tu	1227 2347	1.2 0.2	37 6	25 W	0755 2035	0.8 0.5	24 15	10 F	0454 1458	1.0 0.2	30 6	25 Sa	0418 1536	1.1 0.0	34 0
11 M	0017 1330	-0.1 1.3	-3 40	26 Tu	0053 1320	0.3 0.9	9	11 W	1308 2358	0.9 0.4	27 12	26 Th	0612 1621	0.9 0.4	27 12	11 Sa	0450 1529	1.2 -0.1	37 -3	26 Su	0441 1558	1.2 -0.1	37 -3
●																							
12 Tu	0107 1455	-0.1 1.2	-3 37	27 W	0057 0920 1521 1722	0.5 0.8 0.6 0.7	15 24 18 21	12 Th	0745 1414 1851 2254	0.8 0.6 0.7 0.6	24 18 21 18	27 F	0536 1558	1.0 0.3	30 9	12 Su	0514 1613	1.4 -0.3	43 -9	27 M	0515 1629	1.4 -0.3	43 -9
13 W	0151 1656	0.1 1.0	3 30	28 Th	0018 0732 1529	0.6 0.8 0.5	18 24 15	13 F	0620 1501	0.9 0.3	27 9	28 Sa	0535 1614	1.2 0.1	37 3	13 M	0551 1700	1.6 -0.5	49 -15	28 Tu	0553 1703	1.4 -0.3	43 -9
14 Th	0224 1926	0.3 0.9	9 27	29 F	0651 1600	1.0 0.4	30 12	14 Sa	0559 1553	1.2 0.0	37 0	29 Su	0552 1641	1.3 0.0	40 0	14 Tu	0635 1748	1.7 -0.5	52 -15	29 W	0633 1739	1.5 -0.4	46 -12
15 F	0230 0751 1441 2257	0.5 0.7 0.4 0.8	15 21 12 24	30 Sa	0644 1635	1.1 0.2	34 6	15 Su	0614 1646	1.4 -0.2	43 -6	30 M	0619 1714	1.4 -0.1	43 -3	15 W	0721 1836	1.7 -0.5	52 -15	30 Th	0715 1816	1.6 -0.4	49 -12
															31 Tu	0651 1749	1.5 -0.2	46 -6					

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

South Pass, Louisiana, 2011

Times and Heights of High and Low Waters

July			August			September																	
Time	Height		Time	Height		Time	Height		Time	Height													
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm												
1 F ●	0756 1852	1.6 -0.4	49 -12	16 Sa	0843 1923	1.3 -0.1	40 -3	1 M	0938 1914	1.2 0.2	37 6	16 Tu	1003 1716 2340	0.9 0.6 0.8	27 18 24	1 Th	0808 2251	0.4 1.5	12 46	16 F	0822 2227	0.6 1.6	18 49
2 Sa	0838 1928	1.5 -0.3	46 -9	17 Su	0916 1936	1.2 0.1	37 3	2 Tu	1033 1857	1.0 0.4	30 12	17 W	0545 1043 1555 2332	0.7 0.8 0.7 1.0	21 24 21 30	2 F	1009 2342	0.3 1.7	9 52	17 Sa	0948 2308	0.5 1.6	15 49
3 Su	0918 1959	1.4 -0.2	43 -6	18 M	0941 1930	1.0 0.2	30 6	3 W	0132 0556 1148 1718	0.6 0.5 0.7 0.6	18 15 21 18	18 Th	0923 2349	0.6 1.1	18 34	3 Sa	1140	0.1	3	18 Su	1104 2357	0.5 1.7	15 52
4 M	0957 2021	1.2 0.0	37 0	19 Tu	0952 1856	0.8 0.3	24 9	4 Th	0042 1052	0.9 0.4	27 12	19 F	1152	0.5	15	4 Su	0041 1253	1.8 0.0	55 0	19 M	1206	0.4	12
5 Tu	1030 2020	1.0 0.2	30 6	20 W	0837 1745	0.7 0.4	21 12	5 F	0057 1227	1.1 0.1	34 3	20 Sa	0022 1237	1.2 0.3	37 9	5 M	0149 1355	1.8 0.0	55 0	20 Tu	0055 1300	1.7 0.3	52 9
6 W	1006 1923	0.7 0.4	21 12	21 Th	0224 1549	0.8 0.4	24 12	6 Sa	0137 1328	1.3 -0.1	40 -3	21 Su	0106 1320	1.4 0.2	43 6	6 Tu	0303 1449	1.7 0.1	52 3	21 W	0202 1347	1.7 0.3	52 9
7 Th	0340 1509	0.7 0.4	21 12	22 F	0213 1431	0.9 0.2	27 6	7 Su	0231 1423	1.5 -0.2	46 -6	22 M	0200 1402	1.4 0.1	43 3	7 W	0420 1536	1.7 0.2	52 6	22 Th	0319 1431	1.7 0.4	52 12
8 F	0309 1410	1.0 0.1	30 3	23 Sa	0233 1431	1.1 0.1	34 3	8 M	0332 1515	1.6 -0.3	49 -9	23 Tu	0301 1444	1.5 0.0	46 0	8 Th	0533 1613	1.6 0.3	49 9	23 F	0442 1512	1.7 0.4	52 12
9 Sa	0325 1444	1.2 -0.2	37 -6	24 Su	0308 1455	1.2 -0.1	37 -3	9 Tu	0436 1603	1.6 -0.3	49 -9	24 W	0405 1525	1.6 0.0	49 0	9 F	0639 1639	1.5 0.5	46 15	24 Sa	0609 1548	1.6 0.6	49 18
10 Su	0403 1528	1.4 -0.4	43 -12	25 M	0353 1528	1.3 -0.2	40 -6	10 W	0537 1647	1.6 -0.2	49 -6	25 Th	0508 1605	1.6 0.0	49 0	10 Sa	0739 1650	1.4 0.7	43 21	25 Su	0742 1610 2126	1.5 0.8 1.0	46 24 30
11 M	0450 1614	1.5 -0.5	46 -15	26 Tu	0441 1603	1.4 -0.3	43 -9	11 Th	0634 1725	1.6 -0.1	49 -3	26 F	0610 1643	1.6 0.1	49 3	11 Su	0837 1637 2206	1.2 0.8 0.9	37 24 27	26 M	0140 0931 1556 2014	0.9 1.3 1.1 1.2	27 40 34 37
12 Tu	0541 1700	1.6 -0.5	49 -15	27 W	0531 1640	1.5 -0.3	46 -9	12 F	0724 1756	1.5 0.1	46 3	27 Sa	0712 1719	1.6 0.2	49 6	12 M	0232 0940 1554 2121	0.8 1.1 0.9 1.1	24 34 27 34	27 Tu	0345 2007	0.7 1.4	21 43
13 W	0632 1744	1.6 -0.5	49 -15	28 Th	0621 1718	1.6 -0.3	49 -9	13 Sa	0809 1815	1.3 0.2	40 6	28 Su	0817 1748	1.5 0.4	46 12	13 Tu	0415 1108 1430 2115	0.8 1.0 0.9 1.2	24 30 27 37	28 W	0521 2034	0.5 1.7	15 52
14 Th	0721 1824	1.6 -0.4	49 -12	29 F	0710 1754	1.6 -0.3	49 -9	14 Su	0849 1819	1.2 0.4	37 12	29 M	0928 1756 2254	1.3 0.6 0.8	40 18 24	14 W	0537 2129	0.7 1.3	21 40	29 Th	0651 2116	0.4 1.9	12 58
15 F	0805 1858	1.5 -0.3	46 -9	30 Sa	0758 1829	1.5 -0.2	46 -6	15 M	0926 1801	1.1 0.5	34 15	30 Tu	0311 1102 1709 2203	0.7 1.1 0.9 1.0	21 34 27 30	15 Th	0657 2153	0.7 1.5	21 46	30 F	0820 2206	0.3 2.0	9 61
●				31 Su	0847 1858	1.4 0.0	43 0					31 W	0549 2214	0.6 1.3	18 40								

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

South Pass, Louisiana, 2011

Times and Heights of High and Low Waters

October						November						December						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	
	0946	0.2	6		16	0901	0.4	12		1	1127	0.3	9		16	1003	0.1	
1 Sa	2301	2.0	61	Su	2223	1.8	55	Tu	2317	1.5	46	W	2228	0.9	27	Th	1029	0.3
2 Su	1106	0.2	6	M	1003	0.4	12	W	1212	1.6	49	17	1043	0.2	6	F	0954	0.4
3 M	0000	2.0	61	Tu	1100	0.4	12	O	1212	0.4	12	17	1043	0.2	6	Sa	0854	0.2
4 Tu	1215	0.2	6	18	1100	0.4	12	3	1239	1.4	43	18	1114	0.4	12	O	1724	0.6
5 W	0105	1.9	58	W	1153	0.4	12	4	1237	1.2	37	19	0021	1.1	34	Sa	0659	0.5
6 Th	1315	0.3	9	O	1153	0.4	12	F	2030	0.8	24	19	0021	1.1	34	1731	0.8	15
7 F	0219	1.7	52	20	0100	1.7	52	5	0304	0.9	27	20	0207	0.7	21	M	0339	0.1
8 Sa	1403	0.5	15	Th	1239	0.5	15	Sa	0620	1.0	30	Su	0602	0.8	24	Tu	0258	-0.3
9 Su	0526	1.4	43	22	0419	1.4	43	M	1134	0.9	27	Su	1018	0.7	21	W	1642	-1.2
10 M	1456	0.8	24	Sa	1348	0.8	24	1855	1.1	34	1855	1.0	30	M	1712	1.1		
11 Tu	0710	1.3	40	22	0419	1.4	43	7	1823	0.6	18	20	0239	0.4	12	Tu	0339	0.1
12 W	1447	1.0	30	Su	2128	1.1	34	M	1823	1.4	43	21	0239	1.2	37	W	1723	-0.6
13 Th	2039	1.1	34	23	0010	1.0	30	8	0354	0.6	18	Tu	1749	0.1	3	O	0400	0.0
14 F	0225	1.0	30	Su	0659	1.2	37	23	0327	1.5	46	21	0400	1.2	37	W	1734	0.0
15 Sa	0904	1.2	37	M	1350	1.0	30	Tu	1839	1.5	46	22	0429	-0.1	-3	O	0431	-0.7
16 Su	1354	1.1	34	1921	1.1	34	8	1839	0.4	12	22	0429	1.3	40	Th	1812	-1.4	
17 M	1948	1.2	37	24	0224	0.8	24	9	0502	0.3	9	23	0502	-0.2	-6	F	0431	-0.8
18 Tu	0339	0.9	27	M	1844	1.4	43	W	1903	1.6	49	23	0515	-0.3	-9	Sa	0522	-1.5
19 W	1937	1.4	43	25	0342	0.5	15	10	0539	0.2	6	24	0537	-0.3	-9	1903	0.5	-24
20 Th	0524	0.6	18	Tu	1852	1.6	49	Th	1932	1.7	52	24	0515	-0.3	-9	1953	1.4	-43
21 F	2006	1.6	49	25	0342	0.5	15	O	1954	0.4	12	25	0613	-0.4	-12	●	0612	-0.8
22 Sa	0435	0.7	21	W	1923	0.3	9	11	0618	0.2	6	25	0611	-0.4	-12	M	0701	-0.7
23 O	1946	1.5	46	26	0451	1.8	55	F	2005	1.7	52	26	0709	-0.4	-12	Su	2040	-1.3
24 ○	●			26	0451	1.8	55	11	0618	0.2	6	26	0709	-0.4	-12	M	0745	-0.6
25 Tu	0524	0.6	18	27	0559	0.1	3	Sa	2005	1.7	52	27	0805	-0.4	-12	W	0820	-0.4
26 W	2006	1.6	49	Th	2005	2.0	61	Sa	2040	0.1	3	27	0805	-0.4	-12	Tu	2158	-0.9
27 Th	0612	0.6	18	28	0707	0.0	0	12	2040	1.7	52	27	0728	-0.4	-12	W	0842	-0.7
28 F	2033	1.7	52	F	2053	2.1	64	13	0745	0.1	3	28	0859	-0.2	-6	W	2221	-0.7
29 Sa	0704	0.5	15	29	0816	0.0	0	M	2156	0.1	3	28	0859	-0.2	-6	O	0842	-0.3
30 ○	2105	1.8	55	Sa	2143	2.1	64	14	0832	0.1	3	29	0945	-0.1	-3	●	0838	-0.1
31 M	0800	0.5	15	30	0925	0.0	0	Tu	2236	0.1	3	29	0838	-0.1	-3	F	0750	0.1
32 W	2142	1.8	55	Su	2234	2.0	61	15	0919	0.1	3	30	0905	-0.1	-3	Sa	0750	0.4
33 Th	0612	0.6	18	31	1030	0.1	3	Tu	2309	0.1	3	30	0905	-0.1	-3	1741	0.4	
34 F	2033	1.7	52	M	2324	1.8	55	Sa	2309	0.1	3	31	0550	0.1	3	1537	0.5	

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Grand Isle (East Point), Louisiana, 2011

Times and Heights of High and Low Waters

January					February					March													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm								
1 Sa	0600 1924	-0.7 1.0	-21 30	16 Su	0535 1902	-0.6 0.9	-18 27	1 Tu	0721 2101	-0.6 0.7	-18 21	16 W	0638 2053	-0.5 0.8	-15 24	1 Tu	0615 2018	-0.3 0.7	-9 21	16 W	0511 1957	-0.2 0.8	-6 24
2 Su	0648 2014	-0.7 1.0	-21 30	17 M	0618 1954	-0.7 0.9	-21 27	2 W	0753 2141	-0.5 0.6	-15 18	17 Th	0720 2203	-0.4 0.7	-12 21	2 W	0646 2112	-0.1 0.6	-3 18	17 Th	0554 2137	0.0 0.7	0 21
3 M	0734 2100	-0.7 1.0	-21 30	18 Tu	0702 2045	-0.7 0.9	-21 27	3 Th	0816 2217	-0.3 0.5	-9 15	18 F	0756 2323	-0.2 0.5	-6 15	3 Th	0705 2208	0.0 0.5	0 15	18 F	0628 1118 1518 2344	0.2 0.3 0.2 0.6	6 9 6 18
4 Tu	0815 2140	-0.6 0.9	-18 27	19 W	0744 2137	-0.7 0.9	-21 27	4 F	0826 2253	-0.2 0.4	-6 12	19 Sa	0814 1305 1659	0.0 0.1 0.0	0 3 0	4 F	0706 2313	0.1 0.4	3 12	19 Sa	0624 0937 1738	0.4 0.5 0.1	12 15 3
●				○								●											
5 W	0850 2216	-0.5 0.8	-15 24	20 Th	0824 2229	-0.6 0.8	-18 24	5 Sa	0816 2330	-0.1 0.3	-3 9	20 Su	0118 0724 1147 2000	0.4 0.2 0.3 -0.1	12 6 9 -3	5 Sa	0630 1116 1728	0.2 0.3 0.2	6 9 6	20 Su	0929 1917	0.7 -0.1	21 -3
6 Th	0917 2246	-0.4 0.7	-12 21	21 F	0859 2324	-0.5 0.6	-15 18	6 Su	0734 1410 1856	0.0 0.1 0.0	0 3 0	21 M	1157 2215	0.5 -0.2	15 -6	6 Su	0049 0459 1051 1907	0.3 0.2 0.4 0.1	9 6 12 3	21 M	1005 2045	0.9 -0.2	27 -6
7 F	0933 2310	-0.3 0.5	-9 15	22 Sa	0919	-0.3	-9	7 M	0015 0607 1328 2302	0.1 0.0 0.2 0.0	3 0 6 0	22 Tu	1239	0.7	21	7 M	1101 2030	0.5 0.0	15 0	22 Tu	1054 2210	1.0 -0.2	30 -6
8 Sa	0933 2319	-0.2 0.4	-6 12	23 Su	0027 0900 1537 2107	0.3 0.0 0.1 0.0	9 0 3 0	8 Tu	1335	0.4	12	23 W	0003 1333	-0.3 0.8	-9 24	8 Tu	1126 2152	0.6 0.0	18 0	23 W	1149 2333	1.1 -0.3	34 -9
9 Su	0904 2201	-0.1 0.2	-3 6	24 M	0240 0626 1434	0.1 0.0 0.3	3 0 9	9 W	0102 1404	-0.1 0.5	-3 15	24 Th	0130 1436	-0.4 0.9	-12 27	9 W	1203 2313	0.7 -0.1	21 -3	24 Th	1248	1.1	34
10 M	0750 1634	0.0 0.3	0 9	25 Tu	0054 1448	-0.2 0.5	-6 15	10 Th	0155 1447	-0.2 0.6	-6 18	25 F	0244 1546	-0.5 0.9	-15 27	10 Th	1248	0.8	24	25 F	0053 1352	-0.3 1.1	-9 34
11 Tu	0526 1600	0.0 0.4	0 12	26 W	0213 1529	-0.4 0.6	-12 18	11 F	0244 1540	-0.3 0.7	-9 21	26 Sa	0349 1700	-0.5 0.9	-15 27	11 F	0030 1342	-0.2 0.9	-6 27	26 Sa	0204 1501	-0.2 1.0	-6 30
12 W	0348 1610	-0.2 0.5	-6 15	27 Th	0314 1623	-0.5 0.8	-15 24	12 Sa	0333 1640	-0.4 0.8	-12 24	27 Su	0445 1813	-0.4 0.8	-12 24	12 Sa	0138 1443	-0.2 0.9	-6 27	27 Su	0306 1616	-0.1 0.9	-3 27
●												●											
13 Th	0350 1641	-0.3 0.6	-9 18	28 F	0412 1724	-0.6 0.8	-18 24	13 Su	0421 1743	-0.5 0.8	-15 24	28 M	0534 1919	-0.4 0.8	-12 24	13 Su	0238 1552	-0.3 1.0	-9 30	28 M	0358 1737	0.0 0.9	0 27
14 F	0418 1723	-0.4 0.7	-12 21	29 Sa	0506 1826	-0.7 0.8	-21 24	14 M	0508 1846	-0.6 0.9	-18 27					14 M	0333 1707	-0.3 1.0	-9 30	29 Tu	0438 1906	0.1 0.8	3 24
15 Sa	0454 1811	-0.5 0.8	-15 24	30 Su	0556 1924	-0.7 0.8	-21 24	15 Tu	0553 1949	-0.6 0.9	-18 27					15 Tu	0423 1828	-0.3 0.9	-9 27	30 W	0505 2045	0.2 0.7	6 21
				31 M	0642 2016	-0.6 0.8	-18 24									31 Th	0511 1103 1522 2243	0.4 0.5 0.4 0.6	12 15 12 18				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Grand Isle (East Point), Louisiana, 2011

Times and Heights of High and Low Waters

April						May						June						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm	
1 F	0430	0.5 15		16 Sa	0801 1733	0.8 0.1 24 3	1 Su	0755 1833	1.1 0.1 34 3	16 M	0755 1902	1.4 -0.3 43 -9	1 W	0836 1950	1.4 -0.2 43 -6	16 Th	0925 2049	1.5 -0.3 46 -9
2 Sa	0857	0.7 21	6	17 Su	0814 1841	1.0 -0.1 30 -3	2 M	0820 1910	1.2 0.0 37 0	17 Tu	0840 1958	1.5 -0.3 46 -9	2 Th	0915 2031	1.4 -0.2 43 -6	17 F	1009 2130	1.4 -0.2 43 -6
3 Su	0903	0.8 1855	24	18 M	0851 1947	1.2 -0.2 37 -6	3 Tu	0851 1950	1.2 0.0 37 0	18 W	0928 2054	1.5 -0.3 46 -9	3 F	0955 2111	1.4 -0.2 43 -6	18 Sa	1046 2202	1.3 -0.1 40 -3
●																		
4 M	0925	0.9 1944	27	19 Tu	0937 2053	1.3 -0.2 40 -6	4 W	0927 2034	1.3 -0.1 40 -3	19 Th	1016 2149	1.5 -0.2 46 -6	4 Sa	1035 2150	1.4 -0.2 43 -6	19 Su	1115 2222	1.1 0.1 34 -3
5 Tu	0955	1.0 2035	30	20 W	1028 2201	1.4 -0.2 43 -6	5 Th	1006 2122	1.3 -0.1 40 -3	20 F	1103 2240	1.4 -0.1 43 -3	5 Su	1114 2225	1.3 -0.1 40 -3	20 M	1129 2222	1.0 0.2 30 -6
6 W	1032	1.1 2132	34	21 Th	1121 2308	1.4 -0.2 43 -6	6 F	1048 2211	1.3 -0.1 40 -3	21 Sa	1144 2323	1.3 0.0 40 0	6 M	1149 2252	1.1 0.1 34 -3	21 Tu	1059 2147	0.8 0.3 24 -9
7 Th	1114	1.1 2234	34	22 F	1215	1.3 -0.2 40 -3	7 Sa	1132 2301	1.3 -0.1 40 -3	22 Su	1217 2353	1.1 0.1 34 3	7 Tu	1209 2300	0.9 0.2 27 6	22 W	0800 2004	0.7 0.4 21 -12
8 F	1201	1.2 2338	37	23 Sa	0012 1307	-0.1 -1.2 -3 -37	8 Su	1216 2347	1.3 0.0 40 0	23 M	1231	1.0 0.0 30	8 W	1000 2217	0.7 0.4 21 12	23 Th	0600 1725	0.8 0.3 24 -9
9 Sa	1253	1.2 1355	37	24 Su	0108 1355	0.0 1.1 0 34	9 M	1301	1.2 0.1 37	24 Tu	0005 1145 2337	0.3 0.8 0.4 9 24 12	9 Th	0647 1639	0.8 0.4 24 12	24 F	0526 1641	0.9 0.2 27 6
10 Su	0040	-0.1 1350	-3	25 M	0154 1439	0.1 0.9 3 27	10 Tu	0027 1343	0.1 1.0 30	25 W	0901 2111	0.7 0.5 21 15	10 F	0556 1614	0.9 0.2 27 6	25 Sa	0530 1651	1.0 0.1 30 -3
●																		
11 M	0136	-0.1 1455	-3	26 Tu	0224 1504	0.3 0.8 9 24	11 W	0056 1338	0.3 0.8 9 24	26 Th	0720 1726	0.8 0.4 24 12	11 Sa	0556 1648	1.1 -0.1 34 -3	26 Su	0552 1716	1.1 -0.1 34 -3
●																		
12 Tu	0228	0.0 1618	0	27 W	0229 1043 1637 1941	0.4 0.7 0.5 0.6 12 21 15 18	12 Th	0056 0830 1548	0.5 0.7 0.5 0.5 15 21 15	27 F	0642 1715	0.9 0.2 27 6	12 Su	0623 1733	1.3 -0.2 40 -6	27 M	0625 1749	1.2 -0.1 37 -3
13 W	0313	0.1 1823	3	28 Th	0134 0839 1655	0.5 0.7 0.5 15 21 15	13 F	0714 1628	0.9 0.3 27 9	28 Sa	0640 1733	1.0 0.1 30 3	13 M	0703 1822	1.4 -0.3 43 -9	28 Tu	0704 1826	1.3 -0.2 40 -6
14 Th	0346	0.3 1058 1355 1355 2119	9 15 12 21	29 F	0750 1726	0.8 0.3 24 9	14 Sa	0658 1716	1.0 0.0 30 0	29 Su	0657 1801	1.1 0.0 34 0	14 Tu	0750 1912	1.5 -0.4 46 -12	29 W	0746 1904	1.4 -0.3 43 -9
15 F	0349	0.5 0841 1614	15 18 9	30 Sa	0742 1759	0.9 0.2 27 6	15 Su	0718 1808	1.2 -0.1 37 -3	30 M	0724 1834	1.2 -0.1 37 -3	15 W	0838 2002	1.5 -0.4 46 -12	30 Th	0829 1942	1.4 -0.3 43 -9

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Grand Isle (East Point), Louisiana, 2011

Times and Heights of High and Low Waters

July				August				September							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m 0911 F 2019	ft 1.4 -0.3	cm 43 -9	16 Sa	h m 1002 2058	ft 1.2 0.0	cm 37 0	1 M	h m 1057 2040	ft 1.1 0.3	cm 34 9	16 Tu	h m 1131 1849	ft 0.8 0.6	cm 24 18	
●															
2 Sa	0952 2053	1.3 -0.2	40 -6	17 Su	1034 2112	1.1 0.1	34 3	2 Tu	1201 2018	0.9 0.5	27 15	17 W	0120 0759 1236 1652	0.8 0.6 0.7 0.6	24 18 21 18
3 Su	1033 2123	1.2 -0.1	37 -3	18 M	1056 2105	0.9 0.3	27 9	3 W	0252 0838 1409 1803	0.7 0.5 0.6 0.5	21 15 18 15	18 Th	0100 1115	0.9 0.6	27 18
4 M	1111 2141	1.1 0.1	34 3	19 Tu	1059 2026	0.8 0.4	24 12	4 Th	0204 1210	0.9 0.4	27 12	19 F	0114 1247	1.0 0.5	30 15
5 Tu	1139 2134	0.9 0.3	27 9	20 W	0614 1857	0.7 0.5	21 15	5 F	0218 1337	1.1 0.2	34 6	20 Sa	0146 1343	1.1 0.4	34 12
6 W	0749 2019	0.7 0.4	21 12	21 Th	0354 1632	0.8 0.4	24 12	6 Sa	0258 1442	1.2 0.0	37 0	21 Su	0230 1434	1.2 0.3	37 9
7 Th	0445 1524	0.7 0.3	21 9	22 F	0337 1531	0.9 0.3	27 9	7 Su	0352 1542	1.4 -0.1	43 -3	22 M	0323 1522	1.3 0.2	40 6
8 F	0421 1520	0.9 0.1	27 3	23 Sa	0353 1542	1.0 0.2	30 6	8 M	0454 1638	1.4 -0.1	43 -3	23 Tu	0421 1608	1.4 0.1	43 3
9 Sa	0439 1600	1.1 -0.1	34 -3	24 Su	0426 1612	1.1 0.1	34 3	9 Tu	0557 1731	1.5 -0.1	46 -3	24 W	0522 1651	1.4 0.1	43 3
10 Su	0518 1647	1.3 -0.2	40 -6	25 M	0509 1649	1.2 0.0	37 0	10 W	0658 1819	1.4 -0.1	43 -3	25 Th	0623 1733	1.5 0.1	46 3
11 M	0607 1737	1.4 -0.3	43 -9	26 Tu	0557 1728	1.3 -0.1	40 -3	11 Th	0754 1900	1.4 0.0	43 0	26 F	0724 1813	1.5 0.2	46 6
12 Tu	0659 1827	1.4 -0.3	43 -9	27 W	0646 1807	1.4 -0.2	43 -6	12 F	0843 1933	1.3 0.1	40 3	27 Sa	0828 1850	1.4 0.3	43 9
13 W	0752 1914	1.4 -0.3	43 -9	28 Th	0735 1846	1.4 -0.2	43 -6	13 Sa	0927 1956	1.2 0.3	37 9	28 Su	0937 1920	1.3 0.5	40 15
14 Th	0841 1956	1.4 -0.2	43 -6	29 F	0824 1923	1.4 -0.1	43 -3	14 Su	1008 2003	1.1 0.4	34 12	29 W	1100 1929	1.1 0.6	34 18
15 F	0924 2031	1.3 -0.1	40 -3	30 Sa	0913 1957	1.4 0.0	43 0	15 M	1047 1946	1.0 0.5	30 15	30 Tu	0016 0503 1301 1832 2319 0740	0.7 0.6 1.0 0.8 0.9 0.5	21 18 30 24 27 15
●															
31 Su	1003 2026	1.3 0.1	40 3												

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Grand Isle (East Point), Louisiana, 2011

Times and Heights of High and Low Waters

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Galveston (Galveston Channel), Texas, 2011

Times and Heights of High and Low Waters

January					February					March					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0748	-0.8	-24	16 Su	0715	-0.7	-21	1 Tu	0052	0.9	27	16 W	0009	1.0	30
	1623	1.2	37		0910	-0.7	-21		0825	-0.7	-21		0017	1.0	30
	2146	0.9	27		1716	0.9	27		1621	1.0	30		0824	-0.3	-9
	2347	1.0	30		2145	0.7	21		2020	0.8	24		1608	1.0	30
2 Su	0833	-0.8	-24	17 M	0757	-0.8	-24	2 W	0147	0.9	27	17 Th	0131	1.1	34
	1704	1.2	37		1640	1.0	30		0946	-0.6	-18		0912	-0.6	-18
	2207	0.9	27		2019	0.9	27		1732	0.8	24		1640	0.9	27
					2345	1.0	30	●	2201	0.7	21		2107	0.6	18
3 M	0038	1.0	30	18 Tu	0840	-0.9	-27	3 Th	0239	0.8	24	18 F	0248	1.1	34
	0915	-0.8	-24		1709	1.0	30		1017	-0.5	-15		0959	-0.4	-12
	1742	1.1	34		2043	0.9	27		1747	0.8	24		1659	0.9	27
	2220	0.9	27						2229	0.5	15	○	2158	0.3	9
4 Tu	0126	1.0	30	19 W	0056	1.0	30	4 F	0333	0.8	24	19 Sa	0405	1.1	34
	0955	-0.8	-24		0924	-0.9	-27		1044	-0.3	-9		1047	-0.2	-6
	1815	1.0	30		1737	1.0	30		1802	0.8	24		1718	0.9	27
	● 2234	0.9	27	○	2123	0.8	24		2306	0.4	12	●	2252	0.1	3
5 W	0211	1.0	30	20 Th	0204	1.0	30	5 Sa	0430	0.7	21	20 Su	0525	1.1	34
	1032	-0.6	-18		1008	-0.8	-24		1110	-0.1	-3		1135	0.1	3
	1845	1.0	30		1803	0.9	27		1817	0.7	21		1737	0.9	27
	2259	0.8	24		2212	0.7	21		2347	0.3	9		2347	-0.1	-3
6 Th	0256	0.9	27	21 F	0315	1.0	30	6 Su	0536	0.6	18	21 M	0650	1.0	30
	1106	-0.5	-15		1053	-0.7	-21		1136	0.0	0		1226	0.4	12
	1911	0.9	27		1827	0.9	27		1832	0.7	21		1757	0.9	27
	2341	0.7	21		2309	0.5	15					6	0504	1.0	30
7 F	0344	0.8	24	22 Sa	0435	0.9	27	7 M	0031	0.2	6	22 Tu	0046	-0.3	-9
	1138	-0.4	-12		1138	-0.4	-12		0652	0.6	18		0822	1.0	30
	1934	0.8	24		1849	0.8	24		1204	0.2	6		1322	0.7	21
									1845	0.7	21		1815	0.9	27
8 Sa	0040	0.6	18	23 Su	0012	0.2	6	8 Tu	0117	0.0	0	23 W	0150	-0.4	-12
	0445	0.7	21		0607	0.8	24		0821	0.6	18		1004	1.1	34
	1207	-0.2	-6		1225	-0.1	-3		1232	0.4	12		1442	0.9	27
	1955	0.8	24		1911	0.8	24		1851	0.7	21		1829	1.0	30
9 Su	0153	0.4	12	24 M	0120	0.0	0	9 W	0206	-0.1	-3	24 Th	0300	-0.5	-15
	0616	0.5	15		0754	0.7	21		1005	0.6	18		1158	1.1	34
	1235	0.0	0		1315	0.2	6		1259	0.5	15	○	1222	0.8	24
	2014	0.8	24		1932	0.8	24		1840	0.7	21		1703	1.0	30
10 M	0301	0.3	9	25 Tu	0229	-0.2	-6	10 Th	0259	-0.2	-6	25 F	0415	-0.5	-15
	0816	0.5	15		0953	0.7	21		1753	0.8	24		1340	1.1	34
	1303	0.2	6		1414	0.5	15					1254	0.9	27	
	2030	0.7	21		1952	0.8	24					1641	1.0	30	
11 Tu	0354	0.1	3	26 W	0339	-0.5	-15	11 F	0356	-0.3	-9	11 Sa	0529	-0.5	-15
	1031	0.5	15		1200	0.8	24		1723	0.9	27		1445	1.2	37
	1329	0.4	12		1603	0.7	21	○	2010	0.8	24				
	2042	0.7	21									1107	1.1	34	
12 W	0436	-0.1	-3	27 Th	0447	-0.6	-18	12 Sa	0454	-0.4	-12	12 Su	0637	-0.4	-12
	2043	0.7	21		1350	0.9	27		1656	0.9	27		1527	1.1	34
												2042	0.9	27	
												2259	1.0	30	
13 Th	0516	-0.3	-9	28 F	0551	-0.7	-21	13 Su	0551	-0.5	-15	13 M	0735	-0.4	-12
	1807	0.8	24		1459	1.0	30		1525	1.0	30		1553	1.1	34
												2054	0.9	27	
14 F	0554	-0.4	-12	29 Sa	0649	-0.8	-24	14 M	0645	-0.6	-18	14 M	0506	-0.2	-6
	1507	0.9	27		1547	1.1	34		1543	1.0	30		1423	1.2	37
									1908	0.9	27				
									2226	1.0	30				
15 Sa	0634	-0.6	-18	30 Su	0742	-0.8	-24	15 Tu	0736	-0.7	-21	15 Tu	0612	-0.2	-6
	1537	1.0	30		1625	1.0	30		1602	1.0	30		1439	1.2	37
					2126	0.8	24		1937	0.9	27		1845	1.1	34
					2351	0.9	27					2309	1.2	37	
31 M	0829	-0.8	-24	31 M	1655	1.0	30								
					2136	0.8	24								

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Galveston (Galveston Channel), Texas, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0255	1.2	37	16 Sa 0252	1.6	49	1 Su 0411	1.5	46	16 M 0425	1.8	55
0922	0.6	18	0856	0.8	24	0953	1.2	37	2135	-0.3	-9
1502	1.1	34	1407	1.3	40	1343	1.3	40	1009	1.3	40
2111	0.5	15	2037	0.1	3	2102	0.1	3	1309	1.4	43
									2107	-0.5	-15
2 Sa 0347	1.3	40	17 Su 0401	1.7	52	2 M 0452	1.6	49	17 Tu 0520	1.9	58
0951	0.7	21	0956	1.0	30	1026	1.2	37	1107	1.4	43
1512	1.1	34	1426	1.3	40	1350	1.3	40	1335	1.5	46
2133	0.3	9	O 2123	-0.2	-6	2128	0.0	0	O 2153	-0.5	-15
3 Su 0437	1.4	43	18 M 0507	1.8	55	3 Tu 0532	1.6	49	18 W 0615	1.9	58
1018	0.9	27	1054	1.2	37	1055	1.2	37	1202	1.4	43
1522	1.2	37	1447	1.4	43	1354	1.3	40	1404	1.5	46
● 2159	0.2	6	2210	-0.3	-9	● 2158	0.0	0	2241	-0.5	-15
4 M 0524	1.4	43	19 Tu 0610	1.9	58	4 W 0614	1.6	49	19 Th 0709	1.8	55
1047	1.0	30	1152	1.3	40	1122	1.3	40	2330	-0.4	-12
1531	1.2	37	1509	1.4	43	1352	1.4	43	4 Sa 0734	1.5	46
2228	0.1	3	2259	-0.4	-12	2232	-0.1	-3	Su 2331	-0.3	-9
5 Tu 0613	1.4	43	20 W 0713	1.8	55	5 Th 0659	1.6	49	5 Su 0804	1.7	52
1117	1.1	34	1256	1.4	43	1148	1.3	40	F 0815	1.5	46
1535	1.2	37	1529	1.5	46	1353	1.4	43	M 0843	0.0	0
2300	0.1	3	2351	-0.3	-9	2308	-0.1	-3	20 M 0843	1.3	40
6 W 0704	1.4	43	21 Th 0820	1.8	55	6 F 0750	1.6	49	6 M 0015	-0.1	-3
1149	1.1	34				2350	-0.1	-3	Sa 0851	1.4	43
1530	1.2	37				21 Sa 0020	-0.2	-6	Tu 0107	0.2	6
2336	0.0	0				0859	1.6	49	1647	1.2	37
7 Th 0801	1.4	43	22 F 0047	-0.2	-6	7 Sa 0846	1.6	49	2014	0.8	24
1221	1.2	37	0931	1.7	52	22 Su 0949	0.0	0	21 Tu 0907	0.2	6
1520	1.3	40				0111	1.5	46	0920	1.3	40
						0949	1.5	46	1550	0.9	27
8 F 0017	0.0	0	23 Sa 0148	0.0	0	8 Su 0035	0.0	0	1840	1.0	30
0906	1.4	43	1045	1.6	49	0941	1.6	49	● 2153	0.9	27
1252	1.3	40				2024	1.0	30	2153	0.9	27
1520	1.4	43				2024	1.0	30	2241	0.8	24
9 Sa 0105	0.0	0	24 Su 0257	0.2	6	9 M 0127	0.1	3	22 W 0927	0.5	15
1022	1.4	43	1149	1.5	46	1029	1.5	46	0140	1.1	34
1328	1.3	40				2029	1.4	43	0944	1.3	40
1533	1.4	43				2029	1.4	43	1629	0.7	21
10 Su 0201	0.1	3	25 M 0416	0.4	12	10 Tu 0227	0.2	6	● 2153	0.9	27
1137	1.4	43	1230	1.4	43	1103	1.4	43	0154	0.3	9
1439	1.3	40	1918	1.0	30	O 0416	0.7	21	0942	1.1	34
1544	1.4	43	2202	1.1	34	● 0416	0.7	21	2111	0.3	9
11 M 0307	0.1	3	26 Tu 0537	0.5	15	11 W 0336	0.4	12	2053	1.1	34
1227	1.4	43	1253	1.3	40	1127	1.4	43	0300	1.1	34
●			1930	0.9	27	1748	0.9	27	0422	0.9	27
2357	1.2	37				2304	1.1	34	1022	1.2	37
12 Tu 0420	0.2	6	27 W 0647	0.7	21	2027	0.2	6	1754	0.0	0
1255	1.4	43	1307	1.3	40	1147	1.3	40	25 F 0300	1.1	34
1828	1.1	34	1946	0.8	24	1818	0.6	18	0646	1.0	30
2144	1.2	37				1920	0.2	6	0956	1.1	34
13 W 0536	0.3	9	28 Th 0124	1.2	37	27 Th 0547	0.9	27	1832	-0.1	-3
1314	1.3	40	0745	0.8	24	0547	0.9	27	26 M 0327	1.2	37
1836	1.0	30	1316	1.2	37	1130	1.2	37	Su 1901	-0.2	-6
			2002	0.6	18	1901	0.4	12	26 Su 0327	1.2	37
14 Th 0002	1.3	40	29 F 0231	1.3	40	26 0030	1.0	30	27 M 0353	1.3	40
0647	0.4	12	0834	0.9	27	0547	0.9	27	1932	-0.3	-9
1332	1.3	40	1325	1.2	37	1141	1.2	37	26 0353	1.3	40
1913	0.7	21	2019	0.4	12	1920	0.2	6	27 1932	-0.3	-9
15 F 0134	1.4	43	30 Sa 0325	1.4	43	2022	-0.3	-9	26 0353	1.3	40
0754	0.6	18	0916	1.1	34	15 M 0325	1.7	52	28 Tu 0421	1.4	43
1349	1.3	40	1334	1.3	40	0904	1.2	37	2005	-0.4	-12
1954	0.4	12	2039	0.3	9	1245	1.4	43	13 M 0350	1.6	49
						1856	0.2	6	28 Tu 0421	1.4	43
						1938	-0.1	-3	14 Tu 0345	1.4	43
						2005	-0.1	-3	14 Tu 0345	1.4	43
						2022	-0.3	-9	15 W 0527	1.7	52
									15 W 0527	1.7	52
									30 Th 0523	1.4	43
									2117	-0.5	-15

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Galveston (Galveston Channel), Texas, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 1003 1246 ● 2156	1.2 37 1.3 40 -0.5 -15	1.4 43 1.2 37 -0.3 -9	16 Sa 1121 1451 2250	0.622 1.1 1.2 0.0 -0.3	1.3 40 37 0 -9	1 M 1054 1612 2306	1.3 40 1.2 37 0.0	1.3 40 0.7 21 0.6	16 Tu 1147 1740 2319	1.3 40 1.1 34 0.6	1.4 43 0.2 6 1.6
2 Sa 1035 1346 2236	1.2 37 1.3 40 -0.5 -15	1.4 43 1.2 37 -0.1 -3	17 Su 1205 1552 2323	0.647 1.0 1.1 -0.1	1.2 37 34 0.3 -3	2 Tu 1150 1743 2349	1.2 37 1.1 34 0.3	1.2 37 0.6 18 0.8	2 W 1227 1857 2344	1.2 37 1.1 34 0.8	1.2 37 0.0 0 1.6
3 Su 1123 1453 2317	1.1 34 1.2 37 -0.3 -9	1.3 43 1.2 37 0.2 6	18 M 1257 1704 2352	0.708 0.9 0.2	1.2 37 24 1.1 6	3 W 1250 1926	1.2 37 0.4 12 1.1	1.2 37 0.4 12 1.1	3 Th 1309 2025	1.4 43 0.547 1.5 0.0	1.4 43 0.46 0 1.6
4 M 1223 1619 2359	0.9 27 1.1 34 -0.1 -3	1.3 40 1.1 34 -0.1 -3	19 Tu 1353 1836	0.727 0.8	1.1 34 21 1.1 34	4 Th 0034 0653 2120	0.6 18 1.2 37 1.1	1.0 30 1.2 37 1.1	4 Su 0008 0622 2210	0.0 30 1.2 37 1.1	0.0 0 1.6
5 Tu 1330 1818	0.7 21 0.9 27	1.2 37 0.4 12	20 W 0744 1445 2028	0.018 0.5 0.8	0.4 12 24	5 F 0123 0708 1458	0.9 40 -0.1 -3	1.0 30 1.3 40	5 Sa 0027 0610 1447	1.0 30 0.2 6	1.7 52 0.0 0
6 W 0808 1437 2035	0.2 37 0.5 15 0.9 27	0.2 6 1.2 37 0.8 24	21 Th 0758 1532 2241	0.040 1.1 0.3	0.6 18 1.3 40 0.8	6 Sa 0227 0719 1604	1.1 34 1.3 40 -0.2 -6	1.3 40 0.2 6	6 Tu 0522 1542 1801	1.3 40 0.2 6	1.7 52 0.0 0
7 Th 0826 1539 2253	0.5 37 0.2 6 0.9 27	0.5 15 1.2 37 0.2 6	22 F 0806 1615	0.052 0.2	0.7 21 34	7 Su 0125 1709	1.4 43 -0.3 -9	1.4 43	7 M 0455 1639	1.4 43	1.7 52 0.1 3
8 F 0842 1636	0.8 24 1.2 37 -0.1 -3	0.8 24	23 Sa 1657	0.757 0.0	1.1 34 0	8 M 0238 1811	1.5 46 -0.4 -12	1.5 46	8 Tu 0443 1734	1.5 46 0.0 0	1.6 49 1.4 43 0.2 6
9 Sa 0857 1730	1.1 34 1.0 30 1.2 37 -0.4 -12	1.2 37 1.2 37 -0.1 -3	24 Su 1738	0.535 -0.1	1.2 37 -3	9 Tu 0325 1909	1.5 46 -0.4 -12	1.5 46	9 W 0333 1825	1.5 46 -0.1 -3	1.6 49 1.3 40 1.5 46 0.3 9
10 Su 1823	1.3 40 -0.5 -15	1.3 40	25 M 1819	0.403 -0.2	1.3 40 -6	10 W 0401 2000	1.5 46 -0.3 -9	1.5 46	10 Th 0334 1913	1.5 46 -0.1 -3	1.5 46 1.2 37 1.5 46 0.5 15
11 M 1914	1.5 46 -0.6 -18	1.5 46	26 Tu 1859	0.353 -0.3	1.3 40 -9	11 Th 0430 0927 1224 2045	1.5 46 1.3 40 1.4 43 -0.3 -9	1.5 46	11 Su 0346 0740 1136 1959	1.5 46 1.4 43 1.5 46 -0.1 -3	1.5 46 1.0 30 1.5 46 0.7 21
12 Tu 2003	1.5 46 -0.7 -21	1.5 46	27 W 1940	0.412 -0.4	1.4 43 -12	12 F 0452 0945 1329 2125	1.4 43 1.2 37 1.3 40 -0.1 -3	1.4 43	12 Sa 0359 0811 1305 2044	1.5 46 1.3 40 1.5 46 0.0 0	1.5 46 0.9 18 1.5 46 0.8 24
13 W 2050	1.5 46 -0.6 -18	1.5 46	28 Th 0840 1047 1201	0.434 1.2 37 -0.4	1.4 43 37 -12	13 Sa 0509 1008 1429 2158	1.3 40 1.1 34 1.3 40 0.0 0	1.4 43	13 Tu 0414 0853 1424 2129	1.5 46 1.1 34 1.5 46 0.2 6	1.5 46 0.7 21 1.5 46 1.0 30
14 Th 1256 2133	1.4 43 1.2 37 1.3 40 -0.6 -18	1.4 43	29 F 0843 1219 2101	0.456 1.2 37 -0.4	1.4 43 37 -12	14 Su 0524 1037 1529 2228	1.3 40 1.0 30 1.2 37 0.2 6	1.4 43	29 M 0430 0939 1542 2214	1.5 46 0.8 24 1.5 46 0.4 12	1.5 46 0.6 18 1.5 46 2.257 1.1 34
15 F 1355 ● 2213	1.4 43 1.1 34 1.2 37 -0.4 -12	1.4 43	30 Sa 0518 0918 1334 2142	0.554 1.2 37 1.3 40 -0.4 -12	1.4 43 37 -12	15 M 0538 1110 1631 2254	1.3 40 0.8 24 1.2 37 0.4 12	1.4 43	15 Tu 0446 1028 1702 2300	1.4 43 0.6 18 1.5 46 0.7 21	1.5 46 0.5 15 1.5 46 2.325 1.3 40
			31 Su 1003 1450 2224	0.539 1.0 30 -0.2	1.3 40 -6			31 W 0503 1120 1826 2348	1.4 43 0.3 9 1.5 46 1.0 30		

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

On days when the tide is diurnal, high water has an approximate stand of about 7 hours. Predictions are for beginning of stand.

Galveston (Galveston Channel), Texas, 2011

Times and Heights of High and Low Waters

October				November				December															
	Time	Height			Time	Height			Time	Height													
1 Sa	0052 0421 1247 2129	1.7 1.8 0.0 1.9	52 55 0 58	16 Su	0305 1205 2101	1.7 0.3 1.7	52 9 52	1 Tu	1434 2328	0.3 1.7	9 52	16 W	1305 2217	0.1 1.5	3 46	1 Th	1453 2241	0.3 1.2	9 37	16 F	0231 0514 1324 2120	0.7 0.8 0.1 1.0	21 24 3 30
2 Su	1353 2303	0.1 1.9	3 58	17 M	0006 0304 1251 2221	1.6 1.7 0.4 1.7	49 52 12 52	2 W	1550 2247	0.4 1.5	12 46	17 Th	1358 2247	0.3 1.5	9 46	2 O	0601 2302	0.8 1.2	24 37	17 Sa	0345 0853 1419 2138	0.6 0.7 0.4 1.0	18 21 12 30
3 M	1507	0.2	6	18 Tu	0038 0311 1343 2339	1.6 1.7 0.4 1.7	49 52 12 52	3 Th	0009 0658 0930 1710	1.6 1.2 1.3 0.6	49 37 40 18	18 F	1500 2308	0.5 1.4	15 43	3 O	0627 1210 1736 2318	0.5 0.9 0.8 1.1	15 27 24 34	18 Su	0436 1120 1532 2154	0.2 0.8 0.6 1.0	6 24 18 30
4 Tu	0030 1627	1.9 0.3	58 9	19 W	0147 0309 1443	1.6 1.7 0.4	49 52 12	4 F	0033 0715 1135 1821	1.5 1.1 1.3 0.8	46 34 40 24	19 Sa	0545 1020 1615 2325	1.0 1.1 0.7 1.3	30 34 21 40	4 O	0652 1351 1901 2331	0.3 1.1 0.9 1.1	9 34	19 M	0523 1307 1718 2212	-0.1 1.0 0.9 1.0	-3 30 27 30
5 W	0123 1743	1.8 0.4	55 12	20 Th	0019 1551	1.7 0.5	52 15	5 Sa	0048 0736 1310 1922	1.5 0.9 1.4 1.0	46 27 43 30	20 Su	0600 1222 1740 2341	0.7 1.2 0.9 1.3	21 37 27 40	5 M	0715 1457 2010 2342	0.1 1.2 1.0 1.1	3 37	20 Tu	0610 1424 1913 2235	-0.4 1.2 1.0 1.1	-12 37 30 34
6 Th	0154 0751 1059 1849	1.7 1.4 1.5 0.6	52 43 46 18	21 F	0039 1701	1.7 0.6	52 18	6 Su	0059 0756 1423 2013	1.4 0.7 1.5 1.1	43 21 46 34	21 M	0634 1349 1904 2358	0.3 1.4 1.1 1.3	9 43 34 40	6 Tu	0738 1541 2103 2353	0.0 1.3 1.0 1.1	0 40 30 34	21 W	0658 1522 2031 2310	-0.6 1.3 1.0 1.1	-18 40 30 34
7 F	0212 0810 1230 1942	1.7 1.3 1.5 0.7	52 40 46 21	22 Sa	0054 0638 1130 1811	1.6 1.3 1.5 0.7	49 40 46 21	7 M	0108 0815 1519 2055	1.4 0.5 1.5 1.2	43 15 46 37	22 Tu	0714 1459 2017	0.0 1.6 1.2	0 49 37	7 W	0802 1616 2138	-0.2 1.3 1.1	-6 40 34	22 Th	0746 1613 2117 2358	-0.8 1.4 1.1 1.2	-24 43 34 37
8 Sa	0223 0830 1344 2026	1.6 1.1 1.6 0.9	49 34 49 27	23 Su	0108 0659 1309 1916	1.6 1.0 1.6 0.9	49 30 49 27	8 Tu	0117 0835 1605 2128	1.4 0.4 1.6 1.3	43 12 49 40	23 W	0019 0758 1559 2117	1.4 -0.3 1.8 1.3	43 -9 55 40	8 O	0006 0829 1648 2149	1.2 -0.3 1.3 1.1	37 -9 40 34	23 F	0835 1701 2149	-0.9 1.4 1.1	-27 43 34
9 Su	0231 0849 1447 2101	1.6 1.0 1.6 1.0	49 30 49 30	24 M	0121 0734 1428 2017	1.6 0.7 1.8 1.1	49 21 55 34	9 W	0126 0857 1645 2152	1.5 0.2 1.6 1.4	46 6 49 43	24 Th	0045 0844 1656 2207	1.5 -0.5 1.8 1.4	46 -15 55 43	9 F	0024 0858 1722 2149	1.2 -0.4 1.4 1.1	37 -12 43 34	24 Sa	0052 0924 1747 2219	1.2 -0.9 1.3 1.1	-37 27 40 34
10 M	0239 0907 1541 2130	1.6 0.8 1.6 1.2	49 24 49 37	25 Tu	0137 0815 1537 2115	1.6 0.4 1.9 1.3	49 12 58 40	10 Th	0137 0922 1724 2211	1.5 0.1 1.7 1.4	46 3 52 43	25 F	0117 0932 1751 2250	1.5 -0.6 1.8 1.4	46 -18 55 43	10 O	0047 0930 1758 2159	1.2 -0.4 1.3 1.1	37 -12 40 34	25 Su	0146 1012 1831 2255	1.2 -0.9 1.2 1.0	37 27 37 30
11 Tu	0248 0928 1631 O 2155	1.6 0.7 1.7 1.3	49 21 52 40	26 W	0155 0859 1642 ● 2209	1.6 0.1 2.0 1.5	49 3 61 46	11 F	0147 0951 1804 2230	1.5 0.1 1.7 1.4	46 3 52 43	26 O	0155 1021 1846 2331	1.5 -0.6 1.7 1.4	46 -18 52 43	11 Sa	0112 1004 1837 2221	1.2 -0.4 1.3 1.1	37 -12 40 34	26 M	0239 1059 1912 2343	1.1 -0.7 1.1 0.9	34 21 34 27
12 W	0257 0952 1719 2219	1.6 0.5 1.7 1.4	49 15 52 43	27 Th	0215 0946 1746 2302	1.7 -0.1 2.1 1.6	52 -3 64 49	12 Sa	0155 1023 1848 2251	1.5 0.0 1.7 1.4	46 0 52 43	27 F	0235 1112 1943	1.5 -0.5 1.6	46 -15 49	12 O	0138 1039 1917 2255	1.2 -0.4 1.3 1.1	37 -12 40 34	27 Tu	0333 1143 1949 2343	1.0 -0.5 1.0 0.9	30 -15 30 27
13 Th	0306 1019 1806 2244	1.6 0.4 1.7 1.5	49 12 52 46	28 F	0239 1035 1850 2353	1.7 -0.2 2.1 1.7	52 -6 64 52	13 Su	0203 1058 1939 2317	1.5 0.0 1.6 1.5	46 0 49 46	28 M	0022 0314 1204 2039	1.4 1.5 -0.3 1.5	43 46 -9 46	13 O	0207 1116 1956 2344	1.2 -0.4 1.2 1.0	37 -12 37 30	28 W	0050 0434 1226 2021	0.8 0.9 -0.3 1.0	24 27 -9 30
14 F	0312 1050 1856 2312	1.6 0.4 1.8 1.5	49 12 55 46	29 Sa	0304 1128 1958	1.8 -0.2 2.0	55 -6 61	14 M	0213 1136 2035 2352	1.6 0.0 1.6 1.5	49 0 49 46	29 Tu	1257 2130	-0.1 1.4	-3 43	14 W	0240 1155 2031	1.1 -0.3 1.2	34 -9 37	29 Th	0221 0557 1306 2047	0.6 0.7 -0.1 0.9	18 21 -3 27
15 Sa	0311 1126 1953 2339	1.6 0.3 1.7 1.6	49 9 52 49	30 Su	0053 0326 1224 2110	1.7 1.8 -0.1 1.9	52 55 -3 58	15 Tu	0227 1218 2131	1.6 0.1 1.6	49 3 49	30 W	1353 2212	0.1 1.3	3 40	15 Th	0056 0324 1238 2058	0.9 1.0 -0.1 1.1	27 30 -3 34	30 F	0342 0752 1345 2109	0.5 0.6 0.2 0.8	15 18 6 24
				31 M	1325 2225	0.1 1.8	3 55										31 Sa	0436 1009 1423 2127	0.2 0.5 0.4 0.8	6 15 12 24			

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

On days when the tide is diurnal, high water has an approximate stand of about 7 hours. Predictions are for beginning of stand.

Port O'Connor, Texas, 2011

Times and Heights of High and Low Waters

January					February					March													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm								
1 Sa	0941 2158	-0.6 0.7	-18 21	16 Su	0932 2118	-0.6 0.6	-18 18	1 Tu	1120 2300	-0.7 0.4	-21 12	16 W	1049 2344	-0.6 0.5	-18 15	1 Tu	1025 2101	-0.3 0.5	-9 15	16 W	0937 2209	-0.1 0.7	-3 21
2 Su	1032 2240	-0.6 0.7	-18 21	17 M	1018 2212	-0.7 0.6	-21 18	2 W	1203	-0.6	-18	17 Th	1132	-0.5	-15	2 W	1115 2044	-0.3 0.4	-9 12	17 Th	1032	0.0	0
3 M	1120 2325	-0.6 0.7	-18 21	18 Tu	1101 2315	-0.7 0.6	-21 18	3 Th	0137 1242	0.3 -0.5	9 -15	18 F	0230 1212	0.4 -0.3	12 -9	3 Th	0302 1159	0.5 -0.2	15 -6	18 F	0244 1123	0.6 0.1	18 3
4 Tu	1204	-0.6	-18	19 W	1143	-0.7	-21	4 F	0341 1316	0.3 -0.4	9 -12	19 Sa	0442 1245	0.4 -0.2	12 -6	4 F	0435 1241	0.4 -0.1	12 -3	19 Sa	0504 1208	0.6 0.3	18 9
●				O																			
5 W	0011 1246	0.6	18	20 Th	0031 1222	0.6	18	5 Sa	0506 1347	0.2 -0.3	6 -9	20 Su	0637 1306	0.3 0.0	9 0	5 Sa	0551 1322	0.4 0.1	12 3	20 Su	0656 1243	0.7 0.4	21 12
6 Th	0057 1323	0.5	15	21 F	0211 1257	0.5	15	6 Su	0106 0629	0.0 0.2	0 6	21 M	0104 0842	-0.2 0.3	-6 9	6 Su	0006 0705	0.2 0.4	6 12	21 M	0854 1244	0.7 0.6	21 18
7 F	0136 1357	0.4	12	22 Sa	0406 1325	0.3 -0.4	9 -12	7 M	0145 0804	0.0 0.1	0 3	22 Tu	0208 1753	-0.3 0.5	-9 15	7 M	0033 0825	0.1 0.4	3 12	22 Tu	0050 1547	-0.2 0.8	-6 24
8 Sa	0131 1424	0.3	9	23 Su	0056 0606	0.0 0.2	0 6	8 Tu	0230 1818	-0.1 0.2	-3 6	23 W	0313 1811	-0.4 0.6	-12 18	8 Tu	0104 1021	0.0 0.5	0 15	23 W	0147 1625	-0.2 0.9	-6 27
9 Su	0012 1439	0.2	6	24 M	0232 0833	-0.1 0.1	-3 3	9 W	0324 1756	-0.2 0.3	-6 9	24 Th	0424 1842	-0.4 0.7	-12 21	9 W	0142 1542	0.0 0.5	0 15	24 Th	0246 1708	-0.2 0.9	-6 27
10 M	1416 2123	0.0	0	25 Tu	0350 1931	-0.3 0.3	-9 9	10 Th	0428 1813	-0.3 0.4	-9 12	25 F	0542 1918	-0.4 0.7	-12 21	10 Th	0229 1630	-0.1 0.6	-3 18	25 F	0352 1750	-0.2 0.9	-6 27
11 Tu	0530 1952	0.0	0	26 W	0504 1937	-0.4 0.4	-12 12	11 F	0543 1845	-0.3 0.5	-9 15	26 Sa	0704 1956	-0.4 0.7	-12 21	11 F	0327 1716	-0.1 0.7	-3 21	26 Sa	0506 1829	-0.1 0.9	-3 27
12 W	0616 1913	-0.2	-6	27 Th	0618 1958	-0.6 0.5	-18 15	12 Sa	0701 1926	-0.4 0.6	-12 18	27 Su	0821 2031	-0.4 0.6	-12 18	12 Sa	0438 1802	-0.1 0.8	-3 24	27 Su	0629 1857	0.0 0.9	0 27
13 Th	0706 1922	-0.3	-9	28 F	0730 2029	-0.6 0.6	-18 18	13 Su	0810 2012	-0.5 0.6	-15 18	28 M	0928 2057	-0.4 0.6	-12 18	13 Su	0602 1849	-0.2 0.8	-6 24	28 M	0751 1904	0.0 0.8	0 24
14 F	0756 1951	-0.4	-12	29 Sa	0837 2105	-0.7 0.6	-21 18	14 M	0910 2104	-0.6 0.6	-18 18					14 M	0724 1939	-0.2 0.8	-6 24	29 Tu	0904 1846	0.1 0.7	3 21
15 Sa	0845 2031	-0.5	-15	30 Su	0938 2143	-0.7 0.5	-21 15	15 Tu	1002 2206	-0.6 0.6	-18 18					15 Tu	0836 2035	-0.2 0.8	-6 24	30 W	1009 1826	0.2 0.6	6 18
	31 M	1032 2222	-0.7 0.5	-21 15												31 Th	0319 1107	0.7 0.3	21 9				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Port O'Connor, Texas, 2011

Times and Heights of High and Low Waters

April						May						June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m
	0456	0.7	21	16	0545	0.8	24	1	0738	0.9	27	16	1026	1.0	30	1	1035
F	1206	0.4	12	Sa	2212	0.2	6	Su	2253	0.1	3	M	2255	-0.3	-9	W	2347
	1738	0.5	15													●	
	2255	0.4	12														
2	0613	0.7	21	17	0741	0.9	27	2	0843	1.0	30	17	1129	1.1	34	2	1136
Sa	1313	0.4	12	Su	2259	0.0	0	M	2322	0.1	3	Tu	2344	-0.4	-12	Th	1322
	1649	0.5	15	O								O				F	0031
	2317	0.3	9														-21
3	0724	0.8	24	18	0943	1.0	30	3	0953	1.0	30	18	1236	1.1	34	3	0025
Su	2341	0.2	6	M	2348	-0.1	-3	Tu	2354	0.0	0	W	1238	-0.4	-12	F	0116
				O											Sa	1404	
●																	-15
4	0837	0.8	24	19	1255	1.1	34	4	1112	1.0	30	19	0033	-0.4	-12	4	0103
M				Tu				W				Th	1340	1.1	-34	Sa	1418
																	-15
5	0008	0.1	3	20	0039	-0.2	-6	5	0030	0.0	0	20	0123	-0.3	-9	5	0141
Tu	1005	0.8	24	W	1419	1.1	34	Th	1236	1.1	34	F	1435	1.0	30	Su	1427
																	-12
6	0041	0.1	3	21	0132	-0.2	-6	6	0108	-0.1	-3	21	0212	-0.2	-6	6	0216
W	1219	0.9	27	Th	1520	1.1	34	F	1350	1.1	34	Sa	1515	0.9	27	M	1507
																	-9
7	0118	0.1	3	22	0227	-0.1	-3	7	0150	-0.1	-3	22	0301	-0.1	-3	7	0248
Th	1420	1.0	30	F	1611	1.1	34	Sa	1451	1.1	34	Su	1529	0.8	24	Tu	1245
																	-6
8	0203	0.0	0	23	0326	0.0	0	8	0235	0.0	0	23	0349	0.0	0	8	0307
F	1530	1.0	30	Sa	1650	1.0	30	Su	1543	1.1	34	M	1506	0.7	21	W	1157
																	0
9	0255	0.0	0	24	0429	0.1	3	9	0321	0.0	0	24	0437	0.1	3	9	0243
Sa	1626	1.1	34	Su	1710	1.0	30	M	1627	1.0	30	Tu	1431	0.6	18	Th	1934
				O								O			F	0856	
●																	-3
10	0355	0.0	0	25	0539	0.2	6	10	0408	0.1	3	25	0526	0.3	9	10	0940
Su	1716	1.1	34	M	1701	0.9	27	Tu	1656	0.9	27	W	1354	0.5	15	F	1950
				O											Sa	2027	
●																	-9
11	0504	0.1	3	26	0656	0.3	9	11	0453	0.3	9	26	0246	0.4	12	11	0913
M	1803	1.0	30	Tu	1634	0.8	24	W	1612	0.7	21	Th	0636	0.3	9	Sa	2030
				O													-12
12	0620	0.1	3	27	0820	0.4	12	12	0528	0.4	12	27	0602	0.5	15	12	0923
Tu	1847	0.9	27	W	1608	0.7	21	Th	1326	0.6	18	F	2110	0.1	3	Su	2117
																	-15
13	0739	0.2	6	28	0311	0.7	21	13	1121	0.6	18	28	0704	0.6	18	13	0955
W	1917	0.8	24	Th	0948	0.5	15	F	2048	0.2	6	Sa	2134	0.0	0	M	2206
																	-15
14	0857	0.4	12	29	0509	0.7	21	14	0925	0.8	24	29	0753	0.7	21	14	1040
Th	1710	0.6	18	F	1131	0.5	15	Sa	2125	0.0	0	Su	2203	-0.1	-3	Tu	2255
																	-18
15	0309	0.7	21	30	0630	0.8	24	15	0934	0.9	27	30	0843	0.8	24	15	1133
F	1016	0.5	15	Sa	2228	0.2	6	Su	2209	-0.2	-6	M	2236	-0.2	-6	W	2302
	1451	0.6	18													○	-18
	2127	0.4	12														

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Port O'Connor, Texas, 2011

Times and Heights of High and Low Waters

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Port O'Connor, Texas, 2011

Times and Heights of High and Low Waters

October						November						December											
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height						
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm						
1 Sa	0336 1415	1.4 0.2	43 6	16 Su	0149 1346	1.4 0.5	43 15	1 Tu	0431 1556	1.5 0.4	46 12	16 W	0314 1455	1.3 0.3	40 9	1 Th	0236 1603	0.9 0.3	27 9	16 F	0256 1437	0.6 0.1	18 3
2 Su	0428 1518	1.5 0.2	46 6	17 M	0300 1434	1.4 0.5	43 15	2 W	0453 1659	1.3 0.5	40 15	17 Th	0354 1533	1.2 0.4	37 12	2 F	0134 1640	0.8 0.4	24 12	17 Sa	0014 1407	0.5 0.2	15 6
3 M	0517 1628	1.5 0.3	46 9	18 Tu	0355 1529	1.5 0.5	46 15	3 Th	0424 1808	1.2 0.6	37 18	18 F	0418 1606	1.1 0.5	34 15	3 Sa	0057 0848	0.7 0.5	21 15	18 Su	0719 2100	0.2 0.6	6 18
●																							
4 Tu	0600 1746	1.4 0.4	43 12	19 W	0442 1631	1.5 0.5	46 15	4 F	0338 1929	1.1 0.8	34 24	19 Sa	0335 1607	0.9 0.7	27 21	4 Su	0012 0839	0.7 0.4	21 21	19 M	0724 2038	0.0 0.7	0 21
●																							
5 W	0631 1907	1.3 0.5	40 15	20 Th	0524 1741	1.4 0.6	43 18	5 Sa	0308 0930	1.0 0.9	30 27	20 Su	0045 0857	0.9 0.7	27 21	5 M	0900 1911	0.2 0.8	6 24	20 Tu	0804 2053	-0.2 -0.8	-6 24
6 Th	0628 2023	1.2 0.6	37 18	21 F	0559 1858	1.3 0.7	40 21	6 Su	0240 0936	1.0 0.7	30 21	21 M	0834 2104	0.5 1.0	15 30	6 Tu	0927 1950	0.1 0.9	3 27	21 W	0852 2129	-0.4 -0.9	-12 27
7 F	0550 2133	1.2 0.7	37 21	22 Sa	0607 2021	1.2 0.8	37 24	7 M	0149 0956	1.0 0.6	30 18	22 Tu	0904 2120	0.2 1.2	6 37	7 W	0959 2035	0.0 0.9	0 27	22 Th	0942 2218	-0.5 1.0	-15 30
8 Sa	0522 1006 1521 2237	1.1 1.0 1.1 0.8	34 30 34 24	23 Su	0417 0914	1.0 0.9	30 27	8 Tu	1020 1940	0.5 1.2	15 37	23 W	0946 2209	0.0 1.3	0 40	8 Th	1032 2125	-0.1 -1.0	-3 30	23 F	1033 2316	-0.6 0.9	-18 27
9 Su	0502 1022 1701 2343	1.0 0.9 1.2 0.9	30 37 37 27	24 M	0152 0916	1.0 0.8	30 24	9 W	1047 2041	0.4 1.3	12 40	24 Th	1033 2312	-0.1 1.3	-3 40	9 F	1107 2220	-0.1 1.0	-3 30	24 Sa	1123 ●	-0.6 -	-18 -
10 M	0436 1044 1820	1.0 0.8 1.2	30 24 37	25 Tu	0952 2002	0.6 1.3	18 40	10 Th	1116 2146	0.4 1.3	12 40	25 F	1121 ●	-0.2 -	-6 -	10 Sa	1143 2319	-0.2 1.0	-6 30	25 Su	0021 1211	0.9 -0.6	27 -18
11 Tu	0103 0347 1107 1930	0.9 1.0 0.7 1.3	27 30 21 40	26 W	1036 2210	0.4 1.4	12 43	11 F	1147 2259	0.3 1.3	9 40	26 Sa	0021 1211	1.4 -0.2	43 -6	11 Su	1218 ●	-0.2 -	-6 -	26 M	0128 1256	0.8 -0.5	24 -15
12 W	1132 2042	0.6 1.3	18 40	27 Th	1124	0.2	6	12 Sa	1221	0.3	9	27 Su	0130 1301	1.3 -0.2	40 -6	12 M	0019 1253	1.0 -0.2	30 -6	27 Tu	0230 1338	0.7 -0.4	21 -12
13 Th	1159 2206	0.6 1.3	18 40	28 F	0023 1214	1.5 0.1	46 3	13 Su	0018 1257	1.3 0.2	40 6	28 M	0231 1349	1.2 -0.1	37 -3	13 Tu	0114 1326	1.0 -0.2	30 -6	28 W	0322 1415	0.6 -0.3	18 -9
14 F	1229 2359	0.5 1.4	15 43	29 Sa	0147 1306	1.6 0.1	49 3	14 M	0128 1336	1.4 0.2	43 6	29 Tu	0318 1436	1.1 0.0	34 0	14 W	0204 1357	0.9 -0.2	27 -6	29 Th	0042 1447	0.4 -0.2	12 -9
15 Sa	1305	0.5	15	30 Su	0253 1400	1.6 0.2	49 6	15 Tu	0226 1415	1.3 0.3	40 9	30 W	0340 1521	1.0 0.1	30 3	15 Th	0244 1423	0.8 -0.1	24 -3	30 F	1507 2259	0.0 0.3	0 9
	31 M	0348	1.5	46		0.3	9									31 Sa	0625 1004	0.0 0.1	0 3				

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Padre Island (south end), Texas, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m 1 Sa 0613 0649	ft 1.6 49	h m 16 Su 0546 1602	ft 1.4 43	h m 1 Tu 0747 1705	ft 1.3 40	h m 16 W 0706 1602	ft 1.3 40	h m 1 Tu 0649 1532	ft 1.1 34	h m 16 W 0551 1418	ft 1.4 43
-0.9 -27		-0.6 -18		-0.6 -18		-0.6 -18		0.2 -6		-0.2 -6	
1622		1602		1705		1602		1532		1418	
1.6		1.4		1.3		1.3		1.3		1.4	
49		43		40		40		34		34	
●		●		●		●		●		●	
2 Su 0703 1705	ft 1.6 49	2 M 0632 1634	ft 1.5 46	2 W 0830 1720	ft 1.2 37	2 Th 0758 1611	ft 1.2 37	2 W 0738 1541	ft 1.2 37	2 Th 0653 1423	ft 1.2 37
-0.9 -27		-0.8 -24		-0.5 -15		-0.5 -15		-0.1 -3		0.0 0	
1705		1634		1.0 30		0.9 27		1.0 30		0.9 27	
1.6		1.5		1.0		0.9		1.0		0.9	
49		46		30		27		30		27	
●		●		●		●		●		●	
3 M 0751 1744	ft 1.6 49	3 Tu 0719 1704	ft 1.5 46	3 Th 0021 0909	ft 1.1 -0.3	3 F 0053 0849	ft 1.1 -0.3	3 Th 0036 0821	ft 1.2 37	3 F 0038 0753	ft 1.3 40
-0.8 -24		-0.8 -24		-0.9 -9		-0.9 -9		0.1 3		0.1 3	
1744		1704		1.1 34		1.0 34		1.1 34		0.1 3	
1.6		1.5		0.9 27		0.9 27		1.1 34		0.1 3	
49		46		27		27		34		30	
●		●		●		●		●		●	
4 Tu 0837 1817	ft 1.5 46	4 W 0806 1729	ft 1.5 46	4 F 0138 0943	ft 1.0 -0.1	4 Sa 0229 0941	ft 1.1 -0.1	4 Tu 0146 0901	ft 1.2 37	4 W 0210 0854	ft 1.3 40
-0.7 -21		-0.8 -24		-0.1 -3		-0.1 -3		0.3 9		0.4 12	
1817		1729		1.0 30		1.0 30		1.0 30		1.0 30	
1.5		1.5		0.8 24		0.9 24		0.9 24		0.9 24	
46		46		24		24		30		30	
●		●		●		●		●		●	
5 W 0918 1841	ft 1.4 43	5 Th 0853 1745	ft 1.4 43	5 Sa 0249 1014	ft 0.9 0.1	5 F 0403 1034	ft 1.1 0.2	5 Tu 0250 0937	ft 1.1 0.4	5 W 0336 0958	ft 1.4 43
-0.5 -15		-0.7 -21		3 27		3 27		12		0.6 18	
1841		1745		0.1 3		0.2 6		0.9 27		0.9 27	
1.4		1.4		27		27		15		0.9 27	
43		43		18		18		15		0.9 27	
●		●		●		●		●		●	
6 Th 0957 1855	ft 1.3 40	6 F 0940 1754	ft 1.2 37	6 Su 0402 1042	ft 0.9 0.3	6 M 0542 1129	ft 1.1 0.5	6 Tu 0351 1012	ft 1.1 0.6	6 W 0500 1108	ft 1.4 43
-0.3 -9		-0.5 -15		9 27		9 15		18		0.8 24	
1855		1754		0.9 27		0.8 24		27		0.9 27	
1.3		1.2		27		27		27		0.9 27	
40		40		12		12		9		0.5 -15	
●		●		●		●		●		●	
7 F 1031 1901	ft 1.2 37	7 Sa 0234 1027	ft 1.0 -0.3	7 M 0524 1106	ft 0.8 0.5	7 Tu 0732 1231	ft 1.1 0.8	7 M 0453 1046	ft 1.1 0.7	7 W 0627 2246	ft 1.5 -18
-0.1 -3		-0.9 -9		7 15		7 24		21		0.6 -18	
1901		1027		0.9 15		0.9 24		21		0.9 27	
1.2		1.0		18		18		21		0.9 27	
37		37		18		18		6		0.5 -15	
●		●		●		●		●		●	
8 Sa 1102 1859	ft 1.2 37	8 Su 0428 1115	ft 0.9 0.1	8 Tu 0705 1126	ft 0.8 0.7	8 W 0018 0944	ft -0.5 1.1	8 Tu 0602 1124	ft 1.1 0.8	8 W 0802 2344	ft 1.5 -18
0.2 6		0.9 3		21 27		21 34		24		0.6 -18	
1.2		1.1		27		27		27		0.9 27	
37		37		27		27		0		0.9 27	
●		●		●		●		●		●	
9 Su 0110 0419	ft 0.9 27	9 M 0013 0633	ft 0.8 24	9 W 0038 1618	ft 0.1 0.9	9 Th 0121 1202	ft -0.6 1.2	9 Tu 0726 2328	ft 1.1 -0.1	9 W 0945 2246	ft 1.5 -18
0.8 24		1.2 12		27 34		34 37		-3		0.5 -15	
0.9 27		1.2 12		27		27		27		0.9 27	
1.2 12		1.1 34		27		27		0		0.9 27	
1851		1743		27		27		0		0.9 27	
1.1		1.0		27		27		0		0.9 27	
34		34		27		27		0		0.9 27	
●		●		●		●		●		●	
10 M 0140 0632	ft 0.8 24	10 Tu 0105 0904	ft 0.9 27	10 Th 0126 1540	ft -0.1 1.0	10 F 0230 1327	ft -0.7 1.3	10 Tu 0920 1118	ft 1.1 1.5	10 W 0047 1118	ft -0.5 46
0.6 18		0.8 24		30 30		30 40		34		0.5 46	
0.8 24		0.9 24		30		30		34		0.5 46	
1.8 24		1.8 24		30		30		34		0.5 46	
1.8 24		1.8 24		30		30		34		0.5 46	
1837		1726		30		30		34		0.5 46	
1.0 30		0.9 27		30		30		34		0.5 46	
30		30		30		30		34		0.5 46	
●		●		●		●		●		●	
11 Tu 0214 1818	ft 1.0 30	11 W 0202 1645	ft 1.0 30	11 F 0221 1431	ft -0.4 1.1	11 M 0342 1417	ft -0.6 1.4	11 Tu 0019 1130	ft -0.1 1.3	11 W 0158 1223	ft -0.4 46
0.4 12		0.4 12		34 34		34 43		34		0.4 46	
1.0 30		1.0 30		34		34		34		0.4 46	
30		30		34		34		34		0.4 46	
●		●		●		●		●		●	
12 W 0252 1750	ft 1.0 30	12 Th 0303 1403	ft 1.2 37	12 Sa 0320 1433	ft -0.4 1.3	12 F 0451 1452	ft -0.5 1.4	12 Tu 0120 1236	ft -0.2 1.4	12 W 0311 1303	ft -0.2 46
0.2 6		0.7 37		37 37		37 40		37		0.2 46	
1.0		1.2		37		37		37		0.2 46	
30		30		37		37		37		0.2 46	
●		●		●		●		●		●	
13 Th 0332 1638	ft 1.1 34	13 F 0406 1453	ft 1.3 40	13 Su 0420 1457	ft -0.5 1.4	13 M 0554 1516	ft -0.4 1.3	13 Tu 0228 1316	ft -0.2 1.5	13 W 0424 1326	ft 0.0 43
-0.1 -3		-0.8 -24		34 34		34 43		34		0.0 43	
1.1		1.3		34		34		34		0.0 43	
34		34		34		34		34		0.0 43	
●		●		●		●		●		●	
14 F 0415 1519	ft 1.2 37	14 Sa 0507 1536	ft 1.4 43	14 M 0517 1523	ft -0.6 1.4	14 F 0339 1345	ft -0.2 1.5	14 Tu 0531 1340	ft 0.2 40	14 W 1843 2256	ft 1.3 37
-0.3 -9		-0.9 -27		37 37		37 43		37		1.1 34	
1.2		1.4		37		37		37		1.2 37	
37		37		37		37		37		1.2 37	
●		●		●		●		●		●	
15 Sa 0500 1534	ft 1.3 40	15 Su 0606 1613	ft 1.4 43	15 Tu 0612 1546	ft -0.6 1.4	15 F 0446 1406	ft -0.2 1.5	15 Tu 0631 1346	ft 0.4 40	15 W 1900 2122	ft 1.3 37
-0.5 -15		-0.8 -24		37 37		37 43		37		0.9 27	
1.3		1.4		37		37		37		0.9 27	
40		40		37		37		37		0.9 27	
●		●		●		●		●		●	
16 M 0659 1643	ft 1.3 40	16 F 0725 1347	ft 1.2 37	16 Th 0725 1347	ft -0.8 1.2	16 W 0829 1922	ft 1.3 40	16 Th 0725 1347	ft 0.6 18	16 W 1922 2122	ft 1.2 37
0.5 40		0.8 37		37 37		37 40		37		0.8 24	
1.3		1.2		37		37		37		0.8 24	
37		37		37		37		37		0.8 24	

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Padre Island (south end), Texas, 2011

Times and Heights of High and Low Waters

April						May						June											
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height						
1 F	0142 0815 1341 1945	1.3 0.7 1.1 0.6	40 21 34 18	16 Sa	0149 0803 1210 1915	1.5 0.8 1.0 -0.1	46 24 30 -3	1 Su	0330 1934	1.5 0.0	46 0	16 M	0400 1941	1.7 -0.9	52 -27	1 W	0523 2014	1.5 -0.6	46 -18	16 Th	0616 2110	1.6 -1.0	49 -30
2 Sa	0245 0905 1328 2008	1.4 0.8 1.0 0.4	43 24 30 12	17 Su	0310 0931 1148 O 1957	1.6 0.9 1.0 -0.4	49 27 30 -12	2 M	0419 2001	1.5 -0.1	46 -3	17 Tu	0505 2028	1.7 -1.0	52 -30	2 Th	0605 2051	1.6 -0.7	49 -21	17 F	0656 2156	1.5 -0.8	46 -24
3 Su	0342 0956 1306 ● 2033	1.4 0.9 1.0 0.2	43 27 30 6	18 M	0426 2042	1.7 -0.7	52 -21	3 Tu	0506 2031	1.5 -0.3	46 -9	18 W	0607 2118	1.7 -1.0	52 -30	3 F	0647 2131	1.6 -0.6	49 -18	18 Sa	0728 2239	1.4 -0.5	43 -15
4 M	0435 2059	1.4 0.1	43 3	19 Tu	0540 2131	1.7 -0.8	52 -24	4 W	0555 2104	1.6 -0.3	49 -9	19 Th	0706 2208	1.7 -0.8	52 -24	4 Sa	0726 2214	1.6 -0.6	49 -18	19 Su	0749 2320	1.3 -0.2	40 -6
5 Tu	0530 2129	1.4 -0.1	43 -3	20 W	0655 2223	1.7 -0.7	52 -21	5 Th	0648 2142	1.6 -0.4	49 -12	20 F	0801 2258	1.7 -0.6	52 -18	5 Su	0758 2259	1.6 -0.4	49 -12	20 M	0801 2358	1.2 0.1	37 3
6 W	0630 2204	1.4 -0.1	43 -3	21 Th	0811 2319	1.7 -0.6	52 -18	6 F	0743 2225	1.7 -0.4	52 -12	21 Sa	0845 2349	1.6 -0.3	49 -9	6 M	0821 2347	1.5 -0.2	46 -6	21 Tu	0805 1456 1749	1.2 0.7 0.8	37 21 24
7 Th	0740 2247	1.4 -0.2	43 -6	22 F	0923	1.7	52	7 Sa	0837 2314	1.7 -0.3	52 -9	22 Su	0917	1.5	46	7 Tu	0834	1.4	43	22 W	0033 0801 1518 2106	0.4 1.1 0.5 0.7	12 34 15 21
8 F	0901 2338	1.5 -0.2	46 -6	23 Sa	0018 1023	-0.4 1.6	-12 49	8 Su	0923	1.7	52	23 M	0039 0936	0.0 1.4	0 43	8 W	0040 0837 1537 ● 2005	0.1 1.2 0.6 0.8	3 37 18 24	23 Th	0100 0749 1549	0.6 1.0 0.3	18 30 9
9 Sa	1016	1.6	49	24 Su	0121 1103	-0.1 1.6	-3 49	9 M	0007 0956	-0.1 1.7	-3 52	24 Tu	0132 0946 1646 ● 2014	0.4 1.3 0.8 0.9	12 40 24 27	9 Th	0142 0832 1554 2314	0.5 1.1 0.2 0.9	15 34 6 27	24 F	0726 1621	1.0 0.0	30 0
10 Su	0037 1112	-0.1 1.7	-3 52	25 M	0228 1127	0.2 1.5	6 46	10 Tu	0108 1016	0.1 1.6	3 49	25 W	0229 0946 1654 2314	0.6 1.2 0.7 1.0	18 37 21 30	10 F	0306 0817 1628	0.8 1.0 -0.2	24 30 -6	25 Sa	0625 1655	1.0 -0.2	30 -6
11 M	0144 1148	0.0 1.7	0 52	26 Tu	0338 1140	0.5 1.4	15 43	11 W	0217 1024	0.3 1.4	9 43	26 Th	0340 0938	0.9 1.2	27 37	11 Sa	0119 0530 0733 1710	1.1 1.0 1.1 -0.6	34 30 34 -18	26 Su	0321 1730	1.1 -0.4	34 -12
12 Tu	0257 1210	0.1 1.6	3 49	27 W	0450 1144	0.7 1.3	21 40	12 Th	0338 1024	0.6 1.2	18 37	27 F	0112 0517 0915 1741	1.1 1.0 1.1 0.2	34 30 34 6	12 Su	0239 1756	1.4 -0.9	43 -27	27 M	0345 1806	1.2 -0.5	37 -15
13 W	0413 1222 1807 2213	0.2 1.4 1.1 1.2	6 43 34 37	28 Th	0005 0601 1141 1821	1.3 0.9 1.2 0.6	40 27 37 18	13 F	0513 1014 1737	0.8 1.1 0.1	24 34 3	28 Sa	0225 1808	1.3 0.0	40 0	13 M	0341 1844	1.5 -1.1	46 -34	28 Tu	0415 1843	1.3 -0.7	40 -21
14 Th	0529 1224 1813	0.4 1.3 0.7	12 40 21	29 F	0129 0713 1129 1845	1.3 1.0 1.2 0.4	40 30 37 12	14 Sa	0132 0703 0951 1813	1.4 1.0 1.1 -0.3	43 30 34 -9	29 Su	0318 1837	1.3 -0.2	40 -6	14 Tu	0436 1933	1.6 -1.2	49 -37	29 W	0447 1922	1.4 -0.7	43 -21
15 F	0016 0645 1220 1839	1.3 0.6 1.1 0.3	40 18 34 9	30 Sa	0235 0833 1101 1909	1.4 1.0 1.1 0.2	43 30 34 6	15 Su	0251 1855	1.5 -0.7	46 -21	30 M	0402 1907	1.4 -0.4	43 -12	15 W	0528 2022	1.6 -1.1	49 -34	30 Th	0520 2001	1.5 -0.8	46 -24
															31 Tu	0442 1939	1.5 -0.5	46 -15					

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Padre Island (south end), Texas, 2011

Times and Heights of High and Low Waters

July				August				September															
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height												
h m 0551 F 2042	ft 1.5 -0.8	cm 46 -24	h m 0614 Sa 2144	ft 1.3 -0.4	cm 40 -12	h m 0523 M 1020	ft 1.2 0.9	cm 37 27	h m 0450 Tu 1617	ft 1.1 1.2	cm 34 37	h m 0318 Th 1901	ft 1.2 1.6	cm 37 49	h m 0149 F 1029	ft 1.4 0.5	cm 43 15						
●				1425 2206	1.1 -0.1	34 -3	2243	0.6	18	1045 1924	0.0 1.6	0 49	1924	1.6	49								
2 Sa	0619 2124	1.5 -0.7	46 -21	17 Su	0626 1115 1341 2222	1.2 1.0 1.1 -0.2	37 30 34 -6	2 Tu	0524 1052 1609 2253	1.1 0.6 1.0 0.2	34 18 30 6	17 W	0441 1055 1735 2312	1.1 0.6 1.1 0.8	34 18 34 24	2 F	0026 0253 1140 2058	1.2 1.3 -0.2 1.6	37 40 -6 49	17 Sa	1108 2104	0.4 1.7	12 52
3 Su	0641 2207	1.4 -0.5	43 -15	18 M	0631 1144 1511 2256	1.1 0.9 1.0 0.1	34 27 30 3	3 W	0519 1134 1802 2342	1.0 0.3 1.0 0.6	30 9 30 18	18 Th	0426 1132 1908 2336	1.1 0.4 1.1 1.0	34 12 34 30	3 Sa	1241 2307	-0.3 1.7	-9 52	18 Su	1155 2301	0.4 1.8	12 55
4 M	0655 2251	1.3 -0.3	40 -9	19 Tu	0631 1221 1646 2325	1.0 0.7 0.8 0.3	30 21 24 9	4 Th	0509 1224 2017	1.0 0.0 1.0	30 0 30	19 F	0406 1213 2131 2336	1.1 0.3 1.1 1.0	34 9 34 30	4 Su	1349	-0.3	-9	19 M	1252	0.4	12
5 Tu	0700 1307 1614 2337	1.2 0.7 0.8 0.0	37 21 24 0	20 W	0624 1300 1842 2348	1.0 0.5 0.8 0.6	30 15 24 18	5 F	0036 0452 1320 2306	0.9 1.0 -0.3 1.2	27 30 -9 37	20 Sa	0341 1302	1.2 0.2	37 6	5 M	0043 1502	1.8 -0.2	55 -6	20 Tu	0009 1358	1.9 0.4	58 12
6 W	0659 1333 1855	1.0 0.4 0.7	30 12 21	21 Th	0611 1342 2138 2339	1.0 0.3 0.8 0.7	30 9 24 21	6 Sa	0152 0406 1422	1.1 1.2 -0.5	34 37 -15	21 Su	0300 1357	1.3 0.1	40 3	6 Tu	0141 1615	1.8 -0.1	55 -3	21 W	0047 1507	2.0 0.4	61 12
7 Th	0025 0651 1414 2157	0.4 1.0 0.0 0.8	12 30 0 24	22 F	0551 1427	1.0 0.1	30 3	7 Su	0125 1527	1.4 -0.6	43 -18	22 M	0219 1458	1.4 0.1	43 3	7 W	0218 1722	1.8 0.1	55 3	22 Th	0113 1616	2.0 0.5	61 15
8 F	0117 0633 1502	0.7 1.0 -0.3	21 30 -9	23 Sa	0520 1513	1.0 0.0	30 0	8 M	0226 1633	1.5 -0.7	46 -21	23 Tu	0225 1600	1.6 0.0	49 0	8 Th	0241 1823	1.8 0.2	55 6	23 F	0130 1722	2.0 0.5	61 15
9 Sa	0548 1555	1.0 -0.7	30 -21	24 Su	0416 1600	1.1 -0.2	34 -6	9 Tu	0311 1736	1.6 -0.7	49 -21	24 W	0243 1658	1.7 -0.1	52 -3	9 F	0255 0724 1107 1917	1.7 1.5 1.6 0.4	52 52 49 12	24 Sa	0141 0652 1037 1826	1.9 1.6 1.7 0.7	58 49 52 21
10 Su	0225 1649	1.3 -0.9	40 -27	25 M	0328 1648	1.2 -0.3	37 -9	10 W	0348 1833	1.6 -0.6	49 -18	25 Th	0302 1753	1.7 -0.1	52 -3	10 Sa	0303 0741 1238 2006	1.6 1.4 1.6 0.6	49 43 49 18	25 Su	0145 0658 1228 1930	1.7 1.3 1.8 0.8	52 40 55 24
11 M	0318 1744	1.4 -1.0	43 -30	26 Tu	0338 1734	1.3 -0.5	40 -15	11 Th	0416 1926	1.6 -0.4	49 -12	26 F	0319 1845	1.7 -0.1	52 -3	11 Su	0306 0806 1352 2051	1.5 1.2 1.7 0.8	46 37 52 24	26 M	0144 0723 1359 2034	1.6 1.0 1.9 1.0	49 30 58 30
12 Tu	0405 1838	1.5 -1.1	46 -34	27 W	0359 1820	1.4 -0.5	43 -15	12 F	0436 0850 1058 2013	1.5 1.3 1.4 -0.2	46 40 43 -6	27 Sa	0331 0809 1058 1937	1.7 1.4 1.5 0.0	52 43 46 0	12 M	0304 0833 1458 2134	1.4 1.0 1.7 1.0	43 30 52 30	27 Tu	0138 0757 1521 2143	1.4 0.6 2.0 1.2	43 18 61 37
13 W	0448 1930	1.5 -1.0	46 -30	28 Th	0423 1904	1.5 -0.6	46 -18	13 Sa	0447 0858 1235 2055	1.4 1.2 1.3 0.0	43 37 40 0	28 Su	0338 0814 1246 ● 2029	1.5 1.3 1.5 0.2	46 40 46 6	13 Tu	0257 0859 1600 2216	1.4 0.8 1.6 1.1	43 24 49 34	28 W	0126 0838 1642	1.4 0.3 2.0	43 9 61
14 Th	0525 2018	1.5 -0.9	46 -27	29 F	0445 1949	1.5 -0.6	46 -18	14 Su	0453 0922 1353 2134	1.3 1.1 1.3 0.2	40 34 40 6	29 M	0340 0839 1418 2121	1.4 1.0 1.5 0.4	43 30 46 12	14 W	0243 0927 1702 2259	1.3 0.7 1.6 1.2	40 21 49 37	29 Th	0925 1805	0.0 2.1	0 64
15 F	0554 2103	1.4 -0.7	43 -21	30 Sa	0504 2034	1.5 -0.5	46 -15	15 M	0454 0951 1505 2210	1.2 0.9 1.2 0.4	37 27 37 12	30 Tu	0337 0914 1547 2216	1.2 0.6 1.5 0.7	37 18 46 21	15 Th	0222 0956 1807 2349	1.3 0.6 1.6 1.3	40 18 49 40	30 F	1015 1933	-0.2 2.1	-6 64
○				31 Su	0517 1005 1237 2119	1.4 1.1 1.2 -0.3	43 34 37 -9					31 W	0330 0957 1720 2315	1.2 0.3 1.5 1.0	37 9 46 30								

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Padre Island (south end), Texas, 2011

Times and Heights of High and Low Waters

October						November						December							
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m		
	1111	-0.2	-6		1029	0.4	12		1250	0.3	9		1138	0.3	9		1206		
1 Sa	2107	2.1	64	16 Su	2043	2.1	64	1 Tu	2226	2.1	64	16 W	2121	2.1	64	1 Th	2111	1.6	49
2 Su	1213	-0.1	-3	17 M	1114	0.4	12	2 W	1354	0.6	18	17 Th	1231	0.5	15	2 F	0404	1.1	34
3 M	1320	0.1	3	18 Tu	1207	0.5	15	3 Th	1502	0.9	27	18 F	1333	0.7	21	3 Sa	0425	0.9	27
4 Tu	1432	0.3	9	19 W	1308	0.6	18	4 F	0522	1.5	46	19 Sa	0448	1.3	40	4 Su	0455	0.6	18
5 W	0023	2.1	64	20 Th	1417	0.7	21	5 Sa	0539	1.2	37	20 Su	0446	0.9	27	5 M	0526	0.4	12
6 Th	0046	2.0	61	21 F	1532	0.9	27	6 Su	0604	1.0	30	21 M	0512	0.5	15	6 Tu	0558	0.2	6
7 F	0059	1.9	58	22 Sa	0553	1.6	49	7 M	0631	0.8	24	22 Tu	0548	0.1	3	7 W	0629	0.0	0
8 Sa	0622	1.6	49	23 Su	0951	1.7	52	8 Tu	1439	1.9	58	23 W	1437	1.9	58	8 Th	0618	-0.9	-27
9 Su	1046	1.8	55	24 M	1651	1.0	30	9 W	0659	0.6	18	24 Th	0630	-0.3	-9	9 F	1619	1.8	55
10 M	1803	1.0	30	25 Tu	1813	1.2	37	10 F	1336	2.0	61	24 M	0716	-0.6	-18	10 Sa	0701	-0.1	-3
11 Tu	0106	1.8	55	26 W	1813	1.2	37	11 W	1940	1.4	43	24 Tu	1648	2.2	67	11 Su	0747	-1.7	52
12 W	0640	1.4	43	27 Th	2340	1.7	52	12 F	2328	1.6	49	24 F	0733	-0.2	-6	12 M	0709	-1.0	-30
13 M	1227	1.8	55	28 Tu	0617	0.8	24	9 W	0726	0.4	12	24 Sa	1726	1.8	55	13 Sa	0800	-1.0	-30
14 Tu	1905	1.2	37	29 W	1336	2.0	61	10 F	1625	2.0	61	24 ●	1756	1.8	55	14 ●	0800	-1.0	-30
15 M	0107	1.7	52	30 Th	1940	1.4	43	10 Tu	1712	0.3	9	25 W	0716	-0.6	-18	15 Sa	0850	-0.9	-27
16 W	0704	1.2	37	31 Tu	2328	1.6	49	11 F	1749	2.0	61	25 M	0805	-0.7	-21	16 M	0850	-0.9	-27
17 M	1345	1.9	58	25 W	0651	0.4	12	11 Tu	1802	1.8	55	25 Tu	0806	-0.3	-9	17 ●	0937	-0.7	-21
18 Tu	2004	1.3	40	26 Th	1456	2.1	64	12 F	1846	0.2	6	26 M	0841	-0.3	-9	18 ●	0937	-0.7	-21
19 M	0102	1.6	49	27 W	1610	2.2	67	12 W	1757	2.0	61	26 Tu	1902	1.6	49	19 ●	0937	-0.7	-21
20 W	0730	1.0	30	28 Th	0732	0.1	3	13 F	0823	0.2	6	27 Tu	1023	-0.4	-12	20 ●	0937	-0.7	-21
21 M	1450	1.9	58	29 Tu	0732	0.1	3	11 W	1846	0.1	6	27 W	1920	1.5	46	21 ●	0937	-0.7	-21
22 Tu	2103	1.5	46	30 W	0817	-0.2	-6	12 M	0854	0.1	3	27 F	1093	-0.4	-12	22 ●	0937	-0.7	-21
23 M	0048	1.6	49	31 Th	1722	-0.2	-6	12 Tu	1937	-0.6	-18	27 M	0917	-0.3	-9	23 ●	0937	-0.7	-21
24 W	0756	0.8	24	27 W	0817	-0.2	-6	13 F	0946	-0.6	-18	27 Tu	1023	-0.4	-12	24 ●	0937	-0.7	-21
25 M	1548	2.0	61	28 Th	1722	-0.2	-6	13 W	1937	-0.6	-18	27 W	1920	1.5	46	25 ●	0937	-0.7	-21
26 Tu	0212	1.5	46	29 Tu	0817	-0.2	-6	14 F	0946	-0.6	-18	27 F	1093	-0.4	-12	26 ●	0937	-0.7	-21
27 W	0018	1.6	49	30 W	0817	-0.2	-6	15 M	1050	0.2	6	27 M	0917	-0.3	-9	27 ●	0937	-0.7	-21
28 M	0822	0.7	21	31 Th	1722	-0.2	-6	15 Tu	2054	0.2	6	27 Tu	1023	-0.4	-12	28 ●	0937	-0.7	-21
29 W	1642	2.0	61	28 W	0906	-0.4	-12	16 F	1007	0.1	3	28 W	1037	-0.3	-9	29 ●	0937	-0.7	-21
30 M	0848	0.5	15	29 Th	1834	-0.4	-12	16 W	2046	0.1	3	28 M	1093	-0.2	-6	30 ●	0937	-0.7	-21
31 W	1735	2.0	61	30 W	0906	-0.4	-12	17 F	1945	-0.4	-12	28 W	1093	-0.1	-3	31 ●	0937	-0.7	-21
32 M	0822	0.7	21	31 Th	1834	-0.4	-12	18 W	1945	-0.4	-12	28 W	1105	-0.1	-3	32 ●	0937	-0.7	-21
33 W	1642	2.0	61	28 W	0906	-0.4	-12	19 F	1945	-0.4	-12	28 W	1105	-0.1	-3	33 ●	0937	-0.7	-21
34 M	0848	0.5	15	29 Th	1834	-0.4	-12	20 W	1945	-0.4	-12	28 W	1105	-0.1	-3	34 ●	0937	-0.7	-21
35 W	1735	2.0	61	30 W	0906	-0.4	-12	21 F	1945	-0.4	-12	28 W	1105	-0.1	-3	35 ●	0937	-0.7	-21
36 M	0822	0.7	21	31 Th	1834	-0.4	-12	22 W	1945	-0.4	-12	28 W	1105	-0.1	-3	36 ●	0937	-0.7	-21
37 W	1642	2.0	61	28 W	0906	-0.4	-12	23 F	1945	-0.4	-12	28 W	1105	-0.1	-3	37 ●	0937	-0.7	-21
38 M	0848	0.5	15	29 Th	1834	-0.4	-12	24 W	1945	-0.4	-12	28 W	1105	-0.1	-3	38 ●	0937	-0.7	-21
39 W	1735	2.0	61	30 W	0906	-0.4	-12	25 F	1945	-0.4	-12	28 W	1105	-0.1	-3	39 ●	0937	-0.7	-21
40 M	0822	0.7	21	31 Th	1834	-0.4	-12	26 W	1945	-0.4	-12	28 W	1105	-0.1	-3	40 ●	0937	-0.7	-21
41 W	1642	2.0	61	28 W	0906	-0.4	-12	27 F	1945	-0.4	-12	28 W	1105	-0.1	-3	41 ●	0937	-0.7	-21
42 M	0848	0.5	15	29 Th	1834	-0.4	-12	28 W	1945	-0.4	-12	28 W	1105	-0.1	-3	42 ●	0937	-0.7	-21
43 W	1735	2.0	61	30 W	0906	-0.4	-12	29 F	1945	-0.4	-12	28 W	1105	-0.1	-3	43 ●	0937	-0.7	-21
44 M	0822	0.7	21	31 Th	1834	-0.4	-12	30 W	1945	-0.4	-12	28 W	1105	-0.1	-3	44 ●	0937	-0.7	-21
45 W	1642	2.0	61	28 W	0906	-0.4	-12	31 F	1945	-0.4	-12	28 W	1105	-0.1	-3	45 ●	0937	-0.7	-21
46 M	0848	0.5	15	29 Th	1834	-0.4	-12	32 W	1945	-0.4	-12	28 W	1105	-0.1	-3	46 ●	0937	-0.7	-21
47 W	1735	2.0	61	30 W	0906	-0.4	-12	33 F	1945	-0.4	-12	28 W	1105	-0.1	-3	47 ●	0937	-0.7	-21
48 M	0822	0.7	21	31 Th	1834	-0.4	-12	34 W	1945	-0.4	-12	28 W	1105	-0.1	-3	48 ●	0937	-0.7	-21
49 W	1642	2.0	61	28 W	0906	-0.4	-12	35 F	1945	-0.4	-12	28 W	1105	-0.1	-3	49 ●	0937	-0.7	-21
50 M	0848	0.5	15	29 Th	1834	-0.4	-12	36 W	1945	-0.4	-12	28 W	1105	-0.1	-3	50 ●	0937	-0.7	-21
51 W	1735	2.0	61	30 W	0906	-0.4	-12	37 F	1945	-0.4	-12	28 W	1105	-0.1	-3	51 ●	0937	-0.7	-21
52 M	0822	0.7	21	31 Th	1834	-0.4	-12	38 W	1945	-0.4	-12	28 W	1105	-0.1	-3	52 ●	0937	-0.7	-21
53 W	1642	2.0	61	28 W	0906	-0.4	-12	39 F	1945	-0.4	-12	28 W	1105	-0.1	-3	53 ●	0937	-0.7	-21
54 M	0848	0.5	15	29 Th	1834	-0.4	-12	40 W	1945	-0.4	-12	28 W	1105	-0.1	-3	54 ●	0937	-0.7	-21
55 W	1735	2.0	61	30 W	0906	-0.4	-12	41 F	1945	-0.4	-12	28 W	1105	-0.1	-3	55 ●	0937	-0.7	-21
56 M	0822	0.7	21	31 Th	1834	-0.4	-12	42 W	1945	-0.4	-12	28 W	1105	-0.1	-3	56 ●	0937	-0.7	-21
57 W	1642	2.0	61	28 W	0906	-0.4	-12	43 F	1945	-0.4	-12	28 W	1105	-0.1	-3	57 ●	0937	-0.7	-21
58 M	0848	0.5	15	29 Th	1834	-0.4	-12	44 W	1945	-0.4	-12	28 W	1105	-0.1	-3	58 ●	0937	-0.7	-21
59 W	1735	2.0	61	30 W	0906	-0.4	-12	45 F	1945	-0.4	-12	28 W	1105	-0.1	-3	59 ●	0937	-0.7	-21
60 M	0822	0.7	21	31 Th	1834	-0.4	-12	46 W	1945	-0.4	-12	28 W	1105	-0.1</td					

Tampico Harbor (Madero), Mexico, 2011

Times and Heights of High and Low Waters

January				February				March					
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height		
h m 0558 Sa 1552	ft -0.7 1.4	cm -21 43	h m 0523 Su 1542	ft -0.5 1.4	cm -15 43	h m 0731 Tu 1630	ft -0.5 1.1	cm -15 34	h m 0646 W 1538	ft -0.4 1.4	cm -12 43		
16 0558 Sa 1552	0.7 1.4	16 0523 Su 1542	-0.5 1.4	16 0731 Tu 1630	-0.5 1.1	16 0646 W 1538	-0.4 1.4	16 0635 Tu 1526	-0.1 1.1	16 0528 W 1416	0.0 1.4		
2 0650 Su 1629	-0.7 1.3	21 0611 M 1608	-0.6 1.4	2 0809 W 2111	-0.4 0.8	2 0739 Th 2036	-0.3 1.0	2 0723 W 2012	0.0 0.8	2 0634 Th 1927	0.1 1.0		
●				3 0736 M 1702	-0.7 1.2	3 0044 Th 1631	0.9 1.4	3 0046 F 1542	1.2 1.2	3 0027 Th 2053	1.0 0.7	3 0013 F 1410	1.3 1.2
4 0816 Tu 1726	-0.6 1.1	4 0746 W 1649	-0.6 1.4	4 0200 F 1629	0.9 0.9	4 0217 Sa 1546	1.2 1.1	4 0140 F 2124	1.1 0.5	4 0145 Sa 1414	1.4 1.1		
●		○		5 0851 W 1740	-0.5 1.1	5 0830 Th 1700	-0.5 1.3	5 0300 Sa 1634	0.9 0.9	5 0240 Sa 1506	1.1 1.0	5 0304 Su 1422	1.4 1.1
6 0924 Th 1748	-0.3 1.0	6 0104 F 1709	1.1 1.2	6 0400 Su 1640	0.9 0.9	6 0502 M 1601	1.2 1.0	6 0333 Su 1512	1.1 1.0	6 0419 M 1432	1.5 1.1		
21 0914 F 2317	-0.4 0.7	21 0914 F 1709	-0.4 1.2	21 0909 Su 2155	0.3 1.0	21 0502 M 2248	1.2 0.4	21 0333 Su 2304	1.1 0.0	21 0419 M 2121	1.5 0.3		
7 0217 F 0957	0.8 -0.1	7 0243 Sa 1000	1.1 -0.1	7 0513 M 1042	0.9 0.5	7 0638 Tu 1645	1.1 1.0	7 0430 M 1606	1.1 1.0	7 0541 Tu 1517	1.4 1.0		
1754 2344	24 0.7	1754 2344	30 21	1716 2300	1.1 0.6	1645 2338	1.0 0.2	1601 2338	0.6 0.6	1139 2231	0.8 -0.3		
8 0325 Sa 1033	0.8 0.1	8 0411 Su 1052	1.0 0.2	8 0639 Tu 1723	0.9 1.0	8 0005 W 1645	-0.2 1.0	8 0537 Tu 1517	1.1 1.0	8 0708 W 2238	1.4 0.1		
9 0016 Su 0444	0.6 0.8	9 0553 M 1152	0.9 0.5	9 0025 W 1628	0.1 1.0	9 0105 Th 1144	-0.3 1.2	9 0652 W 1506	1.1 1.1	9 0946 Th 2327	1.3 0.0		
1112 1808	18 30	1112 1808	24 30	1152 1731	0.5 1.0	1152 1731	15 30	1144 1715	1.2 1.0	1144 1715	34 30	●	
10 0049 M 0624	0.5 0.7	10 0045 Tu 0759	0.1 0.9	10 0109 Th 1520	0.0 1.1	10 0207 F 1324	-0.4 1.3	10 1047 Th 1324	1.2 0.4	10 0035 F 1119	-0.3 1.3		
1152 1812	15 30	1152 1812	21 30	1250 1733	0.8 1.0	1250 1733	24 30	1144 1715	1.2 1.0	1137 1715	-0.2 34	●	
11 0126 Tu 1019	0.3 0.8	11 0138 W 1128	-0.2 1.0	11 0156 F 1419	-0.1 1.2	11 0320 Sa 1422	-0.3 1.3	11 0017 F 1144	0.0 1.3	11 0137 Sa 1222	-0.2 1.3		
1219 1809	24 30	1219 1809	0.7 1.0	1352 1715	0.9 1.0	1352 1715	27 30	1144 1715	1.2 1.0	1222 1715	-0.2 34	●	
12 0207 W 1744	0.1 1.0	12 0239 Th 1351	-0.4 1.2	12 0252 Sa 1432	-0.2 1.3	12 0433 Su 1457	-0.3 1.2	12 0107 Sa 1240	0.0 1.4	12 0246 Su 1322	-0.1 1.3		
●				13 0255 Th 1503	0.0 1.1	13 0346 F 1441	-0.5 1.3	13 0353 Su 1454	-0.3 1.4	13 0202 Su 1332	0.0 1.5	13 0405 M 1354	0.1 1.2
14 0346 F 1457	-0.2 1.2	14 0450 Sa 1518	-0.6 1.3	14 0452 M 1515	-0.3 1.5	14 0549 Tu 1530	-0.4 1.5	14 0309 M 1402	0.0 1.5	14 0514 Tu 1356	0.2 1.1		
1518 1518	-6 40	1518 1518	-18 37	1515 1515	-9 46	1530 1530	-12 46	1402 1402	0 46	1356 1906 2248	34 30 34	●	
15 0435 Sa 1518	-0.3 1.3	15 0550 Su 1550	-0.6 1.2	15 0549 Tu 1530	-0.4 1.5	15 0421 Tu 1416	0.0 1.5	15 0421 Tu 1416	0 46	1339 1904	0.4 0.8	●	
31 0645 M 1616	-9 37	31 0645 M 1616	-0.5 1.2	31 0645 M 1616	-15 37					1339 1904	12 24	●	
31 0003 Th 0713										0003 Th 1325 1914	1.1 1.0 0.7	31 0003 Th 1325 1914	34 30 21

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Tampico Harbor (Madero), Mexico, 2011

Times and Heights of High and Low Waters

April					May					June						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 F	0119	1.2	37	16 Sa	0112	1.4	43	1 Su	0302	1.3	40	16 M	0321	1.5	46	
	0756	0.6	18		0745	0.7	21		0850	1.0	30		1936	-0.6	-18	
	1321	1.0	30		1220	1.1	34		1125	1.1	34					
	1932	0.5	15		1912	0.2	6		1922	0.0	0					
2 Sa	0224	1.3	40	17 Su	0235	1.5	46	2 M	0348	1.4	43	17 Tu	0421	1.6	49	
	0832	0.7	21		0846	0.9	27		1953	-0.1	-3		2020	-0.7	-21	
	1324	1.0	30		1230	1.1	34									
	1955	0.4	12	O	1953	-0.1	-3									
3 Su	0315	1.3	40	18 M	0345	1.6	49	3 Tu	0433	1.4	43	18 W	0521	1.5	46	
	0904	0.8	24		0943	1.0	30		2024	-0.2	-6		2104	-0.7	-21	
	1330	1.0	30		1240	1.1	34									
●	2021	0.2	6		2034	-0.4	-12	●								
4 M	0405	1.3	40	19 Tu	0455	1.6	49	4 W	0522	1.4	43	19 Th	0617	1.4	43	
	0938	0.9	27		2118	-0.5	-15		2055	-0.3	-9		2149	-0.6	-18	
	1335	1.1	34													
	2050	0.1	3													
5 Tu	0459	1.3	40	20 W	0607	1.5	46	5 Th	0610	1.5	46	20 F	0708	1.3	40	
	1025	1.0	30		2207	-0.5	-15		2130	-0.3	-9		2240	-0.4	-12	
	1332	1.1	34													
	2121	0.0	0													
6 W	0558	1.3	40	21 Th	0719	1.4	43	6 F	0700	1.5	46	21 Sa	0800	1.2	37	
	2157	-0.1	-3		2304	-0.4	-12		2210	-0.2	-6		2335	-0.2	-6	
7 Th	0702	1.4	43	22 F	0913	1.4	43	7 Sa	0800	1.5	46	22 Su	0855	1.2	37	
	2240	-0.1	-3		2259	-0.1	-3						7	0747	1.3	40
8 F	0932	1.4	43	23 Sa	0006	-0.2	-6	8 Su	0926	1.5	46	23 M	0027	0.1	3	
	2332	0.0	0		1036	-1.3	-40		2355	0.0	0		0920	1.1	34	
9 Sa	1046	1.5	46	24 Su	0104	0.0	0	9 M	1002	1.5	46	24 Tu	0116	0.3	9	
	1111	1.3	40		1111	1.3	40						0924	1.0	30	
10 Su	0026	0.0	0	24 M	0202	0.2	6	10 Tu	0053	0.2	6	25 W	0207	0.6	18	
	1123	1.6	49		1127	1.2	37		1012	1.4	43		0925	1.0	30	
11 M	0123	0.1	3	25 M	0202	0.2	6	10 W	0053	0.2	6	25 F	0254	0.8	24	
	1149	1.6	49		1127	1.1	34		1012	1.4	43		0814	1.1	34	
12 Tu	0228	0.2	6	26 Tu	0315	0.4	12	11 W	0155	0.4	12	26 Th	0329	0.8	24	
	1203	1.5	46		1127	1.1	34		1014	1.3	40		0927	1.0	30	
13 W	0349	0.3	9	27 W	0344	0.6	18	11 W	1642	1.0	30	26 W	0329	1.0	30	
	1206	1.4	43		1122	1.1	34		1642	1.0	30		0927	1.0	30	
	1810	1.1	34		1739	0.8	24									
	2153	1.2	37		2327	1.1	34									
14 Th	0510	0.5	15	27 F	0344	0.6	18	12 Th	0319	0.6	18	27 F	0012	1.0	30	
	1207	1.3	40		1122	1.1	34		1018	1.2	37		0519	0.9	27	
	1809	0.9	27		1739	0.8	24		1651	0.7	21		0929	1.0	30	
	2337	1.3	40		2327	1.1	34		2301	1.2	37		1705	0.3	9	
15 F	0630	0.6	18	28 Th	0549	0.7	21	13 F	0500	0.8	24	28 Tu	0154	1.2	37	
	1212	1.2	37		1120	1.0	30		1024	1.1	34		1739	0.1	3	
	1836	0.5	15		1757	0.6	18		1723	0.4	12					
16 W	0707	0.9	27	29 F	0053	1.2	37	14 Sa	0043	1.3	40	29 W	0250	1.3	40	
	1121	1.0	30		1121	1.0	30		0647	0.9	27		1816	-0.1	-3	
	1822	0.4	12													
17 F	0209	1.3	40	30 Sa	0806	0.9	27	15 Su	0215	1.5	46	30 W	0331	1.4	43	
	1124	1.0	30		0806	1.0	30		1041	1.1	34		1853	-0.3	-9	
	1851	0.2	6		1822	0.4	12		1849	-0.3	-9					
18 W	0409	1.4	43	31 Tu	0409	1.4	43	16 W	0444	1.4	43	30 Th	0440	1.4	43	
	1825	-0.4	-12		1928	-0.4	-12		2012	-0.8	-24		1946	-0.5	-15	

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Tampico Harbor (Madero), Mexico, 2011

Times and Heights of High and Low Waters

July				August				September															
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height												
h m 0509 F 2023	ft 1.4 -0.5	cm 43 -15	16 Sa	0522 0939 1316 2120	1.1 0.9 1.0 -0.3	34 27 30 -9	1 M	0435 0933 1426 2137	1.3 1.0 1.3 0.1	40 30 40 3	16 Tu	0405 0928 1556 2210	1.1 0.6 1.2 0.6	34 18 37 18	1 Th	0322 1018 1808	1.2 0.2 1.5	37 6 46	16 F	0235 1004 1840	1.2 0.3 1.4	37 9 43	
●																							
2 Sa	0533 2101	1.4 -0.4	43 -12	17 Su	0529 0952 1427 2154	1.0 0.9 1.0 -0.1	30 27 30 -3	2 Tu	0442 1008 1545 2225	1.2 0.8 1.2 0.4	37 24 37 12	17 W	0410 1005 1705 2252	1.1 0.5 1.2 0.8	34 15 37 24	2 F	0005 0326 1121 2003	1.2 1.3 0.0 1.5	37 40 0 46	17 Sa	1052 2052	0.3 1.5	9 46
3 Su	0552 2141	1.4 -0.3	43 -9	18 M	0533 1023 1529 2231	1.0 0.8 1.0 0.2	30 24 30 6	3 W	0449 1101 1719 2326	1.2 0.5 1.2 0.7	37 12 37 21	18 Th	0415 1054 1826 2355	1.1 0.4 1.1 1.0	34 12 34 30	3 Sa	1227 2252	-0.1 1.5	-3 46	18 Su	1148 2251	0.3 1.6	9 49
4 M	0604 1159 1435 2227	1.3 1.0 1.1 0.0	40 30 34 0	19 Tu	0540 1116 1640 2313	1.0 0.7 0.9 0.4	30 21 27 12	4 Th	0457 1201 1909	1.1 0.3 1.2	34 9 37	19 F	0412 1149 2132	1.1 0.3 1.2	34 9 37	4 Su	1331	-0.1	-3	19 M	1243 2335	0.3 1.7	9 52
5 Tu	0613 1221 1610 2322	1.2 0.9 1.0 0.3	37 27 30 9	20 W	0546 1207 1811 2359	1.0 0.5 0.9 0.6	30 15 27 18	5 F	0035 0500 1258 2237	1.0 1.2 0.0 1.2	30 37 0 37	20 Sa	0102 0344 1241 2333	1.1 1.2 0.2 1.3	34 37 6 40	5 M	0007 1443	-1.6 -0.1	49 -3	20 Tu	1338	0.3	9
6 W	0622 1255 1807	1.2 0.6 1.0	37 30 30	21 Th	0551 1252 2027	1.0 0.4 0.9	30 12 27	6 Sa	0154 0443 1358	1.1 1.2 -0.1	34 37 -3	21 Su	1332	0.2	6	6 Tu	0119 1602	1.6 0.0	49 0	21 W	0014 1441	1.7 0.4	52 12
7 Th	0021 0628 1339 2045	0.6 1.1 0.4 1.0	18 34 12 30	22 F	0040 0547 1337	0.8 1.0 0.2	24 30 6	7 Su	0027 1507	1.4 -0.3	43 -9	22 M	0041 1429	1.4 0.2	43 6	7 W	0210 1712	1.5 0.1	46 3	22 Th	0049 1553	1.7 0.4	52 12
8 F	0118 0631 1432 2343	0.8 1.1 0.1 1.1	24 34 3 34	23 Sa	0513 1427	1.1 0.1	34 3	8 M	0158 1618	1.4 -0.3	43 -9	23 Tu	0141 1533	1.5 0.1	46 3	8 Th	0237 0742 1001 1814	1.4 1.2 1.3 0.2	43 37 40 6	23 F	0110 1700	1.7 0.5	52 15
9 Sa	0317 0617 1533	1.0 1.1 -0.2	30 34 -6	24 Su	0208 1524	1.2 0.0	37 0	9 Tu	0246 1723	1.5 -0.3	46 -9	24 W	0216 1634	1.6 0.1	49 3	9 F	0246 0731 1120 1909	1.3 1.2 1.3 0.3	40 37 40 9	24 Sa	0116 0658 1040 1805	1.6 1.4 1.5 0.6	49 43 46 18
10 Su	0152 1634	1.3 -0.4	40 -12	25 M	0230 1619	1.3 -0.1	40 -3	10 W	0321 1823	1.4 -0.3	43 -9	25 Th	0241 1730	1.6 0.1	49 3	10 Sa	0240 0735 1229 1953	1.3 1.0 1.4 0.5	40 30 43 15	25 Su	0117 0654 1202 1910	1.5 1.2 1.6 0.7	46 37 49 21
11 M	0248 1731	1.4 -0.6	43 -18	26 Tu	0257 1710	1.4 -0.2	43 -6	11 Th	0348 1916	1.3 -0.2	40 -6	26 F	0256 1824	1.6 0.1	49 3	11 Su	0231 0746 1339 2028	1.2 0.9 1.4 0.6	37 27 43 18	26 M	0119 0715 1328 2009	1.4 0.9 1.7 0.8	43 27 52 24
12 Tu	0330 1828	1.4 -0.7	43 -21	27 W	0323 1758	1.5 -0.3	46 -9	12 F	0403 0832 1141 2000	1.3 1.1 1.2 -0.1	40 34 37 -3	27 Sa	0302 0807 1114 1918	1.6 1.3 1.4 0.1	49 40 43 3	12 M	0228 0803 1437 2100	1.2 0.8 1.4 0.8	37 24 43 24	27 Tu	0126 0746 1446 2102	1.4 0.6 1.8 1.0	43 18 55 30
13 W	0408 1921	1.4 -0.7	43 -21	28 Th	0346 1845	1.5 -0.3	46 -9	13 Sa	0405 0834 1252 2035	1.2 1.0 1.2 0.0	37 30 37 0	28 Su	0303 0806 1235 2007	1.5 1.2 1.5 0.3	46 37 46 9	13 Tu	0230 0826 1529 2132	1.2 0.6 1.4 0.9	37 18 43 27	28 W	0134 0823 1558 2200	1.3 0.3 1.8 1.2	40 9 55 37
14 Th	0442 2006	1.3 -0.6	40 -18	29 F	0406 1931	1.5 -0.3	46 -9	14 Su	0401 0843 1401 2107	1.1 0.9 1.2 0.2	34 27 37 6	29 M	0304 0822 1400 2053	1.4 1.0 1.5 0.4	43 30 46 12	14 W	0235 0853 1624 2209	1.2 0.5 1.4 1.0	37 15 43 30	29 Th	0142 0905 1717 2342	1.3 0.0 1.8 1.3	40 0 55 40
15 F	0507 0935 1152 O	1.2 1.0 1.1 -0.5	37 30 34 -15	30 Sa	0421 0915 1127 2013	1.5 1.2 1.3 -0.2	46 37 40 -6	15 M	0401 0901 1459 2137	1.1 0.8 1.2 0.4	34 24 37 12	30 Tu	0309 0850 1516 2141	1.3 0.7 1.5 0.7	40 21 46 21	15 Th	0239 0925 1729 2324	1.2 0.4 1.4 1.1	37 12 43 34	30 F	0143 0953 1842	1.4 -0.1 1.7	43 -3 52
31 Su	0429 0915 1257 2054	1.4 1.1 1.3 -0.1	43 34 40 -3					31 W	0315 0929 1636 2239	1.3 0.4 1.5 0.9	40 12 46 27												

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Tampico Harbor (Madero), Mexico, 2011

Times and Heights of High and Low Waters

October					November					December													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm																				
1 Sa	1053 2033	-0.2 1.7	-6 52	16 Su	1012 2004	0.2 1.6	6 49	1 Tu	1240 2226	0.1 1.5	3 46	16 W	1121 2051	0.2 1.6	6 49	1 Th	0248 0517	0.8 0.9	24 27	16 F	1150 1917	0.3 1.3	9 40
2 Su	1201 2232	-0.1 1.7	-3 52	17 M	1101 2155	0.2 1.7	6 52	2 W	1340 2242	0.3 1.4	9 43	17 Th	1217 2112	0.3 1.6	9 49	2 F	0314 0733	0.8 0.9	24 27	17 Sa	0220 0632	0.8 0.9	24
3 M	1307 2326	0.0 1.6	0 49	18 Tu	1158 2235	0.3 1.7	9 52	3 Th	1448 2245	0.6 1.3	18 40	18 F	1314 2121	0.5 1.5	15 46	3 Sa	0343 1038	0.6 1.0	18 30	18 Su	0249 0957	0.5 0.9	15 27
4 Tu	1415	0.2	6	19 W	1254 2258	0.4 1.8	12 55	4 F	0457 0957	1.0 1.2	30 37	19 Sa	0423 0755	1.0 1.1	30 34	4 Su	0414 1220	0.4 1.1	12 34	19 M	0331 1207	0.2 1.1	6 34
5 W	0006 1535	1.6 0.4	49 12	20 Th	1353 2310	0.5 1.7	15 52	5 Sa	0513 1130	0.8 1.3	24 40	20 Su	0426 1049	0.8 1.2	24 37	5 M	0445 1407	0.2 1.2	6 37	20 Tu	0420 1403	-0.2 1.3	-6 40
6 Th	0033 0618 0854 1650	1.5 1.2 1.3 0.5	46 37 40 15	21 F	1508 2315	0.7 1.6	21 49	6 Su	0533 1256 1900 2242	0.6 1.4 1.1 1.2	18 43 34 37	21 M	0453 1228 1803 2145	0.4 1.4 1.1 1.2	12 43 34 37	6 Tu	0519 1456	0.0 1.3	0 40	21 W	0510 1459	-0.5 1.5	-15 46
7 F	0040 0614 1050 1757	1.4 1.1 1.3 0.7	43 34 40 21	22 Sa	0542 0949 1631 2319	1.3 1.4 0.8 1.5	40 43 24 46	7 M	0558 1412 2014 2241	0.5 1.4 1.1 1.2	15 43 34 37	22 Tu	0532 1402	0.1 1.6	3 49	7 W	0555 1533	-0.1 1.4	-3 43	22 Th	0603 1545	-0.7 1.5	-21 46
8 Sa	0034 0626 1204 1900	1.3 1.0 1.4 0.8	40 30 43 24	23 Su	0540 1127 1752 2325	1.0 1.5 0.9 1.4	30 46 27 43	8 Tu	0628 1504	0.3 1.5	9 46	23 W	0617 1508	-0.3 1.7	-9 52	8 Th	0634 1608	-0.3 1.4	-9 43	23 F	0657 1629	-0.8 1.5	-24 46
9 Su	0029 0643 1319 1951	1.3 0.8 1.5 0.9	40 24 46 27	24 M	0604 1256 1917 2332	0.7 1.6 1.1 1.4	21 49 34 43	9 W	0659 1547	0.1 1.6	3 49	24 Th	0705 1606	-0.5 1.7	-15 52	9 F	0711 1643	-0.4 1.4	-12 43	24 Sa	0748 1711	-0.9 1.4	-27 43
10 M	0029 0704 1422 2032	1.2 0.7 1.5 1.0	37 21 46 30	25 Tu	0639 1419 2028 2339	0.3 1.8 1.2 1.3	9 55 37 40	10 Th	0732 1630	0.0 1.6	0 49	25 F	0753 1704	-0.7 1.7	-21 52	10 Sa	0747 1717	-0.4 1.5	-12 46	25 Su	0835 1746	-0.8 1.3	-24 40
11 Tu	0031 0729 1513 O	1.2 0.5 1.6 1.1	37 15 49 34	26 W	0721 1528 2132 2339	0.0 1.8 1.2 1.3	0 55 37 40	11 F	0804 1715	-0.1 1.6	-3 49	26 Sa	0840 1759	-0.7 1.6	-21 49	11 Su	0821 1749	-0.4 1.5	-12 46	26 M	0918 1811	-0.7 1.2	-21 37
12 W	0032 0756 1601 2151	1.2 0.3 1.6 1.1	37 9 49 34	27 Th	0804 1636	-0.3 1.9	-9 58	12 Sa	0836 1800	-0.2 1.6	-6 49	27 Su	0927 1846	-0.6 1.5	-18 46	12 M	0855 1816	-0.4 1.5	-12 46	27 Tu	1000 1827	-0.4 1.1	-12 34
13 Th	0023 0826 1653	1.2 0.2 1.6	37 6 49	28 F	0849 1747	-0.4 1.8	-12 55	13 Su	0910 1842	-0.1 1.6	-3 49	28 M	1016 1928	-0.4 1.4	-12 43	13 Tu	0929 1838	-0.3 1.5	-9 46	28 W	0019 0254	0.8 0.9	24 27
14 F	0857 1750	0.1 1.6	3 49	29 Sa	0937 1856	-0.4 1.7	-12 52	14 M	0946 1925	-0.1 1.6	-3 49	29 Tu	1112 2002	-0.2 1.3	-6 40	14 W	1008 1855	-0.1 1.4	-3 43	29 Th	0042 0413	0.7 0.8	21 24
15 Sa	0931 1848	0.1 1.6	3 49	30 Su	1033 2015	-0.3 1.6	-9 49	15 Tu	1029 2011	0.0 1.6	0 49	30 W	1208 2022	0.1 1.2	3 37	15 Th	1055 1907	0.1 1.4	3 43	30 F	0109 0553	0.6 0.8	18 24
				31 M	1137 2146	-0.1 1.6	-3 49								31 Sa	0141 0754	0.4 0.7	12 21					

Time meridian 90° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Cristobal (Colon), Panama, 2011

Times and Heights of High and Low Waters

January					February					March						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa	0152	-0.1	-3	16 Su	0052	-0.1	-3	1 Tu	0005	0.1	3	16 W	0226	0.0	0	
	0953	1.5	46	0917	1.3	40	0256	0.0	0	1010	1.1	34	0953	1.0	30	
	1806	-0.2	-6	1749	-0.1	-3	1106	1.1	34	1754	-0.2	-6	1731	-0.1	-3	
	2313	0.1	3	2156	0.0	0	1923	-0.2	-6	2318	0.2	6	2316	0.2	6	
2 Su	0221	0.0	0	17 M	0119	-0.1	-3	2 W	1153	1.0	30	17 Th	0338	0.0	0	
	1040	1.4	43	0957	1.3	40	2009	-0.1	-3	1102	1.0	30	1041	0.8	24	
	1906	-0.2	-6	1835	-0.2	-6	1833	-0.2	-6	1833	-0.2	-6	1816	-0.1	-3	
				2310	0.0	0							2243	0.5	15	
3 M	1128	1.4	43	18 Tu	0152	-0.1	-3	3 Th	1240	0.9	27	18 F	0026	0.3	9	
	2000	-0.3	-9	1041	1.3	40	2048	-0.1	-3	0510	0.1	3	0432	0.2	6	
				1915	-0.2	-6				1201	0.9	27	1131	0.7	21	
										O	1912	-0.2	-6	1857	0.0	0
4 Tu	1216	1.3	40	19 W	0035	0.0	0	4 F	0352	0.3	9	19 Sa	0130	0.5	15	
	2048	-0.2	-6	0239	-0.1	-3	0624	0.2	6	0655	0.1	3	0559	0.2	6	
				1128	1.2	37	1329	0.7	21	1308	0.7	21	1228	0.6	18	
				O	1951	-0.2	-6	2118	-0.1	-3	1952	-0.1	-3	1931	0.1	3
5 W	1303	1.1	34	20 Th	0152	0.1	3	5 Sa	0417	0.4	12	20 Su	0229	0.7	21	
	2129	-0.2	-6	0359	0.0	0	0825	0.3	9	0837	0.0	0	0741	0.2	6	
				1219	1.2	37	1422	0.6	18	1421	0.6	18	1336	0.4	12	
				2024	-0.2	-6	2141	0.0	0	2034	-0.1	-3	1959	0.1	3	
6 Th	1348	1.0	30	21 F	0247	0.3	9	6 Su	0438	0.5	15	21 M	0323	0.9	27	
	2202	-0.2	-6	0555	0.2	6	1003	0.3	9	1004	-0.1	-3	0911	0.1	3	
				1314	1.0	30	1517	0.5	15	1536	0.5	15	1450	0.4	12	
				2056	-0.2	-6	2159	0.0	0	2118	-0.1	-3	2021	0.1	3	
7 F	1433	0.9	27	22 Sa	0332	0.5	15	7 M	0459	0.6	18	22 Tu	0415	1.0	30	
	2229	-0.2	-6	0756	0.3	9	1117	0.2	6	1116	-0.2	-6	1019	0.1	3	
				1415	0.9	27	1611	0.4	12	1646	0.4	12	1600	0.3	9	
				2129	-0.2	-6	2215	0.0	0	2203	-0.1	-3	2041	0.2	6	
8 Sa	0549	0.5	15	23 Su	0416	0.7	21	8 Tu	0522	0.7	21	23 W	0505	1.1	34	
	0936	0.4	12	0944	0.2	6	1214	0.1	3	1219	-0.3	-9	1110	0.0	0	
	1518	0.8	24	1519	0.7	21	1702	0.3	9	1750	0.3	9	1656	0.3	9	
	2250	-0.1	-3	2203	-0.2	-6	2232	0.0	0	2249	-0.1	-3	2100	0.2	6	
9 Su	0605	0.7	21	24 M	0459	0.9	27	9 W	0547	0.8	24	24 Th	0555	1.2	37	
	1108	0.4	12	1113	0.1	3	1303	0.1	3	1848	0.3	9	1152	-0.1	-3	
	1603	0.6	18	1626	0.6	18	2250	0.0	0	O	2335	-0.1	-3	2123	0.1	3
	2308	-0.1	-3	2238	-0.2	-6							2224	0.0	0	
10 M	0623	0.8	24	25 Tu	0543	1.1	34	10 Th	0616	0.9	27	25 F	0644	1.2	37	
	1224	0.3	9	1229	0.0	0	1347	0.0	0	1409	-0.3	-9	1230	-0.1	-3	
	1650	0.5	15	1732	0.4	12	1830	0.2	6	1941	0.3	9	1811	0.2	6	
	2324	-0.1	-3	2315	-0.2	-6	2311	0.0	0				2152	0.1	3	
11 Tu	0644	0.9	27	26 W	0627	1.2	37	11 F	0647	1.0	30	26 Sa	0520	0.9	27	
	1327	0.3	9	1336	-0.1	-3	1430	-0.1	-3	0732	1.2	37	1306	-0.2	-6	
	1738	0.4	12	1836	0.3	9	1908	0.2	6	1501	-0.3	-9	1838	0.2	6	
	2340	0.0	0	O	2352	-0.2	-6	2337	-0.1	-3	2033	0.2	6	2226	0.0	0
12 W	0708	1.0	30	27 Th	0713	1.3	40	12 Sa	0722	1.1	34	27 Su	0557	1.0	30	
	1424	0.2	6	1438	-0.2	-6	1512	-0.1	-3	0820	1.2	37	1341	-0.2	-6	
	1827	0.3	9	1938	0.2	6	1946	0.1	3	1552	-0.3	-6	1905	0.2	6	
	O	2356	0.0	0					2125	0.2	6	O	2306	0.0	0	
13 Th	0736	1.1	34	28 F	0030	-0.2	-6	13 Su	0008	-0.1	-3	28 M	0149	0.0	0	
	1517	0.1	3	0759	1.4	43	0759	1.2	37	0907	1.1	34	1415	-0.2	-6	
	1915	0.2	6	1537	-0.2	-6	1554	-0.1	-3	1642	-0.2	-6	1936	0.2	6	
				2039	0.2	6	2027	0.1	3	2218	0.2	6	2353	0.0	0	
14 F	0012	0.0	0	29 Sa	0108	-0.1	-3	14 M	0045	-0.1	-3	14 Tu	0717	1.1	34	
	0806	1.2	37	0846	1.4	43	0840	1.2	37	0923	1.2	37	1449	-0.2	-6	
	1609	0.0	0	1635	-0.2	-6	1635	-0.1	-3	1715	-0.2	-6	2013	0.2	6	
	2004	0.1	3	2141	0.1	3	2116	0.1	3	2213	0.1	3				
15 Sa	0031	0.0	0	30 Su	0145	-0.1	-3	15 Tu	0130	-0.1	-3	15 Tu	0046	0.0	0	
	0840	1.2	37	0932	1.3	40	0923	1.2	37	1715	-0.2	-6	0800	1.0	30	
	1700	-0.1	-3	1733	-0.2	-6				2213	0.1	3	1522	-0.2	-6	
	2056	0.1	3	2248	0.1	3							2057	0.3	9	
31 M	0221	0.0	0	31 M	1019	1.2	37							31 Th	0410	0.1
				1830	-0.2	-6							1643	0.0	0	
													2316	0.5	15	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Cristobal (Colon), Panama, 2011

Times and Heights of High and Low Waters

April						May						June							
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F 1113 0.4 12 1706 0.1 3 2355 0.6 18	0532 0.1 3	16 Sa 1029 0.4 12 1559 -0.1 -3 2312 1.0 30	0511 -0.1 -3	1 Su 2335 0.9 27	0725 -0.1 -3	16 M 1207 0.1 3 1538 -0.1 -3 2341 1.3 40	0652 -0.3 -9	1 W 0849 -0.3 -9	0849 -0.3 -9	16 Th 0837 -0.4 -12	0012 1.4 43	0837 -0.4 -12	●	0009 1.1 34	2 Th 0926 -0.3 -9	0104 1.3 40	0924 -0.4 -12		
	0701 0.1 3	17 Su 1157 0.2 6 1641 -0.1 -3	0637 -0.2 -6	2 M 0826	0826 -0.1 -3	17 Tu 1353 0.1 3 1622 0.0 0	0756 -0.4 -12	2 Th 0926	0009 1.1 34	17 F 0924	0104 1.3 40	0924 -0.4 -12	○	0957 -0.4 -12	0051 1.1 34	3 F 0957	0155 1.2 37	0957 -0.4 -12	
	1238 0.3 9	1723 0.2 6	1157 0.2 6	3 M 0007	0007 1.1 34	3 Tu 0914	0011 0.9 27	18 W 0852	0035 1.3 40	3 F 0957	0051 1.1 34	0957 -0.4 -12	18 0155 1.2 37	0852 -0.5 -15	0051 1.1 34	18 Sa 1005	0155 1.2 37	1005 -0.4 -12	
	1434 0.2 6	1728 0.1 3	1335 0.2 6	0753 -0.3 -9	0914 -0.2 -6	1731 0.0 0	0914 -0.2 -6	18 0852	0035 1.3 40	19 0957	0051 1.1 34	0957 -0.4 -12	18 1719 0.3 9	0852 -0.5 -15	0051 1.1 34	18 1934 0.2 6	0155 1.2 37	1934 0.2 6	
4 M 0925 -0.1 -3	0110 0.7 21	19 Tu 0859 -0.4 -12 1505 0.2 6 1831 0.1 3	0104 1.2 37	4 W 0954	0050 1.0 30	19 Th 0942	0130 1.3 40	4 Sa 1023	0135 1.1 34	19 M 1041	0245 1.0 30	1023 -0.4 -12	19 1750 0.5 15	0954 -0.3 -9	0135 1.1 34	19 2117 0.4 12	1041 -0.4 -12	245 1.0 30	
	1012 -0.2 -6	20 W 0956 -0.5 -15 1617 0.2 6 1940 0.1 3	0201 1.2 37	5 Th 1028	0131 1.0 30	20 F 1028	0225 1.2 37	5 Su 1046	0220 1.1 34	20 M 1112	0333 0.9 27	1046 -0.4 -12	20 1820 0.6 18	0956 -0.5 -15	0220 1.1 34	20 2249 0.4 12	1112 -0.3 -9	333 0.9 27	
	1052 -0.2 -6	21 Th 1048 -0.5 -15 1714 0.3 9 2050 0.1 3	0257 1.2 37	6 F 1058	0213 1.0 30	21 Sa 1109	0317 1.1 34	6 M 1107	0307 1.0 30	21 Tu 1138	0420 0.7 21	1109 -0.5 -15	21 1848 0.7 21	1058 -0.4 -12	0307 1.0 30	21 1848 0.7 21	1138 -0.3 -9	420 0.7 21	
	1126 -0.3 -9	22 F 1134 -0.5 -15 1803 0.4 12 2158 0.1 3	0352 1.2 37	7 Sa 1125	0257 1.0 30	22 Su 1146	0407 1.0 30	7 Tu 1129	0356 0.9 27	22 W 1200	0012 0.3 9	1146 -0.4 -12	22 1915 0.8 24	1125 -0.4 -12	0407 1.0 30	22 1915 0.8 24	0505 0.6 18	012 0.3 9	
8 F 1158 -0.3 -9	0346 0.9 27	23 Sa 1218 -0.5 -15 1848 0.4 12 2303 0.2 6	0444 1.1 34	8 Su 1848	0341 1.0 30	23 M 1915	0454 0.9 27	8 W 1857	0448 0.7 21	23 Th 1219	0126 0.3 9	1848 0.5 15	23 1942 0.9 27	1218 0.4 12	0454 0.9 27	23 1942 0.9 27	0552 0.5 15	126 0.3 9	
	1227 -0.3 -9	24 Sa 1257 -0.4 -12 1929 0.5 15	0533 1.0 30	9 M 1211	0426 1.0 30	24 Tu 1539	0006 0.3 9	9 Th 1218	0049 0.2 6	24 F 1235	0233 0.2 6	1539 0.7 21	24 2009 1.0 30	1211 -0.4 -12	0006 0.3 9	24 2009 1.0 30	0640 0.3 9	233 0.2 6	
	1849 0.2 6	25 Su 1257 -0.4 -12 1929 0.5 15	0006 0.2 6	10 Tu 1235	0512 0.9 27	25 W 1310	0120 0.3 9	10 F 1246	0210 0.1 3	25 Sa 1249	0337 0.1 3	1310 -0.2 -6	25 2038 1.0 30	1235 -0.3 -9	0120 0.3 9	25 2038 1.0 30	0643 0.4 12	337 0.1 3	
	2142 0.1 3	○	0217 0.2 6	11 W 1333	0621 0.9 27	26 Th 1328	0234 0.2 6	11 Sa 1316	0326 0.0 0	26 Su 1259	0437 0.0 0	1328 -0.1 -3	26 2108 1.1 34	1333 -0.3 -9	0234 0.2 6	26 2108 1.1 34	0643 0.4 12	437 0.0 0	
10 Su 1255 -0.3 -9	0508 1.0 30	25 M 1333	0006 0.2 6	10 Tu 1919	0512 0.9 27	25 W 2019	0120 0.3 9	10 F 2049	0210 0.1 3	25 Sa 2055	0337 0.1 3	2019 0.8 24	10 2055 1.2 37	1333 -0.3 -9	0120 0.3 9	25 2055 1.2 37	0643 0.4 12	337 0.1 3	
	1904 0.3 9	0621 0.9 27	0621 0.9 27	11 W 2009	0601 0.8 24	26 Th 2049	0234 0.2 6	11 Sa 2055	0326 0.0 0	26 Su 2108	0437 0.0 0	2049 0.9 27	11 2108 1.1 34	2009 0.5 15	0234 0.2 6	26 2108 1.1 34	0643 0.4 12	437 0.0 0	
	2246 0.1 3	○	0751 0.6 18	11 W 2047	0601 0.8 24	26 Th 2049	0234 0.2 6	11 Sa 2055	0326 0.0 0	26 Su 2108	0437 0.0 0	2049 0.9 27	11 2108 1.1 34	2047 0.6 18	0234 0.2 6	26 2108 1.1 34	0643 0.4 12	437 0.0 0	
	2352 0.1 3	○	0751 0.6 18	12 W 2122	0653 0.6 18	27 Th 2118	0347 0.1 3	12 Su 2141	0438 0.1 3	27 M 2141	0536 0.1 3	2118 0.9 27	12 2141 1.2 37	2122 0.7 21	0347 0.1 3	27 2141 1.2 37	0934 0.0 0	536 0.1 3	
12 Tu 2003 0.5 15	0635 0.9 27	27 W 2122	0217 0.2 6	12 Th 2029	0136 0.2 6	27 F 2118	0347 0.1 3	12 Su 2141	0438 0.1 3	27 M 2141	0536 0.1 3	2118 0.9 27	12 2141 1.2 37	2122 0.7 21	0347 0.1 3	27 2141 1.2 37	0934 0.0 0	536 0.1 3	
	1350 -0.3 -9	28 Th 2141	0329 0.2 6	13 F 2112	0259 0.1 3	28 Tu 2219	0501 0.1 3	13 M 2230	0545 0.1 3	28 Tu 2217	0632 0.1 3	2219 1.0 30	13 2230 1.4 43	2141 0.7 21	0501 0.1 3	28 2217 1.2 37	0632 0.1 3	545 0.1 3	
	2003 0.5 15	○	0840 0.4 12	13 F 2112	0753 0.4 12	28 Tu 2219	0501 0.1 3	13 M 2230	0545 0.1 3	28 Tu 2217	0632 0.1 3	2219 1.0 30	13 2230 1.4 43	2141 0.7 21	0501 0.1 3	28 2217 1.2 37	0632 0.1 3	545 0.1 3	
	1418 -0.2 -6	○	1452 -0.1 -3	14 F 2229	0448 0.1 3	29 Tu 2229	0422 0.0 0	14 M 2253	0501 0.1 3	29 W 2253	0648 0.1 3	2229 1.0 30	14 2253 1.1 34	2229 0.8 24	0422 0.0 0	29 2253 1.2 37	0648 0.1 3	448 0.1 3	
14 Th 1449 -0.2 -6	0219 0.1 3	29 F 2229	0448 0.1 3	14 Sa 2159	0422 0.0 0	29 Tu 2219	0610 0.0 0	14 M 2253	0648 0.1 3	29 W 2253	0723 0.1 3	2219 1.0 30	14 2253 1.1 34	2229 0.8 24	0422 0.0 0	29 2253 1.2 37	0648 0.1 3	448 0.1 3	
	0815 0.7 21	○	0937 0.3 9	14 Sa 2159	0422 0.0 0	29 Tu 2219	0610 0.0 0	14 M 2253	0648 0.1 3	29 W 2253	0723 0.1 3	2219 1.0 30	14 2253 1.1 34	2229 0.8 24	0422 0.0 0	29 2253 1.2 37	0648 0.1 3	448 0.1 3	
	1449 -0.2 -6	○	1505 0.0 0	15 Sa 2301	0540 0.2 6	30 Tu 2301	0610 0.0 0	15 M 2253	0648 0.1 3	30 W 2253	0723 0.1 3	2301 0.8 24	15 2253 1.1 34	2301 0.8 24	0540 0.2 6	30 2253 1.2 37	0648 0.1 3	448 0.1 3	
	2129 0.7 21	○	1057 0.2 6	15 Sa 2301	0540 0.2 6	30 Tu 2301	0610 0.0 0	15 M 2253	0648 0.1 3	30 W 2253	0723 0.1 3	2301 0.8 24	15 2253 1.1 34	2301 0.8 24	0540 0.2 6	30 2253 1.2 37	0648 0.1 3	448 0.1 3	
15 F 1522 -0.2 -6	0343 0.0 0	30 Sa 2301	0610 0.0 0	15 M 2253	0540 0.2 6	31 Tu 2330	0610 0.0 0	15 W 2330	0745 0.1 3	31 O 2330	0807 0.1 3	2330 0.8 24	15 2330 1.1 34	2301 0.8 24	0540 0.2 6	31 2330 0.8 24	0807 0.1 3	448 0.1 3	
	0916 0.5 15	○	1057 0.2 6	15 M 2253	0540 0.2 6	31 Tu 2330	0610 0.0 0	15 W 2330	0745 0.1 3	31 O 2330	0807 0.1 3	2330 0.8 24	15 2330 1.1 34	2301 0.8 24	0540 0.2 6	31 2330 0.8 24	0807 0.1 3	448 0.1 3	
	1522 -0.2 -6	○	1506 0.1 3	15 M 2253	0540 0.2 6	31 Tu 2330	0610 0.0 0	15 W 2330	0745 0.1 3	31 O 2330	0807 0.1 3	2330 0.8 24	15 2330 1.1 34	2301 0.8 24	0540 0.2 6	31 2330 0.8 24	0807 0.1 3	448 0.1 3	
	2219 0.9 27	○	1057 0.2 6	15 M 2253	0540 0.2 6	31 Tu 2330	0610 0.0 0	15 W 2330	0745 0.1 3	31 O 2330	0807 0.1 3	2330 0.8 24	15 2330 1.1 34	2301 0.8 24	0540 0.2 6	31 2330 0.8 24	0807 0.1 3	448 0.1 3	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Cristobal (Colon), Panama, 2011

Times and Heights of High and Low Waters

July				August				September							
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height				
h m 0842	ft -0.3	cm -9	16 0041	ft 1.1	cm 34	1 0047	ft 1.0	cm 30	16 0219	ft 0.6	cm 18				
F Sa	0857	-0.3	-9	Sa	0829	-0.1	-3	Tu	0915	0.1	3				
●				M	1500	0.5	15		1603	0.6	18				
2 Sa	0020	1.2	37		1923	0.3	9		2157	0.3	9				
	0910	-0.3	-9	17 Su	0132	1.0	30	2 Tu	0147	0.8	24				
					0934	-0.2	-6	17 W	0320	0.5	15				
					1642	0.4	12		0939	0.1	3				
					1941	0.3	9		1633	0.7	21				
					2114	0.2	6		2306	0.2	6				
									2349	-0.2	-6				
3 Su	0106	1.1	34	18 M	0222	0.9	27	3 W	0252	0.7	21	18 Th	0418	0.5	15
	0934	-0.3	-9		1006	-0.2	-6		1000	0.1	3		1001	0.8	24
					1711	0.5	15		1701	0.8	24	3 Sa	0527	0.4	12
					2130	0.4	12					Su	1015	0.0	0
					2245	0.1	3					0937	1.3	30	
4 M	0156	1.0	30	19 Tu	0312	0.7	21	4 Th	0400	0.6	18	18 Sa	1721	1.3	40
	0957	-0.3	-9		1032	-0.1	-3		1006	-0.1	-3		1701	1.1	34
	1659	0.4	12		1737	0.6	18		1710	1.1	34	4 Su	0045	-0.2	-6
	2026	0.3	9		2300	0.3	9					M	0624	0.4	12
												1013	0.3	9	
5 Tu	0250	0.9	27	20 W	0403	0.6	18	5 F	0000	0.0	0	19 O	1811	1.4	43
	1021	-0.3	-9		1054	-0.1	-3		0506	0.4	12				
	1720	0.6	18		1803	0.8	24		1043	-0.1	-3				
	2219	0.3	9						1755	1.2	37				
6 W	0347	0.7	21	21 Th	0014	0.3	9	6 Sa	0105	-0.1	-3	20 Su	0047	0.1	3
	1047	-0.3	-9		0453	0.5	15		0609	0.4	12		0555	0.4	12
	1751	0.8	24		1113	-0.1	-3		1122	-0.1	-3		1041	0.1	3
	2351	0.2	6						1800	1.0	30		1800	1.4	43
7 Th	0447	0.6	18	21 F	0115	0.2	6	6 Sa	0129	0.0	0	5 M	0137	-0.2	-6
	1115	-0.3	-9		0543	0.4	12		0634	0.3	9		0717	0.4	12
	1828	1.0	30		1131	0.0	0		1104	0.1	3		1153	0.0	0
					1855	0.9	27		1841	1.3	40		1901	1.4	43
8 F	0110	0.1	3	22 Sa	0208	0.1	3	6 Su	0105	-0.1	-3	6 Tu	0227	-0.2	-6
	0549	0.4	12		0630	0.3	9		0609	0.4	12		0808	0.4	12
	1146	-0.3	-9		1149	0.0	0		1122	-0.1	-3		1243	0.1	3
	1908	1.2	37		1923	1.0	30		1832	1.1	34		1950	1.3	40
9 Sa	0220	0.0	0	23 F	0258	0.0	0	7 Su	0204	-0.2	-6	21 W	0227	-0.2	-6
	0654	0.3	9		0716	0.2	6		0710	0.3	9		0858	0.4	12
	1219	-0.2	-6		1207	0.0	0		1203	-0.1	-3		1334	0.1	3
	1951	1.3	40		1954	1.1	34		1928	1.4	43		2039	1.2	37
10 Su	0325	-0.1	-3	24 Su	0348	0.0	0	8 M	0301	-0.2	-6	8 Th	0404	-0.1	-3
	0759	0.2	6		0802	0.1	3		0744	0.2	6		0949	0.4	12
	1253	-0.2	-6		1226	0.0	0		1244	-0.1	-3		1427	0.2	6
	2036	1.4	43		2027	1.2	37		2015	1.4	43		2128	1.1	34
11 M	0427	-0.2	-6	25 M	0452	-0.2	-6	9 Tu	0357	-0.2	-6	9 W	0450	0.0	0
	0908	0.1	3		0802	0.1	3		0906	0.2	6		1043	0.5	15
	1330	-0.2	-6		1226	0.0	0		1327	-0.1	-3		1527	0.2	6
	2123	1.4	43		2104	1.1	34		2104	1.4	43		2219	0.9	27
12 Tu	0527	-0.3	-9	26 Tu	0437	-0.1	-3	10 W	0452	-0.2	-6	10 Th	0409	0.0	0
	1021	0.1	3		0848	0.1	3		1006	0.2	6		0901	0.2	6
	1406	-0.1	-3		1246	0.0	0		1410	0.0	0		1317	0.1	3
	2212	1.4	43		2102	1.2	37		2152	1.3	40		2101	1.2	37
13 W	0626	-0.3	-9	27 W	0527	-0.1	-3	11 Th	0547	-0.2	-6	26 F	0446	0.0	0
	1144	0.0	0		0940	0.1	3		1113	0.2	6		0951	0.3	9
	1444	-0.1	-3		1309	0.0	0		1456	0.1	3		1410	0.1	3
	2301	1.4	43		2140	1.2	37		2241	1.2	37		2146	1.1	34
14 Th	0722	-0.3	-9	28 Th	0613	-0.1	-3	12 F	0640	-0.1	-3	27 Sa	0522	0.0	0
	1320	0.1	3		1044	0.0	0		1227	0.3	9		1048	0.4	12
	1522	0.0	0		1338	-0.1	-3		1550	0.2	6		1519	0.1	3
	2351	1.3	40		2221	1.2	37		2332	1.0	30		2235	1.0	30
15 F	0813	-0.3	-9	29 F	0654	-0.1	-3	14 Su	0024	0.9	27	29 M	0634	0.0	0
					1200	0.1	3		0811	0.0	0		1251	0.6	18
					1420	0.0	0		1443	0.4	12		1829	0.2	6
					2305	1.2	37		1839	0.3	9				
16 O												31 W	0154	0.6	18
												0754	0.0	0	
												1445	1.0	30	
												2137	0.0	0	
17 Su	0800	-0.1	-3	30 Su	0729	-0.1	-3	15 M	0119	0.8	24	31 W	0154	0.6	18
	1415	0.3	9		1317	0.2	6		0846	0.0	0		0754	0.0	0
	1719	0.2	6		1529	0.1	3		1528	0.5	15		1445	1.0	30
					2353	1.1	34		2026	0.3	9		2137	0.0	0
18 Su	0800	-0.1	-3	31 Su	0800	-0.1	-3	16 F	0039	0.7	21	31 W	0154	0.6	18
	1415	0.3	9		1317	0.2	6		0713	0.0	0		0754	0.0	0
	1719	0.2	6		1529	0.1	3		1349	0.8	24		1445	1.0	30
					2353	1.1	34		2010	0.1	3		2137	0.0	0

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Cristobal (Colon), Panama, 2011

Times and Heights of High and Low Waters

October					November					December					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0441	0.4	12	16 Su	1524	1.1	34	1 Tu	0626	0.6	18	16 W	1558	1.1	34
	0846	0.2	6		2344	-0.1	-3		1034	0.4	12		2354	-0.2	-6
	1553	1.4	43						1705	1.3	40				
	2330	-0.3	-9										0653	0.8	24
2 Su	0538	0.5	15	17 M	1604	1.2	37	2 W	0032	-0.3	-9	17 Th	0653	0.6	18
	0948	0.2	6						0709	0.7	21		1022	0.5	15
	1647	1.4	43						1145	0.4	12		1642	1.0	30
									1755	1.1	34		1810	0.7	21
3 M	0019	-0.3	-9	18 Tu	0012	-0.1	-3	3 Th	0108	-0.2	-6	18 F	0013	-0.1	-3
	0629	0.5	15		0704	0.4	12		0750	0.8	24		0707	0.7	21
	1048	0.2	6		0912	0.3	9		1255	0.4	12		1151	0.5	15
	●	1739	1.4	43		1644	1.2	37		1844	1.0	30		1729	0.9	27
4 Tu	0105	-0.3	-9	19 W	0038	-0.1	-3	4 F	0141	-0.1	-3	19 Sa	0034	-0.1	-3
	0716	0.6	18		0707	0.5	15		0829	0.9	27		0733	0.9	27
	1147	0.2	6		1024	0.4	12		1408	0.4	12		1315	0.4	12
	1830	1.3	40		○	1725	1.1	34		1933	0.8	24		1820	0.8	24
5 W	0149	-0.2	-6	20 Th	0102	-0.1	-3	5 Sa	0209	0.0	0	20 Su	0057	-0.1	-3
	0802	0.6	18		0724	0.6	18		0906	0.9	27		0807	1.1	34
	1246	0.2	6		1132	0.4	12		1523	0.3	9		1437	0.3	9
	1919	1.2	37						2025	0.6	18		1917	0.6	18
6 Th	0230	-0.1	-3	21 F	0125	-0.1	-3	6 Su	0232	0.1	3	21 M	0123	-0.1	-3
	0846	0.7	21		0751	0.7	21		0942	1.0	30		0846	1.3	40
	1348	0.3	9		1244	0.3	9		1643	0.3	9		1557	0.2	6
	2008	1.0	30						2125	0.5	15		2023	0.4	12
7 F	0308	0.0	0	22 Sa	0150	0.0	0	7 M	0247	0.2	6	22 Tu	0153	-0.1	-3
	0931	0.7	21		0825	0.8	24		1016	1.0	30		0930	1.4	43
	1454	0.3	9		1401	0.3	9		1802	0.2	6		1713	0.0	0
	2059	0.9	27		1942	0.8	24		2246	0.4	12		2142	0.3	9
8 Sa	0342	0.1	3	23 Su	0216	0.0	0	8 Tu	0249	0.2	6	23 W	0225	0.0	0
	1013	0.8	24		0905	1.0	30		1049	1.1	34		1018	1.5	46
	1608	0.3	9		1523	0.3	9		1915	0.1	3		1823	-0.1	-3
	2153	0.7	21						2316	0.2	6		2316	0.2	6
9 Su	0411	0.2	6	24 M	0245	0.0	0	9 W	1122	1.1	34	24 Th	0302	0.0	0
	1055	0.8	24		0951	1.1	34		2015	0.0	0		1110	1.6	49
	1732	0.3	9		1649	0.2	6					1926	-0.2	-6	
	2300	0.6	18		2150	0.5	15								
10 M	0433	0.3	9	25 Tu	0318	0.1	3	10 Th	1157	1.1	34	25 F	0059	0.2	6
	1134	0.9	27		1040	1.3	40		2104	0.0	0		0345	0.1	3
	1859	0.2	6		1812	0.0	0					1203	1.6	49	
					2316	0.4	12		○				2022	-0.3	-9
11 Tu	0031	0.4	12	26 W	0356	0.1	3	11 F	1234	1.2	37	26 Sa	0239	0.2	6
	0447	0.3	9		1133	1.4	43		2144	-0.1	-3		0440	0.1	3
	1213	0.9	27		1927	-0.1	-3					1258	1.5	46	
	○	2016	0.2		●				2114	-0.3	-9		2117	-0.2	-6
12 W	1250	1.0	30	27 Th	0056	0.3	9	12 Sa	1312	1.2	37	27 M	0355	0.3	9
	2115	0.1	3		0441	0.2	6		2218	-0.1	-3		0557	0.2	6
					1229	1.4	43					1354	1.5	46	
					2032	-0.2	-6					2200	-0.4	-12	
13 Th	1327	1.0	30	28 F	0232	0.3	9	13 Su	1353	1.2	37	28 W	0449	0.4	12
	2202	0.0	0		0538	0.2	6		2248	-0.2	-6		0729	0.3	9
					1326	1.5	46					1448	1.4	43	
					2129	-0.3	-9					2243	-0.4	-12	
14 F	1406	1.0	30	29 Sa	0350	0.4	12	14 M	1434	1.2	37	29 Tu	0534	0.5	15
	2240	0.0	0		0649	0.3	9		2313	-0.2	-6		0900	0.4	12
					1423	1.5	46					1541	1.2	37	
					2220	-0.3	-9					2322	-0.3	-9	
15 Sa	1445	1.1	34	30 Su	0450	0.4	12	15 Tu	1516	1.2	37	30 W	0615	0.7	21
	2314	-0.1	-3		0805	0.3	9		2334	-0.2	-6		1027	0.4	12
					1519	1.5	46					1632	1.1	34	
					2308	-0.4	-12					2356	-0.3	-9	
31 M	0540	0.5	15	31 M	0921	0.4	12								
					1613	1.4	43								
					2351	-0.3	-9								

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Bermuda Esso Pier, St. Georges Island, Bermuda, 2011

Times and Heights of High and Low Waters

January					February					March					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0554	3.0	91	16 Su	0523	2.6	79	1 Tu	0052	-0.2	-6	16 W	0006	-0.3	-9
	1225	0.1	3		1156	0.3	9		0721	2.8	85		0637	2.9	88
	1814	2.2	67		1738	1.9	58		1344	-0.1	-3		1300	-0.2	-6
2 Su															
	0011	-0.1	-3	17 M	0614	2.8	85	2 W	0138	-0.2	-6	17 Th	0100	-0.5	-15
	0647	3.1	94		1244	0.1	3		0801	2.8	85		0725	3.0	91
	1316	0.0	0		1830	2.0	61		1422	-0.2	-6		1344	-0.5	-15
3 M															
	0102	-0.2	-6	18 Tu	0027	-0.2	-6	3 Th	0219	-0.2	-6	18 F	0152	-0.6	-18
	0734	3.1	94		0701	3.0	91		0838	2.8	85		0811	3.1	94
	1401	-0.1	-3		1329	-0.1	-3		1456	-0.2	-6		1428	-0.7	-21
4 Tu															
	0149	-0.2	-6	19 W	0117	-0.3	-9	4 F	0257	-0.2	-6	19 Sa	0243	-0.7	-21
	0818	3.1	94		0747	3.2	98		0913	2.7	82		0857	3.1	94
	1443	-0.1	-3		1412	-0.3	-9		1528	-0.2	-6		1511	-0.8	-24
5 W															
	0234	-0.2	-6	20 Th	0206	-0.5	-15	5 Sa	0335	-0.2	-6	20 Su	0334	-0.7	-21
	0859	3.0	91		0832	3.2	98		0946	2.6	79		0943	3.0	91
	1522	-0.1	-3		1454	-0.4	-12		1600	-0.2	-6		1555	-0.8	-24
6 Th															
	0234	-0.2	-6	21 F	0255	-0.5	-15	6 Su	0412	-0.1	-3	21 M	0425	-0.6	-18
	0937	2.9	88		0917	3.2	98		1019	2.5	76		1030	2.8	85
	1559	-0.1	-3		1537	-0.5	-15		1631	-0.1	-3		1640	-0.7	-21
7 F															
	0315	-0.1	-3	21 Th	0255	-0.5	-15	6 Su	2243	2.4	73	21 M	0413	-0.2	-6
	1014	2.8	85		0917	3.2	98		2243	2.4	73		0918	2.4	73
	1635	0.0	0		1537	-0.5	-15		2243	2.4	73		1524	-0.2	-6
8 Sa															
	0437	0.1	3	22 Su	0346	-0.5	-15	7 M	0449	0.0	0	22 Tu	0519	-0.4	-12
	1051	2.6	79		1002	3.1	94		1052	2.3	70		1119	2.5	76
	1710	0.0	0		1621	-0.6	-18		1702	-0.1	-3		1728	-0.6	-18
9 Su															
	0519	0.2	6	24 M	0533	-0.3	-9	9 W	0612	0.3	9	24 Th	0055	2.8	85
	1127	2.4	73		1139	2.7	82		1203	1.9	58		0720	0.0	0
	1745	0.1	3		1753	-0.5	-15		1811	0.1	3		1312	2.0	61
10 M															
	0000	2.3	70	25 Tu	0018	2.8	85	10 Th	0043	2.3	70	25 F	0200	2.6	79
	0604	0.4	12		0633	-0.1	-3		0701	0.4	12		0831	0.2	6
	1206	2.2	67		1232	2.4	73		1246	1.8	55		1421	1.8	55
11 Tu															
	0045	2.2	67	26 W	0118	2.8	85	11 F	0136	2.2	67	26 Sa	0312	2.5	76
	0653	0.5	15		0739	0.1	3		0801	0.5	15		0947	0.3	9
	1248	2.0	61		1332	2.1	64		1341	1.6	49		1537	1.8	55
12 W															
	0135	2.2	67	27 Th	0224	2.7	82	12 Sa	0238	2.2	67	27 Su	0423	2.4	73
	0750	0.6	18		0852	0.2	6		0910	0.5	15		0722	0.4	12
	1337	1.8	55		1440	1.9	58		1448	1.6	49		1305	1.7	52
13 Th															
	0230	2.2	67	28 F	0334	2.6	79	13 Su	0345	2.3	70	28 M	0525	2.4	73
	0854	0.6	18		1007	0.3	9		1020	0.4	12		0829	0.4	12
	1434	1.7	52		1553	1.9	58		1600	1.7	52		1413	1.6	49
14 F															
	0330	2.3	70	29 Sa	0442	2.6	79	14 M	0448	2.5	76	29 Tu	0305	2.3	70
	1000	0.6	18		1115	0.2	6		1121	0.2	6		0940	0.4	12
	1538	1.7	52		1703	1.9	58		1706	1.8	55		1528	1.7	52
15 Sa															
	0428	2.4	73	30 Su	0543	2.7	82	15 Tu	0545	2.7	82	30 W	0413	2.4	73
	1102	0.5	15		1214	0.1	3		1213	0.0	0		1043	0.2	6
	1640	1.8	55		1803	2.0	61		1804	2.1	64		1638	1.9	58
31 M															
	0635	2.8	85	31 M	0001	-0.1	-3					31 Th	0018	0.1	3
	1303	0.0	0										0630	2.3	70
	2239	0.2	6										1241	0.0	0

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bermuda Esso Pier, St. Georges Island, Bermuda, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 F 0100	0.0	0		16 Sa 0028	-0.4	-12		1 M 0113	0.1	3	
0708	2.4	73		Sa 0634	2.7	82		Su 0709	2.2	67	
1315	-0.1	-3		1242	-0.6	-18		M 1307	0.0	0	
1927	2.5	76		Sa 1903	3.2	98		Su 1930	2.7	82	
2 Sa 0139	-0.1	-3		17 Su 0123	-0.6	-18		M 1936	3.4	104	
0743	2.4	73		M 0725	2.7	82		● 2017	3.0	91	
1347	-0.1	-3		1330	-0.7	-21		1 W 0204	0.1	3	
2001	2.6	79	O	1954	3.4	104		W 0753	2.2	67	
● 2035	2.7	82		M 2006	2.8	85		Th 1347	0.0	0	
4 M 0251	-0.2	-6		18 M 0215	-0.6	-18		● 2017	3.0	91	
0849	2.3	70		Su 0815	2.7	82		16 0202	-0.4	-12	
1449	-0.2	-6		M 1418	-0.7	-21		17 Tu 0756	2.6	79	
2108	2.7	82		Su 2043	3.5	107		14 1356	-0.6	-18	
5 Tu 0326	-0.1	-3		● 2042	2.9	88		● 2026	3.5	107	
0922	2.2	67		5 Th 0342	0.0	0		2 0244	0.0	0	
1521	-0.2	-6		W 0933	2.5	76		17 0833	2.2	67	
2142	2.7	82		M 1554	-0.6	-18		14 1426	-0.1	-3	
				Su 2222	3.3	101		● 2057	3.0	91	
6 W 0402	-0.1	-3		5 F 0342	0.0	0		1 0204	0.1	3	
0955	2.1	64		20 W 0953	2.5	76		W 0831	2.5	76	
1553	-0.1	-3		M 1505	-0.7	-21		16 1309	2.3	70	
2217	2.7	82		Su 2132	3.4	104		● 1635	0.0	0	
				● 2132	2.9	88		20 M 1740	0.2	6	
7 Th 0439	0.0	0		6 Th 0421	0.0	0		20 0445	0.0	0	
1029	2.0	61		21 F 1043	-0.4	-12		20 1039	2.3	70	
1626	0.0	0		Th 1644	-0.4	-12		5 Su 1026	2.4	73	
2255	2.6	79		Su 2314	3.0	91		W 1625	-0.2	-6	
								● 2254	3.0	91	
8 F 0518	0.1	3		6 F 0421	0.0	0		5 F 0431	-0.2	-6	
1107	1.9	58		21 Sa 0448	-0.4	-12		6 Su 1026	2.4	73	
1704	0.0	0		Th 1043	2.4	73		6 W 1117	2.3	70	
2337	2.5	76		1644	-0.4	-12		● 1716	0.0	0	
				Su 2314	3.0	91		21 M 1726	0.1	3	
9 Sa 0604	0.2	6		6 F 1605	0.0	0		21 0529	0.0	0	
1151	1.8	55		22 F 1737	-0.2	-6		21 Tu 1222	2.4	70	
1750	0.1	3		Sa 1136	2.2	67		22 W 1824	0.1	3	
				M 1737	-0.2	-6		● 22 0701	0.3	9	
10 Su 0027	2.5	76		7 Sa 0502	0.1	3		22 1319	2.3	70	
0657	0.3	9		22 F 1052	2.0	61		22 1925	0.5	15	
1246	1.8	55		Sa 11647	0.0	0					
1846	0.2	6		2319	2.7	82					
11 M 0126	2.4	73		8 Su 0547	0.2	6					
0759	0.3	9		23 M 1139	2.0	61					
1352	1.8	55		Su 1736	0.1	3					
● 1955	0.2	6									
12 Tu 0232	2.4	73		23 M 0034	2.6	79					
0904	0.2	6		8 F 0701	0.2	6					
1505	2.0	61		24 M 1306	2.1	64					
2111	0.1	3		Su 1907	0.3	9					
13 W 0340	2.4	73		9 M 0008	2.6	79					
1005	0.1	3		24 F 0752	0.3	6					
1614	2.2	67		Su 1405	2.1	64					
2223	0.0	0		● 1939	0.3	9					
14 Th 0443	2.5	76		10 M 0103	2.6	79					
1101	-0.1	-3		25 F 0733	0.2	6					
1716	2.5	76		Su 1338	2.1	64					
2329	-0.2	-6		● 1941	0.2	6					
15 F 0541	2.6	79		11 M 0222	2.2	67					
1153	-0.4	-12		25 W 0843	0.3	9					
1811	2.9	88		Su 1504	2.1	64					
				● 2113	0.5	15					
16 M 0126	2.4	73		11 W 0204	2.5	76					
0759	0.3	9		26 F 0831	0.1	3					
1352	1.8	55		Su 1445	2.3	70					
● 1955	0.2	6		● 2054	0.2	6					
17 Tu 0232	2.4	73		12 M 0309	2.4	73					
0904	0.2	6		27 F 0930	0.0	0					
1505	2.0	61		Su 1551	2.5	76					
2256	0.1	3		2206	0.1	3					
18 W 0340	2.4	73		12 W 1027	-0.2	-6					
1005	0.1	3		Su 1653	2.8	85					
1614	2.2	67		● 2312	-0.1	-3					
2223	0.0	0									
19 F 0443	2.5	76		13 M 0413	2.4	73					
1101	-0.1	-3		28 F 1116	0.2	6					
1716	2.5	76		Su 1734	2.3	70					
2329	-0.2	-6		● 2348	0.3	9					
20 Th 0541	2.5	76		14 M 0513	2.5	76					
1101	0.1	3		29 F 1155	0.1	3					
1716	2.5	76		Su 1816	2.5	76					
2329	-0.2	-6		● 1844	3.3	101					
21 F 0541	2.6	79		15 M 0013	-0.2	-6					
1153	-0.4	-12		30 F 0630	2.2	67					
1811	2.9	88		Su 1232	0.0	0					
				● 1854	2.6	79					
22 W 0541	2.6	79		16 M 0043	0.3	9					
1153	-0.4	-12		31 F 0610	2.5	76					
1811	2.9	88		Su 1214	-0.4	-12					
				● 1844	3.3	101					
23 Th 0541	2.6	79		17 M 0149	-0.2	-6					
1153	-0.4	-12		30 F 0713	2.1	64					
1811	2.9	88		Su 1308	0.0	0					
				● 1938	2.9	88					

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bermuda Esso Pier, St. Georges Island, Bermuda, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0220	0.1	3	16 Sa 0304	0.0	0	1 M 0313	-0.2	-6	1 Th 0411	-0.3	-9
0809 2.3	70		0900 2.6	79		0916 2.9	88		1032 3.5	107	
1405 -0.1	-3		1501 -0.1	-3		1522 -0.3	-9		1651 -0.1	-3	
● 2036 3.2	98		2124 3.1	94		2139 3.3	101		2252 2.9	88	
2 Sa 0300	0.0	0	17 Su 0344	0.0	0	2 Tu 0355	-0.2	-6	2 F 0458	-0.2	-6
0852 2.4	73		0943 2.6	79		1004 3.0	91		1125 3.4	104	
1450 -0.1	-3		1544 0.0	0		1612 -0.2	-6		1747 0.1	3	
2117 3.2	98		2203 3.0	91		2224 3.1	94		2345 2.7	82	
3 Su 0341	-0.1	-3	18 M 0421	0.1	3	3 W 0438	-0.3	-9	3 Sa 0551	0.0	0
0937 2.5	76		1024 2.6	79		1053 3.1	94		1223 3.2	98	
1536 -0.1	-3		1627 0.1	3		1705 -0.1	-3		1848 0.3	9	
2200 3.2	98		2242 2.8	85		2312 2.9	88		2318 2.4	73	
4 M 0423	-0.1	-3	19 Tu 0458	0.1	3	4 Th 0524	-0.2	-6	4 Su 0043	2.5	76
1023 2.6	79		1105 2.6	79		1146 3.1	94		0649 0.2	6	
1624 -0.1	-3		1709 0.3	9		1801 0.1	3		1327 3.1	94	
2245 3.1	94		2319 2.6	79					1956 0.5	15	
5 Tu 0506	-0.1	-3	20 W 0534	0.2	6	5 F 0003	2.7	82	5 M 0150	2.3	70
1113 2.7	82		1147 2.5	76		0614 -0.1	-3		0757 0.3	9	
1717 0.0	0		1753 0.4	12		1243 3.1	94		1437 2.9	88	
2331 2.9	88		2358 2.4	73		1903 0.2	6		2110 0.6	18	
6 W 0551	-0.1	-3	21 Th 0611	0.3	9	6 Sa 0059	2.5	76	6 Tu 0304	2.3	70
1206 2.7	82		1231 2.5	76		0710 0.0	0		0910 0.4	12	
1814 0.1	3		1841 0.6	18		1346 3.0	91		1550 2.9	88	
						● 2011 0.4	12		2220 0.6	18	
7 Th 0022	2.7	82	22 F 0039	2.2	67	7 Su 0203	2.3	70	7 W 0417	2.3	70
0640 -0.1	-3		0651 0.4	12		0812 0.1	3		1022 0.4	12	
1303 2.8	85		1318 2.4	73		1454 2.9	88		1655 2.9	88	
1917 0.2	6		1934 0.7	21		2124 0.5	15		2321 0.5	15	
8 F 0118	2.5	76	23 Sa 0125	2.1	64	8 M 0314	2.2	67	8 Th 0519	2.4	73
0734 0.0	0		0735 0.5	15		0921 0.2	6		1124 0.3	9	
1406 2.8	85		1412 2.4	73		1604 2.9	88		1751 2.9	88	
● 2025 0.3	9		● 2033 0.8	24		2235 0.5	15				
9 Sa 0220	2.3	70	24 Su 0219	2.0	61	9 Tu 0425	2.2	67	9 F 0011	0.4	12
0833 0.0	0		0827 0.5	15		1029 0.2	6		0611 2.6	79	
1511 2.9	88		1510 2.4	73		1709 3.0	91		1217 0.3	9	
2137 0.3	9		2137 0.8	24		2338 0.4	12		1838 2.9	88	
10 Su 0327	2.2	67	25 M 0319	1.9	58	10 W 0530	2.3	70	10 Th 0445	2.2	67
0935 0.0	0		0924 0.5	15		1132 0.2	6		0656 2.7	82	
1617 3.0	91		1609 2.5	76		1807 3.0	91		1303 0.2	6	
2246 0.3	9		2239 0.7	21					1918 2.9	88	
11 M 0434	2.2	67	26 Tu 0420	1.9	58	11 Th 0032	0.3	9	11 Su 0129	0.2	6
1039 0.0	0		1022 0.4	12		0625 2.4	73		0735 2.8	85	
1720 3.1	94		1705 2.7	82		1228 0.1	3		1344 0.1	3	
2350 0.2	6		2335 0.6	18		1857 3.1	94		1955 2.9	88	
12 Tu 0538	2.3	70	27 W 0518	2.0	61	12 F 0118	0.2	6	12 M 0203	0.2	6
1140 -0.1	-3		1117 0.3	9		0714 2.6	79		0811 2.9	88	
1818 3.2	98		1756 2.8	85		1317 0.0	0		1422 0.1	3	
						1941 3.1	94		2030 2.9	88	
13 W 0046	0.1	3	28 Th 0024	0.4	12	13 Sa 0159	0.1	3	13 Tu 0034	0.3	9
0636 2.3	70		0610 2.2	67		0757 2.7	82		0632 2.6	79	
1236 -0.1	-3		1209 0.2	6		1401 0.0	0		1237 0.0	0	
1910 3.2	98		1844 3.0	91		● 2021 3.1	94		● 1946 3.3	101	
14 Th 0136	0.0	0	29 F 0109	0.3	9	14 Su 0236	0.1	3	29 M 0200	-0.1	-3
0728 2.4	73		0658 2.4	73		0837 2.7	82		0807 3.2	98	
1328 -0.2	-6		1258 0.0	0		1442 0.0	0		1534 0.2	6	
1958 3.2	98		1928 3.2	98		2058 3.0	91		2136 2.7	82	
15 F 0222	0.0	0	30 Sa 0151	0.1	3	15 M 0311	0.1	3	15 Th 0242	-0.3	-9
0816 2.5	76		0745 2.6	79		0915 2.8	85		0854 3.4	104	
1416 -0.2	-6		1346 -0.1	-3		1522 0.1	3		1507 -0.3	-9	
● 2043 3.2	98		● 2012 3.3	101		2134 2.9	88		2117 3.3	101	
31 Su 0232	-0.1	-3	31 W 0830	2.8	85				31 Th 0326	-0.3	-9
1434 -0.2	-6		1434 -0.2	-6					0942 3.5	107	
2055 3.3	101		2055 3.3	101					1558 -0.3	-9	
									2203 3.1	94	

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Bermuda Esso Pier, St. Georges Island, Bermuda, 2011

Times and Heights of High and Low Waters

October					November					December													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm									
1 Sa	0435	-0.1 3	-3	16 Su	0410	0.4 2.9	12	1 Tu	0011	2.5 0.3	76 9	16 W	0512	0.5 2.8	15 85	1 Th	0046	2.4 0.4	73 12	16 F	0552	0.3 2.7	9 82
	1105	3.5 0.1	107 3	16 Su	1037	2.9 0.5	88 15	1 Tu	0611	3.0 2.7	91 82	16 W	1141	2.8 0.5	85 15	1 Th	0648	2.4 2.4	73 73	16 F	1208	2.7 0.1	82 3
	1731	2.7 0.1	82 3	17 M	1703	0.5 0.6	15 18	2 W	1241	3.0 2.7	91 82	17 Th	1812	0.5 2.7	15 82	2 F	1304	2.6 0.4	79 9	17 Sa	1832	2.5 0.1	76 3
	2328	2.7 0.3	82 9	17 M	2254	2.3 2.2	70 67	1 O	1911	0.4 0.5	12 15	16 O	1929	0.3 0.4	9 12	17 O	1923	0.1 0.1	76 3				
2 Su	0530	0.1 3.3	3 101	17 M	0448	0.5 1.18	15 85	2 W	0116	2.4 0.5	73 15	17 Th	0011	2.2 0.5	67 15	2 F	0146	2.4 0.6	73 18	17 Sa	0048	2.5 0.3	76 9
	1202	3.3 0.3	101 9	17 M	1118	2.8 0.6	18 18	2 W	0718	2.7 2.7	82 82	17 Th	1232	2.7 0.4	82 12	2 F	0752	2.4 2.4	73 73	17 O	1401	2.5 0.1	76 3
	1831	0.3 0.5	9 15	17 M	1747	0.6 2.3	18 67	2 O	2014	0.5 0.5	15 15	19 O	1903	0.4 0.4	12 12	2 O	2022	0.4 0.4	12 12	18 O	1923	0.1 0.1	76 3
				18 Tu	1206	2.7 0.7	18 21	3 Th	0225	2.4 0.6	73 18	18 F	0111	2.3 0.6	70 18	3 Sa	0247	2.4 0.7	73 21	18 Su	0150	2.6 0.4	79 12
3 M	0028	2.5 0.3	76 9	18 Tu	0532	0.6 1.206	18 18	3 Th	0830	2.4 2.6	73 79	18 F	0711	2.6 2.6	79 79	3 Sa	0859	2.4 2.2	73 67	18 Su	0802	2.6 2.4	79 73
	0631	3.0 3.0	91 91	18 Tu	1837	0.7 0.7	21 21	3 O	2115	0.5 0.5	15 15	19 O	1958	0.4 0.4	12 12	3 O	2114	0.5 0.5	15 15	19 O	2020	0.0 0.0	82 0
	1306	0.5 0.5	91 15					4 F	0331	2.4 0.7	73 21	19 Sa	0215	2.5 0.5	76 15	4 Su	0345	2.4 0.7	73 21	19 M	0254	2.7 0.3	82 9
	1938	0.5 0.5	15 15					4 W	0940	2.5 2.5	76 76	19 Sa	1003	2.6 2.6	76 64	4 O	1556	2.1 0.3	70 12	19 M	0915	2.3 0.3	82 9
4 Tu	0136	2.4 0.5	73 15	19 W	0626	0.7 2.7	64 82	4 O	2209	0.5 0.5	15 15	19 F	2056	0.3 0.3	9 9	4 O	2203	0.4 0.4	12 12	19 O	2120	0.0 0.0	82 0
	0741	2.9 2.9	88 88	19 O	1935	0.7 0.7	21 21																
	1416	0.6 0.6	18 18																				
	2048	0.6 0.6	18 18																				
5 W	0250	2.3 0.6	70 18	20 Th	0133	2.2 0.7	67 21	5 Sa	0429	2.5 0.6	76 18	20 Su	0321	2.7 0.4	82 12	5 M	0437	2.6 0.6	79 18	20 Tu	0359	2.9 0.2	88 6
	0856	0.6 2.7	18 82	20 M	0733	0.7 2.6	21 79	5 Sa	1042	2.4 2.4	73 73	20 Su	0935	2.5 2.5	76 76	5 M	1100	2.1 2.1	64 64	20 O	1026	2.2 0.4	67 6
	1526	2.7 0.6	82 18	20 F	1405	2.6 0.7	21 21	5 O	2256	0.5 0.5	15 15	20 O	2153	0.1 0.3	3 9	5 O	2250	0.4 0.4	12 12	20 O	2221	-0.1 -0.1	-3 -3
	2154	0.6 0.6	18 18	21 F	0846	2.3 2.7	70 82	6 Sa	1135	2.4 2.4	73 73	21 M	0422	3.0 0.3	91 91	6 Tu	0523	2.7 0.5	82 64	21 W	0501	3.1 0.1	94 3
6 Th	0400	2.4 0.6	73 18	21 W	1511	2.7 2.7	82 82	6 O	2337	0.4 0.4	12 12	21 O	1733	2.4 2.4	73 73	6 O	2333	0.3 0.3	9 9	21 O	1131	2.3 1.1	70 70
	1007	2.7 2.7	82 82	21 O	2136	0.5 0.5	15 15																
	1630	0.5 0.5	15 15																				
	2251	0.5 0.5	15 15																				
7 F	0500	2.5 0.5	76 15	22 Sa	0348	2.5 0.5	76 15	7 M	0600	2.8 0.4	85 12	22 Tu	0520	3.3 0.1	101 3	7 W	0606	2.8 0.4	85 12	22 Th	0559	3.3 -0.1	101 -3
	1109	0.5 0.5	15 15	22 M	0957	0.5 0.0	15 0	7 M	1220	2.8 3.7	85 94	22 Tu	1144	2.6 3.7	79 113	7 W	1234	2.8 3.0	85 91	22 O	1230	3.3 2.4	101 73
	1724	2.7 2.7	82 82	22 O	1613	2.7 2.9	82 88	7 O	1815	2.4 2.4	73 73	22 O	1739	2.6 2.6	79 79	7 O	2342	-0.2 -0.2	-6 -6	22 O	2321	2.3 -0.2	70 -6
	2338	0.5 0.5	15 15	23 Sa	0447	2.9 0.3	88 9	8 Tu	0014	0.3 3.0	9 91	23 F	0614	3.5 -0.1	107 82	8 Th	0015	0.3 2.9	9 88	23 F	0647	3.4 3.0	104 -6
8 Sa	0549	2.7 0.4	82 12	23 Su	1102	0.3 2.8	9 85	8 Tu	0638	3.0 0.3	9 9	23 W	1241	2.7 2.7	82 82	8 Th	1314	0.3 0.3	9 9	23 F	1323	-0.2 -0.2	-6 -6
	1200	0.4 2.7	12 82	23 O	1710	0.3 2.9	9 88	8 O	1804	0.0 2.9	73 73	23 O	1854	2.4 2.4	73 73	8 O	1902	2.2 2.2	67 67	23 O	1914	2.5 2.5	76 76
	1810	2.7 2.7	82 82	24 M	0542	3.2 0.0	98 0	9 W	0050	0.3 3.1	9 94	24 Th	0035	-0.3 3.7	-9 113	9 F	0055	0.2 3.0	6 91	24 Sa	0113	-0.4 3.5	-12 107
				24 M	1200	0.0 2.9	0 88	9 O	0714	3.1 3.1	9 94	24 O	0706	3.7 0.0	113 0	9 O	1334	-0.2 -0.2	-6 -6	24 O	2006	2.5 2.5	76 76
9 Su	0018	0.4 2.8	12 85	25 Tu	0110	-0.1 3.9	-3 119	10 F	0125	0.2 3.1	6 94	25 F	0126	-0.4 3.8	-12 116	10 Sa	0134	0.1 3.1	3 94	25 Su	0205	-0.4 3.4	-12 104
	0631	2.8 2.8	85 85	25 O	0633	3.5 3.5	107 107	10 O	0750	3.1 0.2	6 6	25 O	0757	-0.3 -0.3	-9 -9	10 O	0803	3.1 0.1	3 3	25 O	0835	3.4 0.3	104 -9
	1244	0.3 0.3	9 9	25 O	1254	-0.1 -0.1	-3 -3	10 O	1414	0.2 0.2	6 6	25 O	1425	-0.3 -0.3	-9 -9	10 O	1431	0.1 0.1	3 3	25 O	1501	-0.3 -0.3	-9 -9
	1849	2.7 2.7	82 82	25 O	1855	3.0 3.0	91 91	10 O	2007	2.4 2.4	73 73	25 O	2019	2.8 2.8	85 85	10 O	2020	2.3 2.3	70 70	25 O	2056	2.6 2.6	79 79
11 Tu	0126	0.3 3.1	9 94	26 W	0058	-0.3 3.7	-9 113	11 F	0200	0.2 3.2	6 98	26 Sa	0217	-0.4 3.7	-12 113	11 Sa	0212	0.1 3.1	3 94	26 M	0255	-0.4 3.3	-12 101
	0742	3.1 3.1	9 94	26 O	0723	3.7 3.9	113 119	11 O	0825	0.2 0.3	6 9	26 O	0848	3.7 0.2	9 -9	11 O	0841	3.1 0.1	3 3	26 W	0922	3.3 0.1	101 -9
	1400	0.2 0.2	6 6	26 O	1347	-0.3 -0.3	-9 -9	11 O	1450	0.2 0.2	6 6	26 O	1515	-0.3 -0.3	-9 -9	11 O	1508	0.1 0.1	3 3	26 O	1547	-0.3 -0.3	-9 -9
	0200	2.7 2.7	82 82	26 O	1945	3.0 2.9	91 88	11 O	2042	2.4 2.4	73 73	26 O	2110	2.7 2.7	82 82	11 O	2058	2.3 2.3	70 70	26 O	2145	2.6 2.6	79 79
12 W	0158	0.2 3.1	6 94	27 Th	0146	-																	

Settlement Point, Grand Bahama Island, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m 1 0514 Sa 1140 1730 2333	ft 3.0 -0.1 2.2 -0.4	cm 91 -3 67 -12	16 0442 Su 1108 1654 2256	ft 2.7 0.1 2.0 -0.2	cm 82 3 61 -6	1 0011 Tu 0639 1302 1857	ft -0.2 2.9 -0.1 2.3	cm -6 88 -3 70	16 0555 W 1215 1815	ft 3.1 -0.2 2.6	cm 94 -6 79
2 Su 0607 1232 1823	3.1 -0.1 2.3	17 M 0533 1158 1747 2348	2.9 0.0 2.2 -0.3	2 W 0057 0721 1341 ● 1939	-0.2 2.9 -0.2 2.4	17 Th 0021 0644 1303 1906	-0.5 3.3 -0.5 2.9	2 W 0617 1234 1836	2.7 0.0 2.4	16 0432 W 1052 1657 2306	2.9 -0.1 2.6 -0.3
	-3		88 0 67 -9		-6 88 -6 73		-15 101 -15 88		82 0 73		88 -9 88 -9
	70		73		73		73		73		73
	2.3		70		79		73		79		79
3 M 0024 0655 1320 1912	-0.4 3.1 -0.2 2.3	18 Tu 0621 1245 1838	3.1 -0.2 2.4	3 Th 0139 0800 1418 2018	-0.2 2.9 -0.2 2.4	18 F 0114 0733 1349 ○ 1957	-0.6 3.3 -0.6 3.1	3 Th 0040 0657 1311 1915	-0.1 2.7 -0.1 2.5	18 F 0003 0619 1233 1845	-0.4 3.2 -0.5 3.2
4 Tu 0111 0740 1404 ● 1958	-0.4 3.1 -0.2 2.3	19 W 0039 0708 1331 ○ 1927	-0.5 3.2 -0.4 2.6	4 F 0220 0837 1453 2056	-0.2 2.8 -0.2 2.5	19 Sa 0206 0821 1435 2048	-0.7 3.3 -0.7 3.3	4 F 0120 0733 1345 ● 1952	-0.1 2.7 -0.1 2.6	19 Sa 0058 0709 1320 ○ 1936	-0.6 3.2 -0.7 3.4
5 W 0156 0822 1445 2042	-0.3 3.0 -0.2 2.4	20 Th 0130 0755 1416 2017	-0.6 3.3 -0.5 2.8	5 Sa 0259 0912 1527 2134	-0.2 2.7 -0.2 2.5	20 Su 0259 0909 1522 2139	-0.7 3.2 -0.8 3.3	5 Sa 0159 0808 1418 2027	-0.1 2.7 -0.2 2.6	20 Su 0151 0759 1408 2027	-0.7 3.2 -0.8 3.5
6 Th 0240 0903 1525 2124	-0.2 2.9 -0.2 2.4	21 F 0221 0842 1502 2107	-0.6 3.3 -0.6 2.9	6 Su 0337 0947 1601 2211	-0.1 2.6 -0.1 2.4	21 M 0352 0958 1610 2231	-0.6 3.0 -0.7 3.2	6 Su 0236 0842 1450 2103	-0.1 2.6 -0.2 2.7	21 M 0244 0848 1456 2118	-0.7 3.1 -0.8 3.5
7 F 0322 0941 1603 2205	-0.1 2.8 -0.1 2.3	22 Sa 0312 0929 1548 2158	-0.6 3.3 -0.6 3.0	7 M 0417 1022 1635 2250	0.0 2.4 -0.1 2.4	22 Tu 0447 1050 1701 2327	-0.4 2.8 -0.6 3.1	7 M 0313 0916 1523 2138	-0.1 2.5 -0.1 2.7	22 Tu 0337 0938 1545 2211	-0.6 2.9 -0.7 3.4
8 Sa 0404 1020 1640 2247	0.0 2.7 -0.1 2.3	23 Su 0406 1018 1636 2252	-0.5 3.1 -0.6 3.0	8 Tu 0458 1059 1710 2331	0.1 2.2 0.0 2.4	23 W 0545 1144 1755 2321	-0.2 2.5 -0.4 2.4	8 Tu 0350 0950 1556 2215	0.0 2.4 -0.1 2.6	23 W 0431 1030 1637 2305	-0.4 2.7 -0.5 3.2
9 Su 0447 1058 1718 2330	0.1 2.5 0.0 2.3	24 M 0502 1109 1726 2348	-0.4 2.9 -0.6 2.9	9 W 0542 1138 1749 ○ 1854	0.2 2.1 0.0 -0.3	24 Th 0026 0648 1244 ○ 1854	3.0 0.0 2.3 -9	9 W 0429 1026 1630 2254	0.1 2.2 0.0 2.6	24 Th 0528 1126 1732 ○ 1732	-0.2 2.5 -0.3 -9
10 M 0533 1138 1757	0.2 2.3 0.0	25 Tu 0601 1203 1819	-0.2 2.6 -0.5	10 Th 0017 0632 1224 1834	2.3 0.3 2.0 0.1	25 F 0130 0755 1349 1958	2.8 0.1 2.1 -0.1	10 Th 0511 0755 1709 2339	0.2 0.1 0.1 2.5	25 F 0003 0628 1226 1832	3.0 0.0 2.3 -1
11 Tu 0016 0622 1222 1839	2.2 0.3 2.1 0.1	26 W 0048 0705 1302 ○ 1917	2.9 0.0 2.4 -0.4	11 F 0109 0729 1316 ○ 1926	2.3 0.4 1.9 0.1	26 Sa 0237 0904 1458 2105	2.7 0.2 2.1 0.0	11 F 0558 1149 1458 2105	0.3 2.0 2.1 0.1	26 Sa 0105 0732 1331 ○ 1936	2.8 0.1 2.2 0.1
12 W 0106 0716 1310 ● 1925	2.2 0.4 2.0 0.1	27 Th 0152 0814 1407 2019	2.8 0.1 2.2 -0.3	12 Sa 0207 0831 1417 2025	2.4 0.4 1.9 0.1	27 Su 0342 1009 1604 2209	2.7 0.2 2.1 0.0	12 Sa 0029 0653 1243 ○ 1849	2.5 0.4 2.0 0.2	27 Su 0210 0838 1439 2043	2.7 0.2 2.1 0.2
13 Th 0159 0815 1403 2015	2.3 0.4 1.9 0.1	28 F 0258 0923 1514 2122	2.8 0.1 2.1 -0.2	13 Su 0308 0934 1521 2127	2.5 0.3 1.9 0.0	28 M 0441 1105 1702 2306	2.7 0.1 2.2 0.0	13 Su 0127 0754 1345 1952	2.5 0.4 2.0 0.2	28 M 0313 0939 1543 2147	2.6 0.2 2.2 0.2
14 F 0254 0915 1500 2108	2.4 0.4 1.9 0.0	29 Sa 0402 1029 1619 2224	2.8 0.1 2.1 -0.2	14 M 0407 1032 1623 2228	2.7 0.2 2.1 -0.2	14 F 0230 0857 1452 2059	2.6 0.3 2.1 0.1	14 F 0511 1033 1638 2244	2.5 0.2 2.3 0.2	29 Tu 0411 1033 1638 2244	2.5 0.2 2.3 0.2
15 Sa 0349 1014 1558 2203	2.5 0.3 1.9 -0.1	30 Su 0501 1127 1718 2320	2.8 0.0 2.1 -0.2	15 Tu 0502 1126 1721 2326	2.9 0.0 2.4 -0.3	15 W 0333 0957 1557 2204	2.7 0.2 2.3 -0.1	15 W 0501 1118 1726 2333	2.5 0.1 2.4 0.1	30 Th 0545 1158 1808	2.6 0.1 2.5 0.1
31 M 0553 1217 1810	2.8 -0.1 2.2	31 M 1217 1810	85 -3 67								76

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Settlement Point, Grand Bahama Island, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0017	0.1	3	16 Sa 0553	3.0	91	1 Su 0030	0.1	3	16 W 0028	-0.4	-12
0625	2.6	79	1203	-0.6	-18	0627	2.3	70	0624	2.7	82
1234	0.0	0	1824	3.4	104	1229	-0.1	-3	1229	-0.6	-18
1846	2.7	82				1851	2.8	85	1858	3.6	110
2 Sa 0057	0.0	0	17 Su 0042	-0.5	-15	2 M 0110	0.0	0	17 Tu 0122	-0.4	-12
0702	2.5	76	0645	3.0	91	0705	2.3	70	0717	2.7	82
1308	-0.1	-3	1253	-0.7	-21	1305	-0.1	-3	1320	-0.6	-18
1922	2.8	85	O 1916	3.6	110	1928	2.9	88	O 1949	3.6	110
3 Su 0135	-0.1	-3	18 M 0136	-0.6	-18	3 Tu 0149	0.0	0	18 W 0214	-0.4	-12
0737	2.5	76	0737	3.0	91	0743	2.3	70	0809	2.7	82
1342	-0.1	-3	1342	-0.7	-21	1341	-0.1	-3	1411	-0.6	-18
● 1958	2.8	85	2007	3.6	110	● 2006	2.9	88	2040	3.5	107
4 M 0213	-0.1	-3	19 Tu 0229	-0.6	-18	4 W 0228	0.0	0	4 Th 0305	-0.4	-12
0812	2.5	76	0828	2.9	88	0820	2.3	70	0901	2.6	79
1415	-0.1	-3	1432	-0.7	-21	1417	-0.1	-3	1502	-0.5	-15
2033	2.8	85	2058	3.6	110	2043	3.0	91	2130	3.4	104
5 Tu 0250	0.0	0	20 W 0321	-0.5	-15	5 Th 0307	0.0	0	5 F 0356	-0.3	-9
0847	2.4	73	0919	2.8	85	0859	2.3	70	0953	2.5	76
1448	-0.1	-3	1522	-0.6	-18	1455	-0.1	-3	1553	-0.3	-9
2109	2.8	85	2150	3.4	104	2122	3.0	91	2220	3.2	98
6 W 0327	0.0	0	21 Th 0414	-0.4	-12	6 F 0347	0.0	0	6 Sa 0447	-0.2	-6
0923	2.3	70	1012	2.6	79	0939	2.2	67	1046	2.4	73
1522	0.0	0	1615	-0.4	-12	1535	0.0	0	1645	-0.1	-3
2146	2.8	85	2243	3.2	98	2204	2.9	88	2311	3.0	91
7 Th 0406	0.1	3	22 F 0509	-0.2	-6	7 Sa 0430	0.1	3	7 W 0538	0.0	0
1000	2.2	67	1107	2.4	73	1023	2.2	67	1141	2.3	70
1559	0.0	0	1709	-0.2	-6	1619	0.1	3	1740	0.1	3
2226	2.8	85	2338	3.0	91	2248	2.9	88			
8 F 0448	0.2	6	23 Sa 0606	0.0	0	8 Su 0516	0.1	3	8 M 0002	2.8	85
1040	2.1	64	1206	2.3	70	1112	2.2	67	0629	0.1	3
1639	0.1	3	1807	0.0	0	1709	0.1	3	1237	2.3	70
2310	2.7	82				2338	2.8	85	1837	0.3	9
9 Sa 0535	0.3	9	24 Su 0036	2.8	85	9 M 0606	0.1	3	24 Tu 0054	2.6	79
1127	2.1	64	0704	0.1	3	1207	2.3	70	0720	0.2	6
1727	0.2	6	1308	2.2	67	1807	0.2	6	1334	2.3	70
			O 1910	0.2	6				O 1936	0.4	12
10 Su 0000	2.7	82	25 M 0135	2.6	79	10 Tu 0032	2.8	85	10 W 0147	2.4	73
0627	0.3	9	0803	0.2	6	0700	0.1	3	0810	0.2	6
1222	2.1	64	1411	2.2	67	1308	2.4	73	1429	2.3	70
1823	0.2	6	2014	0.3	9	O 1912	0.2	6	2035	0.5	15
11 M 0057	2.7	82	26 Tu 0234	2.5	76	11 W 0131	2.7	82	26 Th 0239	2.3	70
0725	0.3	9	0858	0.2	6	0756	0.0	0	0857	0.2	6
1324	2.2	67	1511	2.3	70	1412	2.6	79	1522	2.4	73
● 1928	0.2	6	2116	0.4	12	2020	0.2	6	2133	0.4	12
12 Tu 0158	2.7	82	27 W 0329	2.4	73	12 Th 0232	2.7	82	27 F 0330	2.2	67
0825	0.2	6	0949	0.2	6	0853	-0.1	-3	0943	0.2	6
1430	2.3	70	1604	2.4	73	1514	2.8	85	1610	2.5	76
2037	0.1	3	2213	0.3	9	2127	0.1	3	2226	0.4	12
13 W 0301	2.8	85	28 Th 0420	2.4	73	13 F 0333	2.7	82	28 Sa 0419	2.2	67
0924	0.0	0	1034	0.2	6	0949	-0.3	-9	1026	0.1	3
1535	2.6	79	1651	2.5	76	1614	3.1	94	1654	3.3	101
2144	0.0	0	2303	0.3	9	2231	-0.1	-3	2314	0.3	9
14 Th 0401	2.9	88	29 F 0505	2.3	70	14 Sa 0432	2.7	82	29 Su 0505	2.2	67
1019	-0.2	-6	1114	0.1	3	1043	-0.4	-12	1108	0.0	0
1635	2.9	88	1734	2.6	79	1711	3.3	101	1738	2.8	85
2248	-0.2	-6	2348	0.2	6	2331	-0.2	-6	2359	0.2	6
15 F 0458	2.9	88	30 Sa 0547	2.3	70	15 Su 0529	2.7	82	30 M 0549	2.2	67
1112	-0.4	-12	1152	0.0	0	1136	-0.5	-15	1149	0.0	0
1731	3.2	98	1813	2.7	82	1805	3.5	107	1819	2.9	88
2347	-0.4	-12							31 Tu 0042	0.1	3
									0632	2.2	67
									1230	-0.1	-3
									1900	3.0	91

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Settlement Point, Grand Bahama Island, 2011

Times and Heights of High and Low Waters

July			August			September											
Time	Height		Time	Height		Time	Height		Time	Height							
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm						
1 F 0139 0730 1328 ● 1958	0.1 2.5 -0.1 3.3	3 76 -3 101	16 Sa 0226 0823 1423 2046	0.0 2.7 0.0 3.3	0 82 0 101	1 M 0236 0842 1447 2104	-0.1 3.3 -0.1 3.6	-3 101 -3 110	16 Tu 0310 0919 1524 2133	0.3 3.0 0.4 3.1	9 91 12 94	1 Th 0340 1001 1618 2220	-0.2 3.8 0.1 3.4	-6 116 3 104	16 F 0340 1000 1616 2212	0.5 3.2 0.6 2.7	15 98 18 82
2 Sa 0222 0816 1414 2041	0.0 2.6 -0.1 3.4	0 79 -3 104	17 Su 0307 0908 1508 2127	0.0 2.8 0.1 3.2	0 85 3 98	2 Tu 0321 0931 1539 2150	-0.1 3.4 0.0 3.5	-3 104 0 107	17 W 0345 0957 1605 2209	0.3 3.0 0.5 2.9	9 91 15 88	2 F 0430 1056 1715 2314	-0.1 3.7 0.3 3.1	-3 113 9 94	17 Sa 0415 1040 1658 2252	0.6 3.1 0.8 2.6	18 94 24 79
3 Su 0304 0903 1502 2125	-0.1 2.7 -0.1 3.4	-3 82 -3 104	18 M 0347 0951 1552 2207	0.1 2.8 0.2 3.0	3 85 6 91	3 W 0407 1022 1632 2240	-0.2 3.4 0.1 3.3	-6 104 3 101	18 Th 0420 1036 1646 2247	0.4 3.0 0.6 2.7	12 91 18 82	3 Sa 0524 1154 1816	0.1 3.6 0.4	3 110 12	18 Su 0454 1123 1745 2336	0.7 3.0 0.9 2.5	21 91 27 76
4 M 0348 0951 1552 2211	-0.1 2.8 0.0 3.3	-3 85 0 101	19 Tu 0426 1034 1636 2246	0.2 2.7 0.4 2.9	6 82 12 88	4 Th 0455 1116 1730 2332	-0.1 3.4 0.2 3.1	-3 104 6 94	19 F 0457 1118 1731 2327	0.5 2.9 0.7 2.6	15 88 79 79	4 Su 0013 0622 1257 1923	2.9 0.2 3.5 0.6	88 6 107 18	19 M 0539 1213 1837	0.7 3.0 0.9	21 91 27
5 Tu 0433 1042 1646 2259	-0.1 2.9 0.0 3.2	-3 88 0 98	20 W 0504 1118 1722 2327	0.2 2.7 0.5 2.7	6 82 15 82	5 F 0546 1214 1831	0.0 3.4 0.3	0 104 9 9	20 Sa 0536 1204 1820	0.6 2.9 0.8	18 88 24	5 M 0118 0727 1404 2031	2.8 0.4 3.3 0.7	85 12 101 21	20 Tu 0028 0632 1309 1936	2.5 0.8 3.0 1.0	76 24 91 30
6 W 0520 1136 1743 2351	-0.1 3.0 0.1 3.0	-3 91 3 91	21 Th 0543 1203 1810	0.3 2.7 0.6	9 82 18	6 Sa 0029 0642 1316	2.9 0.0 3.3	88 0 101	21 Su 0012 0621 1255	2.5 0.6 2.8	76 18 85	6 Tu 0227 0835 1510	2.7 0.5 3.3	82 101 101	21 W 0129 0732 1409 2036	2.5 0.8 3.0 0.9	76 24 91 27
7 Th 0611 1234 1845	-0.1 3.0 0.2	-3 91 6	22 F 0010 0625 1251 1902	2.5 0.4 2.6 0.7	76 82 79 21	7 Su 0131 0743 1421 2046	2.7 0.1 3.3 0.5	82 3 101 15	22 M 0104 0712 1351 2015	2.4 0.7 2.9 1.0	73 21 88 30	7 W 0335 0941 1612 2237	2.7 0.5 3.3 0.6	82 15 101 18	22 Th 0233 0837 1509 2134	2.6 0.7 3.2 0.8	79 21 98 24
8 F 0047 0705 1335 ● 1951	2.8 -0.1 3.1 0.3	85 -3 94 9	23 Sa 0056 0710 1343 ● 1959	2.3 0.4 2.6 0.8	70 12 79 24	8 M 0238 0847 1527 2153	2.6 0.2 3.3 0.5	79 6 101 15	23 Tu 0202 0809 1450 2115	2.4 0.7 2.9 0.9	73 21 88 27	8 Th 0436 1041 1706 2327	2.8 0.5 3.3 0.6	85 15 101 18	23 F 0335 0941 1606 2227	2.8 0.6 3.3 0.6	85 18 101 18
9 Sa 0147 0802 1438 2059	2.6 -0.1 3.1 0.3	79 -3 94 9	24 Sa 0148 0759 1437 2058	2.2 0.5 2.7 0.8	67 15 82 24	9 Tu 0345 0951 1629 2255	2.6 0.2 3.3 0.5	79 6 101 15	24 W 0304 0909 1547 2212	2.4 0.6 3.1 0.8	73 18 94 24	9 F 0529 1134 1754	2.9 0.5 3.3	88 15 101	24 Sa 0432 1041 1700 2316	3.1 0.4 3.5 0.3	94 12 107 9
10 Su 0251 0902 1541 2205	2.5 -0.1 3.2 0.3	76 -3 98 9	25 M 0244 0852 1532 2156	2.2 0.4 2.8 0.7	67 12 85 21	10 W 0447 1052 1725 2349	2.6 0.2 3.4 0.4	79 6 104 12	25 Th 0404 1008 1641 2304	2.6 0.5 3.3 0.6	79 15 101 18	10 Sa 0011 0615 1221 1836	0.5 3.0 0.4 3.3	15 91 101 101	25 Su 0526 1137 1751	3.4 0.2 3.6	104 6 110
11 M 0355 1003 1641 2307	2.5 -0.1 3.3 0.2	76 -3 101 6	26 Tu 0341 0945 1625 2250	2.2 0.4 3.0 0.6	67 12 91 18	11 Th 0543 1146 1815	2.7 0.2 3.4	82 6 104	26 F 0459 1104 1731 2351	2.8 0.3 3.5 0.4	85 9 107 12	11 Su 0050 0656 1303 1914	0.4 3.1 0.4 3.3	12 94 101 101	26 M 0004 0617 1231 1840	0.1 3.7 0.0 3.6	3 113 0 110
12 Tu 0457 1101 1737	2.5 -0.1 3.4	76 -3 104	27 W 0436 1038 1715 2339	2.3 0.3 3.1 0.5	70 9 79 15	12 F 0036 0633 1236 1900	0.3 2.8 0.2 3.4	9 85 6 104	27 Sa 0551 1157 1820 1900	3.1 0.2 3.6 3.4	94 6 110 104	12 M 0126 0734 1343 1951	0.4 3.2 0.4 3.2	12 98 12 98	27 Tu 0051 0707 1323 ● 1929	-0.1 3.9 -0.1 3.6	-3 119 -3 110
13 W 0003 0554 1156 1830	0.1 2.6 -0.1 3.4	3 79 -3 104	28 Th 0528 1129 1802	2.5 0.2 3.3	76 6 101	13 Sa 0119 0719 1321 ● 1941	0.3 2.9 0.2 3.4	9 88 6 104	28 Tu 0037 0641 1249 ● 1907	0.2 3.4 0.0 3.7	6 104 0 113	13 M 0200 0811 1421 2026	0.4 3.3 0.4 3.1	12 101 12 94	28 W 0138 0758 1415 2018	-0.2 4.1 -0.1 3.6	-6 125 -3 110
14 Th 0054 0647 1248 1918	0.1 2.6 -0.1 3.4	3 79 -3 104	29 F 0025 0618 1219 1848	0.3 2.7 0.1 3.5	9 82 3 107	14 Su 0158 0800 1404 2020	0.3 3.0 0.2 3.3	9 91 6 101	29 W 0122 0730 1340 1953	0.0 3.6 -0.1 3.8	0 110 -3 116	14 Th 0233 0846 1458 2101	0.4 3.3 0.5 3.0	12 101 15 91	29 Th 0226 0848 1508 2109	-0.3 4.1 -0.1 3.4	-9 125 -3 104
15 F 0142 0737 1337 ● 2003	0.0 2.7 -0.1 3.4	0 82 -3 104	30 Sa 0110 0706 1308 ● 1933	0.2 2.9 0.0 3.6	6 88 0 110	15 M 0235 0840 1444 2057	0.3 3.0 0.3 3.2	9 91 9 98	30 Tu 0207 0819 1431 2041	-0.1 3.8 -0.1 3.7	-3 116 -3 113	15 Th 0306 0923 1537 2136	0.4 3.2 0.5 2.9	12 98 15 88	30 F 0315 0941 1602 2201	-0.2 4.0 0.0 3.3	-6 122 0 101
			31 Su 0153 0754 1357 2018	0.0 3.1 -0.1 3.6	0 94 -3 110				31 W 0252 0909 1524 2129	-0.2 3.8 0.0 3.6	-6 116 0 110						

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Settlement Point, Grand Bahama Island, 2011

Times and Heights of High and Low Waters

October					November					December						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa	0407	-0.1	-3	16 Su	0342	0.5	15	1 Tu	0542	0.3	9	16 W	0445	0.4	12	
	1035	3.9	119	16 Su	1009	3.2	98	1210	3.3	101	1113	3.0	91	0015	2.5	76
	1659	0.2	6	1632	0.6	18	1839	0.3	9	1741	0.4	12	0616	0.3	9	
	2257	3.1	94	2224	2.5	76				2342	2.4	73	1233	2.8	85	
2 Su	0502	0.1	3	17 M	0421	0.6	18	2 W	0044	2.6	79	17 Th	0539	0.5	15	
	1134	3.6	110	1051	3.1	94	0646	0.5	15	1203	2.9	88	0113	2.4	73	
	1800	0.4	12	1717	0.7	21	1311	3.0	91	1832	0.4	12	0716	0.4	12	
	2358	2.9	88	2310	2.5	76	●	1939	0.4	12	1327	2.5	76	1232	2.7	82
3 M	0603	0.3	9	18 Tu	0507	0.7	21	3 Th	0149	2.6	79	18 F	0040	2.5	76	
	1236	3.4	104	1139	3.0	91	0752	0.6	18	0641	0.5	15	0211	2.4	73	
	1904	0.5	15	1807	0.8	24	1411	2.9	88	1259	2.9	88	0818	0.5	15	
	●						2037	0.5	15	1925	0.3	9	1421	2.4	73	
4 Tu	0104	2.8	85	19 W	0002	2.5	76	4 F	0251	2.6	79	19 Sa	0141	2.7	82	
	0709	0.5	15	0601	0.7	21	0857	0.6	18	0747	0.4	12	0306	2.5	76	
	1341	3.3	101	1233	3.0	91	1509	2.8	85	1359	2.8	85	0918	0.5	15	
	2010	0.6	18	●	1902	0.7	21	2129	0.4	12	2021	0.1	3	1514	2.3	70
5 W	0213	2.7	82	20 Th	0102	2.5	76	5 Sa	0347	2.7	82	20 Su	0243	2.9	88	
	0818	0.6	18	0703	0.7	21	0956	0.6	18	0855	0.3	9	0357	2.6	79	
	1446	3.2	98	1601	2.7	82	1605	2.8	85	1500	2.8	85	1013	0.5	15	
	2113	0.6	18	2216	0.4	12	2116	0.0	0	2213	0.2	6	1536	2.4	73	
6 Th	0319	2.8	85	21 F	0206	2.7	82	6 Su	0436	2.8	85	21 M	0343	3.1	94	
	0924	0.7	21	0810	0.7	21	1048	0.5	15	1000	0.2	6	0443	2.7	82	
	1546	3.1	94	1432	3.1	94	1649	2.6	79	1600	2.8	85	1103	0.4	12	
	2209	0.6	18	2056	0.5	15	2258	0.3	9	2211	-0.2	-6	1652	2.2	67	
7 F	0417	2.9	88	22 Sa	0308	2.9	88	7 M	0520	2.9	88	22 Tu	0441	3.4	104	
	1024	0.6	18	0917	0.5	15	1135	0.5	15	1101	0.0	0	0527	2.8	85	
	1639	3.1	94	1532	3.1	94	1731	2.6	79	1658	2.8	85	1149	0.3	9	
	2256	0.5	15	2150	0.3	9	2336	0.3	9	2305	-0.4	-12	1737	2.2	67	
8 Sa	0507	3.0	91	23 Su	0407	3.2	98	8 Tu	0559	3.0	91	23 W	0536	3.6	110	
	1115	0.6	18	1019	0.3	9	1217	0.4	12	1158	-0.2	-6	0608	2.9	88	
	1725	3.0	91	1628	3.2	98	1811	2.6	79	1753	2.9	88	1231	0.2	6	
	2338	0.5	15	2242	0.1	3				2358	-0.5	-15	1819	2.2	67	
9 Su	0550	3.1	94	24 M	0502	3.5	107	9 W	0013	0.2	6	24 Th	0629	3.7	113	
	1200	0.5	15	1118	0.1	3	0637	3.1	94	1253	-0.3	-9	0017	0.0	0	
	1806	3.0	91	1723	3.3	101	1256	0.3	9	1848	2.9	88	0648	3.0	91	
				2332	-0.1	-3	1850	2.6	79				1312	0.1	3	
10 M	0015	0.4	12	25 Tu	0555	3.8	116	10 Th	0049	0.2	6	25 F	0051	-0.6	-18	
	0629	3.2	98	1214	-0.1	-3	0714	3.2	98	0722	3.8	116	0057	-0.1	-3	
	1242	0.4	12	1815	3.3	101	1335	0.3	9	1346	-0.3	-9	0727	3.0	91	
	1844	3.0	91	●	1907	3.3	101	●	1927	2.5	76	1941	2.9	88	0758	3.5	107
11 Tu	0050	0.4	12	26 W	0022	-0.3	-9	11 F	0125	0.1	3	11 Sa	0143	-0.5	-15	
	0706	3.3	101	0647	4.0	122	0751	3.2	98	0813	3.8	116	0137	-0.1	-3	
	1320	0.4	12	1307	-0.2	-6	1413	0.2	6	1438	-0.3	-9	0806	3.1	94	
	●	1920	2.9	●	1907	3.3	101	2005	2.5	76	2034	2.8	85	1431	0.0	0
12 W	0124	0.3	9	27 Th	0112	-0.4	-12	12 Sa	0201	0.2	6	12 M	0235	-0.5	-15	
	0741	3.3	101	0738	4.0	122	0828	3.2	98	0904	3.7	113	0217	-0.1	-3	
	1358	0.4	12	1400	-0.2	-6	1452	0.3	9	1530	-0.3	-9	0845	3.1	94	
	1956	2.9	88	1958	3.3	101	2043	2.5	76	2127	2.8	85	1510	0.0	0	
13 Th	0157	0.3	9	28 F	0202	-0.4	-12	13 Su	0238	0.2	6	13 Tu	0328	-0.3	-9	
	0817	3.3	101	0830	4.0	122	0906	3.2	98	0956	3.5	107	0258	0.0	0	
	1435	0.4	12	1453	-0.2	-6	1531	0.3	9	1622	-0.2	-6	0924	3.1	94	
	2031	2.8	85	2050	3.2	98	2122	2.4	73	2221	2.7	82	1550	0.0	0	
14 F	0231	0.4	12	29 Sa	0253	-0.3	-9	14 M	0317	0.3	9	14 Tu	0422	-0.1	-3	
	0853	3.3	101	0922	3.9	119	0945	3.1	94	1047	3.2	98	0342	0.0	0	
	1512	0.5	15	1547	-0.1	-3	1611	0.3	9	1714	0.0	0	1006	3.0	91	
	2107	2.7	82	2144	3.0	91	2204	2.4	73	2317	2.6	79	1631	0.0	0	
15 Sa	0305	0.4	12	30 Su	0346	-0.2	-6	15 Tu	0358	0.3	9	15 W	0517	0.1	3	
	0930	3.2	98	1016	3.7	113	1027	3.1	94	1139	3.0	91	0430	0.1	3	
	1551	0.5	15	1642	0.1	3	1654	0.4	12	1806	0.1	3	1050	2.9	88	
	2144	2.6	79	2240	2.9	88	2250	2.4	73				1715	0.0	0	
31 M	0442	0.0	0	31 M	1112	3.5	107						2323	2.5	76	
				1739	0.2	6							31 Sa	0634	0.3	9
				2340	2.7	82							0030	2.3	70	
													1238	2.3	70	
													1858	0.0	0	

Time meridian 75° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to mean lower low water which is the chart datum of soundings.

Magueyes Island, Puerto Rico, 2011

Times and Heights of High and Low Waters

January					February					March					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0909 2249	0.7 -0.2	21 -6	16 Su	0858 2233	0.7 -0.3	21 -9	1 Tu	0942	0.5	15	16 W	0922	0.6	18
2 Su	0940 2333	0.7 -0.3	21 -9	17 M	0928 2318	0.7 -0.3	21 -9	2 W	0020 0959	-0.2 0.5	-6 15	17 Th	0002 0943	-0.1 0.6	-3 18
3 M	1010	0.7	21	18 Tu	0959	0.7	21	3 Th	0058 1010	-0.1 0.5	-3 15	18 F	0055 0953	-0.1 0.5	-3 15
4 Tu	0014 1039	-0.2 0.7	-6 21	19 W	0001 1028	-0.3 0.7	-9 21	4 F	0130 1012	-0.1 0.4	-3 12	19 Sa	0145 0942	0.0 0.4	0 12
●				O				4 F	1012	0.4	12	4 F	0126 0849	0.0 0.3	0 9
5 W	0050 1102	-0.2 0.6	-6 18	20 Th	0040 1053	-0.2 0.7	-6 21	5 Sa	0158 1002	0.0 0.4	0 12	5 Sa	0214 0832	0.1 0.3	3 9
								5 Sa	1724 2047	0.1 0.2	3 6	5 Sa	1458 2251	0.1 0.3	3 9
6 Th	0120 1119	-0.1 0.6	-3 18	21 F	0115 1108	-0.1 0.6	-3 18	6 Su	0219 0935	0.1 0.3	3 9	6 Su	0305 0756	0.1 0.2	3 6
								6 Su	1650 2246	0.1 0.2	3 6	6 Su	1449 2226	0.0 0.3	0 9
7 F	0143 1126	-0.1 0.5	-3 15	22 Sa	0145 1104	0.0 0.5	0 15	7 M	0216 0846	0.1 0.3	3 9	7 M	0417 0639	0.1 0.2	3 6
								7 M	1640	0.0	0	7 M	1451 2334	-0.1 0.3	-3 9
8 Sa	0156 1119	0.0 0.5	0 15	23 Su	0159 1029	0.1 0.4	3 12	8 Tu	0736 1646	-0.1 -0.1	-3 -3	8 Tu	1500	-0.1	-3
								8 Tu	1859 2229	0.1 0.2	3 6	8 Tu	1624	-0.2	-6
9 Su	0146 1051	0.1 0.4	3 12	24 M	0051 0916	0.1 0.4	3 12	9 W	0644 1703	0.3 -0.1	9 -3	9 W	0121 1517	0.3 -0.2	9 -6
								9 W	1755	0.1	3	O			
10 M	0956 1944	0.4 0.1	12 3	25 Tu	0751 1758	0.4 0.0	12 0	10 Th	0639 1733	0.4 -0.2	12 -6	10 Th	0351 1541	0.4 -0.2	12 -6
								10 Th	1754	-0.2	-6	10 Th	1541	-0.2	-6
11 Tu	0844 1925	0.4 0.0	12 0	26 W	0716 1827	0.5 -0.1	15 -3	11 F	0657 1816	0.4 -0.2	12 -6	11 F	0500 1903	0.4 -0.2	12 -6
								11 F	1816	-0.2	-6	11 F	1611	-0.2	-6
12 W	0758 1938	0.4 0.0	12 0	27 Th	0725 1915	0.5 -0.2	15 -6	12 Sa	0724 1919	0.5 -0.2	15 -6	12 Sa	0547 1648	0.5 -0.2	15 -6
								12 Sa	1919	-0.2	-6	12 Sa	1648	-0.2	-6
13 Th	0751 2010	0.5 -0.1	15 -3	28 F	0750 2020	0.6 -0.2	18 -6	13 Su	0754 2041	0.6 -0.2	18 -6	13 Su	0626 1735	0.5 -0.2	15 -6
								13 Su	2041	-0.2	-6	13 Su	1735	-0.2	-6
14 F	0805 2054	0.5 -0.2	15 -6	29 Sa	0821 2134	0.6 -0.3	18 -9	14 M	0825 2200	0.6 -0.2	18 -6	14 M	0702 1840	0.6 -0.1	18 -3
								14 M	2200	-0.2	-6	14 M	1840	-0.1	-3
15 Sa	0829 2144	0.6 -0.2	18 -6	30 Su	0851 2241	0.6 -0.3	18 -9	15 Tu	0855 2306	0.6 -0.2	18 -6	15 Tu	0734 2052	0.6 -0.1	18 -3
								15 Tu	2306	-0.2	-6	15 Tu	2052	-0.1	-3
				31 M	0918 2335	0.6 -0.2	18 -6					31 Th	0015 0712	0.1 0.3	3 9
													0712	0.3	9
													1400	0.1	3
													2021	0.3	9

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Magueyes Island, Puerto Rico, 2011

Times and Heights of High and Low Waters

April						May						June							
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0142	0.2	6	16 Sa	1241	0.0	0	1 Su	1206	-0.1	-3	16 M	1143	-0.3	-9	1 W	1207	-0.3	-9
	0654	0.3	9		2123	0.5	15		2148	0.5	15		2218	0.7	21		2257	0.7	21
	1333	0.1	3																
	2054	0.3	9																
2 Sa	0319	0.1	3	17 Su	1233	-0.1	-3	2 M	1219	-0.2	-6	17 Tu	1211	-0.3	-9	2 Th	1234	-0.3	-9
	0605	0.2	6		2205	0.6	18		2221	0.6	18		2259	0.7	21		2333	0.7	21
	1321	0.0	0																
	2129	0.4	12		O														
3 Su	1320	-0.1	-3	18 M	1246	-0.2	-6	3 Tu	1236	-0.3	-9	18 W	1244	-0.4	-12	3 F	1300	-0.3	-9
	2207	0.4	12		2253	0.6	18		2259	0.6	18		2343	0.7	21				
4 M	1327	-0.1	-3	19 Tu	1311	-0.3	-9	4 W	1258	-0.3	-9	19 Th	1317	-0.3	-9	4 Sa	0009	0.7	21
	2250	0.4	12		2347	0.6	18		2342	0.6	18		1325	-0.3	-9		1349	-0.1	-3
5 Tu	1341	-0.2	-6	20 W	1341	-0.3	-9	5 Th	1321	-0.3	-9	20 F	0027	0.7	21	5 Su	0042	0.7	21
	2341	0.4	12		1348	-0.3	-9		1346	-0.3	-9		1348	-0.3	-9		1349	0.0	18
																		0	
6 W	1359	-0.2	-6	21 Th	0049	0.6	18	6 F	0031	0.6	18	21 Sa	0108	0.6	18	6 M	0110	0.7	21
	1413	-0.3	-9		1413	-0.3	-9		1346	-0.3	-9		1413	-0.2	-6		1356	-0.1	-3
																		15	
7 Th	0047	0.5	15	22 F	0157	0.6	18	7 Sa	0122	0.6	18	22 Su	0142	0.6	18	7 Tu	0125	0.7	21
	1421	-0.3	-9		1445	-0.3	-9		1410	-0.3	-9		1426	-0.1	-3		1343	0.0	15
																		3	
8 F	0207	0.5	15	23 Sa	0302	0.5	15	8 Su	0212	0.6	18	23 M	0203	0.5	15	8 W	0117	0.6	18
	1447	-0.3	-9		1511	-0.2	-6		1432	-0.2	-6		1416	0.0	0		1247	0.1	15
																		3	
9 Sa	0323	0.5	15	24 Su	0354	0.5	15	9 M	0256	0.6	18	24 Tu	0203	0.5	15	9 Th	0012	0.5	15
	1514	-0.2	-6		1525	-0.1	-3		1445	-0.1	-3		1325	0.1	3		1123	0.1	15
																		18	
10 Su	0423	0.6	18	25 M	0431	0.4	12	10 Tu	0329	0.6	18	25 W	0124	0.4	12	10 F	1025	0.1	3
	1542	-0.2	-6		1513	0.0	0		1437	0.0	0		1210	0.1	3		2057	0.6	18
																		0	
11 M	0510	0.6	18	26 Tu	0450	0.4	12	11 W	0347	0.5	15	26 Th	1117	0.1	3	11 Sa	1007	-0.1	-3
	1605	-0.1	-3		1421	0.1	3		1353	0.1	3		2123	0.4	12		2054	0.7	-21
																		-3	
12 Tu	0547	0.6	18	27 W	0449	0.4	12	12 Th	0325	0.4	12	27 F	1052	0.0	0	12 Su	1018	-0.2	-6
	1609	0.0	0		1317	0.1	3		1246	0.1	3		2058	0.5	15		2114	0.7	-21
																		-6	
13 W	0615	0.5	15	28 Th	0409	0.3	9	13 F	1151	0.1	3	28 Sa	1049	-0.1	-3	13 M	1044	-0.3	-9
	1530	0.1	3		1232	0.1	3		2107	0.5	15		2105	0.6	18		2144	0.8	24
																		-6	
14 Th	0628	0.4	12	29 F	1208	0.0	0	14 Sa	1124	0.0	0	29 Su	1059	-0.2	-6	14 Tu	1119	-0.3	-9
	1419	0.1	3		2101	0.4	12		2114	0.6	18		2124	0.6	18		2218	0.8	24
	2050	0.3	9															-6	
15 F	0029	0.2	6	30 Sa	1201	-0.1	-3	15 Su	1124	-0.2	-6	30 M	1117	-0.2	-6	15 W	1157	-0.3	-9
	0612	0.3	9		2121	0.5	15		2142	0.7	21		2151	0.6	18		2253	0.8	24
	1317	0.1	3															-6	
	2052	0.4	12															24	

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Magueyes Island, Puerto Rico, 2011

Times and Heights of High and Low Waters

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to mean lower low water which is the chart datum of soundings.

Magueyes Island, Puerto Rico, 2011

Times and Heights of High and Low Waters

October						November						December								
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height			
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m			
	0237	0.1	3		0209	0.1	3		0308	0.1	3		0228	0.2	6		0143			
1 Sa	1447	0.9	27	16 Su	1353	0.8	24	1 Tu	1548	0.8	24	16 W	1432	0.9	27	1 Th	1348	0.6	18	
2 Su	0313	0.1	3	17 M	0235	0.1	3	2 W	0327	0.2	6	17 Th	0232	0.2	6	2 F	0137	0.3	9	
3 M	1713	0.9	27	18 Tu	0301	0.2	6	3 Th	0319	0.3	9	18 F	0225	0.2	6	3 Sa	0000	0.3	9	
●					1605	0.9	27		1642	0.7	21		1523	0.8	24		0936	0.6	18	
4 Tu	0433	0.2	6	19 W	0326	0.2	6	4 F	0221	0.4	12	19 Sa	0143	0.3	9	4 Su	0849	0.6	18	
●	1757	0.9	27		1650	0.9	27		1638	0.7	21		1502	0.7	21		2136	0.6	18	
5 W	0511	0.3	9	20 Th	0345	0.3	9	5 Sa	0103	0.4	12	20 Su	0036	0.4	12	5 M	0831	0.6	18	
	1829	0.9	27		1725	0.9	27		0925	0.6	18		0956	0.6	18		2149	-0.1	-3	
	0953	0.4	12		1215	0.5	15		1215	0.5	15		2337	0.3	9					
	1858	0.8	24		1547	0.6	18		1547	0.6	18									
6 Th	0541	0.4	12	21 F	0346	0.4	12	6 Su	0011	0.4	12	21 M	0847	0.7	21	6 Tu	0841	0.7	21	
	1850	0.8	24		1751	0.9	27		0832	0.7	21		2307	0.2	6		2222	-0.2	-6	
7 F	0420	0.4	12	22 Sa	0308	0.5	15	7 M	0839	0.7	21	22 Tu	0853	0.8	24	7 W	0903	0.7	21	
	0711	0.5	15		1804	0.8	24		2341	0.2	6		2306	0.1	3		0921	0.8	24	
	0953	0.4	12													2303	-0.2	-6		
	1858	0.8	24																	
8 Sa	0234	0.5	15	23 Su	0201	0.5	15	8 Tu	0900	0.8	24	23 W	0921	0.9	27	8 Th	0932	0.7	21	
	0728	0.6	18		0844	0.6	18		2349	0.2	6		2326	0.0	0		2346	-0.3	-9	
	1200	0.5	15		1207	0.5	15													
	1853	0.7	21		1749	0.7	21													
9 Su	0137	0.5	15	24 M	0101	0.5	15	9 W	0929	0.8	24	24 Th	0958	0.9	27	9 F	1004	0.8	24	
	0801	0.7	21		0838	0.8	24										1034	0.8	24	
	1332	0.5	15																	
	1830	0.6	18																	
10 M	0109	0.5	15	25 Tu	0025	0.4	12	10 Th	0004	0.1	3	25 F	1042	0.9	27	10 Sa	0002	-0.1	-3	
	0835	0.7	21		0906	0.9	27		1002	0.8	24		2357	-0.1	-3		0228	-0.3	-9	
	1522	0.5	15																	
	1729	0.6	18																	
11 Tu	0058	0.4	12	26 W	0016	0.3	9	11 F	0025	0.0	0	26 Sa	0034	-0.1	-3	11 Su	0030	-0.2	-6	
	0911	0.8	24		0947	0.9	27		1041	0.8	24		1128	-0.9	27		0106	-0.2	-6	
●																1139	0.7	21		
12 W	0059	0.3	9	27 Th	0029	0.2	6	12 Sa	0049	0.0	0	27 Su	0111	-0.1	-3	12 M	0057	-0.1	-3	
	0949	0.8	24		1036	1.0	30		1124	0.8	24		1214	-0.9	27		0138	-0.1	-3	
																1200	0.6	18		
13 Th	0109	0.3	9	28 F	0055	0.1	3	13 Su	0114	0.0	0	28 M	0145	-0.1	-3	13 Tu	0121	-0.1	-3	
	1033	0.8	24		1133	1.0	30		1212	0.9	27		1258	0.8	24		0201	0.0	0	
																1206	0.6	18		
14 F	0125	0.2	6	29 Sa	0128	0.0	0	14 M	0138	0.0	0	29 Tu	0214	0.0	0	14 W	0141	0.0	0	
	1125	0.8	24		1237	0.9	27		1302	0.9	27		1333	0.8	24		0210	0.5	3	
																1152	0.5	15		
15 Sa	0145	0.2	6	30 Su	0203	0.0	0	15 Tu	0201	0.0	0	30 W	0232	0.1	3	15 Th	0152	0.0	0	
	1231	0.8	24		1348	0.9	27		1350	0.9	27		1353	0.7	21		0141	0.5	3	
																1109	0.2	6		
																2250	0.2	6		
31 M	0238	0.0	0		1455	0.9	27									31 Sa	0952	0.4	12	
																		2034	0.1	3

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

San Juan, Puerto Rico, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa 0702	1.7	52		16 Su 0634	1.5	46		1 Tu 0107	-0.3	-9	
1335	0.4	12		1302	0.5	15		0825	1.5	46	
1757	0.8	24		1705	0.8	24		1447	0.4	12	
				2348	-0.4	-12		1935	0.8	24	
2 Su 0027	-0.4	-12		17 M 0723	1.6	49		0156	-0.3	-9	
0755	1.7	52		1353	0.5	15		0905	1.4	43	
1429	0.4	12		1805	0.8	24		1523	0.3	9	
1852	0.8	24						● 2026	0.9	27	
3 M 0118	-0.4	-12		18 Tu 0040	-0.4	-12		0242	-0.2	-6	
0844	1.7	52		0810	1.7	52		0941	1.4	43	
1517	0.4	12		1439	0.4	12		1556	0.3	9	
1945	0.8	24		1906	0.9	27		2115	1.0	30	
4 Tu 0207	-0.3	-9		19 W 0134	-0.4	-12		19 F 0327	-0.1	-3	
0928	1.6	49		0855	1.7	52		1013	1.3	40	
1600	0.4	12		1523	0.4	12		1627	0.2	6	
● 2037	0.8	24		○ 2008	0.9	27		2203	1.0	30	
5 W 0254	-0.3	-9		20 Th 0228	-0.4	-12		5 Sa 0411	0.0	0	
1010	1.6	49		0939	1.8	55		1043	1.3	40	
1639	0.4	12		1604	0.3	9		1657	0.2	6	
2128	0.9	27		2110	1.0	30		2249	1.1	34	
6 Th 0339	-0.2	-6		21 F 0323	-0.3	-9		6 Su 0455	0.1	3	
1047	1.5	46		1022	1.7	52		1111	1.2	37	
1715	0.3	9		1645	0.2	6		1725	0.1	3	
2218	0.9	27		2212	1.1	34		2335	1.1	34	
7 F 0424	-0.1	-3		22 Sa 0420	-0.2	-6		7 M 0539	0.2	6	
1122	1.5	46		1104	1.6	49		1138	1.1	34	
1749	0.3	9		1726	0.1	3		1755	0.1	3	
2310	0.9	27		2316	1.2	37					
8 Sa 0509	0.1	3		23 Su 0521	0.0	0		8 Tu 0023	1.1	34	
1154	1.4	43		1145	1.5	46		0626	0.3	9	
1821	0.3	9		1808	0.0	0		1205	1.0	30	
9 Su 0002	1.0	30		24 M 0020	1.3	40		1827	0.0	0	
0556	0.2	6		0624	0.1	3		9 W 0112	1.1	34	
1224	1.3	40		1228	1.3	40		0716	0.4	12	
1852	0.2	6		1853	-0.1	-3		1233	0.9	27	
10 M 0057	1.0	30		25 Tu 0127	1.4	43		1902	-0.1	-3	
0646	0.3	9		0732	0.2	6		2014	1.5	46	
1252	1.2	37		1312	1.2	37		0839	0.3	9	
1924	0.1	3		1940	-0.2	-6		1337	0.9	27	
11 Tu 0153	1.1	34		26 W 0234	1.4	43		● 2003	-0.3	-9	
0742	0.4	12		0845	0.3	9		0913	0.5	15	
1322	1.0	30		1358	1.0	30		F 1345	0.8	24	
1959	0.0	0		● 2031	-0.3	-9		2031	-0.2	-6	
12 W 0251	1.1	34		27 Th 0342	1.5	46		1025	1.2	37	
0843	0.5	15		1000	0.4	12		0812	0.4	12	
1354	0.9	27		1449	0.9	27		1305	0.8	24	
● 2037	0.0	0		2126	-0.3	-9		1943	-0.1	-3	
13 Th 0349	1.2	37		27 Sa 0449	1.5	46		2103	-0.3	-9	
0951	0.5	15		1114	0.4	12		0528	1.4	43	
1431	0.9	27		1545	0.8	24		1154	0.4	12	
2120	-0.1	-3		2223	-0.3	-9		1434	0.8	24	
14 F 0446	1.3	40		28 Su 0501	1.3	40		2125	-0.2	-6	
1059	0.6	18		1114	0.4	12		2028	1.4	43	
1516	0.8	24		1545	0.8	24		1244	0.4	12	
2207	-0.2	-6		2223	-0.3	-9		1739	0.8	24	
15 Sa 0541	1.4	43		28 M 0649	1.5	46		2222	-0.3	-9	
1204	0.5	15		1317	0.4	12		1302	1.3	40	
1607	0.8	24		1744	0.8	24		0946	0.5	15	
2256	-0.3	-9						1137	0.4	12	
31 M 0015	-0.3	-9						1637	0.9	27	
0740	1.5	46						2049	-0.2	-6	
1405	0.4	12						2302	-0.1	-3	
1841	0.8	24									

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Juan, Puerto Rico, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0137	0.2	6	16 Sa	0113	0.1	3	1 Su	0215	0.3	9	16 M	0219	0.2	6
	0741	1.1	34		0702	1.2	37		0718	0.9	27		0713	0.9	27
	1341	0.2	6		1310	-0.1	-3		1321	0.0	0		1325	-0.4	-12
	2004	1.3	40		1953	1.7	52		2026	1.5	46		2039	1.9	58
2 Sa	0226	0.2	6	17 Su	0219	0.1	3	2 M	0303	0.3	9	17 Tu	0319	0.2	6
	0814	1.0	30		0751	1.1	34		0754	0.8	24		0806	0.9	27
	1412	0.1	3		1356	-0.3	-9		1355	-0.1	-3		1415	-0.5	-15
	2046	1.4	43	O	2049	1.8	55		2106	1.5	46	O	2133	1.9	58
3 Su	0312	0.2	6	18 M	0322	0.1	3	3 Tu	0348	0.3	9	18 W	0415	0.2	6
	0845	1.0	30		0839	1.0	30		0829	0.7	21		0858	0.8	24
	1442	0.0	0		1443	-0.4	-12		1430	-0.1	-3		1506	-0.4	-12
	● 2127	1.4	43		2145	1.9	58	●	2146	1.6	49		2225	1.9	58
4 M	0357	0.2	6	19 Tu	0421	0.1	3	4 W	0431	0.3	9	19 Th	0508	0.2	6
	0916	0.9	27		0928	0.9	27		0904	0.7	21		0952	0.8	24
	1513	0.0	0		1532	-0.4	-12		1505	-0.2	-6		1558	-0.4	-12
	2207	1.4	43		2239	1.9	58		2227	1.6	49		2316	1.8	55
5 Tu	0440	0.3	9	20 W	0518	0.1	3	5 Th	0514	0.3	9	20 F	0559	0.2	6
	0946	0.8	24		1018	0.9	27		0940	0.7	21		1046	0.8	24
	1544	-0.1	-3		1623	-0.4	-12		1543	-0.2	-6		1650	-0.3	-9
	2246	1.4	43		2334	1.8	55		2308	1.6	49		1654	-0.1	-3
6 W	0522	0.3	9	21 Th	0614	0.2	6	6 F	0557	0.4	12	21 Sa	0005	1.7	52
	1016	0.8	24		1110	0.8	24		1018	0.7	21		0647	0.3	9
	1617	-0.1	-3		1715	-0.3	-9		1623	-0.2	-6		1143	0.8	24
	2327	1.4	43						2350	1.6	49		1743	-0.1	-3
7 Th	0605	0.3	9	22 F	0029	1.7	52	7 Sa	0640	0.4	12	22 Su	0053	1.6	49
	1047	0.7	21		0710	0.2	6		1103	0.7	21		0734	0.3	9
	1653	-0.1	-3		1204	0.8	24		1708	-0.1	-3		1244	0.8	24
					1810	-0.2	-6					1839	0.0	0	
8 F	0011	1.4	43	23 Sa	0124	1.6	49	8 Su	0034	1.6	49	23 M	0138	1.4	43
	0650	0.4	12		0804	0.3	9		0723	0.4	12		0817	0.3	9
	1122	0.7	21		1303	0.8	24		1158	0.8	24		1348	0.9	27
	1734	-0.1	-3		1908	-0.1	-3		1759	0.0	0		1938	0.2	6
9 Sa	0058	1.4	43	24 Su	0218	1.5	46	9 M	0120	1.6	49	24 Tu	0221	1.3	40
	0738	0.4	12		0856	0.3	9		0806	0.4	12		0857	0.2	6
	1205	0.7	21		1407	0.8	24		1303	0.8	24		1453	1.0	30
	1822	-0.1	-3	O	2010	0.0	0		1900	0.0	0	O	2041	0.3	9
10 Su	0149	1.5	46	25 M	0311	1.4	43	10 Tu	0208	1.5	46	25 W	0301	1.2	37
	0828	0.4	12		0944	0.3	9		0849	0.3	9		0934	0.2	6
	1301	0.8	24		1514	0.9	27		1416	1.0	30		1556	1.1	34
	1918	-0.1	-3		2114	0.1	3		2009	0.2	6		2149	0.4	12
11 M	0242	1.5	46	26 Tu	0400	1.3	40	11 W	0256	1.5	46	26 Th	0340	1.1	34
	0919	0.4	12		1027	0.3	9		0932	0.2	6		1009	0.1	3
	1409	0.8	24		1619	1.0	30		1531	1.1	34		1654	1.2	37
	● 2023	0.0	0		2221	0.2	6		2126	0.2	6		2258	0.5	15
12 Tu	0336	1.5	46	27 W	0445	1.2	37	12 F	0346	1.4	43	27 Th	0418	1.0	30
	1008	0.4	12		1105	0.2	6		1016	0.1	3		1045	0.0	0
	1525	1.0	30		1719	1.1	34		1642	1.3	40		1747	1.3	40
	2135	0.0	0		2326	0.3	9		2245	0.3	9				
13 W	0430	1.4	43	28 Th	0526	1.1	34	13 F	0437	1.2	37	28 Tu	0003	0.5	15
	1055	0.3	9		1140	0.2	6		1101	-0.1	-3		0457	0.9	27
	1640	1.1	34		1812	1.2	37		1747	1.5	46		1121	0.0	0
	2250	0.1	3									1835	1.4	43	
14 Th	0522	1.4	43	29 F	0027	0.3	9	14 Sa	0002	0.3	9	29 W	0215	0.4	12
	1140	0.2	6		0605	1.0	30		0528	1.1	34		0538	0.8	24
	1749	1.3	40		1214	0.1	3		1148	-0.2	-6		1159	-0.1	-3
					1900	1.3	40		1847	1.7	52		1919	1.5	46
15 F	0003	0.1	3	30 Sa	0123	0.3	9	15 Su	0113	0.3	9	30 Tu	0157	0.4	12
	0612	1.3	40		0642	0.9	27		0621	1.0	30		0620	0.7	21
	1225	0.0	0		1248	0.0	0		1236	-0.3	-9		1237	-0.2	-6
	1853	1.5	46		1944	1.4	43		1944	1.8	55		2003	1.5	46
												31 Tu	0246	0.4	12
												0702	0.7	21	
												1316	-0.2	-6	
												2045	1.6	49	

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Juan, Puerto Rico, 2011

Times and Heights of High and Low Waters

July					August					September				
Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0345	0.5	15	16 0417	0.4	12	1 0418	0.4	12	16 0436	0.4	12	1 0456	0.1	3
F 0801	0.8	24	Sa 0915	1.0	30	M 0950	1.3	40	Tu 1039	1.4	43	Th 1140	1.9	58
1417	-0.2	-6	Sa 1523	-0.1	-3	M 1554	0.1	3	M 1645	0.4	12	Tu 1759	0.5	15
● 2144	1.8	55	Sa 2227	1.7	52	Sa 2233	1.8	55	Sa 2253	1.4	43	Th 2326	1.4	43
2 0425	0.4	12	17 0455	0.4	12	2 0456	0.3	9	17 W 0506	0.3	9	2 0543	0.0	0
Sa 0856	0.9	27	Su 1008	1.0	30	Tu 1051	1.4	43	W 1126	1.4	43	F 1241	1.9	58
1505	-0.2	-6	Su 1611	0.0	0	Tu 1653	0.2	6	W 1733	0.5	15	F 1904	0.6	18
2224	1.8	55	Su 2303	1.6	49	Su 2313	1.6	49	Su 2321	1.3	40	Sa 2334	1.1	34
3 0503	0.4	12	18 0529	0.3	9	3 W 0536	0.2	6	18 Th 0536	0.3	9	3 Sa 0012	1.3	40
Su 0955	0.9	27	M 1102	1.1	34	W 1153	1.5	46	Th 1213	1.5	46	Sa 0633	0.0	0
1556	-0.1	-3	M 1659	0.2	6	W 1756	0.3	9	Th 1821	0.6	18	Su 1344	1.9	58
2304	1.8	55	Su 2336	1.5	46	Su 2354	1.5	46	Su 2349	1.2	37	Su 2012	0.6	18
4 0540	0.3	9	19 0602	0.3	9	4 Th 0619	0.0	0	19 F 0609	0.2	6	4 Su 0103	1.2	37
M 1056	1.0	30	Tu 1155	1.2	37	Th 1256	1.6	49	F 1302	1.5	46	M 0729	0.0	0
1651	0.0	0	Tu 1749	0.3	9	Th 1903	0.5	15	F 1912	0.7	21	Su 1450	1.9	58
2343	1.7	52										○ 2121	0.7	21
5 0618	0.2	6	20 0007	1.3	40	5 F 0037	1.3	40	20 Sa 0017	1.1	34	5 M 0200	1.1	34
Tu 1200	1.1	34	W 0633	0.2	6	F 0704	0.0	0	Sa 0644	0.2	6	M 0829	0.0	0
1751	0.2	6	W 1248	1.2	37	F 1402	1.7	52	Sa 1354	1.5	46	M 1555	1.8	55
			W 1841	0.4	12	Su 2014	0.6	18	F 2007	0.7	21	Su 2229	0.7	21
6 0023	1.6	49	21 0037	1.2	37	6 Sa 0123	1.2	37	21 Su 0049	1.1	34	6 Tu 0304	1.1	34
W 0657	0.1	3	Th 0705	0.2	6	Sa 0755	-0.1	-3	Su 0725	0.2	6	W 0932	0.1	3
1307	1.3	40	Th 1343	1.3	40	Sa 1508	1.7	52	Su 1449	1.5	46	W 1657	1.8	55
1857	0.3	9	Su 1937	0.5	15	○ 2129	0.6	18	○ 2107	0.8	24	Su 2329	0.7	21
7 0104	1.4	43	22 0106	1.1	34	7 Su 0213	1.1	34	22 M 0128	1.0	30	7 W 0412	1.1	34
Th 0739	0.0	0	F 0740	0.1	3	Su 0849	-0.1	-3	M 0811	0.1	3	W 1036	0.1	3
1415	1.4	43	F 1438	1.3	40	M 1615	1.7	52	M 1546	1.5	46	W 1754	1.8	55
2010	0.4	12	Su 2038	0.6	18	Su 2243	0.6	18	Su 2211	0.8	24	Th 2317	0.8	24
8 0148	1.3	40	23 0138	1.0	30	8 M 0310	1.0	30	23 Tu 0216	1.0	30	8 Th 0020	0.7	21
F 0824	-0.1	-3	Sa 0818	0.1	3	M 0947	-0.2	-6	Tu 0903	0.1	3	F 0518	1.2	37
1522	1.5	46	Sa 1534	1.4	43	M 1718	1.8	55	Tu 1642	1.6	49	Th 1137	0.2	6
● 2128	0.5	15	○ 2144	0.7	21	Su 2351	0.6	18	Su 2311	0.8	24	W 1843	1.7	52
9 0235	1.1	34	24 0214	0.9	27	9 Tu 0412	1.0	30	24 W 0316	1.0	30	9 F 0103	0.7	21
Sa 0913	-0.2	-6	Su 0900	0.0	0	Tu 1047	-0.2	-6	W 0959	0.1	3	F 0619	1.3	40
1628	1.6	49	Su 1630	1.4	43	Tu 1817	1.8	55	W 1735	1.7	52	Sa 1234	0.2	6
2247	0.5	15	Su 2250	0.7	21							Su 1926	1.7	52
10 0327	1.0	30	25 0257	0.9	27	10 W 0049	0.6	18	25 Th 0004	0.8	24	10 Sa 0140	0.6	18
Su 1005	-0.3	-9	M 0946	0.0	0	W 0516	1.0	30	Th 0424	1.1	34	Su 0634	1.6	49
1732	1.7	52	M 1725	1.5	46	W 1146	-0.1	-3	Th 1058	0.1	3	M 1246	0.4	12
			Su 2354	0.7	21	Su 1911	1.8	55	Su 1824	1.8	55	Su 2004	1.6	49
11 0001	0.5	15	26 0348	0.9	27	11 Th 0139	0.6	18	26 F 0050	0.7	21	11 Su 0213	0.6	18
M 0424	0.9	27	Tu 1036	-0.1	-3	Th 0619	1.0	30	W 0533	1.2	37	26 M 0735	1.8	55
1100	-0.3	-9	Tu 1816	1.6	49	Th 1242	-0.1	-3	F 1157	0.1	3	M 1350	0.4	12
1831	1.8	55	Su 1958	1.8	55	Su 1910	1.8	55	Su 2038	1.6	49	Su 1910	1.8	55
12 0106	0.5	15	27 0049	0.7	21	12 F 0222	0.6	18	27 Sa 0132	0.6	18	12 Tu 0244	0.5	15
Tu 0524	0.9	27	W 0446	0.9	27	F 0717	1.1	34	Sa 0639	1.3	40	W 0851	1.6	49
1155	-0.4	-12	W 1127	-0.1	-3	F 1334	0.0	0	Su 1256	0.1	3	W 1505	0.4	12
1926	1.8	55	Su 1904	1.7	52	Su 2040	1.7	52	○ 2109	1.5	46	○ 2039	1.6	49
13 0203	0.5	15	28 0138	0.6	18	13 Sa 0300	0.5	15	28 Tu 0212	0.5	15	13 W 0314	0.4	12
W 0624	0.9	27	Th 0546	0.9	27	Sa 0812	1.2	37	Su 0742	1.4	43	W 0934	1.6	49
1250	-0.3	-9	Th 1218	-0.1	-3	Sa 1424	0.1	3	Su 1355	0.1	3	M 1551	0.5	15
2017	1.8	55	Su 1949	1.8	55	○ 2117	1.7	52	○ 2036	1.9	58	Su 2139	1.4	43
14 0253	0.4	12	29 0221	0.6	18	14 Su 0334	0.5	15	29 M 0251	0.4	12	14 W 0343	0.4	12
Th 0723	0.9	27	F 0648	1.0	30	Su 0903	1.3	40	W 0842	1.6	49	Th 1017	1.7	52
1343	-0.3	-9	F 1310	-0.1	-3	Su 1512	0.2	6	M 1454	0.2	6	W 1636	0.6	18
2104	1.8	55	Su 2032	1.8	55	Su 2152	1.6	49	Su 2117	1.8	55	Su 2208	1.3	40
15 0337	0.4	12	30 0301	0.5	15	15 M 0406	0.4	12	30 Tu 0331	0.3	9	15 Th 0413	0.3	9
F 0820	0.9	27	Sa 0748	1.1	34	Sa 0952	1.3	40	Sa 0942	1.7	52	W 1059	1.7	52
1434	-0.2	-6	Sa 1403	-0.1	-3	Sa 1559	0.3	9	Sa 1554	0.3	9	Th 1721	0.6	18
○ 2147	1.7	52	● 2113	1.9	58	Sa 2223	1.5	46	Sa 2159	1.7	52	Su 2236	1.2	37
31 0340	0.5	15	Su 0849	1.2	37				31 W 0412	0.2	6			
Su 1457	0.0	0	Su 1457	0.0	0				W 1040	1.9	58			
			Su 2153	1.8	55				W 1656	0.4	12			
									W 2242	1.5	46			

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

San Juan, Puerto Rico, 2011

Times and Heights of High and Low Waters

October			November			December							
Time	Height		Time	Height		Time	Height		Time	Height			
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm		
1 Sa 1224 1859 2351	0.0	0	16 Su 1159 1840 2259	0.2	6	1 Tu 0033 1356 2037	1.1	34	16 W 0533 1258 1947	0.2	6		
	2.1	64		1.8	55		0642 1449	0.1	3		0717 1404	1.1	34
	0.6	18		0.8	24		1356 2037	1.9	58		1404 2040	1.5	46
	1.2	37		1.0	30			0.6	18		2040	0.4	12
2 Su 1324 2002	0.0	0	17 M 1243 1928 2341	0.2	6	2 W 0141 0744 2127	1.1	34	17 Th 0032 0628 2027	1.0	30		
	2.0	61		1.8	55		0744 1449	0.3	9		0821 1445	0.4	12
	0.7	21		0.8	24		1449 2127	1.7	52		1445 2119	1.4	43
				1.0	30			0.6	18			0.3	9
3 M 1426 ● 2104	0.048	1.2	18 Tu 1330 2016	0.3	9	3 Th 0252 0850 2212	1.2	37	18 F 0144 0733 2107	1.1	34		
	0.1	3		1.8	55		0850 1539	0.4	12		1426 2107	1.7	52
	1.9	58		0.8	24		1539 2212	1.6	49		2107	0.5	15
	0.7	21						0.5	15				
4 Tu 1527 2203	0.152	1.2	19 W 0650 1419 2103	1.1	34	4 F 0402 0958 2251	1.3	40	19 Sa 0259 0847 2149	1.3	40		
	0.2	6		0.3	9		0958 1624	0.5	15		0847 1512	0.5	15
	1.8	55		1.8	55		1624 2251	1.5	46		1512 2149	1.6	49
	0.7	21		0.8	24			0.5	15			0.3	9
5 W 1624 2255	0.301	1.2	20 Th 0752	1.1	34	5 Sa 0505 1105 2327	1.4	43	20 Su 0411 1006 2233	1.5	46		
	0.914	0.3		0.4	12		1105 1706	0.6	18		1006 1601	0.6	18
	1.8	55		1.8	55		1706 2327	1.4	43		1601 2233	1.5	46
	0.7	21		0.7	21			0.4	12			0.1	3
6 Th 1716 2340	0.411	1.2	21 F 0902 1559 2232	1.2	37	6 Su 0600 1209 2319	1.5	46	21 M 0518 1125 2319	1.7	52		
	1.021	0.4		0.4	12		1209 1744	0.6	18		1125 1651	0.6	18
	1.7	52		1.8	55		1744 2319	1.3	40		1651 2319	1.4	43
	0.6	18							0.0	0			
7 F 1801	0.517	1.3	22 Sa 1016	1.4	43	7 M 0001 0649 2314	0.3	9	22 Tu 0620 1238 2314	1.8	55		
	1.124	0.4		0.5	15		0649 1307	1.6	49		1238 1743	0.6	18
	1.6	49		1.7	52		1307 2314	0.6	18		1743 2314	1.3	40
	1.6	49		0.5	15			1.2	37				
8 Sa 1224 1841	0.018	0.6	23 Su 1130	1.6	49	8 Tu 0034 0733 1857	0.2	6	23 W 0007 0718 1836	-0.2	-6		
	0.615	1.5		0.5	15		0733 1359	1.7	52		0718 1346	2.0	61
	0.5	15		1.7	52		1359 1857	0.6	18		1346 1836	0.5	15
	1.5	46		0.3	9			1.1	34			0.9	27
9 Su 1319 1917	0.052	0.5	24 M 1241	1.8	55	9 W 0108 0815 1933	0.2	6	24 Th 0057 0814 1930	-0.3	-9		
	0.706	1.6		0.5	15		0815 1448	1.8	55		0814 1448	2.1	64
	1.6	49		1.6	49		1448 1933	0.6	18		1448 1930	0.5	15
	1.5	46						1.1	34			0.8	24
10 M 1410 1950	0.123	0.5	25 Tu 0727	0.2	6	10 Th 0142 0856 2008	0.1	3	25 F 0149 0908 ●	-0.3	-9		
	0.752	1.7		2.0	61		0856 1533	1.8	55		0908 1545	2.1	64
	1.4	52		0.5	15		1533 2008	0.6	18		1545 ●	0.5	15
	1.4	43		1.5	46			1.0	30			1.0	30
11 Tu 1458 ○ 2022	0.154	0.4	26 W 0824	0.0	0	11 F 0217 0936 2042	0.1	3	26 Sa 0241 1002 2118	-0.4	-12		
	0.835	1.7		2.1	64		0936 1617	1.8	55		1002 1640	2.1	64
	0.6	18		0.5	15		1617 2042	0.6	18		1640 2118	0.5	15
	1.3	40		1.4	43			1.0	30			1.0	30
12 W 1544 2053	0.224	0.3	27 Th 0919	-0.1	-3	12 Sa 1016	0.1	3	27 M 1054 1732 2215	-0.3	-9		
	0.915	1.8		2.2	67		1016 1700	1.8	55		1054 1732	2.0	61
	0.6	18		0.5	15		1700 2117	0.6	18		1732 2215	0.5	15
	1.2	37		1.3	40			0.9	27			1.0	30
13 Th 2124	0.255	0.3	28 F 1014	-0.2	-6	13 Su 1055	0.1	3	28 M 1145 1823 2314	-0.2	-6		
	0.955	1.8		2.2	67		1055 1743	1.8	55		1145 1823	1.9	58
	0.6	18		0.5	15		1743 2154	0.6	18		1823 2314	0.5	15
	1.1	34		1.2	37			0.9	27			1.0	30
14 F 2154	0.327	0.2	29 Sa 1110	-0.2	-6	14 M 1136	0.1	3	29 Tu 1234	-0.1	-3		
	1.035	1.8		2.2	67		1136 1825	1.8	55		1234 1912	1.8	55
	0.7	21		0.5	15		1825 2237	0.7	21		1912	0.4	12
	1.1	34		1.1	34			0.9	27			1.0	30
15 Sa 1755 2225	0.400	0.2	30 Su 1206	-0.1	-3	15 Tu 1216	0.1	3	30 W 0618	1.0	30		
	1.116	1.8		2.1	64		1216 1906	1.8	55		618 1320	0.1	3
	0.7	21		0.6	18		1906 2329	0.7	21		1320 1957	1.7	52
	1.1	34		1.1	34			1.0	30			0.4	12
31 Sa 1349 2022	0.543	0.0	31 M 1301	0.0	0	16 Th 1227	0.1	3	31 Sa 1349	1.1	34		
	0.750	1.8		2.0	61		1227 1909	1.7	52		1349 1945	0.4	12
	0.7	21		0.6	18		1909	0.4	12		1945 2022	0.2	6
	1.1	34										0.1	3

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charlotte Amalie, St. Thomas Island, 2011

Times and Heights of High and Low Waters

January					February					March					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 Sa	0801 2349	0.8 -0.3	24 -9	16 Su	0743 2314	0.7 -0.3	21 -9	1 Tu	0031 0903	-0.3 0.7	-9 21	16 W	0820	0.7	21
2 Su	0845	0.8	24	17 M	0821 2358	0.8 -0.4	24 -12	2 W	0116 0931	-0.3 0.6	-9 18	17 Th	0045 0852	-0.2 0.7	-6 21
3 M	0032 0926	-0.3 0.8	-9 24	18 Tu	0858	0.8	24	3 Th	0158 0953	-0.2 0.6	-6 18	18 F	0148 0921	-0.2 0.7	-6 21
4 Tu	0113 1003	-0.3 0.8	-9 24	19 W	0044 0933	-0.3 0.9	-9 27	4 F	0241 1010	-0.1 0.6	-3 18	19 Sa	0257 0946	-0.1 0.6	-3 18
●				O					1010 1727 2044	0.1 0.1 0.2	3 3 6		0216 0852	0.0 0.5	0 15
5 W	0152 1035	-0.2 0.8	-6 24	20 Th	0133 1006	-0.3 0.8	-9 24	5 Sa	0326 1025	0.0 0.5	0 15	5 Sa	0414 1007	0.0 0.4	0 12
									1738 2153	0.1 0.2	3 6		0309 0905	0.0 0.4	0 12
6 Th	0228 1102	-0.2 0.7	-6 21	21 F	0226 1036	-0.2 0.8	-6 24	6 Su	0419 1039	0.1 0.4	3 12	6 M	0541 1021	0.1 0.3	3 9
									1753 2305	0.1 0.3	3 9		0407 0919	0.1 0.3	3 9
7 F	0303 1123	-0.1 0.7	-3 21	22 Sa	0326 1103	-0.1 0.7	-3 21	7 M	0525 1052	0.1 0.4	3 12	7 M	0510 0721	0.1 0.1	3 3
									1810	0.0	0		0026 0721	0.5 0.1	15 9
									1025 1800	0.2 -0.2	6 -6		0933 1611	0.3 0.0	6 0
8 Sa	0340 1141	0.0 0.6	0 18	23 Su	0439 1125	0.1 0.6	3 18	8 Tu	0028 0649	0.3 0.2	9 6	8 Tu	0621 0946	0.1 0.2	3 6
									1104 1832	0.3 -0.1	9 -3		0157 1843	0.6 -0.2	18 -6
9 Su	0424 1157	0.1 0.6	3 18	24 M	0024 0611	0.4 0.2	12 6	9 W	0212 0835	0.3 0.1	9 3	9 W	0000 0746	0.4 0.1	12 3
									1106 1900	0.2 -0.1	6 -3		0323 1935	0.6 -0.3	18 -9
10 M	0102 0548	0.2 0.1	6 3	25 Tu	0223 0806	0.4 0.2	12 6	10 Th	0347 1936	0.4 -0.2	12 -6	10 Th	0110 2036	0.5 0.6	15 -9
									1142 1947	0.3 -0.1	9 -3		0436 2036	0.6 -0.3	18 -9
11 Tu	0420 0752	0.3 0.2	9 6	26 W	0359 2025	0.5 -0.2	15 -6	11 F	0451 2019	0.5 -0.2	15 -6	11 F	0230 2139	0.5 -0.3	15 -9
									1221 2023	0.4 0.0	12 0		0538 2139	0.6 -0.3	18 -9
12 W	0510 2048	0.4 -0.1	12 -3	27 Th	0509 2110	0.6 -0.3	18 -9	12 Sa	0542 2108	0.5 -0.3	15 -9	12 Sa	0344 2240	0.5 -0.3	15 -6
●									1917	-0.1	-3		0443 2020	0.5 -0.2	15 -6
13 Th	0549 2118	0.5 -0.2	15 -6	28 F	0608 2200	0.7 -0.3	21 -9	13 Su	0627 2159	0.6 -0.3	18 -9	13 Su	0714 2338	0.6 -0.2	18 -6
									2338	-0.2	-6		0443 2020	0.6 -0.2	18 -6
14 F	0627 2153	0.6 -0.3	18 -9	29 Sa	0701 2252	0.7 -0.4	21 -12	14 M	0707 2252	0.7 -0.3	21 -9	14 M	0532 2126	0.7 -0.2	21 -6
									2347	-0.3	-9		0615 2126	0.5 -0.2	15 -6
15 Sa	0705 2232	0.7 -0.3	21 -9	30 Su	0747 2343	0.7 -0.4	21 -12	15 Tu	0745 2347	0.7 -0.3	21 -9	15 Tu	0614 2235	0.7 -0.1	21 -3
									1914	-0.1	-3		0643 1821	0.5 0.3	15 9
				31 M	0828	0.7	21					31 Th	0037 1303	0.0 0.5	0 15

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Charlotte Amalie, St. Thomas Island, 2011

Times and Heights of High and Low Waters

April						May						June							
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F 0142 0.1 3 0719 0.4 12 1347 0.1 3 2001 0.4 12	16 Sa 0149 0.2 6 0636 0.4 12 1310 0.0 0 2012 0.7 21	1 Su 0339 0.1 3 0551 0.2 6 1243 -0.1 -3 2050 0.7 21	16 M 1239 -0.2 -6 2113 0.9 27	1 W 1250 -0.3 -9 2158 0.8 24	16 Th 1338 -0.3 -9 2242 0.9 27														
															●				
2 Sa 0247 0.1 3 0733 0.3 9 1358 0.0 0 2044 0.5 15	17 Su 0325 0.2 6 0655 0.3 9 1331 -0.1 -3 O 2108 0.8 24	2 M 1301 -0.1 -3 2127 0.7 21	17 Tu 1314 -0.3 -9 2204 0.9 27	2 Th 1323 -0.3 -9 2237 0.9 27	17 F 1421 -0.2 -6 2321 0.9 27														
															O				
3 Su 0351 0.2 6 0747 0.3 9 1410 0.0 0 ● 2126 0.5 15	18 M 0502 0.1 3 0703 0.2 6 1357 -0.2 -6 2204 0.8 24	3 Tu 1322 -0.2 -6 2205 0.7 21	18 W 1352 -0.3 -9 2255 0.9 27	3 F 1358 -0.2 -6 2315 0.9 27	18 Sa 1502 -0.1 -3 2355 0.8 24														
															●				
4 M 0457 0.1 3 0801 0.2 6 1423 -0.1 -3 2208 0.6 18	19 Tu 1429 -0.2 -6 2302 0.8 24	4 W 1348 -0.2 -6 2247 0.7 21	19 Th 1434 -0.3 -9 2345 0.9 27	4 Sa 1437 -0.2 -6 2353 0.9 27	19 Su 1543 0.0 0 24														
5 Tu 0608 0.1 3 0812 0.2 6 1441 -0.1 -3 2253 0.6 18	20 W 1508 -0.3 -9	5 Th 1420 -0.2 -6 2331 0.8 24	20 F 1519 -0.2 -6	5 Su 1519 -0.1 -3	20 M 0023 0.8 24														
6 W 1506 -0.2 -6 2343 0.6 18	21 Th 0002 0.8 24 1554 -0.2 -6	6 F 1456 -0.2 -6	21 Sa 0034 0.8 24 1606 -0.1 -3	6 M 0029 0.9 27	21 Tu 0045 0.7 21														
															O	0842 0.2 6 1329 0.3 9 1748 0.2 6			
7 Th 1539 -0.2 -6	22 F 0103 0.8 24 1649 -0.2 -6	7 Sa 0018 0.8 24 1538 -0.2 -6	22 Su 0117 0.8 24 1700 0.0 0	7 Tu 0102 0.8 24 0927 0.1 3 1246 0.2 6 1720 0.1 3	22 W 0102 0.6 18 0852 0.1 3 1647 0.4 12 1942 0.3 9														
8 F 0040 0.6 18 1621 -0.2 -6	23 Sa 0204 0.7 21 1755 -0.1 -3	8 Su 0106 0.8 24 1628 -0.1 -3	23 M 0154 0.7 21 1816 0.1 3	8 W 0132 0.7 21 0933 0.1 3 1528 0.3 9	23 Th 0115 0.5 15 0908 0.1 3 1729 0.5 15														
															O	2147 0.4 12			
9 Sa 0142 0.6 18 1714 -0.2 -6	24 Su 0259 0.7 21 1912 0.0 0	9 M 0152 0.8 24 1731 0.0 0	24 Tu 0224 0.6 18 1014 0.1 3 1649 0.2 6 O 1955 0.1 3	9 Th 0156 0.6 18 0947 0.1 3 1659 0.5 15 2144 0.4 12	24 F 0120 0.5 15 0927 0.0 0 1806 0.6 18														
10 Su 0243 0.7 21 1818 -0.1 -3	25 M 0345 0.6 18 1209 0.0 0 1434 0.1 3 2034 0.0 0	10 Tu 0234 0.8 24 1100 0.1 3 1409 0.2 6 O 1902 0.1 3	25 W 0247 0.6 18 1021 0.1 3 1744 0.4 12 2143 0.3 9	10 F 0211 0.5 15 1006 0.0 0 1758 0.7 21	25 Sa 0950 -0.1 -3 1842 0.7 21														
11 M 0338 0.7 21 1934 -0.1 -3	26 Tu 0422 0.6 18 1144 0.1 3 1709 0.2 6 2200 0.1 3	11 W 0312 0.7 21 1100 0.1 3 1623 0.3 9 2058 0.2 6	26 Th 0304 0.5 15 1034 0.0 0 1824 0.5 15 2340 0.3 9	11 Sa 1030 -0.1 -3 1849 0.8 24	26 Su 1017 -0.1 -3 1918 0.7 21														
12 Tu 0425 0.7 21 1237 0.1 3 1501 0.2 6 2100 0.0 0	27 W 0449 0.5 15 1150 0.1 3 1810 0.4 12 2328 0.2 6	12 Th 0345 0.6 18 1111 0.1 3 1740 0.5 15 2303 0.3 9	27 F 0315 0.4 12 1050 0.0 0 1900 0.6 18	12 Su 1100 -0.2 -6 1938 0.9 27	27 M 1047 -0.2 -6 1954 0.8 24														
13 W 0506 0.7 21 1232 0.2 6 1653 0.3 9 2233 0.1 3	28 Th 0510 0.4 12 1201 0.1 3 1856 0.5 15	13 F 0412 0.5 15 1126 0.0 0 1839 0.6 18	28 Sa 1108 -0.1 -3 1935 0.7 21	13 M 1135 -0.3 -9 2026 0.9 27	28 Tu 1120 -0.2 -6 2030 0.8 24														
14 Th 0541 0.6 18 1240 0.1 3 1810 0.4 12	29 F 0555 0.2 6 0526 0.4 12 1214 0.0 0 1936 0.5 15	14 Sa 0113 0.3 9 0430 0.4 12 1145 -0.1 -3 1932 0.8 24	29 Su 1129 -0.1 -3 2009 0.7 21	14 Tu 1214 -0.3 -9 2113 0.9 27	29 W 1155 -0.2 -6 2106 0.9 27														
15 F 0010 0.2 6 0611 0.5 15 1253 0.1 3 1914 0.6 18	30 Sa 0218 0.2 6 0540 0.3 9 1228 0.0 0 2014 0.6 18	15 Su 1210 -0.2 -6 2023 0.8 24	30 M 1153 -0.2 -6 2045 0.8 24	15 W 1256 -0.3 -9 2159 0.9 27	30 Th 1233 -0.2 -6 2141 0.9 27														
															O				

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charlotte Amalie, St. Thomas Island, 2011

Times and Heights of High and Low Waters

July					August					September							
Time	Height		Time	Height		Time	Height		Time	Height		Time	Height				
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm			
1 F ●	1311 -0.2 -6 2215 1.0 30		16 Sa	1421 0.0 0 2243 0.9 27		1 M	0543 0.4 12 0852 0.5 15 1504 0.2 6 2231 0.9 27		16 Tu	0505 0.4 12 0956 0.6 18 1630 0.4 12 2215 0.7 21		1 Th	0445 0.3 9 1156 0.9 27 1907 0.5 15 2151 0.6 18		16 F	0356 0.3 9 1152 0.9 27	
2 Sa	1352 -0.1 -3 2248 1.0 30		17 Su	1504 0.1 3 2304 0.8 24		2 Tu	0556 0.4 12 1019 0.5 15 1619 0.3 9 2253 0.8 24		17 W	0520 0.4 12 1105 0.6 18 1741 0.5 15 2227 0.6 18		2 F	0518 0.2 6 1320 1.0 30		17 Sa	0423 0.3 9 1257 0.9 27	
3 Su	1437 -0.1 -3 2318 0.9 27		18 M	0651 0.2 6 0925 0.3 9 1553 0.2 6 2322 0.7 21		3 W	0614 0.3 9 1153 0.6 18 1751 0.4 12 2309 0.7 21		18 Th	0538 0.3 9 1222 0.7 21 1905 0.5 15 2238 0.6 18		3 Sa	0601 0.1 3 1443 1.0 30		18 Su	0500 0.2 6 1410 0.9 27	
4 M	1529 0.1 3 2345 0.9 27		19 Tu	0659 0.3 9 1101 0.4 12 1655 0.3 9 2336 0.7 21		4 Th	0637 0.2 6 1337 0.7 21 1943 0.5 15 2314 0.6 18		19 F	0601 0.2 6 1354 0.7 21		4 Su	0655 0.1 3 1558 1.0 30		19 M	0548 0.2 6 1519 1.0 30	
5 Tu	0746 0.2 6 1124 0.3 9 1639 0.2 6		20 W	0713 0.2 6 1305 0.4 12 1820 0.3 9 2348 0.6 18		5 F	0708 0.1 3 1513 0.8 24		20 Sa	0631 0.2 6 1520 0.7 21		5 M	0756 0.1 3 1701 1.0 30		20 Tu	0645 0.2 6 1615 1.0 30	
6 W	0009 0.8 24 0759 0.2 6 1336 0.4 12 1821 0.3 9		21 Th	0731 0.2 6 1532 0.5 15 2005 0.4 12 2356 0.5 15		6 Sa	0746 0.0 0 1628 0.9 27		21 Su	0709 0.1 3 1626 0.8 24		6 Tu	0902 0.1 3 1755 1.0 30		21 W	0748 0.2 6 1701 1.0 30	
7 Th	0027 0.7 21 0818 0.1 3 1537 0.6 18 2033 0.4 12		22 F	0753 0.1 3 1637 0.6 18		7 Su	0832 0.0 0 1731 0.9 27		22 M	0754 0.1 3 1718 0.9 27		7 W	1008 0.1 3 1840 1.0 30		22 Th	0855 0.3 9 1741 1.1 34	
8 F	0034 0.5 15 0843 0.0 0 1652 0.7 21		23 Sa	0821 0.0 0 1725 0.7 21		8 M	0924 -0.1 -3 1827 1.0 30		23 Tu	0844 0.1 3 1803 0.9 27		8 Th	1111 0.2 6 1917 1.0 30		23 F	1004 0.3 9 1816 1.1 34	
9 Sa	0913 -0.1 -3 1751 0.8 24		24 Su	0854 0.0 0 1808 0.7 21		9 Tu	1019 -0.1 -3 1916 1.0 30		24 W	0935 0.1 3 1842 1.0 30		9 F	0245 0.4 12 0510 0.5 15 1211 0.3 9 1945 0.9 27		24 Sa	0141 0.6 18 0513 0.7 21 1117 0.4 12 1847 1.0 30	
10 Su	0951 -0.2 -6 1844 0.9 27		25 M	0931 -0.1 -3 1848 0.8 24		10 W	1114 -0.1 -3 2000 1.0 30		25 Th	1028 0.1 3 1917 1.0 30		10 Sa	0242 0.5 15 0629 0.6 18 1309 0.3 9 2006 0.9 27		25 Su	0147 0.6 18 0629 0.8 24 1236 0.4 12 1915 1.0 30	
11 M	1033 -0.2 -6 1933 0.9 27		26 Tu	1012 -0.1 -3 1926 0.9 27		11 Th	1207 0.0 0 2036 1.0 30		26 F	1123 0.1 3 1950 1.1 34		11 Su	0250 0.5 15 0731 0.7 21 1407 0.4 12 2022 0.8 24		26 M	0158 0.5 15 0735 0.9 27 1401 0.5 15 1939 0.8 24	
12 Tu	1119 -0.2 -6 2020 1.0 30		27 W	1054 -0.1 -3 2003 0.9 27		12 F	1258 0.1 3 2106 0.9 27		27 Sa	0335 0.5 15 0535 0.6 18 1221 0.2 6 2019 1.0 30		12 M	0300 0.5 15 0825 0.7 21 1507 0.5 15 2035 0.8 24		27 Tu	0213 0.4 12 0837 1.0 30 1529 0.5 15 2000 0.7 21	
13 W	1207 -0.2 -6 2104 1.0 30		28 Th	1137 -0.1 -3 2037 1.0 30		13 Sa	1346 0.1 3 2129 0.9 27		28 Su	0336 0.5 15 0659 0.6 18 1324 0.3 9 2047 1.0 30		13 Tu	0312 0.4 12 0915 0.8 24 1610 0.5 15 2048 0.7 21		28 W	0232 0.3 9 0938 1.1 34 1701 0.5 15 2013 0.6 18	
14 Th	1253 -0.2 -6 2142 0.9 27		29 F	1222 -0.1 -3 2109 1.0 30		14 Su	0444 0.4 12 0741 0.5 15 1436 0.2 6 2147 0.8 24		29 M	0346 0.5 15 0813 0.7 21 1435 0.3 9 2111 0.9 27		14 W	0324 0.4 12 1005 0.8 24 1718 0.5 15 2101 0.6 18		29 Th	0257 0.3 9 1042 1.1 34	
15 F	1338 -0.1 -3 2216 0.9 27		30 Sa	1310 0.0 0 2139 1.0 30		15 M	0453 0.4 12 0850 0.5 15 1529 0.3 9 2201 0.8 24		30 Tu	0401 0.5 15 0924 0.8 24 1556 0.4 12 2132 0.8 24		15 Th	0338 0.3 9 1056 0.9 27 1833 0.5 15 2111 0.6 18		30 F	0329 0.2 6 1149 1.1 34	
O			31 Su	1403 0.1 3 2206 1.0 30					31 W	0420 0.4 12 1038 0.9 27 1725 0.5 15 2147 0.7 21							

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Charlotte Amalie, St. Thomas Island, 2011

Times and Heights of High and Low Waters

October						November						December											
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height						
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm				
1 Sa	0410 1300	0.1 1.1	34	16 Su	0312 1226	0.2 1.0	30	1 Tu	0520 1433	0.2 1.0	30	16 W	0353 1323	0.1 1.0	30	1 Th	0550 1403 2159	0.3 0.8 0.3	9 24 9	16 F	0433 1259 2111	0.2 0.8 0.2	6 24 6
2 Su	0502 1413	0.1 1.1	34	17 M	0350 1322	0.2 1.0	30	2 W	0636 1518 2359	0.3 1.0 0.3	9 30 9	17 Th	0443 1401 2247	0.2 1.0 0.3	6 30 9	2 F	0445 0730 1424	0.4 0.3 0.7	12 9 21	17 Sa	0237 0616 1323	0.4 0.3 0.7	12 9 21
3 M	0607 1520	0.2 1.1	34	18 Tu	0437 1417	0.2 1.0	30	3 Th	0243 0802 1554 2327	0.4 0.3 0.9 0.4	12 9 27 12	18 F	0128 0559 1436	0.4 0.3 0.9	12 9 27	3 Sa	0542 0924 1438 2220	0.5 0.4 0.6 0.2	15 12 18 6	18 Su	0435 0850 1338 2142	0.5 0.4 0.6 0.0	15 12 18 0
4 Tu	0720 1618	0.2 1.1	34	19 W	0534 1507	0.3 1.1	34	4 F	0519 0934 1620 2332	0.5 0.4 0.8 0.4	15 12 24 12	19 Sa	0408 0803 1506 2249	0.5 0.4 0.8 0.3	15 12 24 9	4 Su	0622 1127 1445 2237	0.6 0.4 0.5 0.1	18 12 15 3	19 M	0535 2206	0.7 -0.1	21 -3
5 W	0836 1705	0.3 1.0	30	20 Th	0648 1550	0.3 1.1	34	5 Sa	0616 1109 1639 2343	0.7 0.5 0.7 0.3	21 15 21 9	20 Su	0526 1019 1532 2303	0.7 0.6 0.7 0.2	21 18 21 6	20 Tu	0627 2237	0.8 -0.2	24 -6				
6 Th	0952 1742	0.4 1.0	12	21 F	0014 0249 0816	0.4 0.5 0.4	12	6 Su	0659 1244 1653 2357	0.8 0.6 0.7 0.3	24 18 21 9	21 M	0622 1239 1549 2322	0.8 0.5 0.6 0.1	24 15 18 3	6 Tu	0732 2321	0.8 0.0	24 0	21 W	0716 2314	0.9 -0.3	27 -9
7 F	0057 0523 1107 1810	0.5 0.6 0.4 0.9	15 18 12 27	22 Sa	0007 0444 0954 1701	0.5 0.6 0.5 1.0	15 18 15 30	7 M	0737 1415 1703	0.9 0.5 0.6	27 15 18	22 Tu	0713 2346	1.0 0.0	30 0	7 W	0807 2347	0.8 -0.1	24 -3	22 Th	0805 2356	0.9 -0.3	27 -9
8 Sa	0100 0629 1220 1830	0.5 0.7 0.5 0.8	15 21 15 24	23 Su	0013 0558 1137 1730	0.5 0.8 0.6 0.9	15 24 18 27	8 Tu	0012 0813	0.2 0.9	6 27	23 W	0802	1.1	34	8 Th	0842	0.9	27	23 F	0853	1.0	30
9 Su	0110 0720 1332 1845	0.5 0.8 0.5 0.8	15 24 15 24	24 M	0025 0658 1321 1754	0.4 0.9 0.6 0.8	12 27 18 24	9 W	0029 0848	0.2 0.9	6 27	24 Th	0017 0853	-0.1 1.1	-3 34	9 F	0015 0917	-0.1 0.9	-3 27	24 Sa	0041 0939	-0.3 1.0	-9 30
10 M	0121 0804 1442 1858	0.4 0.9 0.6 0.7	12 27 18 21	25 Tu	0041 0754 1505 1811	0.3 1.0 0.5 0.6	9 30 15 18	10 Th	0048 0923	0.1 1.0	3 30	25 F	0054 0944	-0.1 1.1	-3 34	10 Sa	0045 0952	-0.2 0.9	-6 27	25 Su	0127 1023	-0.3 0.9	-9 27
11 Tu	0133 0844 1552 1910	0.4 0.9 0.5 0.6	12 27 15 18	26 W	0101 0848	0.2 1.1	6 34	11 F	0110 1000	0.1 1.0	3 30	26 Sa	0134 1035	-0.2 1.1	-6 34	11 Su	0116 1026	-0.2 0.9	-6 27	26 M	0213 1103	-0.2 0.9	-6 27
12 W	0145 0923 1704 1920	0.3 1.0 0.5 0.6	9 30 15 18	27 Th	0128 0943	0.1 1.2	3 37	12 Sa	0135 1039	0.0 1.0	0 30	27 Su	0218 1126	-0.1 1.1	-3 34	12 M	0148 1100	-0.1 0.9	-3 27	27 Tu	0257 1137	-0.2 0.8	-6 24
13 Th	0159 1003	0.3 1.0	9 30	28 F	0201 1040	0.1 1.2	3 37	13 Su	0204 1119	0.0 1.0	0 30	28 M	0303 1214	-0.1 1.0	-3 30	13 Tu	0221 1132	-0.1 0.9	-3 27	28 W	0343 1205	0.0 0.8	0 24
14 F	0217 1046	0.2 1.0	6 30	29 Sa	0240 1139	0.0 1.2	0 37	14 M	0236 1201	0.0 1.0	0 30	29 Tu	0350 1257	0.0 1.0	0 30	14 W	0258 1203	0.0 0.9	0 27	29 Th	0433 1227 2018	0.1 0.7 0.1	3 21 3
15 Sa	0241 1133	0.2 1.0	6 30	30 Su	0325 1240	0.0 1.2	0 37	15 Tu	0312 1243	0.1 1.0	3 30	30 W	0441 1334	0.1 0.9	3 27	15 Th	0339 1232 2108 2351	0.1 0.9 0.2 0.3	3 27 6 9	30 F	0027 0545 1243 2031	0.2 0.1 0.6 0.1	6 3 18 3
				31 M	0418 1339	0.1 1.1	3 34									31 Sa	0418 0729 1254 2049	0.3 0.2 0.5 0.0	9 6 15 0				

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
 Heights are referred to mean lower low water which is the chart datum of soundings.

Lime Tree Bay, St. Croix Island, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0927 0.8 24 2231 -0.3 -9	16 Su 0907 0.7 21 2218 -0.3 -9	1 Tu 1010 0.6 18 2349 -0.2 -6	16 W 0933 0.6 18 2334 -0.2 -6	1 Tu 0902 0.5 15 2246 -0.1 -3	16 W 0800 0.6 18 2214 0.0 0						
2 Su 1000 0.8 24 2316 -0.3 -9	17 M 0938 0.7 21 2302 -0.3 -9	2 W 1023 0.5 15 ●	17 Th 0955 0.6 18 ●	2 W 0907 0.4 12 2344 0.0 0	17 Th 0817 0.5 15 2339 0.1 3						
3 M 1032 0.7 21 2358 -0.3 -9	18 Tu 1009 0.8 24 2345 -0.3 -9	3 Th 0031 0.2 15 1024 0.5 15	18 F 0029 0.1 15 1001 0.5 15	3 Th 0855 0.4 12 ○	18 F 0810 0.4 12 1412 0.2 6 1809 0.3 9						
4 Tu 1059 0.7 21 ●	19 W 1039 0.8 24 ●	4 F 0110 0.1 12 1014 0.4 12	19 Sa 0124 0.0 0 0940 0.4 12 1539 0.2 6 1921 0.3 9	4 F 0039 0.0 0 0832 0.3 9 1413 0.2 6 ● 1848 0.3 9	19 Sa 0112 0.2 6 0726 0.3 9 1313 0.2 6 ○ 2023 0.4 12						
5 W 0038 -0.2 -6 1119 0.7 21	20 Th 0028 -0.3 -9 1103 0.7 21	5 Sa 0146 0.0 0 0955 0.4 12 1636 0.1 3 1932 0.2 6	20 Su 0220 0.1 3 0851 0.3 9 1509 0.1 3 2156 0.3 9	5 Sa 0134 0.1 3 0803 0.3 9 1403 0.1 3 2030 0.3 9	20 Su 0318 0.2 6 0547 0.3 9 1318 0.0 0 2156 0.5 15						
6 Th 0114 -0.2 -6 1130 0.6 18	21 F 0109 -0.2 -6 1116 0.6 18	6 Su 0218 0.1 3 0930 0.3 9 1619 0.1 3 2155 0.2 6	21 M 0316 0.2 6 0738 0.3 9 1526 0.0 0	6 Su 0231 0.1 3 0728 0.2 6 1416 0.0 0 2152 0.3 9	21 M 1346 -0.1 -3 2322 0.5 15						
7 F 0146 -0.1 -3 1128 0.6 18	22 Sa 0148 -0.1 -3 1109 0.6 18	7 M 0242 0.1 3 0859 0.3 9 1632 0.0 0	22 Tu 0029 0.4 12 1601 -0.1 -3	7 M 0339 0.1 3 0640 0.2 6 1439 0.0 0 2312 0.3 9	22 Tu 1424 -0.2 -6 ●						
8 Sa 0212 0.0 0 1116 0.5 15	23 Su 0220 0.1 3 1036 0.5 15 1808 0.2 6 2112 0.3 9	8 Tu 0818 0.3 9 1658 0.0 0	23 W 0502 0.4 12 1646 -0.2 -6	8 Tu 1508 -0.1 -3 ●	23 W 0053 0.5 15 1507 -0.3 -9						
9 Su 0229 0.1 3 1053 0.5 15	24 M 0229 0.2 6 0942 0.4 12 1737 0.1 3	9 W 0727 0.4 12 1733 -0.1 -3	24 Th 0556 0.5 15 1737 -0.3 -9	9 W 0043 0.4 12 1541 -0.2 -6	24 Th 0237 0.5 15 1554 -0.3 -9						
10 M 0212 0.2 6 1021 0.5 15 1850 0.1 3	25 Tu 0838 0.4 12 1758 0.0 0	10 Th 0654 0.4 12 1814 -0.2 -6	25 F 0646 0.5 15 1834 -0.3 -9	10 Th 0240 0.4 12 1619 -0.2 -6	25 F 0414 0.5 15 1644 -0.3 -9						
11 Tu 0940 0.4 12 1903 0.0 0	26 W 0750 0.5 15 1838 -0.1 -3	11 F 0702 0.5 15 1901 -0.3 -9	26 Sa 0731 0.5 15 1936 -0.3 -9	11 F 0420 0.4 12 1702 -0.3 -9	26 Sa 0527 0.5 15 1736 -0.2 -6						
12 W 0851 0.5 15 1932 -0.1 -3	27 Th 0747 0.6 18 1927 -0.2 -6	12 Sa 0727 0.5 15 1953 -0.3 -9	27 Su 0810 0.5 15 2041 -0.2 -6	12 Sa 0523 0.5 15 1750 -0.3 -9	27 Su 0618 0.5 15 1831 -0.2 -6						
13 Th 0820 0.5 15 2009 -0.2 -6	28 F 0811 0.6 18 2022 -0.3 -9	13 Su 0758 0.6 18 2048 -0.3 -9	28 M 0842 0.5 15 2145 -0.2 -6	13 Su 0612 0.5 15 1845 -0.3 -9	28 M 0652 0.5 15 1932 -0.1 -3						
14 F 0821 0.6 18 2050 -0.2 -6	29 Sa 0844 0.6 18 2118 -0.3 -9	14 M 0831 0.6 18 2143 -0.3 -9		14 M 0653 0.6 18 1947 -0.2 -6	29 Tu 0706 0.4 12 2047 0.0 0						
15 Sa 0840 0.6 18 2134 -0.3 -9	30 Su 0917 0.6 18 2213 -0.3 -9	15 Tu 0903 0.7 21 2239 -0.3 -9		15 Tu 0730 0.6 18 2056 -0.1 -3	30 W 0655 0.4 12 2222 0.1 3						
	31 M 0947 0.6 18 2303 -0.3 -9				31 Th 0623 0.3 9 1241 0.2 6 1818 0.3 9						

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Lime Tree Bay, St. Croix Island, 2011

Times and Heights of High and Low Waters

April						May						June							
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0010 0539 1216 1952	0.2 0.3 0.1 0.3	6 9 3 9	16 Sa	1145 2051	0.1 0.5	3 15	1 Su	1134 2142	-0.1 0.6	-3 18	16 M	1127 2220	-0.3 0.8	-9 24	1 W	1206 2300	-0.3 0.8	-9 24
2 Sa	0222 0426 1225 2054	0.2 0.3 0.0 0.4	6 9 0 12	17 Su	1159 2149	-0.1 0.6	-3 18	2 M	1202 2218	-0.2 0.6	-6 18	17 Tu	1205 2305	-0.3 0.8	-9 24	2 Th	1239 2334	-0.3 0.8	-9 24
3 Su	1246 2147	0.0 0.5	0 15	18 M	1229 2246	-0.2 0.6	-6 18	3 Tu	1232 2257	-0.3 0.6	-9 18	18 W	1246 2351	-0.4 0.8	-12 24	3 F	1312	-0.3	-9
●																18 Sa	0009 1345	0.8 -0.2	24 -6
4 M	1312 2239	-0.1 0.5	-3 15	19 Tu	1307 2346	-0.3 0.7	-9 21	4 W	1304 2339	-0.3 0.7	-9 21	19 Th	1326	-0.4	-12	4 Sa	0007 1344	0.8 -0.3	24 -9
5 Tu	1341 2333	-0.2 0.5	-6 15	20 W	1349	-0.3	-9	5 Th	1336	-0.3	-9	20 F	0034 1405	0.7 -0.3	21 -9	5 Su	0037 1414	0.8 -0.2	24 -6
6 W	1413	-0.2	-6	21 Th	0048 1432	0.7 -0.3	21 -9	6 F	0024 1409	0.7 -0.3	21 -9	21 Sa	0112 1441	0.7 -0.2	21 -6	6 M	0101 1440	0.8 -0.1	24 -3
7 Th	0034 1447	0.5 -0.3	15 -9	22 F	0151 1514	0.6 -0.3	18 -9	7 Sa	0109 1443	0.7 -0.3	21 -9	22 Su	0137 1510	0.6 -0.1	18 -3	7 Tu	0114 1454	0.7 0.0	21 0
8 F	0140 1523	0.5 -0.3	15 -9	23 Sa	0250 1555	0.6 -0.2	18 -6	8 Su	0152 1516	0.7 -0.2	21 -6	23 M	0146 1530	0.6 0.0	18 0	8 W	0107 1419	0.7 0.2	21 6
9 Sa	0247 1603	0.6 -0.3	18 -9	24 Su	0336 1632	0.5 -0.1	15 -3	9 M	0229 1547	0.7 -0.1	21 -3	24 Tu	0135 1523	0.5 0.1	15 3	9 Th	0033 1033	0.6 0.2	18 6
●																24 F	0830 2131	0.1 0.6	3 18
10 Su	0348 1644	0.6 -0.2	18 -6	25 M	0400 1704	0.5 0.0	15 0	10 Tu	0256 1608	0.7 0.0	21 0	25 W	0106 1212	0.5 0.2	15 6	10 F	0927 2148	0.1 0.6	3 18
●																25 Sa	0851 2106	0.0 0.6	0 18
11 M	0438 1730	0.6 -0.1	18 -3	26 Tu	0358 1718	0.4 0.1	12 3	11 W	0304 1548	0.6 0.2	18 6	26 Th	0017 0957	0.5 0.1	15 3	11 Sa	0928 2112	0.0 0.7	0 21
●																26 Su	0921 2109	-0.1 0.7	-3 21
12 Tu	0517 1820	0.6 0.0	18 0	27 W	0329 1324	0.4 0.2	12 6	12 Th	0241 1212	0.5 0.2	15 6	27 F	0949 2141	0.0 0.5	0 15	12 Su	0953 2125	-0.2 0.8	-6 24
																27 M	0956 2128	-0.2 0.7	-6 21
13 W	0543 1925	0.5 0.1	15 3	28 Th	0233 1108	0.4 0.2	12 6	13 F	0115 1046	0.5 0.1	15 3	28 Sa	1005 2120	-0.1 0.6	-3 18	13 M	1029 2155	-0.3 0.8	-9 24
																28 Tu	1033 2153	-0.3 0.8	-9 24
14 Th	0546 1441	0.5 0.2	15 6	29 F	1057 2053	0.1 0.5	3 15	14 Sa	1036 2111	0.0 0.6	0 18	29 Su	1030 2133	-0.2 0.7	-6 21	14 Tu	1109 2232	-0.3 0.8	-9 24
																29 W	1109 2221	-0.3 0.8	-9 24
15 F	0507 1207	0.4 0.2	12 6	30 Sa	1111 2112	0.0 0.5	0 15	15 Su	1055 2140	-0.1 0.7	-3 21	30 M	1101 2157	-0.2 0.7	-6 21	15 W	1151 2309	-0.4 0.8	-12 24
																30 Th	1145 2249	-0.3 0.9	-9 27

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Lime Tree Bay, St. Croix Island, 2011

Times and Heights of High and Low Waters

July					August					September													
Time	Height		Time	Height		Time	Height		Time	Height		Time	Height										
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm									
1 F ●	1221 2316	-0.3 0.9	-9 27	16 Sa	1259 2324	-0.1 0.7	-3 21	1 M	1324 2245	0.2 0.8	6 24	16 Tu	0354 0733	0.4 0.5	12 15	1 Th	0304 1208	0.3 0.7	9 21	16 F	0244 1220	0.3 0.8	9 24
2 Sa	1255 2339	-0.2 0.9	-6 27	17 Su	1332 2318	0.0 0.7	0 21	2 Tu	1356 2217	0.3 0.7	9 21	17 W	0346 0946	0.4 0.5	12 15	2 F	0339 1616	0.2 0.8	6 24	17 Sa	0320 1411	0.2 0.8	6 24
3 Su	1327 2355	-0.1 0.8	-3 24	18 M	1359 2301	0.1 0.6	3 18	3 W	0558 0859	0.4 0.5	12 15	18 Th	0404 1210	0.3 0.6	9 18	3 Sa	0423 1728	0.1 0.9	3 27	18 Su	0400 1559	0.2 0.8	6 24
4 M	1355 2357	0.0 0.8	0 24	19 Tu	1417 2235	0.2 0.6	6 18	4 Th	0521 2029	0.3 0.7	9 21	19 F	0434 1907	0.2 0.6	6 18	4 Su	0514 1824	0.1 0.9	3 27	19 M	0443 1705	0.1 0.9	3 27
5 Tu	1414 2341	0.1 0.7	3 21	20 W	0648 0941	0.3 0.4	9 12	5 F	0540 1940	0.2 0.7	6 21	20 Sa	0511 1844	0.2 0.7	6 21	5 M	0612 1913	0.1 0.9	3 27	20 Tu	0531 1752	0.1 0.9	3 27
6 W	1353 2302	0.3 0.6	9 18	21 Th	0623 2124	0.3 0.6	9 18	6 Sa	0617 1934	0.1 0.8	3 24	21 Su	0555 1856	0.1 0.8	3 24	6 Tu	0714 1955	0.1 0.9	3 27	21 W	0623 1830	0.2 0.9	6 27
7 Th	0813 2204	0.3 0.6	9 18	22 F	0641 2044	0.2 0.6	6 18	7 Su	0705 1959	0.0 0.8	0 24	22 M	0644 1921	0.1 0.8	3 24	7 W	0819 2030	0.1 0.9	3 27	22 Th	0721 1903	0.2 1.0	6 30
8 F	0746 2104	0.1 0.7	3 21	23 Sa	0712 2021	0.1 0.7	3 21	8 M	0800 2033	-0.1 -0.9	-3 27	23 Tu	0736 1949	0.0 0.9	0 27	8 Th	0925 2053	0.2 0.8	6 24	23 F	0828 1929	0.3 0.9	9 27
9 Sa	0805 2041	0.0 0.7	0 21	24 Su	0751 2023	0.0 0.7	0 21	9 Tu	0857 2108	-0.1 -0.9	-3 27	24 W	0830 2018	0.0 0.9	0 27	9 F	1029 2058	0.3 0.8	9 24	24 Sa	0945 1943	0.4 0.9	12 27
10 Su	0841 2054	-0.1 0.8	-3 24	25 M	0835 2041	-0.1 0.8	-3 24	10 W	0953 2140	-0.1 0.9	-3 27	25 Th	0924 2046	0.1 0.9	3 27	10 Sa	1130 2040	0.3 0.7	9 21	25 Su	1113 1934	0.5 0.8	15 24
11 M	0924 2123	-0.2 0.8	-6 24	26 Tu	0919 2105	-0.1 0.8	-3 24	11 Th	1045 2205	0.0 0.9	0 27	26 F	1018 2111	0.1 0.9	3 27	11 Su	1229 2009	0.4 0.7	12 21	26 M	0144 0612	0.6 0.7	18 21
12 Tu	1011 2156	-0.2 0.9	-6 27	27 W	1003 2131	-0.2 0.9	-6 27	12 F	1133 2219	0.0 0.8	0 24	27 Sa	1112 2129	0.2 0.9	6 27	12 M	0131 0642	0.6 0.7	18 21				
13 W	1058 2229	-0.3 0.9	-9 27	28 Th	1046 2157	-0.2 0.9	-6 27	13 Sa	1217 2218	0.1 0.8	3 24	28 Su	1206 2133	0.3 0.8	9 24	13 Tu	0129 0820	0.5 0.7	15 21	28 W	0057 0942	0.4 0.9	12 27
14 Th	1142 2257	-0.2 0.8	-6 24	29 F	1127 2222	-0.1 0.9	-3 27	14 Su	1258 2202	0.2 0.7	6 21	29 M	1302 2113	0.4 0.7	12 21	14 W	0146 0938	0.4 0.7	12 21	29 Th	0124 1106	0.3 0.9	9 27
15 F	1222 2316	-0.2 0.8	-6 24	30 Sa	1207 2241	-0.1 0.9	-3 27	15 M	1336 2138	0.3 0.6	9 18	30 Tu	0317 0716	0.5 0.6	15 18	15 Th	0212 1054	0.3 0.7	9 21	30 F	0202 1235	0.2 0.9	6 27
○				31 Su	1247 2251	0.0 0.8	0 24					31 W	0248 0944	0.5 0.7	15 21								

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Lime Tree Bay, St. Croix Island, 2011

Times and Heights of High and Low Waters

October						November						December					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m
	0246	0.1	3		0230	0.1	3		0341	0.1	3		0258	0.1	3		0242
1 Sa	1417	0.9	27	16 Su	1319	0.9	27	1 Tu	1528	0.9	27	16 W	1359	0.9	27	1 Th	0327
2 Su	0334	0.1	3	17 M	0306	0.1	3	2 W	0420	0.2	6	17 Th	0326	0.2	6	2 F	0327
3 M	1553	0.9	27	18 Tu	1423	0.9	27	3 Th	0452	0.3	9	18 F	0346	0.3	9	3 Sa	1142
4 Tu	0424	0.1	3	19 W	0422	0.2	6	4 F	0509	0.4	12	19 Sa	0326	0.4	12	4 Su	1021
5 W	1707	0.9	27	20 Th	1607	1.0	30	5 Sa	1009	0.7	15	20 Sa	1408	0.7	15	5 M	0923
6 Th	0517	0.1	3	21 F	0503	0.3	9	6 Sa	0102	0.5	15	20 Su	2225	0.4	12	6 Tu	0845
7 F	1838	0.9	27	22 Sa	1643	0.9	27	7 M	0135	0.7	21	21 M	1246	0.7	21	7 W	0908
8 Sa	0712	0.3	9	23 Su	0546	0.4	12	8 Tu	0935	0.7	21	21 Tu	2225	0.4	12	8 Th	0921
9 Su	1835	0.8	24	24 F	1705	0.9	27	9 M	0921	0.7	21	21 W	0856	0.7	21	9 W	0900
10 M	0826	0.4	12	25 Sa	1706	0.8	24	10 Tu	0833	0.8	24	22 Tu	0921	0.7	21	10 Tu	0933
11 Tu	1752	0.7	21	26 W	0635	0.5	15	11 F	0854	0.8	24	22 M	0853	0.8	24	11 Sa	1012
12 O	0002	0.6	18	27 W	0616	0.6	18	12 Tu	0925	0.9	27	23 W	0921	0.9	27	12 F	1034
13 W	0609	0.7	21	28 F	0843	0.5	15	13 M	0925	0.9	27	23 Tu	2307	0.0	0	13 Th	0940
14 F	1210	0.6	18	29 F	1627	0.7	21	14 Tu	1002	1.0	30	24 W	1002	-0.1	-30	14 W	1049
15 M	1655	0.7	21	30 F	2348	0.5	15	15 Tu	1002	-0.1	-30	24 Tu	2347	-0.1	-30	15 F	1011
16 Tu	2344	0.5	15	31 M	0746	0.8	24	16 W	1025	0.9	27	25 W	1002	1.0	30	16 F	1052
17 O	0740	0.8	24	32 Tu	2326	0.4	12	17 M	1025	0.9	27	25 Tu	1049	1.0	30	17 W	1043
18 W	2357	0.4	12	33 F	0839	0.9	27	18 Tu	1001	0.9	27	26 W	1049	0.8	24	18 M	0019
19 Tu	0840	0.8	24	34 W	2339	0.3	9	19 F	1001	0.9	27	26 Tu	1049	0.8	24	19 Tu	1129
20 O	0840	0.8	24	35 W	0934	1.0	30	20 M	1001	0.9	27	27 W	1049	0.8	24	20 M	0101
21 W	0932	0.8	24	36 W	0934	1.0	30	21 Tu	1040	0.9	27	27 Tu	1114	-0.9	-27	21 M	1157
22 Tu	0021	0.3	9	37 W	0010	0.1	3	22 F	0016	0.0	0	28 W	0028	-0.2	-6	22 W	0139
23 O	0932	0.8	24	38 W	1030	1.0	30	23 Tu	1040	0.9	27	28 Tu	1114	-0.9	-27	23 M	1213
24 W	0049	0.2	6	39 F	0048	0.0	0	24 M	0049	0.0	0	29 W	0113	-0.2	-6	24 W	0139
25 Th	1022	0.9	27	40 F	1131	1.0	30	25 Tu	0123	0.0	0	29 Tu	1224	-0.2	-6	25 Tu	1213
26 F	0121	0.2	6	41 F	0048	1.0	30	26 Tu	1204	0.9	27	29 M	0154	-0.1	-3	26 M	1213
27 F	1116	0.9	27	42 F	1131	1.0	30	27 Tu	1246	0.9	27	29 Tu	1303	-0.9	-27	27 W	0212
28 Sa	0154	0.1	3	43 F	0131	1.0	30	28 M	0155	0.0	0	29 W	0232	-0.1	-3	28 W	0212
29 Sa	1215	0.9	27	44 F	1235	1.0	30	29 Tu	1246	0.9	27	29 Tu	1231	-0.8	-24	29 M	1149
30 Sa	0215	0.0	0	45 F	0227	0.0	0	30 Tu	1325	0.9	27	30 W	0304	0.1	3	30 F	0248
31 M	1340	1.0	30	46 F	0227	0.0	0	31 Tu	1325	0.9	27	30 Tu	1242	0.8	24	31 F	0248
				47 M	0259	0.0	0									31 M	1441

Time meridian 60° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to mean lower low water which is the chart datum of soundings.

Isla Zapara (Malecon), Venezuela, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa 0221	4.1	125		16 Su 0140	3.8	116		1 Tu 0354	3.9	119	
0808	1.6	49		0706	1.8	55		0948	1.6	49	
1413	4.8	146		1331	4.4	134		1539	4.4	134	
2054	0.3	9		1958	0.6	18		2217	0.7	21	
2 Su 0318	4.1	125		17 M 0223	3.9	119		2 0440	3.8	116	
0905	1.7	52		0750	1.7	52		1038	1.7	52	
1504	4.7	143		1413	4.6	140		1625	4.2	128	
2146	0.4	12		2041	0.5	15		● 2303	1.0	30	
3 M 0414	4.0	122		18 Tu 0308	3.9	119		3 Th 0524	3.7	113	
1001	1.8	55		0838	1.7	52		1128	1.8	53	
1554	4.6	140		1457	4.7	143		1710	4.0	122	
2239	0.5	15		2127	0.4	12		2348	1.3	40	
4 Tu 0508	3.9	119		19 W 0354	4.0	122		4 F 0606	3.6	110	
1057	2.0	61		0930	1.6	49		1218	1.9	58	
1644	4.5	137		1545	4.7	143		1757	3.9	119	
● 2330	0.8	24		○ 2215	0.4	12					
5 W 0602	3.9	119		20 Th 0442	4.1	125		5 Sa 0033	1.5	46	
1154	2.1	64		1026	1.5	46		0649	3.5	107	
1734	4.3	131		1638	4.7	143		1307	1.9	58	
				2306	0.5	15		1846	3.7	113	
6 Th 0021	1.0	30		21 F 0533	4.2	128		6 Su 0116	1.7	52	
0654	3.8	116		1127	1.5	46		0732	3.5	107	
1251	2.1	64		1736	4.7	143		1356	1.8	55	
1825	4.1	125						1937	3.6	110	
7 F 0110	1.2	37		22 Sa 0000	0.6	18		21 M 0037	0.9	27	
0743	3.8	116		0628	4.3	131		0653	4.3	131	
1347	2.1	64		1232	1.3	40		1321	0.5	15	
1916	4.0	122		1838	4.5	137		1939	4.2	128	
8 Sa 0158	1.4	43		23 Su 0057	0.8	24		6 Su 0552	4.3	131	
0828	3.8	116		0726	4.3	131		1214	0.6	18	
1442	2.1	64		1339	1.2	37		1828	4.4	134	
2008	3.8	116		1946	4.4	134					
9 Su 0243	1.6	49		24 M 0158	1.0	30		7 M 0030	1.9	58	
0910	3.8	116		0826	4.4	134		0758	4.2	128	
1532	2.0	61		1447	0.9	27		1429	0.3	9	
2100	3.7	113		2056	4.3	131		2052	4.2	128	
10 M 0325	1.8	55		25 Tu 0302	1.1	34		8 W 0253	1.2	37	
0949	3.8	116		0927	4.4	134		0905	4.2	128	
1616	1.9	58		1553	0.7	21		1535	0.2	6	
2152	3.6	110		2207	4.2	128		2203	4.1	125	
11 Tu 0403	1.9	58		26 W 0407	1.2	37		9 Th 0114	2.0	61	
1027	3.9	119		1028	4.5	137		0718	3.2	98	
1656	1.7	52		1656	0.5	15		1346	1.3	40	
2241	3.6	110		● 2315	4.2	128		2006	3.4	104	
12 W 0438	1.9	58		27 Th 0511	1.3	40		24 Th 0114	2.0	61	
1103	3.9	119		1126	4.6	140		0850	3.2	98	
1731	1.5	46		1756	0.3	9		1639	0.1	3	
● 2328	3.6	110						● 2310	4.1	125	
13 Th 0512	1.9	58		28 F 0019	4.1	125		9 W 0159	2.0	61	
1139	4.0	122		0612	1.3	40		0940	3.5	107	
1805	1.3	40		1221	4.6	140		1603	1.4	43	
				1853	0.2	6		2212	3.4	104	
14 F 0014	3.7	113		29 Sa 0118	4.1	125		28 M 0155	4.0	122	
0547	1.9	58		0710	1.4	43		0756	1.2	37	
1215	4.1	125		1314	4.6	140		1350	4.3	131	
1840	1.0	30		1947	0.2	6		2017	0.5	15	
15 Sa 0057	3.7	113		30 Su 0214	4.0	122		13 Th 0147	3.9	119	
0625	1.9	58		0805	1.4	43		0727	1.4	43	
1253	4.3	131		1404	4.6	140		1344	4.5	137	
1918	0.8	24		2039	0.3	9		2007	0.3	9	
				31 M 0305	4.0	122					
				0858	1.5	46					
				1452	4.5	137					
				2129	0.5	15					

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Isla Zapara (Malecon), Venezuela, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0313	3.8	116	16 Sa 0210	4.6	140	1 Su 0301	3.9	119	16 M 0241	4.8	146
0947	1.1	34	0846	0.2	6	0949	0.8	24	0933	-0.3	-9
1542	3.7	113	1500	4.3	131	1602	3.5	107	1601	4.1	125
2147	1.6	49	2052	0.9	27	2131	2.1	64	2138	1.6	49
2 Sa 0346	3.7	113	17 Su 0300	4.6	140	2 M 0336	3.8	116	17 Tu 0336	4.6	140
1025	1.1	34	0943	-0.1	-3	1023	0.8	24	1030	-0.3	-9
1626	3.6	110	1603	4.2	128	1649	3.5	107	1706	4.1	125
2222	1.8	55	O 2152	1.2	37	2209	2.2	67	O 2245	1.7	52
3 Su 0421	3.5	107	18 M 0355	4.5	137	3 Tu 0413	3.7	113	18 W 0435	4.5	137
1102	1.1	34	1042	-0.2	-6	1058	0.7	21	1129	-0.3	-9
1712	3.5	107	1709	4.2	128	1738	3.5	107	1812	4.1	125
● 2259	2.0	61	2257	1.4	43	● 2252	2.3	70	2356	1.8	55
4 M 0459	3.4	104	19 Tu 0454	4.4	134	4 W 0454	3.6	110	19 Th 0537	4.3	131
1138	1.0	30	1143	-0.3	-9	1136	0.7	21	1228	-0.2	-6
1801	3.4	104	1818	4.2	128	1828	3.5	107	1918	4.2	128
2340	2.1	64				2342	2.3	70			
5 Tu 0540	3.3	101	20 W 0008	1.5	46	5 Th 0537	3.5	107	20 F 0109	1.9	58
1216	1.0	30	0559	4.2	128	1217	0.7	21	0642	4.1	125
1852	3.4	104	1246	-0.2	-6	1918	3.6	110	1327	0.0	0
			1928	4.1	125				2022	4.2	128
6 W 0027	2.2	67	21 Th 0122	1.6	49	6 F 0036	2.4	73	21 Sa 0221	1.8	55
0624	3.2	98	0707	4.1	125	0624	3.5	107	0748	4.0	122
1257	1.0	30	1349	-0.1	-3	1300	0.6	18	1426	0.3	9
1944	3.4	104	2037	4.2	128	2007	3.7	113	2120	4.3	131
7 Th 0117	2.2	67	22 F 0236	1.6	49	7 Sa 0132	2.3	70	22 Su 0327	1.7	52
0712	3.2	98	0816	4.0	122	0715	3.5	107	0853	3.9	119
1339	0.9	27	1452	0.0	0	1345	0.6	18	1522	0.6	18
2035	3.4	104	2141	4.2	128	2052	3.8	116	2212	4.3	131
8 F 0208	2.2	67	23 Sa 0345	1.5	46	8 Su 0228	2.2	67	23 M 0428	1.6	49
0801	3.2	98	0923	4.0	122	0809	3.6	110	0955	3.8	116
1423	0.8	24	1552	0.2	6	1432	0.6	18	1615	0.9	27
2121	3.5	107	2238	4.3	131	2134	3.9	119	2257	4.4	134
9 Sa 0257	2.1	64	24 Tu 0447	1.3	40	9 M 0322	2.0	61	24 Tu 0522	1.4	43
0850	3.4	104	1026	3.9	119	0904	3.6	110	1052	3.7	113
1508	0.7	21	1648	0.4	12	1519	0.7	21	1703	1.2	37
2204	3.7	113	O 2329	4.3	131	2214	4.1	125	O 2336	4.4	134
10 Su 0344	2.0	61	25 M 0543	1.2	37	10 Tu 0414	1.7	52	25 W 0611	1.3	40
0939	3.5	107	1123	3.9	119	1001	3.7	113	1145	3.6	110
1553	0.7	21	1740	0.7	21	1607	0.7	21	1747	1.4	43
2243	3.8	116				● 2253	4.3	131			
11 M 0431	1.8	55	26 Tu 0013	4.3	131	11 W 0506	1.4	43	26 Th 0011	4.3	131
1028	3.7	113	0634	1.1	34	1058	3.8	116	0654	1.2	37
1639	0.6	18	1216	3.8	116	1657	0.8	24	1235	3.6	110
● 2321	4.0	122	1827	1.0	30	2333	4.5	137	1826	1.7	52
12 Tu 0519	1.5	46	27 W 0051	4.2	128	12 F 0558	1.0	30	27 F 0043	4.3	131
1118	3.9	119	0720	1.1	34	1157	3.9	119	0732	1.0	30
1726	0.6	18	1304	3.8	116	1748	0.9	27	1321	3.5	107
			1910	1.2	37				1901	1.9	58
13 W 0000	4.2	128	28 Th 0125	4.1	125	13 F 0016	4.7	143	28 Sa 0114	4.2	128
0608	1.1	34	0802	1.0	30	0650	0.6	18	0807	0.9	27
1210	4.1	125	1350	3.7	113	1256	4.0	122	1405	3.5	107
1814	0.6	18	1949	1.5	46	1841	1.0	30	1934	2.0	61
14 Th 0040	4.4	134	29 F 0156	4.1	125	14 Sa 0101	4.8	146	29 Su 0147	4.2	128
0658	0.8	24	0840	0.9	27	0744	0.2	6	0840	0.8	24
1304	4.2	128	1434	3.6	110	1356	4.1	125	1450	3.5	107
1904	0.6	18	2024	1.7	52	1937	1.2	37	2007	2.1	64
15 F 0123	4.5	137	30 Sa 0228	4.0	122	15 M 0149	4.8	146	30 M 0221	4.1	125
0751	0.5	15	0916	0.9	27	0838	-0.1	-3	0912	0.7	21
1401	4.3	131	1517	3.6	110				1535	3.6	110
1957	0.8	24	2057	1.9	58				2043	2.2	67
									31 Tu 0257	4.1	125
									0945	0.6	18
									1621	3.6	110
									2125	2.3	70

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Isla Zapara (Malecon), Venezuela, 2011

Times and Heights of High and Low Waters

July						August						September							
Time		Height		Time		Height		Time		Height		Time		Height		Time		Height	
1 F	0343	4.4	134	16 Sa	0458	4.4	134	1 M	0458	4.5	137	16 Tu	0102	2.1	64	1 Th	0051	0.9	27
	1025	0.4	12		1146	0.6	18		1124	0.6	18		0621	3.7	113		0657	4.2	128
●	1716	4.0	122		1836	4.2	128		1807	4.4	134		1249	1.6	49		1256	1.2	37
	2229	2.3	70										1925	4.0	122		1924	4.7	143
2 Sa	0429	4.4	134	17 Su	0031	2.2	67	2 Tu	0006	1.7	52	17 W	0157	2.0	61	2 F	0159	0.7	21
	1108	0.4	12		0552	4.1	125		0559	4.4	134		0717	3.5	107		0811	4.1	125
	1803	4.1	125		1236	0.9	27		1216	0.8	24		1333	1.9	58		1402	1.4	43
	2327	2.3	70		1927	4.2	128		1859	4.6	140		2007	3.9	119		2027	4.8	146
3 Su	0519	4.3	131	18 M	0134	2.1	64	3 W	0112	1.5	46	18 Th	0249	1.9	58	3 Sa	0306	0.5	15
	1154	0.5	15		0648	3.9	119		0705	4.2	128		0814	3.4	104		0926	4.1	125
	1850	4.2	128		1325	1.2	37		1312	1.0	30		1416	2.0	61		1512	1.6	49
					2013	4.2	128		1954	4.7	143		2048	3.9	119		2130	4.8	146
4 M	0030	2.1	64	19 Tu	0234	2.1	64	4 Th	0219	1.2	37	19 F	0335	1.7	52	4 Su	0410	0.3	9
	0615	4.2	128		0746	3.6	110		0817	4.0	122		0912	3.3	101		1038	4.1	125
	1243	0.6	18		1412	1.5	46		1413	1.2	37		1458	2.2	67		1620	1.6	49
	1938	4.4	134		2056	4.2	128		2051	4.7	143		2128	4.0	122		2232	4.9	149
5 Tu	0134	1.9	58	20 W	0330	1.9	58	5 F	0325	0.9	27	20 Sa	0416	1.5	46	5 M	0511	0.2	6
	0718	4.1	125		0845	3.5	107		0930	4.0	122		1006	3.3	101		1143	4.2	128
	1334	0.8	24		1458	1.7	52		1517	1.4	43		1537	2.2	67		1725	1.6	49
	2027	4.5	137		2136	4.2	128		2148	4.8	146		2207	4.0	122		2329	4.9	149
6 W	0239	1.6	49	21 Th	0420	1.7	52	6 Sa	0428	0.6	18	21 Su	0452	1.4	43	6 Tu	0608	0.2	6
	0825	3.9	119		0943	3.4	104		1043	3.9	119		1056	3.4	104		1243	4.2	128
	1428	1.0	30		1540	1.9	58		1622	1.5	46		1616	2.2	67		1825	1.6	49
	2116	4.7	143		2213	4.2	128		2245	4.9	149		2245	4.1	125		2325	4.4	134
7 Th	0342	1.3	40	22 F	0504	1.5	46	7 Su	0527	0.3	9	22 M	0525	1.2	37	7 W	0024	4.9	149
	0934	3.9	119		1038	3.4	104		1151	4.0	122		1142	3.5	107		0701	0.2	6
	1526	1.2	37		1619	2.1	64		1726	1.6	49		1654	2.2	67		1337	4.3	131
	2207	4.8	146		2249	4.2	128		2340	5.0	152		2322	4.3	131		1922	1.7	52
8 F	0442	0.9	27	23 Sa	0541	1.3	40	8 M	0624	0.1	3	23 Tu	0558	1.0	30	8 Th	0115	4.8	146
	1044	3.9	119		1129	3.4	104		1254	4.1	125		1224	3.6	110		0752	0.4	12
	1625	1.4	43		1655	2.1	64		1828	1.7	52		1735	2.2	67		1426	4.3	131
	2257	4.9	149		2324	4.3	131									2015	1.7	52	
9 Sa	0540	0.5	15	24 Su	0614	1.1	34	9 Tu	0034	5.0	152	24 W	0000	4.4	134	9 F	0204	4.7	143
	1151	3.9	119		1215	3.4	104		0718	0.0	0		0633	0.8	24		0840	0.6	18
	1725	1.5	46		1730	2.2	67		1352	4.1	125		1304	3.8	116		1511	4.2	128
	2349	5.0	152		2359	4.3	131		1927	1.8	55		1818	2.1	64		2107	1.7	52
10 Su	0636	0.2	6	25 M	0645	0.9	27	10 W	0125	4.9	149	25 Th	0039	4.6	140	10 Sa	0250	4.5	137
	1256	4.0	122		1259	3.5	107		0810	0.1	3		0710	0.6	18		0925	0.9	27
	1826	1.7	52		1807	2.2	67		1446	4.2	128		1343	3.9	119		1553	4.2	128
									2023	1.8	55		1904	2.0	61		2157	1.8	55
11 M	0040	5.0	152	26 Tu	0035	4.4	134	11 Th	0215	4.8	146	26 F	0120	4.7	143	11 Su	0336	4.3	131
	0729	0.0	0		0717	0.8	24		0900	0.2	6		0750	0.5	15		1008	1.2	37
	1357	4.0	122		1342	3.6	110		1538	4.2	128		1422	4.1	125		1633	4.1	125
	1926	1.8	55		1847	2.2	67		2119	1.9	58		1953	1.8	55		2246	1.8	55
12 Tu	0131	5.0	152	27 W	0112	4.5	137	12 F	0303	4.7	143	27 Sa	0204	4.8	146	12 M	0422	4.0	122
	0822	-0.1	-3		0751	0.6	18		0948	0.5	15		0832	0.5	15		1050	1.5	46
	1456	4.1	125		1424	3.8	116		1627	4.1	125		1504	4.3	131		1712	4.0	122
	2026	1.9	58		1931	2.1	64		2214	2.0	61		2045	1.7	52		2335	1.9	58
13 W	0223	4.9	149	28 Th	0150	4.6	140	13 Sa	0351	4.5	137	28 Su	0252	4.8	146	13 Tu	0509	3.8	116
	0914	-0.1	-3		0828	0.5	15		1035	0.7	21		0917	0.5	15		1130	1.8	55
	1553	4.1	125		1505	3.9	119		1713	4.1	125		1548	4.4	134		1751	3.9	119
	2126	2.0	61		2017	2.1	64		2309	2.0	61		2142	1.5	46		2327	0.6	18
14 Th	0314	4.8	146	29 F	0231	4.7	143	14 Su	0440	4.2	128	29 M	0345	4.7	143	14 W	0024	1.8	55
	1005	0.1	3		0908	0.4	12		1120	1.1	34		1005	0.6	18		0559	3.6	110
	1649	4.1	125		1548	4.0	122		1758	4.1	125		1635	4.5	137		1210	2.0	61
	2227	2.1	64		2108	2.0	61						2241	1.3	40		1832	3.8	116
15 F	0406	4.6	140	30 Sa	0316	4.7	143	15 M	0005	2.1	64	30 Tu	0443	4.6	140	15 Th	0112	1.8	55
	1056	0.3	9		0951	0.4	12		0529	4.0	122		1057	0.8	24		0652	3.5	107
	1743	4.1	125		1632	4.2	128		1205	1.4	43		1727	4.6	140		1251	2.2	67
	2328	2.2	67		2203	2.0	61		1842	4.0	122		2345	1.1	34		1914	3.8	116
													31 W	0547	4.4	134			
													1036	1.0	30				
													1718	4.3	131				
													2302	1.9	58				

Time meridian $67^{\circ} 30' \text{ W.}$ 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to the chart datum of soundings.

Isla Zapara (Malecon), Venezuela, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm
1 Sa	0139	0.4 12	16 Su	0145	1.4 43	1 Tu	0326	0.4 12	16 W	0222	1.2 37
	0804	4.2 128		0817	3.5 107		1008	4.4 134		0916	3.9 119
	1354	1.6 49		1336	2.5 76		1602	1.8 55		1443	2.4 73
	2005	4.8 146		1955	3.9 119		2152	4.7 143		2045	4.1 125
2 Su	0245	0.3 9	17 M	0226	1.4 43	2 W	0426	0.6 18	17 Th	0306	1.2 37
	0918	4.2 128		0907	3.6 110		1106	4.5 137		0957	4.0 122
	1506	1.7 52		1424	2.5 76		1704	1.7 52		1536	2.2 67
	2111	4.8 146		2039	3.9 119		2252	4.6 140		2136	4.2 128
3 M	0349	0.3 9	18 Tu	0306	1.3 40	3 Th	0521	0.8 24	18 F	0351	1.1 34
	1026	4.3 131		0953	3.7 113		1157	4.5 137		1035	4.2 128
	1614	1.7 52		1511	2.4 73		1800	1.6 49		1628	1.9 58
	2214	4.8 146		2123	4.1 125		2347	4.5 137		2228	4.3 131
4 Tu	0450	0.3 9	19 W	0347	1.2 37	4 F	0613	1.0 30	19 Sa	0437	1.1 34
	1128	4.4 134		1033	3.8 116		1242	4.5 137		1114	4.4 134
	1718	1.6 49		1558	2.3 70		1853	1.5 46		1721	1.6 49
	2313	4.8 146		2207	4.2 128					2322	4.4 134
5 W	0547	0.4 12	20 Th	0428	1.1 34	5 Sa	0039	4.4 134	20 Su	0525	1.2 37
	1223	4.4 134		1111	4.0 122		0700	1.3 40		1155	4.6 140
	1816	1.6 49		1646	2.1 64		1322	4.5 137		1814	1.2 37
				2253	4.4 134		1941	1.5 46			
6 Th	0008	4.7 143	21 F	0510	1.0 30	6 Su	0127	4.2 128	21 M	0018	4.4 134
	0639	0.6 18		1147	4.2 128		0743	1.5 46		0615	1.2 37
	1313	4.4 134		1736	1.8 55		1357	4.4 134		1239	4.8 146
	1910	1.6 49		2341	4.5 137		2025	1.4 43		1908	0.8 24
7 F	0059	4.6 140	22 Sa	0554	0.9 27	7 M	0212	4.1 125	22 Tu	0116	4.4 134
	0728	0.8 24		1225	4.4 134		0823	1.8 55		0708	1.3 40
	1357	4.4 134		1826	1.5 46		1431	4.3 131		1326	4.9 149
	2001	1.6 49					2106	1.4 43		2003	0.5 15
8 Sa	0148	4.5 137	23 Su	0032	4.6 140	8 Tu	0256	3.9 119	23 W	0215	4.4 134
	0814	1.1 34		0640	0.9 27		0859	2.0 61		0803	1.4 43
	1437	4.3 131		1306	4.6 140		1505	4.2 128		1418	5.0 152
	2049	1.6 49		1919	1.2 37		2145	1.4 43		2100	0.3 9
9 Su	0233	4.3 131	24 M	0125	4.6 140	9 W	0340	3.8 116	24 Th	0315	4.4 134
	0856	1.4 43		0729	1.0 30		0933	2.1 64		0901	1.5 46
	1513	4.2 128		1350	4.8 146		1540	4.2 128		1512	5.0 152
	2134	1.6 49		2014	0.8 24		2222	1.4 43		2158	0.2 6
10 M	0318	4.1 125	25 Tu	0222	4.6 140	10 Th	0425	3.7 113	25 F	0418	4.4 134
	0936	1.7 52		0821	1.1 34		1006	2.3 70		1003	1.7 52
	1548	4.1 125		1438	4.9 149		1618	4.1 125		1610	5.0 152
	2218	1.6 49		2111	0.6 14		2259	1.3 40		● 2257	0.1 3
11 Tu	0403	3.9 119	26 W	0322	4.6 140	11 F	0513	3.7 113	26 Sa	0524	4.3 131
	1014	1.9 58		0916	1.2 37		1042	2.4 73		1109	1.8 55
	1624	4.0 122		1531	5.0 152		1658	4.0 122		1711	4.9 149
	○ 2300	1.6 49		● 2210	0.4 12		2337	1.3 40		2358	0.2 6
12 W	0449	3.7 113	27 Th	0425	4.5 137	12 Sa	0602	3.6 110	27 Su	0631	4.3 131
	1050	2.1 64		1016	1.4 43		1122	2.5 76		1218	1.9 58
	1701	3.9 119		1628	4.9 149		1741	4.0 122		1815	4.8 146
	2342	1.6 49		2312	0.3 9						
13 Th	0538	3.6 110	28 F	0532	4.4 134	13 Su	0016	1.3 40	28 M	0100	0.3 9
	1127	2.3 70		1121	1.6 49		0653	3.6 110		0738	4.3 131
	1742	3.9 119		1730	4.9 149		1207	2.5 76		1329	1.9 58
							1824	4.0 122		1920	4.7 143
14 F	0023	1.5 46	29 Sa	0015	0.2 6	14 M	0057	1.3 40	29 Tu	0201	0.5 15
	0629	3.5 107		0643	4.3 131		0744	3.7 113		0843	4.4 134
	1206	2.4 73		1231	1.7 52		1257	2.6 79		1438	1.9 58
	1825	3.8 116		1835	4.8 146		1910	4.0 122		2024	4.6 140
15 Sa	0104	1.5 46	30 Su	0120	0.2 6	15 Tu	0139	1.2 37	30 W	0301	0.7 21
	0723	3.5 107		0754	4.3 131		0832	3.8 116		0943	4.4 134
	1250	2.5 76		1343	1.8 55		1349	2.5 76		1543	1.8 55
	1910	3.8 116		1943	4.8 146		1957	4.1 125		2127	4.5 137
31 M	0224	0.3 9	31 M	0904	4.4 134				31 W	0100	1.1 34
				1455	1.8 55					1618	1.7 52
				2049	4.7 143					2159	4.0 122

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Amuay, Venezuela, 2011

Times and Heights of High and Low Waters

January					February					March				
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm
1 Sa	0308	0.7 21		16 Su	0318 0.5 15		1 Tu	0427 0.5 15		16 Tu	0323 0.5 15		1 Tu	0254 0.6 18
	0611	0.5 15		0532 0.4 12			0739 0.3 9			0713 0.2 6			0657 0.2 6	
	1259	1.4 43		1152 1.2 37			1420 1.0 30			1314 1.1 34			1341 1.0 30	
	2035	-0.6 -18		1958 -0.6 -18			2139 -0.5 -15			2041 -0.6 -18			2023 -0.4 -12	
2 Su	0409	0.7 21		17 M	0403 0.5 15		2 W	0512 0.5 15		17 Th	0351 0.5 15		2 W	0333 0.6 18
	0657	0.5 15		0618 0.4 12			0826 0.3 9			0812 0.1 3			0742 0.2 6	
	1340	1.4 43		1231 1.3 40			1458 0.9 27			1411 1.0 30			1428 0.9 27	
	2123	-0.6 -18		2039 -0.6 -18			● 2213 -0.4 -12			2123 -0.5 -15			2056 -0.3 -9	
3 M	0507	0.7 21		18 Tu	0442 0.5 15		3 Th	0554 0.5 15		18 F	0421 0.6 18		3 Th	0409 0.6 18
	0743	0.6 18		0709 0.4 12			0915 0.3 9			0914 0.0 0			0827 0.2 6	
	1418	1.3 40		1313 1.3 40			1530 0.8 24			1514 0.9 27			1515 0.8 24	
	2207	-0.6 -18		2120 -0.7 -21			2243 -0.3 -9			○ 2206 -0.4 -12			2124 -0.1 -3	
4 Tu	0602	0.7 21		19 W	0517 0.5 15		4 F	0633 0.5 15		19 Sa	0455 0.7 21		4 F	0440 0.5 15
	0831	0.6 18		0806 0.4 12			1008 0.3 9			1020 -0.1 -3			0912 0.1 3	
	1453	1.2 37		1400 1.2 37			1557 0.7 21			1630 0.8 24			1606 0.6 18	
	● 2248	-0.5 -15		○ 2201 -0.7 -21			2312 -0.2 -6			2250 -0.3 -9			● 2151 0.0 0	
5 W	0653	0.7 21		20 Th	0549 0.6 18		5 Sa	0707 0.5 15		20 Su	0535 0.8 24		5 Sa	0505 0.5 15
	0923	0.6 18		0910 0.4 12			1106 0.3 9			1129 -0.2 -6			0959 0.1 3	
	1521	1.1 34		1452 1.1 34			1620 0.5 15			1802 0.6 18			1708 0.6 18	
	2326	-0.4 -12		2243 -0.6 -18			2341 -0.1 -3			2338 -0.1 -3			2218 0.1 3	
6 Th	0738	0.7 21		21 F	0621 0.6 18		6 Su	0738 0.5 15		21 M	0620 0.8 24		6 Su	0519 0.5 15
	1022	0.6 18		1020 0.3 9			1210 0.2 6			1241 0.3 -9			1049 0.1 3	
	1541	0.9 27		1552 1.0 30			1826 0.4 12			1941 0.6 18			1825 0.5 15	
				2326 -0.5 -15									2247 0.2 6	
7 F	0000	-0.3 -9		22 Sa	0655 0.7 21		7 M	0012 0.0 0		22 Tu	0030 0.0 0		7 M	0434 0.6 18
	0818	0.7 21		1135 0.2 6			0804 0.6 18			0712 0.9 27			1142 0.0 0	
	1130	0.6 18		1707 0.8 24			1318 0.1 3			1354 -0.4 -12			1952 0.4 12	
	1558	0.8 24					2038 0.3 9			2111 0.6 18			2319 0.3 9	
8 Sa	0033	-0.2 -6		23 Su	0011 -0.4 -12		8 Tu	0046 0.1 3		23 W	0126 0.1 3		8 Tu	0417 0.6 18
	0852	0.8 24		0732 0.8 24			0823 0.6 18			0809 1.0 30			1238 -0.1 -3	
	1245	0.5 15		1254 0.1 3			1425 0.0 0			1507 -0.5 -15			2116 0.5 15	
	1622	0.6 18		1851 0.6 18			2209 0.3 9			2230 0.6 18			2356 0.4 12	
9 Su	0105	-0.1 -3		24 M	0058 -0.2 -6		9 W	0124 0.2 6		24 Th	0226 0.2 6		9 W	0447 0.7 21
	0921	0.8 24		0813 0.9 27			0834 0.7 21			0910 1.0 30			1337 -0.1 -3	
	1405	0.4 12		1413 -0.1 -3			1527 -0.1 -3			1615 -0.6 -18			2228 0.5 15	
	1703	0.5 15		2045 0.5 15			2323 0.3 9			○ 2337 0.6 18				
10 M	0138	0.0 0		25 Tu	0148 -0.1 -3		10 Th	0207 0.2 6		25 F	0326 0.3 9		10 Th	0040 0.4 12
	0947	0.8 24		0857 1.0 30			0846 0.7 21			1010 1.0 30			0535 0.7 21	
	1523	0.3 9		1529 -0.3 -9			1621 -0.2 -6			1717 -0.6 -18			1435 -0.2 -6	
	2148	0.4 12		2222 0.5 15									2323 0.5 15	
11 Tu	0213	0.1 3		26 W	0239 0.1 3		11 F	0022 0.4 12		26 Sa	0034 0.6 18		11 F	0133 0.4 12
	1010	0.9 27		0943 1.1 34			0253 0.3 9			0425 0.3 9			0636 0.8 24	
	1626	0.1 3		1639 -0.4 -12			0916 0.8 24			1107 1.1 34			1530 -0.3 -9	
	2317	0.4 12		○ 2342 0.5 15			○ 1710 -0.3 -9			1812 -0.6 -18			○ 1641 -0.5 -15	
12 W	0250	0.2 6		27 Th	0333 0.2 6		12 Sa	0110 0.4 12		27 Su	0125 0.6 18		12 Sa	0003 0.5 15
	1028	0.9 27		1032 1.2 37			0342 0.3 9			0520 0.3 9			0231 0.4 12	
	1715	0.0 0		1742 -0.6 -18			0958 0.9 27			1201 1.1 34			0749 0.9 27	
							1754 -0.5 -15			1902 -0.6 -18			○ 1620 -0.3 -9	
13 Th	0030	0.4 12		28 F	0051 0.5 15		13 Su	0150 0.4 12		28 M	0212 0.6 18		13 Su	0034 0.6 18
	0329	0.3 9		0426 0.3 9			0432 0.3 9			0610 0.3 9			0525 0.4 12	
	1042	1.0 30		1121 1.2 37			1044 1.0 30			1252 1.0 30			1151 1.0 30	
	1757	-0.2 -6		1838 -0.7 -21			1837 -0.6 -18			1945 -0.5 -15			1707 -0.4 -12	
14 F	0133	0.4 12		29 Sa	0152 0.5 15		14 M	0224 0.4 12					14 M	0100 0.6 18
	0409	0.3 9		0517 0.3 9			0523 0.3 9			0520 0.2 6			0426 0.4 12	
	1057	1.0 30		1209 1.2 37			1132 1.1 34			1012 1.0 30			1012 1.0 30	
	1838	-0.3 -9		1930 -0.7 -21			1919 -0.6 -18			1751 -0.4 -12			1856 -0.2 -6	
15 Sa	0229	0.4 12		30 Su	0248 0.6 18		15 Tu	0255 0.4 12					15 Tu	0123 0.6 18
	0449	0.3 9		0606 0.3 9			0617 0.2 6			1221 1.1 34			0523 0.3 9	
	1120	1.1 34		1255 1.2 37			2000 -0.6 -18			1833 -0.4 -12			1342 0.9 27	
	1918	-0.5 -15		2018 -0.7 -21									1929 0.0 0	
31 Th	0339	0.5 15		31 M	0653 0.3 9								31 Th	0234 0.8 24
				1339 1.1 34									0745 0.2 6	
				2101 -0.6 -18									1438 0.8 24	
													1958 0.1 3	

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Amuay, Venezuela, 2011

Times and Heights of High and Low Waters

April					May					June					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm
1 F	0258	0.8	24	16	0136	1.2	37	1	0139	1.1	34	16	0132	1.6	49
	0827	0.1	3	Sa	0816	-0.3	-9	Su	0858	-0.1	-3	M	0908	-0.5	-15
	1536	0.7	21		1509	0.9	27		1704	0.8	24		1651	0.9	27
	2026	0.3	9		1958	0.3	9		1952	0.7	21		2008	0.7	21
2 Sa	0313	0.8	24	17	0210	1.3	40	2	0118	1.1	34	17	0211	1.6	49
	0908	0.0	0	Su	0912	-0.4	-12	M	0937	-0.1	-3	Tu	1001	-0.6	-18
	1640	0.7	21		1627	0.9	27		1818	0.8	24		1800	1.0	30
	2053	0.4	12	O	2045	0.4	12		2018	0.7	21	O	2102	0.8	24
3 Su	0258	0.8	24	18	0247	1.3	40	3	0125	1.2	37	18	0254	1.5	46
	0949	0.0	0	M	1009	-0.5	-15	Tu	1017	-0.2	-6	W	1055	-0.6	-18
	1752	0.7	21		1745	0.9	27						1904	1.0	30
	●	2120	0.5	15		2136	0.5	15	●					2202	0.9	27
4 M	0221	0.8	24	19	0330	1.3	40	4	0149	1.2	37	19	0340	1.4	43
	1033	-0.1	-3	Tu	1108	-0.5	-15	W	1059	-0.2	-6	Th	1148	-0.5	-15
	1910	0.7	21		1901	0.9	27						2002	1.1	34
	2149	0.6	18		2233	0.7	21						2310	0.9	27
5 Tu	0230	0.9	27	20	0419	1.3	40	5	0223	1.3	40	20	0431	1.3	40
	1119	-0.1	-3	W	1208	-0.5	-15	Th	1143	-0.2	-6	F	1241	-0.4	-12
					2010	1.0	30					Su	2054	1.1	34
					2337	0.7	21					M	1242	-0.3	-9
6 W	0259	1.0	30	21	0517	1.2	37	6	0305	1.3	40	21	0026	0.9	27
	1208	-0.2	-6	Th	1308	-0.5	-15	F	1230	-0.3	-9	Sa	0533	1.2	37
					2112	1.0	30					M	1331	-0.3	-9
												2139	1.2	37	
7 Th	0339	1.0	30	22	0049	0.8	24	7	0356	1.2	37	22	0149	0.8	24
	1300	-0.2	-6	F	0630	1.1	34	Sa	1316	-0.3	-9	Su	0702	1.0	30
					1407	-0.4	-12		2227	1.0	30		1418	-0.2	-6
					2205	1.1	34						2219	1.2	37
8 F	0429	1.0	30	23	0206	0.7	21	8	0053	0.9	27	23	0316	0.7	21
	1352	-0.2	-6	Sa	0755	1.1	34	Su	0457	1.1	34	W	0841	0.9	27
	2307	0.8	24		1504	-0.3	-9		1403	-0.2	-6	M	1501	0.0	0
					2251	1.1	34		2242	1.0	30		2254	1.2	37
9 Sa	0108	0.7	21	24	0323	0.7	21	9	0213	0.8	24	9	0435	0.6	18
	0533	1.0	30	Su	0916	1.0	30	M	0612	1.0	30	Tu	1009	0.8	24
	1444	-0.3	-9		1555	-0.2	-6		1448	-0.2	-6		1540	0.1	3
	2330	0.8	24	O	2333	1.1	34		2257	1.1	34	O	2326	1.2	37
10 Su	0218	0.7	21	25	0432	0.6	18	10	0325	0.7	21	10	0531	0.0	0
	0649	1.0	30	M	1030	0.9	27	Tu	0750	0.9	27	W	1127	0.8	24
	1532	-0.3	-9		1640	-0.1	-3		1533	-0.1	-3	M	1616	0.3	9
	2349	0.8	24					O	2313	1.1	34		2353	1.3	40
11 M	0325	0.6	18	26	0009	1.1	34	11	0430	0.5	15	11	0619	0.3	9
	0818	1.0	30	Tu	0531	0.4	12	Sa	0952	0.9	27	W	1239	0.7	21
	1619	-0.3	-9		1138	0.9	27		1617	0.0	0	M	1650	0.4	12
	●				1719	0.0	0		2331	1.2	37				
12 Tu	0007	0.9	27	27	0042	1.1	34	12	0530	0.2	6	12	0719	-0.4	-12
	0427	0.5	15	W	0620	0.3	9	Th	1138	0.8	24	F	0656	0.1	3
	0949	1.0	30		1242	0.8	24		1701	0.1	3		1349	0.7	21
	1703	-0.2	-6		1754	0.2	6		2354	1.4	43		1722	0.5	15
13 W	0024	0.9	27	28	0110	1.1	34	13	0627	0.0	0	13	0033	1.3	40
	0526	0.3	9	Th	0704	0.2	6	Sa	1305	0.8	24	W	0731	0.0	0
	1114	0.9	27		1345	0.8	24		1746	0.3	9	M	1456	0.8	24
	1746	-0.1	-3		1825	0.3	9					1754	0.6	18	
14 Th	0044	1.0	30	29	0132	1.1	34	14	0023	1.5	46	14	0039	1.3	40
	0623	0.1	3	F	0743	0.1	3	Sa	0721	-0.2	-6	W	0806	-0.1	-3
	1234	0.9	27		1449	0.8	24		1424	0.8	24	M	1603	0.8	24
	1829	0.0	0		1855	0.4	12		1831	0.4	12		1825	0.7	21
15 F	0108	1.1	34	30	0146	1.1	34	15	0055	1.5	46	15	0152	1.6	49
	0719	-0.1	-3	Sa	0821	0.0	0	Su	0814	-0.4	-12	W	0950	-0.6	-18
	1351	0.9	27		1554	0.8	24		1539	0.9	27	M	1754	1.0	30
	1913	0.1	3		1924	0.6	18		1918	0.6	18	O	2036	0.9	27

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Amuay, Venezuela, 2011

Times and Heights of High and Low Waters

July					August					September													
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height									
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm								
1 F	0125 1008	1.5 -0.4	46 -12	16 Sa	0307 1055	1.3 -0.2	40 -6	1 M	0312 1051	1.3 -0.1	40 -3	16 Tu	0522 1112	0.9 1.0	27 30	1 Th	0015 0715	0.2 1.0	6 30	16 F	0039 1632	0.5 1.3	15 40
●	2224	0.8	24		1856	1.0	30		1821	1.1	34		1901	1.1	34		1145	0.6	18		1819	1.5	46
2 Sa	0207 1047	1.5 -0.3	46 -9	17 Su	0342 1130	1.2 -0.1	37 -3	2 Tu	0423 1132	1.1 0.1	34 3	17 W	0015 0708	0.6 0.8	18 24	2 F	0126 1239	0.1 0.8	3 24	17 Sa	0135 1710	0.4 1.4	12 43
1929 2159	1.0 0.9	30 27		1936	1.1	34		1850	1.2	37		1927	1.1	34		1914	1.6	49					
3 Su	0254 1127	1.4 -0.3	43 -9	18 M	0411 1204	1.0 0.1	30 3	3 W	0028 0607	0.5 0.9	15 27	18 Th	0122 0850	0.6 0.8	18 21	3 Sa	0235 1012	0.0 1.1	0 34	18 Su	0228 1802	0.3 1.4	9 43
1951 2317	1.0 0.8	30 24		2012	1.1	34		1216	0.2	6		1947	1.2	37		2016	1.6	49					
4 M	0349 1207	1.2 -0.2	37 -6	19 Tu	0050 0440	0.7 0.8	21 24	4 Th	0144 0818	0.3 0.8	9 24	19 F	0227 1019	0.5 0.8	15 24	4 Su	0342 1119	-0.1 1.2	-3 37	19 M	0319 1906	0.3 1.5	9 46
2013	1.1	34		1236	0.2	6		1303	0.4	12		1249	0.7	21		1445	0.9	27		2120	1.7	52	
5 Tu	0038 0458	0.7 1.0	21 30	20 W	0213 0818	0.6 0.7	18 21	5 F	0258 1002	0.1 0.8	3 24	20 Sa	0325 2010	0.3 1.3	9 40	5 M	0443 1216	-0.2 1.2	-6 37	20 Tu	0405 1238	0.2 1.2	6 37
1249 2036	-0.1 1.2	-3 37		1308	0.3	9		1355	0.5	15		2053	1.5	46		1550	1.0	30		2222	1.7	52	
6 W	0159 0648	0.5 0.8	15 24	21 Th	0335 1001	0.5 0.7	15 21	6 Sa	0406 1125	-0.1 0.9	-3 27	21 Su	0415 2043	0.2 1.3	6 40	6 Tu	0539 1305	-0.2 1.3	-6 40	21 W	0448 1301	0.2 1.2	6 37
1333 2103	0.1 1.3	3 40		1343	0.5	15		1450	0.7	21		2143	1.6	49		1652	0.9	27		2321	1.6	49	
7 Th	0315 0926	0.3 0.7	9 21	22 F	0433 1126	0.3 0.7	9 21	7 Su	0508 1234	-0.2 1.0	-6 30	22 M	0459 1314	0.1 1.0	3 30	7 W	0629 1350	-0.1 1.3	-3 40	22 Th	0529 1321	0.1 1.2	3 37
1419 2135	0.3 1.4	9 43		1420	0.6	18		1548	0.8	24		2235	1.7	52		2126	1.4	43		1750	0.9	27	
8 F	0423 1112	0.1 0.7	3 21	23 Sa	0514 1238	0.2 0.7	6 21	8 M	0604 1333	-0.3 1.0	-9 30	23 Tu	0540 1351	0.0 1.0	0 30	8 Th	0017 0713	1.6 0.0	49 0	23 F	0608 1338	0.1 1.3	3 40
1507 2212	0.4 1.5	12 46		1501	0.6	18		1646	0.8	24		2327	1.7	52		1613	0.9	27		1432	1.3	40	
9 Sa	0524 1234	-0.2 0.8	-6 24	24 O	0551 2220	0.1 1.3	3 40	9 Tu	0656 1425	-0.4 1.1	-12 34	24 W	0619 1422	0.0 1.0	0 30	9 F	0111 0753	1.5 0.1	46 3	24 Sa	0647 1355	0.2 1.3	6 40
1557 2236	0.5 1.4	15 43		1338	0.8	24		1742	0.8	24		2300	1.5	46		1707	0.9	27		1936	0.8	24	
10 Su	0620 1344	-0.3 0.8	-9 24	25 M	0627 2257	-0.1 1.4	-3 43	10 W	0018 0744	1.7 -0.3	52 -9	25 Th	0657 1449	-0.1 1.0	-3 30	10 Sa	0204 0827	1.4 0.2	43 6	25 Su	0047 0726	1.4 0.3	43 9
1649 2335	0.7 1.7	21 52		1513	1.1	34		1513	1.1	34		1802	0.9	27		1545	1.3	40		1415	1.4	43	
11 M	0712 1447	-0.5 0.9	-15 27	26 Tu	0704 1516	-0.2 0.9	-6 27	11 Th	0106 0827	1.6 -0.3	49 -9	26 F	0735 1513	-0.1 1.1	-3 34	11 Su	0258 0857	1.3 0.4	40 12	26 M	0158 0806	1.4 0.4	43 12
1742	0.7	21		1716	0.8	24		1558	1.1	34		1929	0.8	24		1857	0.8	24		1616	1.3	40	
12 Tu	0019 0802	1.7 -0.5	52 -15	27 W	0741 1557	-0.2 0.9	-6 27	12 F	0153 0907	1.5 -0.2	46 -6	27 Sa	0040 0813	1.5 0.0	46 0	12 M	0356 0923	1.2 0.5	37 15	27 Tu	0317 0848	1.3 0.5	40 15
1543 1835	0.9 0.8	27 24		1804	0.8	24		1640	1.1	34		2021	0.8	24		1955	0.7	21		2203	0.6	18	
13 W	0104 0849	1.7 -0.5	52 -15	28 Th	0002 0818	1.5 -0.3	46 -9	13 Sa	0238 0942	1.4 0.0	43 0	28 Su	0136 0851	1.5 0.0	46 0	13 Tu	0505 0949	1.1 0.7	34 21	28 W	0444 0933	1.2 0.7	37 21
1636 1928	1.0 0.8	30 24		1632	0.9	27		1720	1.1	34		O	2115	0.8	24		1557	1.2	37		1659	1.2	37
14 Th	0147 0934	1.6 -0.5	49 -15	29 F	0042 0855	1.5 -0.3	46 -9	14 Su	0322 1014	1.2 0.1	37 3	29 W	0238 0931	1.4 0.1	43 3	14 Th	0626 1015	1.0 0.8	30 24	29 Th	0614 1021	1.2 0.8	37 24
1726 2023	1.0 0.8	30 24		1703	0.9	27		1757	1.1	34		2212	0.7	21		2159	0.5	15		2345	0.5	15	
15 F	0229 1016	1.5 -0.4	46 -12	30 Sa	0127 0933	1.5 -0.3	46 -9	15 M	0411 1043	1.1 0.3	34 9	30 Tu	0354 1012	1.2 0.3	37 9	15 Th	0756 1042	1.0 0.9	30 27	30 F	0000 0741	0.0 1.2	0 37
1813 2121	1.0 0.9	30 27		1730	1.0	30		1830	1.1	34		2311	0.7	21		1654	1.4	43		2306	0.4	12	
O	2054	0.8	24	31 Su	0216 1011	1.4 -0.2	43 -6									31 W	0529 1056	1.1 0.5	34 15				
	1755	1.0	30		1755	1.0	30									1732	1.5	46					
	2201	0.7	21		2201	0.7	21																

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Amuay, Venezuela, 2011

Times and Heights of High and Low Waters

October						November						December								
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		Time	Height			
	h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa	0106	0.0	0	16 Su	0055	0.3	9	1 Tu	0240	-0.1	-3	16 W	0147	0.0	0	1 Th	0247	0.0	0	
	0858	1.3	40		1609	1.6	49		1032	1.4	43		1047	1.2	37		1036	1.3	40	
	1219	1.1	34			1438	1.1	34		1327	1.1	34		1553	0.7	21				
	1828	1.7	52			2028	1.5	46		1731	1.4	43		2131	1.0	30		1441	0.6	18
2 Su	0210	-0.1	-3	17 M	0143	0.2	6	2 W	0332	0.0	0	17 Th	0229	0.1	3	2 F	0328	0.1	3	
	1004	1.3	40		1702	1.5	46		1114	1.5	46		1056	1.2	37		1111	1.3	40	
	1329	1.1	34			1557	1.0	30		1448	1.0	30		1710	0.6	18		1554	0.4	12
	1941	1.7	52			2148	1.4	43		1849	1.2	37		2254	0.9	27		2125	0.7	21
3 M	0313	-0.1	-3	18 Tu	0230	0.2	6	3 Th	0418	0.1	3	18 F	0310	0.1	3	3 Sa	0405	0.3	9	
	1059	1.4	43		1806	1.5	46		1153	1.5	46		1106	1.3	40		1143	1.4	43	
	1443	1.1	34			1708	0.9	27		1600	0.8	24		1809	0.4	12		1026	1.3	40
	2056	1.6	49			2302	1.3	40		2034	1.1	34					1658	0.1	3	
4 Tu	0411	0.0	0	19 W	0315	0.2	6	4 F	0459	0.3	9	19 Sa	0351	0.2	6	4 Su	0010	0.8	24	
	1148	1.4	43		1152	1.3	40		1227	1.5	46		1119	1.4	43		0439	0.4	12	
	1555	1.1	34		1454	1.2	37		1809	0.7	21		1703	0.6	18		1211	1.4	43	
	2207	1.6	49		1923	1.5	46						2240	1.0	30		1854	0.3	9	
5 W	0503	0.0	0	20 Th	0357	0.2	6	5 Sa	0012	1.2	37	20 Su	0432	0.3	9	5 M	0122	0.8	24	
	1231	1.5	46		1206	1.3	40		0535	0.4	12		1136	1.5	46		0511	0.5	15	
	1701	1.0	30		1602	1.0	30		1258	1.5	46		1802	0.3	9		1236	1.4	43	
	2313	1.5	46		2049	1.4	43		1900	0.6	18						1932	0.1	3	
6 Th	0549	0.1	3	21 F	0438	0.2	6	6 Su	0120	1.1	34	21 M	0021	0.9	27	6 Tu	0230	0.8	24	
	1310	1.5	46		1218	1.4	43		0607	0.6	18		0515	0.4	12		0542	0.6	18	
	1800	0.9	27		1704	0.9	27		1325	1.5	46		1202	1.6	49		1254	1.4	43	
					2221	1.3	40		1944	0.5	15		1857	0.1	3		2007	0.0	0	
7 F	0015	1.5	46	22 Sa	0518	0.3	9	7 M	0227	1.1	34	22 Tu	0146	0.9	27	7 W	0338	0.8	24	
	0629	0.3	9		1232	1.5	46		0636	0.7	21		0558	0.5	15		0612	0.7	21	
	1346	1.5	46		1802	0.7	21		1346	1.5	46		1233	1.7	52		1301	1.4	43	
	1854	0.8	24		2348	1.3	40		2024	0.4	12		1951	-0.1	-3		2042	-0.1	-3	
8 Sa	0116	1.4	43	23 Su	0559	0.4	12	8 Tu	0335	1.0	30	23 W	0303	1.0	30	8 Th	1301	1.4	43	
	0704	0.4	12		1250	1.6	49		0703	0.8	24		0644	0.7	21		2118	-0.1	-3	
	1417	1.5	46		1859	0.5	15		1357	1.5	46		1310	1.8	55					
	1943	0.7	21			2102	0.3	9		2045	-0.3	-9		2045	-0.4	-12		2128	-0.7	-21
9 Su	0216	1.3	40	24 M	0112	1.2	37	9 W	0447	1.0	30	24 Th	0416	1.0	30	9 F	1309	1.4	43	
	0734	0.6	18		0640	0.5	15		0728	0.9	27		0732	0.8	24		2155	-0.2	-6	
	1445	1.4	43		1314	1.7	52		1346	1.5	46		1352	1.8	55					
	2028	0.6	18		1955	0.2	6		2139	0.2	6		2139	-0.4	-12		2218	-0.7	-21	
10 M	0320	1.2	37	25 Tu	0234	1.2	37	10 Th	1336	1.5	46	25 F	0526	1.0	30	10 Sa	1332	1.4	43	
	0801	0.7	21		0722	0.6	18		2218	0.1	3		0824	0.9	27		2232	-0.2	-6	
	1505	1.4	43		1345	1.8	55					1437	1.8	55						
	2111	0.5	15		2051	0.1	3					● 2233	-0.5	-15						
11 Tu	0428	1.1	34	26 W	0355	1.2	37	11 F	1350	1.5	46	26 Sa	0632	1.1	34	11 Su	1403	1.4	43	
	0826	0.9	27		0807	0.8	24		2258	0.1	3		0921	0.9	27		2310	-0.3	-9	
	1512	1.4	43		1421	1.9	58					1525	1.7	52						
	○ 2154	0.5	15		● 2148	-0.1	-3					2328	-0.4	-12		2353	-0.5	-15		
12 W	0543	1.1	34	27 Th	0516	1.2	37	12 Sa	1417	1.6	49	27 Su	0732	1.1	34	12 M	1441	1.4	43	
	0850	1.0	30		0855	0.9	27		2340	0.1	3		1025	1.0	30		2349	-0.3	-9	
	1444	1.4	43		1503	1.9	58					1618	1.6	49						
	2236	0.4	12		2246	-0.2	-6									1117	0.7	21		
13 Th	0706	1.1	34	28 F	0633	1.2	37	13 Su	1454	1.6	49	28 M	0021	-0.4	-12	13 Tu	1525	1.3	40	
	0912	1.0	30		0949	1.0	30					0827	1.2	37						
	1433	1.5	46		1550	1.9	58					1138	1.0	30						
	2321	0.4	12		2345	-0.2	-6					1717	1.5	46						
14 F	1452	1.5	46	29 Sa	0745	1.3	40	14 M	0022	0.0	0	29 Tu	0113	-0.3	-9	14 W	0028	-0.2	-6	
					1050	1.1	34		1537	1.5	46		0915	1.2	37		0928	0.9	27	
					1645	1.8	55					1259	1.0	30		1152	0.8	24		
												1831	1.3	40		1617	1.2	37		
15 Sa	0007	0.3	9	30 Su	0044	-0.2	-6	15 Tu	0105	0.0	0	30 W	0202	-0.2	-6	15 Th	0107	-0.2	-6	
	1526	1.5	46		0849	1.3	40		1629	1.5	46		0958	1.3	40		0938	1.0	30	
					1159	1.2	37					1426	0.9	27		1319	0.8	24		
					1749	1.7	52					2001	1.1	34		1721	1.0	30		
31 M				31 M	0143	-0.2	-6									31 Sa	0235	0.1	3	
					0944	1.4	43									1025	1.0	30		
					1317	1.2	37									1651	0.2	6		
					1905	1.6	49									2251	0.5	15		

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Punta Gorda, Venezuela, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0225	5.3	162	16 Su 0151	4.7	143	1 Tu 0400	5.3	162	16 W 0314	5.4	165
0835	0.7	21	0818	1.1	34	1001	0.1	3	0936	0.0	0
1431	6.3	192	1348	5.6	171	1600	6.1	186	1517	6.2	189
2112	-0.7	-21	2056	-0.2	-6	2229	-1.1	-34	2205	-1.1	-34
2 Su 0324	5.5	168	17 M 0250	5.0	152	2 0436	5.5	168	17 Th 0400	6.0	183
0929	0.5	15	0910	0.8	24	1044	-0.1	-3	1022	-0.6	-18
1524	6.5	198	1444	6.0	183	1638	6.2	189	1606	6.6	201
2202	-0.9	-27	2144	-0.6	-18	● 2308	-1.1	-34	2248	-1.5	-46
3 M 0412	5.7	174	18 Tu 0339	5.5	168	3 Th 0508	5.7	174	18 F 0442	6.4	195
1017	0.4	12	0957	0.4	12	1122	-0.3	-9	1107	-1.1	-34
1610	6.6	201	1534	6.4	195	1713	6.3	192	1653	6.9	210
2247	-1.1	-34	2228	-1.0	-30	2345	-1.1	-34	○ 2331	-1.6	-49
4 Tu 0453	5.9	180	19 W 0423	5.9	180	4 F 0536	5.8	177	19 Sa 0523	6.8	207
1101	0.2	6	1042	0.0	0	1159	-0.4	-12	1151	-1.4	-43
1651	6.7	204	1620	6.7	204	1744	6.3	192	1737	7.0	213
● 2329	-1.1	-34	○ 2311	-1.3	-40						
5 W 0528	5.9	180	20 Th 0504	6.2	189	5 Sa 0020	-0.9	-27	20 Su 0013	-1.5	-46
1142	0.2	6	1125	-0.4	-12	0604	5.9	180	0603	7.0	213
1728	6.7	204	1705	7.0	213	1234	-0.4	-12	1236	-1.6	-49
			2352	-1.5	-46	1815	6.2	189	1822	6.9	210
6 Th 0009	-1.0	-30	21 F 0544	6.5	198	6 Su 0054	-0.7	-21	21 M 0055	-1.2	-37
0601	5.9	180	1209	-0.6	-18	0631	5.9	180	0644	7.0	213
1221	0.2	6	1749	7.0	213	1308	-0.3	-9	1322	-1.5	-46
1803	6.6	201				1846	6.0	183	1907	6.5	198
7 F 0046	-0.8	-24	22 Sa 0033	-1.4	-43	7 M 0127	-0.4	-12	22 Tu 0140	-0.8	-24
0633	5.9	180	0625	6.7	204	0701	5.9	180	0726	6.7	204
1259	0.3	9	1254	-0.8	-24	1342	-0.2	-6	1412	-1.2	-37
1837	6.4	195	1834	6.9	210	1920	5.8	177	1955	6.0	183
8 Sa 0123	-0.5	-15	23 Su 0116	-1.2	-37	8 Tu 0200	0.0	0	23 W 0229	-0.2	-6
0704	5.9	180	0706	6.7	204	0732	5.8	177	0812	6.4	195
1337	0.4	12	1341	-0.8	-24	1419	0.0	0	1506	-0.8	-24
1912	6.2	189	1921	6.6	201	1956	5.5	168	2048	5.4	165
9 Su 0200	-0.2	-6	24 M 0201	-0.8	-24	9 W 0235	0.4	12	24 Th 0324	0.3	9
0737	5.8	177	0751	6.6	201	0808	5.7	174	0904	5.9	180
1417	0.5	15	1433	-0.6	-18	1501	0.3	9	1608	-0.4	-12
1949	5.9	180	2011	6.1	186	2038	5.1	155	● 2149	4.8	146
10 M 0239	0.2	6	25 Tu 0251	-0.3	-9	10 Th 0316	0.8	24	25 F 0430	0.8	24
0812	5.7	174	0839	6.3	192	0850	5.5	168	1006	5.4	165
1501	0.7	21	1530	-0.4	-12	1555	0.5	15	1717	-0.1	-3
2031	5.5	168	2106	5.6	171	2129	4.7	143	2305	4.4	134
11 Tu 0322	0.6	18	26 W 0348	0.2	6	11 F 0413	1.2	37	26 Sa 0542	1.1	34
0853	5.6	171	0933	6.0	183	0941	5.2	158	1123	5.0	152
1552	0.8	24	1634	-0.2	-6	1705	0.7	21	1828	0.0	0
2118	5.1	155	● 2211	5.0	152	○ 2233	4.4	134			
12 W 0412	1.0	30	27 Th 0454	0.7	21	12 Sa 0527	1.4	43	27 Su 0035	4.3	131
0939	5.4	165	1037	5.6	171	1044	5.0	152	0655	1.1	34
1652	0.9	27	1744	0.0	0	1820	0.6	18	1248	5.0	152
● 2216	4.8	146	2329	4.6	140	2352	4.2	128	1934	-0.1	-3
13 Th 0512	1.3	40	28 F 0606	1.0	30	13 Su 0643	1.4	43	28 M 0157	4.5	137
1033	5.2	158	1152	5.4	165	1159	5.0	152	0759	0.8	24
1758	0.9	27	1853	-0.1	-3	1928	0.3	9	1403	5.2	158
2325	4.5	137				2031	-0.3	-9	2314	4.5	137
14 F 0617	1.4	43	29 M 0056	4.5	137	14 M 0114	4.4	134	14 F 0610	1.4	43
1137	5.2	158	0716	1.0	30	0749	1.1	34	1124	5.0	152
1903	0.7	21	1310	5.4	165	1315	5.2	158	1852	0.4	12
			1958	-0.3	-9	2027	-0.2	-6			
15 Sa 0041	4.5	137	30 Su 0216	4.7	143	15 Tu 0221	4.9	149	15 F 0037	4.6	140
0721	1.4	43	0819	0.7	21	0845	0.5	15	0720	1.0	30
1244	5.3	162	1419	5.6	171	1421	5.7	174	1246	5.2	158
2003	0.3	9	2055	-0.6	-18	2118	-0.7	-21	1955	0.0	0
			31 M 0315	5.0	152						
			0913	0.4	12						
			1514	5.8	177						
			2145	-0.9	-27						

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Punta Gorda, Venezuela, 2011

Times and Heights of High and Low Waters

April				May				June							
	Time	Height			Time	Height			Time	Height					
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm				
1 <i>F</i>	0332	5.6	171	16 <i>Sa</i>	0302	6.7	204	1 <i>Su</i>	0322	6.0	183	16 <i>M</i>	0323	7.1	216
	0954	-0.3	-9		0939	-1.2	-37		1003	-0.5	-15		1008	-1.5	-46
	1555	5.8	177		1533	6.4	195		1601	5.8	177		1609	6.4	195
	2211	-0.3	-9		2158	-0.6	-18		2217	0.4	12		2224	0.0	0
2 <i>Sa</i>	0402	5.9	180	17 <i>Su</i>	0349	7.1	216	2 <i>M</i>	0354	6.2	189	17 <i>Tu</i>	0411	7.3	223
	1032	-0.6	-18		1027	-1.6	-49		1041	-0.6	-18		1056	-1.7	-52
	1629	5.9	180		1622	6.7	204		1636	5.9	180		1657	6.5	198
	2248	-0.3	-9	O	2245	-0.6	-18		2254	0.4	12	O	2312	0.1	3
3 <i>Su</i>	0431	6.1	186	18 <i>M</i>	0433	7.3	223	3 <i>Tu</i>	0426	6.4	195	18 <i>W</i>	0456	7.3	223
	1108	-0.8	-24		1113	-1.9	-58		1117	-0.7	-21		1142	-1.7	-52
	1700	6.0	183		1709	6.8	207		1708	6.0	183		1743	6.4	195
	●	2323	-0.2	-6		2330	-0.5	-15	●	2330	0.5	15		2358	0.2	6
4 <i>M</i>	0458	6.2	189	19 <i>Tu</i>	0516	7.4	226	4 <i>W</i>	0457	6.5	198	19 <i>Th</i>	0540	7.1	216
	1142	-0.8	-24		1159	-1.9	-58		1152	-0.7	-21		1228	-1.5	-46
	1730	6.1	186		1755	6.7	204		1741	6.0	183		1827	6.3	192
	2356	0.0	0									4 <i>Sa</i>	0024	0.9	27
5 <i>Tu</i>	0526	6.3	192	20 <i>W</i>	0015	-0.3	-9	5 <i>Th</i>	0005	0.7	21	20 <i>F</i>	0045	0.4	12
	1214	-0.7	-21		0558	7.2	219		0530	6.5	198		0623	6.8	207
	1800	6.0	183		1245	-1.7	-52		1227	-0.6	-18		1315	-1.1	-34
					1840	6.4	195		1815	5.9	180		1910	6.1	186
6 <i>W</i>	0028	0.3	9	21 <i>Th</i>	0102	0.1	3	6 <i>F</i>	0039	0.8	24	21 <i>Sa</i>	0133	0.7	21
	0555	6.3	192		0641	6.9	210		0605	6.5	198		0707	6.5	198
	1246	-0.6	-18		1333	-1.3	-40		1303	-0.4	-12		1402	-0.7	-21
	1832	5.9	180		1925	6.0	183		1852	5.9	180		1954	5.8	177
7 <i>Th</i>	0059	0.5	15	22 <i>F</i>	0151	0.5	15	7 <i>Sa</i>	0117	1.0	30	22 <i>Su</i>	0223	0.9	27
	0628	6.3	192		0726	6.5	198		0645	6.4	195		0753	6.0	183
	1320	-0.4	-12		1424	-0.8	-24		1342	-0.3	-9		1451	-0.2	-6
	1907	5.7	174		2014	5.6	171		1934	5.8	177		2040	5.6	171
8 <i>F</i>	0131	0.8	24	23 <i>Sa</i>	0244	0.9	27	8 <i>Su</i>	0201	1.2	37	23 <i>M</i>	0317	1.1	34
	0704	6.2	189		0815	5.9	180		0729	6.2	189		0843	5.6	171
	1357	-0.1	-3		1518	-0.3	-9		1429	0.0	0		1542	0.2	6
	1948	5.5	168		2107	5.3	162		2022	5.7	174		2129	5.4	165
9 <i>Sa</i>	0210	1.1	34	24 <i>Su</i>	0344	1.2	37	9 <i>M</i>	0257	1.3	40	24 <i>Tu</i>	0414	1.2	37
	0747	6.0	183		0912	5.4	165		0822	5.9	180		0940	5.2	158
	1443	0.1	3		1618	0.2	6		1525	0.2	6		1637	0.6	18
	2036	5.3	162	○	2208	5.0	152		2118	5.6	171	○	2223	5.3	162
10 <i>Su</i>	0306	1.4	43	25 <i>M</i>	0449	1.3	40	10 <i>Tu</i>	0405	1.3	40	25 <i>W</i>	0515	1.2	37
	0838	5.7	174		1019	5.0	152		0923	5.6	171		1044	5.0	152
	1547	0.4	12		1720	0.5	15		1631	0.4	12		1734	0.8	24
	2135	5.1	155		2315	4.9	149	○	2222	5.6	171		2320	5.3	162
11 <i>M</i>	0422	1.5	46	26 <i>Tu</i>	0555	1.2	37	11 <i>W</i>	0517	1.1	34	26 <i>Sa</i>	0614	1.0	30
	0941	5.4	165		1136	4.9	149		1036	5.4	165		0704	-0.1	-3
	1702	0.5	15		1821	0.6	18		1740	0.5	15		1249	5.4	165
	○	2246	5.0	152					2330	5.8	177		1919	0.8	24
12 <i>Tu</i>	0542	1.3	40	27 <i>W</i>	0022	5.0	152	12 <i>Th</i>	0626	0.6	18	27 <i>M</i>	0108	6.5	198
	1057	5.2	158		0656	1.0	30		1155	5.4	165		0804	-0.5	-15
	1815	0.5	15		1250	4.9	149		1846	0.5	15		1400	5.5	168
					1918	0.6	18					1925	1.0	30	
13 <i>W</i>	0003	5.2	158	28 <i>Th</i>	0119	5.2	158	13 <i>F</i>	0037	6.1	186	28 <i>Sa</i>	0109	5.6	171
	0653	0.9	27		0751	0.6	18		0728	0.0	0		0802	0.4	12
	1220	5.3	162		1352	5.1	155		1310	5.6	171		1359	5.1	155
	1920	0.2	6		2009	0.5	15		1946	0.3	9		2015	1.0	30
14 <i>Th</i>	0112	5.6	171	29 <i>F</i>	0206	5.5	168	14 <i>Sa</i>	0138	6.5	198	29 <i>W</i>	0157	5.8	177
	0754	0.2	6		0840	0.2	6		0825	-0.6	-18		0850	0.0	0
	1334	5.6	171		1442	5.4	165		1417	5.9	180		1449	5.3	162
	2017	-0.1	-3		2055	0.4	12		2042	0.2	6		2102	0.9	27
15 <i>F</i>	0211	6.2	189	30 <i>Sa</i>	0246	5.8	177	15 <i>Su</i>	0233	6.8	207	30 <i>M</i>	0240	6.0	183
	0849	-0.5	-15		0923	-0.2	-6		0918	-1.1	-34		0934	-0.2	-6
	1438	6.1	186		1524	5.6	171		1516	6.2	189		1532	5.5	168
	2109	-0.4	-12		2137	0.4	12		2135	0.1	3		2146	0.9	27
31 <i>Tu</i>	0319	6.2	189	31 <i>Su</i>	0319	6.2	189	16 <i>W</i>	1015	-0.5	-15	31 <i>M</i>	0319	6.2	189
					1612	5.7	174		1612	5.7	174		1647	6.2	189
					2227	0.9	27		2227	0.9	27	○	2256	0.4	12

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Punta Gorda, Venezuela, 2011

Times and Heights of High and Low Waters

July					August					September				
Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0414	6.7	204	16 Sa 0511	6.9	210	1 M 0525	7.3	223	16 Tu 0021	0.3	9	1 Th 0057	-0.5	-15
1113 -0.7	-21		1151 -1.0	-30		1210 -0.8	-24		0601 6.8	207		0640 7.3	223	
1707 6.1	186		1751 6.3	192		1802 7.2	219		1237 -0.1	-3		1311 0.0	0	
● 2326 0.7	21					1820 6.8	207		1820 6.8	207		1859 7.8	238	
2 Sa 0455	6.8	207	17 Su 0007	0.4	12	2 Tu 0032	-0.1	-3	17 W 0057	0.4	12	2 F 0146	-0.4	-12
1152 -0.8	-24		0549 6.8	207		0608 7.2	219		0633 6.6	201		0727 6.9	210	
1745 6.3	192		1230 -0.8	-24		1250 -0.7	-21		1311 0.3	9		1358 0.5	15	
			1824 6.4	195		1842 7.3	223		1849 6.8	207		1945 7.5	229	
3 Su 0008	0.6	18	18 M 0048	0.5	15	3 W 0118	-0.2	-6	18 Th 0133	0.6	18	3 Sa 0240	-0.1	-3
0537 6.9	210		0625 6.6	201		0654 7.0	213		0706 6.4	195		0819 6.4	195	
1231 -0.8	-24		1308 -0.5	-15		1333 -0.3	-9		1345 0.7	21		1452 1.1	34	
1824 6.6	201		1856 6.4	195		1924 7.3	223		1920 6.7	204		2035 7.1	216	
4 M 0051	0.4	12	19 Tu 0128	0.6	18	4 Th 0207	-0.1	-3	19 F 0211	0.8	24	4 Su 0341	0.3	9
0621 6.9	210		0701 6.4	195		0742 6.7	204		0743 6.1	186		0920 5.8	177	
1311 -0.7	-21		1345 -0.1	-3		1419 0.1	3		1420 1.1	34		1556 1.7	52	
1904 6.7	204		1928 6.3	192		2010 7.2	219		1955 6.5	198		2135 6.6	201	
5 Tu 0137	0.4	12	20 W 0209	0.7	21	5 F 0302	0.0	0	20 Sa 0254	1.0	30	5 M 0449	0.6	18
0707 6.7	204		0738 6.1	186		0836 6.2	189		0824 5.7	174		1034 5.4	165	
1354 -0.4	-12		1424 0.3	9		1513 0.7	21		1501 1.6	49		1709 2.0	61	
1948 6.8	207		2003 6.2	189		2101 6.9	210		2036 6.3	192		2248 6.2	189	
6 W 0228	0.3	9	21 Th 0252	0.8	24	6 Sa 0403	0.2	6	21 Su 0347	1.2	37	6 Tu 0559	0.7	21
0757 6.4	195		0819 5.7	174		0937 5.7	174		0913 5.3	162		1202 5.3	162	
1442 -0.1	-3		1505 0.8	24		1615 1.2	37		1554 2.0	61		1823 2.0	61	
2036 6.7	204		2041 6.1	186		● 2200 6.6	201		● 2124 6.1	186		2257 6.0	183	
7 Th 0325	0.3	9	22 F 0341	1.0	30	7 Su 0511	0.3	9	22 M 0451	1.4	43	7 W 0011	6.1	186
0853 6.0	183		0905 5.4	165		1051 5.2	158		1015 5.0	152		0706 0.6	18	
1537 0.4	12		1552 1.2	37		1727 1.5	46		1704 2.3	70		1328 5.5	168	
2128 6.6	201		2124 6.0	183		2310 6.3	192		2223 5.9	180		1930 1.8	55	
8 F 0428	0.3	9	23 Sa 0437	1.1	34	8 M 0621	0.3	9	23 Tu 0602	1.4	43	8 Th 0128	6.2	189
0956 5.6	171		0959 5.0	152		1217 5.1	155		1132 4.9	149		0806 0.4	12	
1639 0.8	24		1648 1.6	49		1839 1.7	52		1818 2.3	70		1431 5.9	180	
● 2228 6.5	198		● 2214 5.8	177					2334 5.8	177		2028 1.4	43	
9 Sa 0534	0.2	6	24 Su 0539	1.1	34	9 Tu 0027	6.2	189	24 W 0708	1.1	34	9 F 0230	6.5	198
1110 5.2	158		1105 4.8	146		0727 0.1	3		1253 5.1	155		0857 0.1	3	
1748 1.1	34		1751 1.8	55		1341 5.3	162		1925 2.1	64		1517 6.2	189	
2334 6.3	192		2313 5.7	174		1947 1.5	46					2118 1.0	30	
10 Su 0641	0.0	0	25 M 0643	1.0	30	10 W 0140	6.3	192	25 Th 0048	6.0	183	10 Sa 0319	6.7	204
1230 5.1	155		1220 4.7	143		0827 -0.1	-3		0806 0.7	21		0941 0.0	0	
1857 1.2	37		1856 1.9	58		1448 5.6	171		1400 5.5	168		1553 6.5	198	
						2046 1.2	37		2023 1.6	49		2202 0.7	21	
11 M 0044	6.3	192	26 Tu 0018	5.7	174	11 Th 0242	6.5	198	26 F 0154	6.3	192	11 Su 0359	6.9	210
0745 -0.3	-9		0742 0.7	21		0919 -0.4	-12		0856 0.3	9		1022 -0.1	-3	
1348 5.3	162		1332 4.9	149		1539 6.0	183		1453 6.0	183		1623 6.8	207	
2001 1.1	34		1955 1.8	55		2138 0.9	27		2113 1.1	34		2241 0.4	12	
12 Tu 0151	6.5	198	27 W 0122	5.9	180	12 F 0334	6.7	204	27 Sa 0250	6.8	207	12 M 0434	7.0	213
0843 -0.6	-18		0836 0.3	9		1006 -0.6	-18		0942 -0.2	-6		1058 0.0	0	
1455 5.6	171		1433 5.2	158		1619 6.3	192		1538 6.6	201		1652 7.0	213	
2100 1.0	30		2049 1.5	46		2223 0.6	18		2200 0.5	15		● 2318 0.3	9	
13 W 0251	6.6	201	28 Th 0220	6.2	189	13 Sa 0417	6.9	210	28 Su 0339	7.2	219	13 Tu 0506	7.0	213
0936 -0.9	-27		0925 -0.1	-3		1048 -0.6	-18		1024 -0.5	-15		1133 0.2	6	
1550 5.8	177		1522 5.6	171		1653 6.5	198		1618 7.1	216		1718 7.1	216	
2153 0.8	24		2138 1.1	34		● 2305 0.4	12		● 2244 0.1	3		2353 0.3	9	
14 Th 0344	6.8	207	29 F 0311	6.5	198	14 Su 0454	6.9	210	29 M 0425	7.5	229	14 W 0536	6.9	210
1025 -1.1	-34		1009 -0.4	-12		1126 -0.6	-18		1105 -0.6	-18		1206 0.4	12	
1636 6.1	186		1605 6.1	186		1724 6.6	201		1658 7.6	232		1745 7.1	216	
2241 0.6	18		2223 0.8	24		2344 0.3	9		2328 -0.3	-9				
15 F 0430	6.9	210	30 Sa 0357	6.9	210	15 M 0529	6.9	210	30 Tu 0510	7.6	232	15 Th 0027	0.4	12
1109 -1.1	-34		1050 -0.7	-21		1202 -0.4	-12		1146 -0.6	-18		0606 6.8	207	
1716 6.2	189		1645 6.5	198		1752 6.7	204		1737 7.8	238		1238 0.7	21	
● 2325 0.5	15		● 2306 0.4	12					1813 7.1	216				
31 Su 0441	7.1	216	31 W 0554	7.6	232				1817 7.9	241				
1130 -0.8	-24		1227 -0.4	-12										
1724 6.9	210		1227 -0.4	-12										
2349 0.1	3													

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Punta Gorda, Venezuela, 2011

Times and Heights of High and Low Waters

October				November				December				
	Time	Height			Time	Height			Time	Height		
1 Sa	0127	-0.5	-15	16 Su	0108	0.7	21	1 Tu	0256	0.3	9	
	0713	7.0	213	0648	6.5	198	0844	6.1	186	0209	0.7	21
	1339	1.0	30	1314	1.7	52	1516	1.9	58	0755	6.2	189
	1922	7.7	235	1848	7.1	216	2049	6.6	201	1424	1.9	58
2 Su	0220	0.0	0	17 M	0145	0.9	27	2 W	0355	0.8	24	
	0804	6.5	198	0727	6.3	192	0945	5.8	177	0259	0.9	27
	1434	1.5	46	1349	2.0	61	1622	2.1	64	0846	6.1	186
	2013	7.2	219	1928	6.9	210	2155	6.1	186	1527	1.9	58
3 M	0319	0.4	12	18 Tu	0230	1.2	37	3 Th	0458	1.1	34	
	0903	6.0	183	0813	6.0	183	1054	5.7	174	0401	1.1	34
	1537	2.0	61	1438	2.3	70	1729	2.0	61	0946	6.0	183
	2112	6.7	204	2016	6.7	204	2310	5.8	177	1640	1.8	55
4 Tu	0424	0.8	24	19 W	0328	1.4	43	4 F	0600	1.2	37	
	1014	5.6	171	0909	5.8	177	1204	5.7	174	0508	1.2	37
	1649	2.2	67	1551	2.5	76	1833	1.8	55	1053	6.1	186
	2225	6.2	189	2114	6.4	195				1751	1.5	46
5 W	0532	1.0	30	20 Th	0439	1.5	46	5 Sa	0026	5.8	177	
	1137	5.5	168	1018	5.7	174	0658	1.2	37	0615	1.2	37
	1801	2.2	67	1711	2.4	73	1305	5.9	180	1202	6.4	195
	2348	6.0	183	2226	6.2	189	1931	1.4	43	1857	1.0	30
6 Th	0638	1.0	30	21 F	0550	1.5	46	6 Su	0131	5.9	180	
	1256	5.7	174	1133	5.9	180	0750	1.1	34	0032	6.0	183
	1907	1.9	58	1824	2.0	61	1354	6.2	189	0717	1.0	30
				2345	6.2	189				1306	6.8	207
7 F	0106	6.1	186	22 Sa	0654	1.2	37	7 M	0224	6.1	186	
	0736	0.9	27	1243	6.3	192	0837	1.0	30	0142	6.3	192
	1357	6.0	183	1926	1.4	43	1435	6.5	198	0814	0.8	24
	2004	1.5	46				2106	0.7	21	1404	7.2	219
8 Sa	0207	6.4	195	23 Su	0100	6.4	195	8 Tu	0307	6.3	192	
	0827	0.7	21	0751	0.9	27	0920	0.9	27	0244	6.6	201
	1441	6.4	195	1343	6.8	207	1511	6.8	207	0908	0.6	18
	2053	1.1	34	2022	0.7	21	2148	0.4	12	1457	7.6	232
9 Su	0256	6.6	201	24 M	0205	6.8	207	9 W	0345	6.4	195	
	0911	0.6	18	0842	0.6	18	1000	0.9	27	0339	6.8	207
	1517	6.7	204	1434	7.4	226	1544	6.9	210	0958	0.4	12
	2136	0.7	21	2113	0.0	0	2227	0.2	6	1547	7.8	238
10 M	0336	6.8	207	25 Tu	0301	7.2	219	10 Th	0420	6.5	198	
	0952	0.5	15	0931	0.3	9	1038	1.0	30	0429	7.0	213
	1549	7.0	213	1522	7.9	241	1616	7.1	216	1046	0.4	12
	2215	0.4	12	2201	-0.5	-15	2303	0.1	3	1634	7.9	241
11 Tu	0410	6.9	210	26 W	0352	7.4	226	11 F	0453	6.6	201	
	1029	0.6	18	1017	0.2	6	1114	1.1	34	0516	7.0	213
	1618	7.1	216	1606	8.2	250	1646	7.2	219	1046	0.4	12
	○ 2252	0.3	9	● 2247	-0.9	-27	2339	0.1	3	1634	7.9	241
12 W	0442	6.9	210	27 Th	0440	7.6	232	12 Sa	0525	6.5	198	
	1105	0.7	21	1102	0.2	6	1148	1.2	37	0006	-1.1	-34
	1645	7.3	223	1650	8.4	256	1718	7.2	213	0602	6.9	210
	2327	0.3	9							1220	0.6	18
13 Th	0513	6.9	210	28 F	0527	7.5	229	13 Su	0014	0.2	6	
	1138	0.9	27	1148	0.4	12	0557	6.5	198	0053	-0.9	-27
	1713	7.3	223	1734	8.3	253	1222	1.4	43	0647	6.7	204
							1751	7.2	219	1848	7.3	223
14 F	0001	0.3	9	29 Sa	0021	-0.9	-27	14 M	0049	0.4	12	
	0543	6.8	207	0613	7.3	223	0632	6.4	195	0731	6.4	195
	1210	1.1	34	1234	0.7	21	1257	1.6	49	1357	1.1	34
	1742	7.3	223	1818	8.1	247	1827	7.1	216	1934	6.9	210
15 Sa	0034	0.5	15	30 Su	0109	-0.6	-18	15 Tu	0127	0.5	15	
	0614	6.7	204	0700	6.9	210	0710	6.3	192	0230	0.0	0
	1242	1.4	43	1323	1.1	34	1335	1.7	52	0818	6.1	186
	1813	7.3	223	1904	7.6	232	1909	7.0	213	1450	1.3	40
31 M	0201	-0.2	-6	31 M	0749	6.5	198					
					1416	1.5	46					
					1953	7.1	216					

Time meridian 67° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Suriname River Entrance, Surinam, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0154 6.6 201	16 0127 6.3 192	1 Tu 0326 6.7 204	16 0303 7.2 219	1 Tu 0224 6.3 192	16 0145 6.7 204	W 0755 1.8 55	W 1408 7.2 219	W 2026 1.2 37	W 0755 1.8 55	W 1408 7.2 219	W 2026 1.2 37
0757 1.9 58	0732 2.2 67	0929 1.8 55	0909 1.3 40	0830 2.2 67	0814 1.8 55	0929 1.9 58	0814 1.9 58	0929 1.9 58	0814 1.9 58	0929 1.9 58	0814 1.9 58
1411 7.2 219	1347 6.9 210	1539 7.2 219	1521 7.8 238	1441 6.7 204	1427 7.2 219	1539 7.2 219	1427 7.2 219	1539 7.2 219	1427 7.2 219	1539 7.2 219	1427 7.2 219
2035 1.3 40	2011 1.6 49	2156 1.2 37	2138 0.6 18	2058 1.7 52	2048 1.2 37	2156 1.2 37	2048 1.2 37	2156 1.2 37	2048 1.2 37	2156 1.2 37	2048 1.2 37
2 Su 0248 6.8 207	17 0227 6.7 204	2 W 0406 7.1 216	17 0350 7.8 238	2 W 0309 6.7 204	17 0241 7.4 226	M 0850 1.1 34	M 1502 7.8 238	M 2116 0.6 18	M 0850 1.1 34	M 1502 7.8 238	M 2116 0.6 18
0850 1.7 52	0830 1.8 55	1009 1.4 43	0957 0.7 21	0915 1.8 55	1524 7.1 216	0850 1.1 34	1502 7.8 238	0850 1.1 34	1502 7.8 238	0850 1.1 34	1502 7.8 238
1502 7.4 226	1443 7.3 223	1619 7.5 229	1608 8.3 253	1524 7.1 216	2137 1.4 43	1502 7.8 238	2137 1.4 43	1502 7.8 238	2137 1.4 43	1502 7.8 238	2137 1.4 43
2124 1.1 34	2105 1.1 34	● 2233 1.0 30	2222 0.2 6	2137 1.4 43	2233 1.0 30	2124 1.1 34	2233 1.0 30	2124 1.1 34	2233 1.0 30	2124 1.1 34	2233 1.0 30
3 M 0336 7.0 213	18 0319 7.1 216	3 Th 0441 7.3 223	18 0433 8.2 250	3 Th 0346 7.1 216	18 0327 8.0 244	F 0937 0.4 24	F 1549 8.3 253	F 2200 0.2 6	F 0938 0.4 24	F 1549 8.3 253	F 2200 0.2 6
0937 1.5 46	0922 1.4 43	1045 1.1 34	1041 0.2 6	0952 1.3 40	1601 7.5 229	0937 0.4 24	1549 8.3 253	0937 0.4 24	1549 8.3 253	0937 0.4 24	1549 8.3 253
1548 7.6 232	1533 7.7 235	1655 7.7 235	1652 8.6 262	1601 7.5 229	2211 1.1 34	1548 8.3 253	2211 1.1 34	1548 8.3 253	2211 1.1 34	1548 8.3 253	2211 1.1 34
2207 1.0 30	2153 0.7 21	2307 0.8 24	○ 2304 -0.1 -3	2211 1.1 34	2233 0.7 21	2207 0.2 6	2233 0.7 21	2207 0.2 6	2233 0.7 21	2207 0.2 6	2233 0.7 21
4 Tu 0418 7.1 216	19 0405 7.5 229	4 F 0514 7.6 232	19 0513 8.6 262	4 F 0418 7.5 229	19 0409 8.5 259	W 1019 0.1 -3	W 1629 8.7 265	W 2240 0.0 0	W 1021 0.1 -3	W 1632 8.7 265	W 2240 0.0 0
1019 1.4 43	1009 1.0 30	1119 0.9 27	1123 -0.1 -3	1025 0.9 27	1025 0.9 27	1019 0.1 -3	1629 8.7 265	1019 0.1 -3	1629 8.7 265	1019 0.1 -3	1629 8.7 265
1629 7.7 235	1620 8.1 247	1728 7.9 241	1734 8.8 268	1634 7.8 238	2344 -0.1 -3	1629 8.7 265	2344 -0.1 -3	1629 8.7 265	2344 -0.1 -3	1629 8.7 265	2344 -0.1 -3
● 2247 0.9 27	○ 2238 0.3 9	2339 0.7 21	2344 -0.1 -3	● 2242 0.8 24	2242 0.8 24	● 2247 0.9 27	2242 0.8 24	● 2247 0.9 27	2242 0.8 24	● 2247 0.9 27	2242 0.8 24
5 W 0456 7.3 223	20 0449 7.9 241	5 Sa 0546 7.7 235	20 0553 8.7 265	5 Sa 0448 7.8 238	20 0449 8.8 268	W 1058 0.4 -12	W 1708 8.7 265	W 2320 0.0 0	W 1102 -0.4 -12	W 1713 8.7 265	W 2320 0.0 0
1058 1.2 37	1054 0.6 18	1152 0.8 24	1204 -0.2 -6	1056 0.7 21	1056 0.7 21	1058 0.4 -12	1708 8.7 265	1058 0.4 -12	1708 8.7 265	1058 0.4 -12	1708 8.7 265
1708 7.7 235	1705 8.4 256	1801 7.9 241	1815 8.7 265	1705 7.9 241	2312 0.7 21	1708 8.7 265	2312 0.7 21	1708 8.7 265	2312 0.7 21	1708 8.7 265	2312 0.7 21
2325 0.8 24	2321 0.1 3	1834 7.8 238	1857 8.3 253	1735 8.0 244	2359 0.2 6	2325 0.0 0	2359 0.2 6	2325 0.0 0	2359 0.2 6	2325 0.0 0	2359 0.2 6
6 Th 0533 7.3 223	21 0532 8.1 247	6 Su 0010 0.8 24	21 0024 0.1 3	6 Su 0517 7.9 241	21 0528 8.9 271	F 1136 0.4 -12	F 1746 8.6 262	F 2359 0.2 6	F 1142 -0.4 -12	F 1754 8.6 262	F 2359 0.2 6
1136 1.2 37	1138 0.4 12	0617 7.7 235	0633 8.6 262	1126 0.5 241	1142 -0.4 -12	1136 0.4 -12	1746 8.6 262	1136 0.4 -12	1746 8.6 262	1136 0.4 -12	1746 8.6 262
1746 7.7 235	1749 8.5 259	1224 0.8 24	1245 0.0 0	1735 8.0 244	2359 0.2 6	1746 8.6 262	2359 0.2 6	1746 8.6 262	2359 0.2 6	1746 8.6 262	2359 0.2 6
1823 7.6 232	1833 8.4 256	1908 7.6 232	1940 7.8 238	1805 7.9 241	2359 0.2 6	1823 0.0 0	2359 0.2 6	1823 0.0 0	2359 0.2 6	1823 0.0 0	2359 0.2 6
7 F 0001 0.9 27	22 0004 0.1 3	7 M 0042 0.9 27	22 0104 0.4 12	7 M 0547 8.0 244	22 0607 8.7 265	F 0609 0.4 -6	F 1213 8.7 265	F 1823 7.7 235	F 1222 -0.2 -6	F 1834 8.2 250	F 2359 0.2 6
0609 7.4 226	0614 8.2 250	0649 7.7 235	0713 8.3 253	1156 0.4 12	1222 -0.2 -6	0609 0.4 -6	1213 8.7 265	0609 0.4 -6	1213 8.7 265	0609 0.4 -6	1213 8.7 265
1213 1.2 37	1222 0.3 9	1258 0.9 27	1328 0.3 9	1805 7.9 241	2359 0.2 6	1213 8.7 265	2359 0.2 6	1213 8.7 265	2359 0.2 6	1213 8.7 265	2359 0.2 6
1823 7.6 232	1833 8.4 256	1908 7.6 232	1940 7.8 238	1837 7.8 238	2359 0.2 6	1823 0.0 0	2359 0.2 6	1823 0.0 0	2359 0.2 6	1823 0.0 0	2359 0.2 6
8 Sa 0037 1.0 30	23 0046 0.2 6	8 Tu 0116 1.1 34	23 0146 1.0 30	8 Tu 0010 0.8 24	23 0038 0.6 18	Sa 0645 0.3 9	Sa 1251 0.5 24	Sa 1901 0.7 235	Sa 0646 0.8 253	Sa 1303 0.3 9	Sa 1915 0.7 235
0645 7.3 223	0657 8.2 250	0723 7.5 229	0756 7.8 238	0616 8.0 244	0646 0.8 253	0645 0.3 9	1251 0.5 24	0645 0.3 9	1251 0.5 24	0645 0.3 9	1251 0.5 24
1251 1.2 37	1306 0.4 12	1334 1.1 34	1414 0.9 27	1227 0.5 15	1303 0.3 9	1251 0.5 24	1306 0.4 12	1251 0.5 24	1306 0.4 12	1251 0.5 24	1306 0.4 12
1901 7.5 229	1918 8.2 250	1944 7.3 223	2027 7.2 219	1837 7.8 238	1915 0.7 235	1901 0.7 223	1918 8.2 250	1901 0.7 223	1918 8.2 250	1901 0.7 223	1918 8.2 250
9 Su 0113 1.2 37	24 0130 0.5 15	9 W 0151 1.4 43	24 0231 1.6 49	9 W 0041 1.0 30	24 0118 1.1 34	Su 0723 0.9 27	Su 1330 0.9 27	Su 1940 0.7 235	Su 0727 0.9 27	Su 1347 0.9 27	Su 2000 0.7 213
0723 7.2 219	0741 7.9 241	0800 7.2 219	0843 7.2 219	0648 0.8 238	0118 1.1 34	0723 0.9 27	1330 0.9 27	0723 0.9 27	1330 0.9 27	0723 0.9 27	1330 0.9 27
1330 1.4 43	1353 0.7 21	1413 1.4 43	1505 1.5 46	1301 0.7 21	0118 1.1 34	1330 0.9 27	1413 1.4 43	1330 0.9 27	1413 1.4 43	1330 0.9 27	1413 1.4 43
1940 7.3 223	2006 7.7 235	2025 6.9 210	○ 2120 6.5 198	1911 0.7 229	2000 0.7 213	1940 0.7 235	2025 6.9 210	1940 0.7 235	2025 6.9 210	1940 0.7 235	2025 6.9 210
10 M 0152 1.4 43	25 0216 1.0 30	10 Th 0231 1.8 55	25 0325 2.2 67	10 Th 0115 1.3 40	25 0202 1.8 55	W 0802 0.1 216	W 1411 1.6 49	W 2022 0.4 195	W 0813 0.1 216	W 1437 1.6 49	W 2052 0.4 195
0802 7.0 213	0828 7.6 232	0842 6.9 210	0940 6.6 201	0723 0.5 229	0202 1.8 55	0802 0.1 216	1411 1.6 49	0802 0.1 216	1411 1.6 49	0802 0.1 216	1411 1.6 49
1411 1.6 49	1443 1.1 34	1500 1.7 52	1609 2.1 64	1339 0.1 34	0202 1.8 55	1411 1.6 49	1443 1.1 34	1411 1.6 49	1443 1.1 34	1411 1.6 49	1443 1.1 34
2022 7.0 213	2057 7.2 219	2113 6.5 198	2229 5.9 180	2037 6.6 201	0202 1.8 55	2022 7.0 213	2057 7.2 219	2022 7.0 213	2057 7.2 219	2022 7.0 213	2057 7.2 219
11 Tu 0234 1.7 52	26 0306 1.5 46	11 F 0320 2.2 67	26 0435 2.7 82	11 F 0154 1.7 52	26 0255 2.4 73	W 0845 0.6 198	W 1458 2.2 67	W 2110 5.8 177	W 0909 0.6 198	W 1539 2.2 67	W 2200 0.5 177
0845 6.8 207	0920 7.2 219	0934 6.6 201	1055 6.1 186	0803 7.1 216	0255 2.4 73	0845 0.6 198	1458 2.2 67	0845 0.6 198	1458 2.2 67	0845 0.6 198	1458 2.2 67
1458 1.8 55	1540 1.5 46	1558 2.0 61	1731 2.4 73	1423 1.5 46	0255 2.4 73	1458 2.2 67	1540 1.5 46	1458 2.2 67	1540 1.5 46	1458 2.2 67	1540 1.5 46
2110 6.6 201	○ 2155 6.7 204	○ 2215 6.1 186	2357 5.7 174	2037 6.6 201	0255 2.4 73	2110 5.8 177	○ 2215 6.1 186	2110 5.8 177	○ 2215 6.1 186	2110 5.8 177	○ 2215 6.1 186
12 W 0321 2.0 61	27 0403 2.0 61	12 Sa 0423 2.5 76	27 0605 2.9 88	12 Sa 0241 2.1 64	27 0406 2.9 88	F 0934 0.6 198	F 1551 2.6 79	F 2205 5.6 171	F 0909 0.6 198	F 1539 2.2 67	F 2200 0.5 177
0934 6.6 201	1020 6.8 207	1042 6.3 192	1225 6.0 183	0854 6.7 204	0406 2.9 88	0934 0.6 198	1551 2.6 79	0934 0.6 198	1551 2.6 79	0934 0.6 198	1551 2.6 79
1551 2.0 61	1646 1.9 58	1713 2.2 67	1859 2.4 73	1520 1.9 58	0406 2.9 88	1551 2.6 79	1646 1.9 58	1551 2.6 79	1646 1.9 58	1551 2.6 79	1646 1.9 58
○ 2205 6.4 195	2304 6.2 189	2335 6.0 183	2439 6.2 189	○ 2139 6.2 189	0406 2.9 88	2205 5.6 171	2304 6.2 189	2205 5.6 171	2304 6.2 189	2205 5.6 171	2304 6.2 189
13 Th 0415 2											

Suriname River Entrance, Surinam, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0315 7.2 219		16 Sa 0259 8.1 247		1 Su 0311 7.4 226		16 M 0315 8.3 253		1 W 0349 7.7 235		16 Th 0425 7.9 241	
0924 1.3 40		0913 0.3 9		0924 1.0 30		0934 0.2 6		1007 0.8 24		1045 0.6 18	
1533 7.4 226		1525 8.2 250		1533 7.4 226		1546 7.9 241		1617 7.3 223		1657 7.4 226	
2140 1.2 37		2132 0.4 12		2136 1.2 37		2149 0.7 21		2218 1.3 40		2257 1.2 37	
2 Sa 0347 7.6 232		17 Su 0342 8.5 259		2 M 0344 7.7 235		17 Tu 0359 8.4 256		2 Th 0427 7.8 238		17 F 0508 7.9 241	
0957 0.9 27		0957 -0.1 -3		0957 0.7 21		1018 0.1 3		1046 0.7 21		1128 0.7 21	
1606 7.6 232		1609 8.4 256		1607 7.5 229		1629 7.9 241		1656 7.4 226		1738 7.3 223	
2211 0.9 27		O 2214 0.2 6		2209 1.1 34		O 2231 0.7 21		2257 1.2 37		2340 1.3 40	
3 Su 0417 7.8 238		18 M 0423 8.7 265		3 Tu 0416 7.9 241		18 W 0441 8.4 256		3 F 0506 7.9 241		18 Sa 0550 7.8 238	
1028 0.6 18		1039 -0.3 -6		1030 0.6 18		1100 0.2 6		1126 0.6 18		1209 0.9 27	
1636 7.8 238		1651 8.4 256		1640 7.6 232		1712 7.8 238		1737 7.4 226		1820 7.2 219	
● 2240 0.8 24		2254 0.3 9		● 2241 1.0 30		2313 0.9 27		2338 1.2 37			
4 M 0446 8.0 244		19 Tu 0503 8.7 265		4 W 0448 8.0 244		19 Th 0522 8.2 250		4 Sa 0548 7.9 241		19 M 0022 1.4 43	
1058 0.4 12		1120 -0.2 -6		1104 0.5 15		1142 0.4 12		1208 0.7 21		0632 7.6 232	
1707 7.9 241		1731 8.2 250		1714 7.6 232		1754 7.5 229		1820 7.4 226		1250 1.1 34	
2310 0.8 24		2334 0.5 15		2315 1.1 34		2354 1.1 34				1901 7.1 216	
5 Tu 0516 8.1 247		20 W 0542 8.5 259		5 Th 0522 8.0 244		20 F 0604 7.9 241		5 Su 0022 1.3 40		20 M 0105 1.5 46	
1128 0.4 12		1200 0.0 0		1139 0.5 15		1225 0.7 21		0633 7.8 238		0715 7.3 223	
1738 7.8 238		1812 7.9 241		1750 7.5 229		1836 7.2 219		1253 0.8 24		1332 1.3 40	
2340 0.9 27				2350 1.2 37				1906 7.3 223		1944 6.9 210	
6 W 0546 8.0 244		21 Th 0013 0.9 27		6 F 0559 7.9 241		21 Sa 0037 1.5 46		6 M 0110 1.4 43		21 Tu 0149 1.7 52	
1200 0.4 18		0622 8.1 247		1218 0.7 21		0648 7.5 229		0722 7.6 232		0800 7.0 213	
1810 7.7 235		1242 0.5 15		1830 7.3 223		1309 1.1 34		1343 1.0 30		1416 1.6 49	
		1854 7.4 226				1921 6.9 210		1957 7.1 216		2029 6.8 207	
7 Th 0012 1.0 30		22 F 0054 1.3 40		7 Sa 0030 1.4 43		22 Su 0123 1.8 55		7 Tu 0204 1.5 46		22 W 0237 1.9 58	
0619 7.9 241		0704 7.6 232		0640 7.6 232		0734 7.1 216		0816 7.3 223		0849 6.8 207	
1235 0.6 18		1326 1.0 30		1301 0.9 27		1356 1.5 46		1437 1.2 37		1504 1.8 55	
1846 7.4 226		1939 6.9 210		1914 7.1 216		2010 6.6 201		2053 7.0 213		2118 6.6 201	
8 F 0047 1.3 40		23 Sa 0140 1.9 58		8 Su 0116 1.6 49		23 M 0214 2.1 64		8 W 0304 1.6 49		23 Th 0329 2.1 64	
0656 7.6 232		0751 7.0 213		0727 7.3 223		0826 6.7 204		0918 7.1 216		0941 6.5 198	
1314 1.0 30		1415 1.6 49		1351 1.2 37		1449 1.9 58		1537 1.4 43		1555 2.1 64	
1927 7.0 213		2031 6.4 195		2007 6.8 207		2105 6.3 192		2155 7.0 213		2211 6.5 198	
9 Sa 0128 1.7 52		24 Su 0233 2.4 73		9 M 0211 1.9 58		24 Tu 0313 2.4 73		9 Th 0410 1.7 52		24 F 0426 2.2 67	
0739 7.2 219		0847 6.5 198		0824 7.0 213		0926 6.4 195		1024 6.9 210		1039 6.3 192	
1401 1.4 43		1514 2.1 64		1450 1.5 46		1548 2.2 67		1641 1.6 49		1651 2.2 67	
2016 6.6 201		● 2135 6.0 183		2109 6.6 201		● 2207 6.2 189		2300 7.0 213		2308 6.4 195	
10 Su 0219 2.1 64		25 M 0342 2.7 82		10 Tu 0318 2.1 64		25 W 0419 2.5 76		10 F 0518 1.6 49		25 Sa 0526 2.2 67	
0833 6.8 207		0958 6.1 186		0933 6.7 204		1032 6.2 189		1133 6.9 210		1139 6.2 189	
1500 1.8 55		1628 2.5 76		1559 1.7 52		1651 2.3 70		1746 1.6 49		1750 2.3 70	
2121 6.3 192		2253 5.8 177		● 2221 6.5 198		2311 6.2 189					
11 M 0327 2.4 73		26 Tu 0505 2.8 85		11 W 0435 2.1 64		26 Th 0526 2.4 73		11 Sa 0004 7.1 216		26 Su 0006 6.5 198	
0945 6.5 198		1120 5.9 180		1050 6.7 204		1138 6.2 189		0625 1.4 43		0626 2.1 64	
1617 2.0 61		1746 2.5 76		1713 1.8 55		1753 2.3 70		1240 6.9 210		1240 6.3 192	
● 2242 6.2 189				2335 6.7 204				1849 1.6 49		1847 2.2 67	
12 Tu 0454 2.5 76		27 W 0008 6.0 183		12 Th 0551 1.9 58		27 F 0011 6.4 195		12 Su 0105 7.4 226		27 M 0102 6.6 201	
1112 6.4 195		0622 2.6 79		1206 6.8 207		0627 2.2 67		0727 1.2 37		0723 1.9 58	
1742 2.0 61		1235 6.1 186		1823 1.6 49		1239 6.3 192		1341 7.1 216		1336 6.4 195	
		1852 2.3 70				1849 2.1 64		1946 1.5 46		1941 2.1 64	
13 W 0007 6.4 195		28 Th 0109 6.3 192		13 F 0041 7.1 216		28 Sa 0104 6.6 201		13 M 0200 7.6 232		28 Tu 0154 6.9 210	
0620 2.2 67		0722 2.2 67		0658 1.4 43		0720 1.9 58		0823 0.9 27		0815 1.6 49	
1236 6.7 204		1333 6.4 195		1312 7.1 216		1331 6.5 198		1436 7.2 219		1428 6.6 201	
1857 1.6 49		1943 2.0 61		1923 1.3 40		1938 1.9 58		2039 1.3 40		2031 1.9 58	
14 Th 0116 6.9 210		29 F 0156 6.7 204		14 Sa 0138 7.6 232		29 Su 0150 6.9 210		14 Tu 0252 7.8 238		29 W 0243 7.2 219	
0730 1.6 49		0809 1.8 55		0756 0.9 27		0807 1.6 49		1527 7.3 223		0903 1.3 40	
1343 7.2 219		1418 6.8 207		1409 7.5 229		1417 6.8 207		2128 1.2 37		1516 6.9 210	
1957 1.2 37		2026 1.7 52		2016 1.0 30		2021 1.7 52				2118 1.6 49	
15 F 0211 7.5 229		30 Sa 0235 7.1 216		15 M 0229 8.0 244		30 W 0232 7.2 219		15 Tu 0340 7.9 241		30 Th 0328 7.4 226	
0825 0.9 27		0848 1.3 40		0847 0.5 15		0849 1.3 40		1001 0.6 18		0948 1.0 30	
1437 7.7 235		1457 7.1 216		1459 7.8 238		1459 7.0 213		1613 7.4 226		1600 7.1 216	
2047 0.7 21		2102 1.4 43		2104 0.8 24		2102 1.5 46		● 2214 1.2 37		2202 1.4 43	
31 Tu 0311 7.4 226						31 Tu 0311 7.4 226					
0928 1.0 30						0928 1.0 30					
1539 7.2 219						1539 7.2 219					
2140 1.4 43						2140 1.4 43					

Time meridian 52° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

Seasonal variations in sea level have not been included in these predictions.

Suriname River Entrance, Surinam, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0412	7.7	235	16 0456	7.7	235	1 0528	8.4	256	16 0547	7.9	241
F 1032	0.7	21	Sa 1112	0.9	27	M 1142	0.2	6	Tu 1156	0.8	24
● 1643	7.4	226	Sa 1721	7.4	226	M 1752	8.2	250	Th 1803	7.8	238
● 2245	1.2	37	Sa 2325	1.1	34						
2 0456	7.9	241	17 0535	7.8	238	2 0000	0.3	9	17 0011	0.7	21
Sa 1115	0.6	18	Su 1150	0.9	27	Tu 0611	8.4	256	W 0620	7.8	238
1726	7.6	232	Su 1758	7.4	226	1223	0.2	6	1228	0.9	27
2329	1.0	30				1833	8.2	250	1835	7.7	235
3 0540	8.1	247	18 0003	1.1	34	3 W 0043	0.3	9	18 0044	0.8	24
Su 1158	0.5	15	M 0613	7.7	235	W 0655	8.3	253	Th 0654	7.6	232
1809	7.7	235	M 1226	0.9	27	1306	0.4	12	1301	1.1	34
			1834	7.4	226	1916	8.1	247	1908	7.5	229
4 0014	0.9	27	19 0040	1.1	34	4 Th 0128	0.4	12	19 0119	1.0	30
M 0625	8.1	247	Tu 0650	7.6	232	Th 0741	7.9	241	F 0730	7.3	223
1242	0.5	15	Su 1302	1.1	34	1350	0.8	14	1336	1.4	43
1854	7.7	235	1911	7.3	223	2001	7.8	238	1944	7.3	223
5 0100	0.9	27	20 0118	1.2	37	5 F 0216	0.8	24	20 0158	1.3	40
Tu 0712	7.9	241	W 0728	7.4	226	Sa 0830	7.5	229	Sa 0809	7.0	213
1328	0.7	21	1339	1.3	40	F 1438	1.3	40	M 1415	1.8	55
1940	7.6	232	1949	7.2	219	2050	7.5	229	2025	6.9	210
6 0149	0.9	27	21 0158	1.4	43	6 Sa 0310	1.2	37	21 0242	1.7	52
W 0802	7.7	235	Th 0809	7.1	216	Sa 0925	6.9	210	Su 0855	6.5	198
1417	0.9	27	1419	1.5	46	Sa 1532	1.8	55	Su 1501	2.2	67
2030	7.5	229	2029	7.0	213	● 2147	7.0	213	● 2114	6.6	201
7 0242	1.1	34	22 0241	1.6	49	7 Su 0412	1.6	49	21 0242	2.2	67
Th 0856	7.4	226	F 0853	6.8	207	Su 1029	6.4	195	W 1037	5.9	180
1509	1.3	40	M 1502	1.9	58	M 1636	2.2	67	1647	2.8	85
2124	7.3	223	2115	6.7	204	2254	6.7	204	2306	6.2	189
8 0340	1.3	40	23 0330	1.9	58	8 M 0524	1.9	58	21 0412	2.3	70
F 0955	7.0	213	Sa 0943	6.5	198	Tu 1145	6.2	189	W 1037	5.9	180
1606	1.6	49	Sa 1552	2.2	67	1752	2.5	76	1647	2.8	85
● 2223	7.1	216	● 2207	6.5	198	2336	6.2	189	2306	6.2	189
9 0444	1.5	46	24 0427	2.1	64	9 Tu 0011	6.5	198	22 0539	2.3	70
Sa 1100	6.7	204	Su 1042	6.2	189	W 0643	2.0	61	Th 1205	6.1	186
1710	1.9	58	Su 1651	2.4	73	Tu 1303	6.1	186	1816	2.5	76
2327	7.0	213	2308	6.4	195	1909	2.4	73			
10 0553	1.6	49	25 0533	2.2	67	10 W 0125	6.6	201	8 0116	6.3	192
Su 1210	6.6	201	M 1150	6.1	186	Th 0753	1.8	55	Th 0741	2.1	64
1817	2.0	61	M 1758	2.5	76	1411	6.4	195	1359	6.3	192
						2015	2.2	67	2005	2.2	67
11 0034	7.0	213	26 0015	6.4	195	11 Th 0228	6.9	210	23 0032	6.4	195
M 0701	1.6	49	Tu 0642	2.1	64	Sa 0850	1.6	49	W 0658	1.9	58
1318	6.6	201	Tu 1300	6.1	186	F 1504	6.7	204	F 1317	6.6	201
1923	2.0	61	1906	2.4	73	2108	1.8	55	1928	1.9	58
12 0138	7.1	216	27 0122	6.6	201	12 F 0319	7.2	219	9 0217	6.7	204
Tu 0805	1.4	43	W 0747	1.9	58	Sa 0937	1.3	40	W 0834	1.7	52
1420	6.7	204	M 1403	6.4	195	1547	7.0	213	1447	6.7	204
2023	1.9	58	2008	2.1	64	2151	1.4	43	2054	1.7	52
13 0236	7.3	223	28 0221	6.9	210	13 Sa 0402	7.5	229	24 0141	7.0	213
W 0900	1.2	37	Th 0843	1.5	46	Sa 1016	1.0	30	W 0758	1.4	43
1514	6.9	210	1457	6.8	207	1625	7.3	223	Sa 1413	7.2	219
2116	1.6	49	2101	1.7	52	● 2230	1.1	34	2023	1.2	37
14 0328	7.5	229	29 0313	7.4	226	14 Su 0439	7.7	235	25 0235	7.6	232
Th 0949	1.0	30	F 0933	1.0	30	Su 1051	0.9	27	Su 0848	0.8	24
1601	7.1	216	F 1545	7.2	219	1659	7.6	232	M 1500	7.9	241
2203	1.4	43	2149	1.2	37	2304	0.9	27	2111	0.5	15
15 0414	7.6	232	30 0400	7.8	238	15 M 0514	7.8	238	11 0342	7.4	226
F 1033	0.9	27	Sa 1017	0.6	18	Tu 1124	0.8	24	26 0322	8.1	247
1643	7.2	219	Sa 1629	7.6	232	1731	7.7	235	W 0932	0.3	9
● 2245	1.3	40	● 2234	0.8	24	2338	0.7	21	M 1542	8.4	256
31 0444	8.2	250	Su 1100	0.3	9	28 0344	8.0	244	27 0406	8.5	259
			Su 1710	8.0	244	Su 0958	0.4	12	Tu 1014	0.1	3
			2317	0.5	15	1608	8.1	247	1623	0.7	265
						● 2216	0.4	12	● 2236	-0.3	-9
31 0444	8.2	250	Su 1100	0.3	9	28 0344	8.0	244	28 0447	8.7	265
			Su 1710	8.0	244	Su 0958	0.4	12	W 1054	0.0	0
			2317	0.5	15	1608	8.1	247	1702	8.9	271
						● 2216	0.4	12	2317	-0.4	-12
31 0444	8.2	250	Su 1100	0.3	9	29 0427	8.4	256	29 0528	8.6	262
			Su 1710	8.0	244	Su 1159	0.1	3	Th 1133	0.1	3
			2317	0.5	15	1808	8.6	262	Th 1742	8.8	268
									2358	-0.3	-9

Time meridian 52° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

Seasonal variations in sea level have not been included in these predictions.

Suriname River Entrance, Surinam, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0040 0.1 3 0653 7.8 238	16 Su 0017 0.8 24 0627 7.3 223	1 Tu 0156 1.4 43 0812 6.5 198	16 W 0126 1.3 40 0741 6.8 207	1 Th 0228 1.7 52 0844 6.5 198	16 F 0205 1.2 37 0820 7.1 216						
1255 1.0 30 1905 7.9 241	1228 1.4 43 1836 7.5 229	1415 2.2 67 2028 6.6 201	1344 1.9 58 1957 7.0 213	1451 2.2 67 2104 6.5 198	1429 1.5 46 2042 7.2 219						
2 Su 0125 0.7 21 0739 7.2 219	17 M 0055 1.1 34 0706 7.0 213	2 0256 2.0 61 W 0916 6.1 186	17 Th 0221 1.5 46 0839 6.6 201	2 0325 2.1 64 F 0943 6.3 192	17 Sa 0300 1.4 43 0917 7.0 213						
1340 1.6 49 1952 7.3 223	1308 1.8 55 1918 7.2 219	1522 2.6 79 2138 6.2 189	1446 2.1 64 2101 6.7 204	1555 2.4 73 2208 6.2 189	1531 1.6 49 2145 6.9 210						
3 M 0216 1.4 43 0832 6.5 198	18 Tu 0139 1.4 43 0754 6.6 201	3 Th 0407 2.3 70 1032 5.9 180	18 F 0326 1.8 55 0947 6.5 198	3 Sa 0428 2.3 70 1047 6.2 189	18 Su 0402 1.6 49 1020 7.0 213						
1434 2.2 67 2048 6.6 201	1356 2.1 64 2009 6.8 207	1643 2.7 82 2259 6.0 183	1559 2.2 67 2215 6.6 201	1702 2.4 73 2316 6.2 189	1638 1.7 52 2254 6.8 207						
4 Tu 0318 2.0 61 0940 6.0 183	19 W 0236 1.8 55 0855 6.2 189	4 F 0524 2.4 73 1147 6.0 183	19 Sa 0438 1.8 55 1059 6.6 201	4 Su 0531 2.3 70 1149 6.3 192	19 M 0508 1.7 52 1126 7.0 213						
1546 2.7 82 2203 6.1 186	1501 2.5 76 2117 6.4 195	1801 2.6 79	1716 2.0 61 2331 6.7 204	1806 2.3 70	1748 1.5 46						
5 W 0439 2.4 73 1106 5.8 177	20 Th 0348 2.1 64 1013 6.1 186	5 Sa 0014 6.1 186 0631 2.3 70	20 Su 0549 1.7 52 1208 7.0 213	5 M 0019 6.2 189 0629 2.2 67	20 Tu 0004 6.8 207 0614 1.7 52						
1717 2.9 88 2334 6.0 183	1624 2.6 79 2241 6.3 192	1248 6.4 195 1902 2.2 67	1826 1.5 46	1245 6.5 198 1903 2.0 61	1232 7.2 219 1855 1.3 40						
6 Th 0606 2.4 73 1230 6.0 183	21 F 0511 2.1 64 1135 6.3 192	6 Su 0113 6.4 195 0724 2.0 61	21 M 0040 7.0 213 0652 1.4 43	6 Tu 0114 6.4 195 0721 2.1 64	21 W 0111 6.9 210 0717 1.6 49						
1841 2.6 79	1749 2.3 70	1337 6.7 204 1950 1.8 55	1307 7.4 226 1926 1.0 30	1334 6.8 207 1952 1.7 52	1333 7.5 229 1956 1.0 30						
7 F 0054 6.2 189 0715 2.2 67	22 Sa 0005 6.6 201 0626 1.8 55	7 M 0200 6.8 207 0807 1.7 52	22 Tu 0139 7.4 226 0747 1.1 34	7 W 0202 6.6 201 0807 1.9 58	22 Th 0211 7.1 216 0815 1.4 43						
1332 6.4 195 1942 2.2 67	1246 6.8 207 1900 1.7 52	1417 7.1 216 2031 1.4 43	1401 7.9 241 2020 0.6 18	1418 7.1 216 2035 1.4 43	1428 7.7 235 2051 0.7 21						
8 Sa 0153 6.6 201 0806 1.8 55	23 Su 0113 7.0 213 0727 1.3 40	8 Tu 0240 7.1 216 0845 1.5 46	23 W 0232 7.7 235 0837 0.9 27	8 Th 0245 6.9 210 0848 1.7 52	23 F 0305 7.3 223 0907 1.2 37						
1418 6.8 207 2028 1.7 52	1342 7.4 226 1956 1.0 30	1453 7.4 226 2107 1.1 34	1449 8.2 250 2108 0.2 6	1458 7.3 223 2115 1.2 37	1519 7.9 241 2141 0.5 15						
9 Su 0237 7.0 213 0846 1.5 46	24 M 0208 7.6 232 0819 0.8 24	9 W 0316 7.3 223 0919 1.3 40	24 Th 0321 7.9 241 0924 0.7 21	9 F 0325 7.1 216 0927 1.5 46	24 Sa 0354 7.5 229 0956 1.1 34						
1455 7.2 219 2105 1.2 37	1431 8.0 244 2045 0.4 12	1527 7.7 235 2141 0.8 24	1535 8.4 256 2154 0.0 0	1536 7.5 229 2153 0.9 27	1607 8.1 247 2227 0.4 12						
10 M 0314 7.3 223 0920 1.2 37	25 Tu 0257 8.0 244 0904 0.5 15	10 Th 0350 7.4 226 0952 1.1 34	25 F 0406 8.0 244 1008 0.7 21	10 Sa 0403 7.2 219 1004 1.4 43	25 Su 0439 7.6 232 1041 1.0 30						
1528 7.6 232 2138 0.9 27	1515 8.5 259 2130 -0.1 -3	1559 7.8 238 2214 0.7 21	1619 8.5 259 2239 0.0 0	1613 7.7 235 2231 0.8 24	1652 8.1 247 2311 0.5 15						
11 Tu 0347 7.6 232 0952 1.0 30	26 W 0342 8.3 253 0947 0.3 9	11 F 0423 7.5 229 1024 1.1 34	26 Sa 0450 7.9 241 1052 0.8 24	11 Su 0441 7.3 223 1041 1.3 40	26 M 0522 7.6 232 1124 1.0 30						
1558 7.8 238 O 2210 0.6 18	1557 8.8 268 ● 2213 -0.3 -9	1632 7.9 241 2247 0.6 18	1702 8.4 256 2322 0.2 6	1650 7.8 238 2309 0.7 21	1734 8.0 244 2352 0.6 18						
12 W 0418 7.7 235 1022 0.9 27	27 Th 0425 8.4 256 1029 0.2 6	12 Sa 0457 7.5 229 1057 1.1 34	27 Su 0534 7.7 235 1135 1.0 30	12 M 0519 7.4 226 1120 1.2 37	27 Tu 0603 7.5 229 1206 1.1 34						
1628 8.0 244 2240 0.5 15	1638 8.8 268 2255 -0.3 -9	1740 7.8 238 2322 0.6 18	1745 8.1 247 1829 7.8 238	1730 7.8 238 2348 0.7 21	1816 7.8 238						
13 Th 0449 7.8 238 1051 0.9 27	28 F 0507 8.3 253 1109 0.4 12	13 Su 0532 7.4 226 1132 1.2 37	28 M 0006 0.5 15 0618 7.4 226	13 Tu 0559 7.4 226 1201 1.2 37	28 W 0033 0.8 24 0643 7.3 223						
1658 8.0 244 2311 0.5 15	1719 8.7 265 2337 -0.1 -24	1740 7.8 238 2359 0.8 24	1219 1.3 40 1829 7.8 238	1811 7.8 238	1247 1.2 37 1858 7.6 232						
14 F 0520 7.7 235 1122 0.9 27	29 Sa 0549 8.0 244 1151 0.7 21	14 M 0609 7.2 219 1210 1.4 43	29 Tu 0050 0.9 27 0703 7.1 216	14 W 0030 0.8 24 0642 7.3 223	29 Th 0114 1.1 34 0724 7.2 219						
1728 8.0 244 2343 0.5 15	1800 8.3 253	1819 7.6 232	1305 1.6 49 1916 7.3 223	1245 1.3 40 1856 7.6 232	1330 1.5 46 1941 7.2 219						
15 Sa 0552 7.6 232 1153 1.1 34	30 Su 0020 0.3 9 0633 7.5 229	15 Tu 0039 1.0 30 0652 7.0 213	30 W 0137 1.3 40 0751 6.7 204	15 Th 0115 0.9 27 0728 7.2 219	30 F 0155 1.4 43 0807 6.9 210						
1800 7.8 238	1234 1.2 37 1844 7.8 238	1253 1.7 52 1904 7.3 223	1355 1.9 58 2007 6.9 210	1334 1.4 43 1946 7.4 226	1415 1.7 52 2026 6.9 210						
31 M 0106 0.8 24 0719 7.0 213	31 M 0106 0.8 24 1320 1.7 52				31 Sa 0240 1.7 52 0853 6.7 204						
1932 7.2 219					1504 1.9 58 2116 6.6 201						

Time meridian 52° 30' W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

Seasonal variations in sea level have not been included in these predictions.

Recife, Brazil, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0206	6.6	200	16 Su 0149	5.6	170	1 Tu 0345	6.9	210	1 Tu 0249	6.6	200
0806	1.3	40	0739	2.6	80	0936	1.0	30	0836	1.3	40
1409	6.9	210	1419	6.2	190	1536	7.2	220	1439	6.6	200
2038	1.0	30	2034	2.0	60	2206	0.7	20	2123	1.0	30
2 Su 0300	6.9	210	17 M 0228	5.9	180	2 0419	6.9	210	2 W 0328	6.9	210
0858	1.3	40	0823	2.3	70	1011	1.0	30	0915	1.0	30
1500	7.2	220	1447	6.6	200	1611	7.2	220	1517	6.9	210
2126	0.7	20	2109	1.3	40	● 2236	0.7	20	2147	1.0	30
3 M 0349	6.9	210	18 Tu 0308	6.6	200	3 Th 0451	6.9	210	3 Th 0400	6.9	210
0945	1.0	30	0906	1.6	50	1045	1.0	30	0954	1.0	30
1547	7.2	220	1524	7.2	220	1647	7.2	220	1554	6.9	210
2208	0.7	20	2145	1.0	30	2304	1.0	30	2213	1.0	30
4 Tu 0428	6.9	210	19 W 0349	6.9	210	4 F 0517	6.6	200	4 F 0428	6.9	210
1023	1.0	30	0951	1.3	40	1113	1.0	30	1043	0.3	10
1626	7.2	220	1604	7.5	230	1711	6.9	210	1702	8.2	250
● 2247	0.7	20	○ 2217	0.7	20	2326	1.3	40	2317	0.0	0
5 W 0502	6.9	210	20 Th 0421	7.2	220	5 Sa 0545	6.6	200	5 Sa 0519	8.2	250
1058	1.0	30	1024	1.0	30	1147	1.3	40	1123	0.0	0
1702	7.2	220	1643	7.9	240	1745	6.9	210	1739	8.2	250
2323	1.0	30	2256	0.3	10	2349	1.3	40	2358	0.3	10
6 Th 0538	6.6	200	21 F 0458	7.5	230	6 Su 0602	6.2	190	6 M 0604	8.2	250
1132	1.3	40	1102	0.7	20	1213	1.6	50	1208	0.3	10
1736	6.9	210	1721	7.9	240	1815	6.6	200	1821	7.9	240
2356	1.3	40	2338	0.3	10	● 0513	6.6	200	● 1121	1.0	30
7 F 0611	6.2	190	22 Sa 0539	7.9	240	7 M 0013	1.6	50	7 M 0524	6.6	200
1208	1.3	40	1143	0.7	20	0619	6.2	190	0651	7.5	230
1806	6.6	200	1800	7.9	240	1234	2.0	60	1300	0.7	20
8 Sa 0021	1.6	50	23 Su 0019	0.7	20	1845	6.2	190	1908	7.2	220
0643	5.9	180	0623	7.5	230	● 0038	0.7	20	● 1143	1.3	40
1247	1.6	50	1228	0.7	20	● 0049	2.0	60	1749	6.6	200
1847	6.2	190	1843	7.5	230	● 0651	7.5	230	2347	1.6	50
9 Su 0053	2.0	60	24 M 0100	1.0	30	● 0119	2.3	70	● 0123	2.0	60
0706	5.9	180	0711	7.2	220	● 0654	5.9	180	0741	6.9	210
1319	2.0	60	1319	1.0	30	● 1300	2.0	60	1358	1.3	40
1926	5.9	180	1930	7.2	220	● 1936	5.2	160	● 2006	6.6	200
10 M 0132	2.3	70	25 Tu 0147	1.3	40	● 0123	3.0	90	● 0119	1.3	40
0741	5.6	170	0808	6.9	210	● 0139	5.2	160	● 0741	6.9	210
1349	2.3	70	1421	1.3	40	● 0817	4.2	160	● 1506	2.0	60
2009	5.6	170	2028	6.6	200	● 1426	3.0	90	● 2117	5.9	180
11 Tu 0217	2.6	80	26 W 0243	2.0	60	● 2026	4.9	150	● 0332	2.3	70
0823	5.2	160	0915	6.6	200	● 0513	3.3	100	● 0653	5.9	180
1428	2.6	80	1534	2.0	60	● 0923	5.2	160	● 1008	5.9	180
2053	4.9	150	● 2141	5.9	180	● 1545	3.3	100	● 1636	2.3	70
12 W 0315	3.0	90	27 Th 0406	2.3	70	● 2239	4.6	140	● 2306	5.6	170
0919	5.2	160	1038	6.2	190	● 0523	2.6	80	● 1900	5.6	170
1536	3.0	90	1654	2.0	60	● 0241	3.3	100	● 0056	2.6	80
● 2236	4.9	150	2315	5.9	180	● 0744	5.2	160	● 0732	5.6	170
13 Th 0428	3.3	100	28 F 0543	2.3	70	● 1545	3.3	100	● 1353	2.6	80
1036	4.9	150	1156	6.2	190	● 2239	4.6	140	● 1947	4.9	150
1741	3.0	90	1823	2.0	60	● 0551	5.6	170	● 0213	3.0	90
2356	4.9	150	1945	1.6	50	● 0647	2.3	70	● 1426	2.3	70
14 F 0545	3.3	100	29 Sa 0056	5.9	180	● 1256	5.9	180	● 1911	4.6	140
1211	5.2	160	0700	2.0	60	● 1947	1.6	50	● 0051	5.6	170
1856	2.6	80	1306	6.2	190	● 0604	3.3	100	● 0836	5.2	160
1951	2.3	70	1945	1.6	50	● 1249	5.6	170	● 1456	3.0	90
15 Sa 0058	5.2	160	30 Su 0202	6.2	190	● 1917	2.6	80	● 2043	1.3	40
0649	3.0	90	0800	1.6	50	● 0111	5.6	170	● 0156	2.3	70
1330	5.6	170	1406	6.6	200	● 0711	2.6	80	● 0819	6.2	190
1951	2.3	70	2047	1.3	40	● 1351	6.2	190	● 1451	2.0	60
16 M 0258	6.6	200	● 0056	5.9	180	● 2006	2.0	60	● 2104	5.9	180
0853	1.3	40	● 0853	1.3	40	● 0511	5.6	170	● 0156	2.0	60
1454	6.9	210	● 1454	6.9	210	● 0744	2.0	60	● 0819	6.2	190
2132	1.0	30	● 2132	1.0	30	● 1536	6.2	190	● 1451	2.0	60
17						● 0744	2.0	60	● 2023	1.6	50
18						● 1536	6.2	190	● 2251	5.6	170
19						● 2043	1.3	40	● 0313	2.3	70
20						● 0043	5.6	170	● 0943	5.9	180
21						● 0638	2.6	80	● 1615	2.3	70
22						● 1326	5.9	180	● 2251	5.6	170
23						● 1941	2.0	60	● 0302	6.6	200
24						● 0043	5.6	170	● 0854	1.3	40
25						● 0638	2.6	80	● 1454	6.6	200
26						● 1326	5.9	180	● 2119	1.3	40
27						● 1941	2.0	60	● 0302	6.6	200
28						● 0043	5.6	170	● 0854	1.3	40
29						● 0638	2.6	80	● 1454	6.6	200
30						● 1326	5.9	180	● 2119	1.3	40
31						● 1941	2.0	60	● 0302	6.6	200

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Recife, Brazil, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0334 6.6 200	16 0230 7.5 230	1 Sa 0839 0.7 20	1 Su 0930 1.3 40	1 M 1526 6.6 200	16 M 0904 0.3 10	1 W 1013 1.3 40	16 W 1013 1.3 40	1 Th 0347 6.6 200	16 Th 1032 0.3 10	16 F 0413 7.5 230	
0926 1.0 30	Sa 1500 7.9 240	1500 7.9 240	1526 6.6 200	1526 6.6 200	1528 7.5 230	1613 7.5 230	1613 6.2 190	1651 6.2 190	1651 7.2 220	1032 0.3 10	1651 7.2 220
1526 6.9 210	2109 0.3 10	2109 0.3 10	2130 1.6 50	2130 1.6 50	2139 0.7 20	● 2206 2.0 60	● 2206 2.0 60	2254 1.0 30	2254 1.0 30	1032 0.3 10	2254 1.0 30
2143 1.3 40											
2 Sa 0358 6.9 210	17 0309 8.2 250	2 Su 0919 0.0 0	2 M 1002 1.3 40	2 Tu 1600 6.6 200	17 Tu 0951 0.3 10	2 Th 0415 6.6 200	17 Th 1119 0.7 20	17 F 0500 7.5 230			
0958 1.0 30	Su 1543 7.9 240	1543 7.9 240	2156 1.6 50	2156 1.6 50	2221 0.7 20	1651 6.2 190	1651 6.2 190	1734 6.9 210	1734 6.9 210	1119 0.7 20	2334 1.0 30
1556 6.9 210	O 2154 0.3 10										
2206 1.3 40											
3 Su 0424 6.6 200	18 0356 8.2 250	3 M 1004 0.0 0	3 Tu 1036 1.3 40	3 W 1636 6.6 200	18 W 1038 0.3 10	3 F 0454 6.9 210	18 Sa 1206 1.0 30	18 0543 7.2 220			
1026 1.0 30	M 1623 7.9 240	1623 7.9 240	2238 0.3 10	● 2224 1.6 50	2302 0.7 20	1715 6.2 190	1819 6.6 200	1819 6.6 200	1109 1.3 40	1819 6.6 200	1206 1.0 30
● 2221 1.3 40											
4 M 0439 6.6 200	19 0443 8.2 250	4 Tu 1051 0.0 0	4 W 1054 1.3 40	4 Th 1704 6.2 190	19 Th 1126 0.3 10	4 Sa 0534 6.9 210	19 Su 1249 1.3 40	19 0015 1.3 40			
1056 1.3 40	Tu 2317 0.3 10	2317 0.3 10	2300 2.0 60	2300 2.0 60	2345 1.0 30	1751 6.2 190	1751 6.2 190	1249 1.3 40	1249 1.3 40	1147 1.6 50	1906 6.2 190
1656 6.6 200											
2251 1.6 50											
5 Tu 0454 6.6 200	20 0526 7.9 240	5 W 1139 0.3 10	5 Th 1117 1.6 50	5 F 1728 6.2 190	20 F 1832 6.6 200	5 Su 0613 6.6 200	20 M 0704 1.6 50	20 0102 1.6 50			
1117 1.3 40	W 1749 7.5 230	1749 7.5 230	2330 2.0 60	2330 2.0 60	1832 6.6 200	1230 1.6 50	1230 1.6 50	1326 1.6 50	1326 1.6 50	0704 1.6 50	1953 5.9 180
1724 6.6 200											
2317 1.6 50	2358 1.0 30										
6 W 0519 6.6 200	21 0611 7.5 230	6 Th 1230 0.7 20	6 F 1841 6.9 210	6 F 1756 5.9 180	21 F 1926 6.2 190	6 Su 0613 6.6 200	21 Tu 0756 5.9 180	21 0154 2.0 60			
1132 1.6 50	1743 6.2 190	1743 6.2 190	2358 2.3 70	2358 2.3 70	1926 6.2 190	1230 1.6 50	1230 1.6 50	1408 2.0 60	1408 2.0 60	0756 5.9 180	2036 5.6 170
2347 2.0 60											
7 Th 0554 6.2 190	22 0045 1.3 40	7 F 0700 6.9 210	7 Sa 1326 2.0 60	7 Sa 1836 5.9 180	22 Su 2028 5.9 180	7 Tu 0128 2.3 70	22 W 0856 5.6 170	22 0253 2.3 70			
1202 2.0 60	1804 5.9 180	1804 5.9 180	1939 6.2 190	1939 6.2 190	2028 5.9 180	0747 6.2 190	0747 6.2 190	1500 2.3 70	1500 2.3 70	0856 5.6 170	2123 5.2 160
8 F 0008 2.3 70	23 0141 2.0 60	8 Sa 0756 6.2 190	8 Su 1324 2.3 70	8 Su 1928 5.6 170	23 M 2141 5.6 170	8 Tu 0234 2.3 70	23 Th 1600 2.6 80	23 0402 2.6 80			
0630 6.2 190	Sa 1432 2.0 60	1432 2.0 60	1324 2.3 70	1928 5.6 170	2141 5.6 170	0849 6.2 190	1000 5.2 160	23 1000 5.2 160			
1245 2.3 70											
1841 5.6 170	2051 5.6 170										
9 Sa 0038 2.6 80	24 0254 2.3 70	9 Su 0909 5.9 180	9 M 1424 2.6 80	9 M 2041 5.6 170	24 Tu 2306 5.2 160	9 Th 0347 2.3 70	24 F 1106 5.2 160				
0709 5.9 180	Su 1551 2.3 70	1551 2.3 70	1424 2.6 80	2041 5.6 170	2306 5.2 160	0956 6.2 190	1106 5.2 160	24 1106 5.2 160			
1330 2.6 80	O 2226 5.6 170										
1926 5.2 160											
10 Su 0132 3.0 90	25 0426 2.6 80	10 M 1032 5.6 170	10 Tu 0909 5.9 180	10 Tu 1541 2.6 80	25 W 1713 2.6 80	10 F 1109 6.2 190	25 Sa 1211 5.2 160				
0809 5.6 170	1728 2.3 70	1728 2.3 70	1541 2.6 80	● 2209 5.6 170	1713 2.6 80	1743 2.0 60	1808 2.6 80	25 0619 2.6 80			
1434 3.0 90											
2045 4.9 150	2356 5.6 170										
11 M 0309 3.3 100	26 0549 2.3 70	11 Tu 1147 5.6 170	11 W 1849 2.3 70	11 W 2324 5.9 180	26 Th 1817 2.3 70	11 Sa 1226 6.2 190	26 Su 1308 5.6 170				
0936 5.2 160	1147 5.6 170	1147 5.6 170	1849 2.3 70	2324 5.9 180	1817 2.3 70	1849 1.6 50	1911 2.6 80	26 0053 5.6 170			
1628 3.0 90											
● 2251 5.2 160											
12 Tu 0451 3.0 90	27 0100 5.9 180	12 W 0653 2.0 60	12 Th 1145 6.2 190	12 Th 1823 2.0 60	27 F 1911 2.3 70	12 Su 0706 1.3 40	27 M 0758 2.0 60				
1111 5.6 170	1249 5.9 180	1249 5.9 180	1145 6.2 190	1823 2.0 60	1911 2.3 70	1334 6.6 200	1334 5.6 170	27 0147 5.9 180			
1802 2.6 80	1939 2.0 60										
13 W 0000 5.9 180	28 0153 6.2 190	13 Th 0743 1.6 50	13 F 1338 6.2 190	13 F 1900 1.6 50	28 M 1954 2.3 70	13 Th 0758 2.0 60	28 Tu 1438 5.9 180				
0602 2.6 80	1338 6.2 190	1338 6.2 190	1338 6.2 190	1900 1.6 50	1954 2.3 70	1438 2.0 60	2032 2.3 70	28 0232 5.9 180			
1232 6.2 190											
1900 2.0 60											
14 Th 0058 6.6 200	29 0230 6.2 190	14 F 0823 1.3 40	14 F 1419 6.2 190	14 F 2039 1.6 50	29 Su 2030 2.0 60	14 Tu 0856 0.7 20	29 W 1515 6.2 190				
0702 2.0 60	1419 6.2 190	1419 6.2 190	1419 6.2 190	2039 1.6 50	2030 2.0 60	1523 7.2 220	2111 2.0 60	29 0306 6.2 190			
1328 6.9 210											
1949 1.3 40											
15 F 0149 7.2 220	30 0258 6.6 200	15 Sa 0858 1.3 40	15 Su 0817 0.7 20	15 Su 2053 0.7 20	30 M 2102 2.0 60	15 Tu 0943 0.3 10	30 Th 1556 6.2 190				
0754 1.3 40	1458 6.6 200	1458 6.6 200	1441 7.5 230	2053 0.7 20	2102 2.0 60	1608 7.2 220	2154 2.0 60	30 0334 6.6 200			
1417 7.2 220	2109 1.6 50										
2030 0.7 20											
16 W 0328 6.6 200	31 0328 6.6 200	16 Tu 0943 1.3 40	16 Tu 1539 6.2 190	16 Tu 2130 2.0 60	31 O 2209 1.0 30	16 O 0956 1.3 40	30 F 2154 2.0 60				
0943 1.3 40											
1417 7.2 220											
2030 0.7 20											

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Recife, Brazil, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0406	6.9	210	16 Sa 0449	7.2	220	1 M 0504	7.5	230	16 Tu 0526	6.9	210
1024	1.3	40	1108	0.7	20	1115	0.7	20	1211	0.7	20
1630	6.6	200	1721	6.9	210	1715	7.5	230	1823	7.9	240
● 2230	1.6	50	2317	1.0	30	2319	1.0	30	16 F 0602	6.2	190
2 Sa 0443	7.2	220	17 Su 0523	7.2	220	2 0539	7.5	230	0032	0.7	20
1058	1.3	40	1147	1.0	30	1156	0.7	20	0641	7.2	220
1700	6.9	210	1800	6.6	200	1800	7.5	230	1253	1.0	30
2304	1.6	50	2356	1.0	30	1813	6.2	190	1911	7.2	220
3 Su 0523	7.2	220	18 M 0556	6.9	210	3 W 0002	1.0	30	0126	1.0	30
1136	1.0	30	1215	1.3	40	0617	7.5	230	0736	6.6	200
1738	6.9	210	1836	6.2	190	1236	1.0	30	1345	1.6	50
2339	1.6	50	1847	7.5	230	1839	5.9	180	2011	6.6	200
4 M 0600	7.2	220	19 Tu 0036	1.3	40	4 Th 0053	1.0	30	0234	1.6	50
1217	1.3	40	0634	6.6	200	0702	7.2	220	0845	6.2	190
1817	6.9	210	1243	1.6	50	1319	1.3	70	1456	2.3	70
			1904	5.9	180	1936	7.2	220	● 2128	6.2	190
5 Tu 0021	1.6	50	20 W 0115	1.6	50	5 F 0149	1.3	40	0354	2.0	60
0639	6.9	210	0715	6.2	190	0756	6.6	200	1017	5.6	170
1300	1.3	40	1317	2.0	60	1409	1.6	50	1639	2.3	70
1906	6.9	210	1928	5.6	170	2036	6.6	200	2258	5.9	180
6 W 0109	1.6	50	21 Th 0149	2.3	70	6 Sa 0253	1.6	50	0532	2.0	60
0723	6.9	210	0800	5.6	170	0900	6.2	190	1204	5.9	180
1345	1.6	50	1402	2.3	70	1517	2.0	60	1804	2.3	70
2000	6.6	200	2006	5.6	170	● 2151	6.2	190	● 2102	4.9	150
7 Th 0208	1.6	50	22 F 0224	2.6	80	7 Su 0406	2.0	60	2009	6.2	190
0817	6.6	200	0854	5.2	160	1023	5.9	180	0015	6.2	190
1438	2.0	60	1456	2.6	80	1651	2.3	70	0708	1.6	50
2104	6.6	200	2100	5.2	160	2309	6.2	190	1613	3.3	100
8 F 0313	2.0	60	23 Sa 0326	3.0	90	8 M 0532	2.0	60	2322	4.9	150
0923	6.2	190	1008	4.9	150	1208	5.9	180	0017	5.2	160
1545	2.0	60	1600	3.0	90	1815	2.3	70	0623	2.6	80
● 2217	6.2	190	● 2206	4.9	150	● 2230	6.2	190	1213	5.2	160
9 Sa 0426	2.0	60	24 Tu 0521	3.0	90	9 F 0024	6.2	190	1908	1.6	50
1041	5.9	180	1124	4.9	150	0706	1.6	50	● 2232	4.9	150
1715	2.3	70	1709	3.3	100	1326	6.2	190	0015	6.2	190
2330	6.6	200	2341	5.2	160	1921	2.0	60	0708	1.6	50
10 Su 0543	2.0	60	25 M 0636	2.6	80	10 W 0128	6.6	200	2322	3.3	100
1211	6.2	190	1234	4.9	150	0815	1.3	40	0017	5.2	160
1830	2.0	60	1824	3.0	90	1424	6.6	200	0623	2.6	80
11 M 0038	6.6	200	● 2230	5.6	170	2015	1.3	40	1213	5.2	160
0658	1.6	50	26 Tu 0115	2.3	70	● 2247	6.9	210	2232	4.9	150
1330	6.2	190	0726	2.3	70	0904	1.0	30	0015	6.2	190
1932	1.6	50	1324	5.2	160	1513	6.9	210	0708	1.6	50
12 Tu 0136	6.9	210	1926	2.6	80	2104	1.0	30	1613	3.3	100
0808	1.3	40	2013	2.3	70	● 2247	6.9	210	1908	1.6	50
1430	6.6	200	2013	2.3	70	● 2247	6.9	210	● 2232	4.9	150
2026	1.3	40				● 2247	6.9	210	0015	6.2	190
13 W 0228	7.2	220	27 Th 0245	6.2	190	12 F 0309	7.2	220	0224	6.6	200
0900	1.0	30	0858	1.6	50	0941	0.7	20	0930	1.0	30
1521	6.9	210	1456	6.2	190	1556	6.9	210	0930	1.0	30
2115	1.0	30	2054	2.0	60	2151	1.0	30	0930	1.0	30
14 Th 0317	7.2	220	29 F 0319	6.9	210	27 F 0253	6.9	210	0404	7.2	220
0945	0.7	20	0934	1.3	40	0904	1.0	30	1023	1.0	30
1604	6.9	210	1532	6.6	200	1502	6.9	210	1638	6.9	210
2202	1.0	30	2132	1.6	50	2108	1.3	40	● 2234	0.7	20
15 F 0404	7.5	230	● 2208	1.3	40	2258	1.0	30	● 2156	0.0	0
1028	0.7	20				● 2219	0.3	10			
1645	6.9	210									
● 2243	1.0	30									
16 W 0443	7.2	220									
1002	1.0	30									
1604	6.9	210									
● 2243	1.0	30									
17 Su 0426	7.5	230									
1039	0.7	20									
1639	7.2	220									
2243	1.0	30									

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Recife, Brazil, 2011

Times and Heights of High and Low Waters

October					November					December						
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height		
1 Sa	0011	0.3	10	16 Su	0554	5.6	170	1 Tu	0200	1.6	50	16 W	0100	2.3	70	
	0623	7.2	220		1154	2.3	70		0817	5.9	180		0702	5.6	170	
	1232	1.0	30		1809	5.9	180		1423	2.0	60		1304	2.6	80	
	1851	7.2	220						2041	5.9	180		1928	5.9	180	
2 Su	0109	1.0	30	17 M	0023	2.3	70	2 W	0315	2.0	60	17 Th	0153	2.6	80	
	0719	6.6	200		0623	5.6	170		0947	5.6	170		0808	5.6	170	
	1326	1.6	50		1221	2.6	80		1553	2.3	70		1413	3.0	90	
	1949	6.6	200		1851	5.6	170		●	2200	5.9	180		2034	5.6	170
3 M	0215	1.6	50	18 Tu	0108	2.6	80	3 Th	0445	2.3	70	18 F	0311	2.6	80	
	0830	5.9	180		0708	5.2	160		1119	5.6	170		0934	5.6	170	
	1441	2.3	70		1311	3.0	90		1709	2.3	70		1538	3.0	90	
	2106	5.9	180		1949	5.2	160		2313	5.9	180		●	2153	5.6	170
4 Tu	0339	2.0	60	19 W	0209	3.0	90	4 F	0623	2.0	60	19 Sa	0441	2.6	80	
	1009	5.6	170		0828	4.9	150		1232	5.9	180		1053	5.9	180	
	1621	2.3	70		1445	3.3	100		1817	2.0	60		1654	2.6	80	
	●	2236	5.9	180	○	2104	5.2	160					2315	5.9	180	
5 W	0524	2.0	60	20 Th	0408	3.0	90	5 Sa	0019	5.9	180	20 Su	0553	2.3	70	
	1151	5.9	180		1019	4.9	150		0721	2.0	60		1156	6.2	190	
	1749	2.3	70		1613	3.3	100		1324	6.2	190		1800	2.0	60	
	2358	5.9	180		2243	5.2	160		1913	1.6	50				1934	2.0
6 Th	0653	1.6	50	21 F	0543	2.6	80	6 Su	0115	6.2	190	21 M	0028	6.2	190	
	1300	6.2	190		1138	5.6	170		0756	1.6	50		0649	2.0	60	
	1854	1.6	50		1734	3.0	90		1406	6.6	200		1251	6.9	210	
									2002	1.3	40		1858	1.6	50	
7 F	0102	6.2	190	22 Sa	0028	5.9	180	7 M	0204	6.2	190	22 Tu	0126	6.9	210	
	0751	1.3	40		0641	2.3	70		0828	1.6	50		0738	1.3	40	
	1354	6.6	200		1234	6.2	190		1443	6.6	200		1339	7.2	220	
	1947	1.3	40		1836	2.3	70		2043	1.3	40		1951	1.0	30	
8 Sa	0151	6.6	200	23 Su	0113	6.6	200	8 Tu	0243	6.6	200	23 W	0217	7.2	220	
	0834	1.3	40		0723	1.6	50		0858	1.6	50		0823	1.0	30	
	1439	6.9	210		1319	6.9	210		1511	6.6	200		1423	7.9	240	
	2028	1.0	30		1926	1.6	50		2111	1.0	30		2038	0.7	20	
9 Su	0230	6.9	210	24 M	0153	6.9	210	9 W	0313	6.6	200	24 Th	0304	7.5	230	
	0900	1.0	30		0802	1.0	30		0924	1.6	50		0908	0.7	20	
	1509	6.9	210		1402	7.5	230		1545	6.6	200		1509	8.2	250	
	2106	1.0	30		2011	1.0	30		2151	1.0	30		2123	0.3	10	
10 M	0308	6.9	210	25 Tu	0238	7.5	230	10 F	0345	6.6	200	25 ○	0347	7.5	230	
	0928	1.0	30		0847	0.7	20		0943	1.6	50		0956	0.3	10	
	1541	6.9	210		1447	7.9	240		1608	6.6	200		1600	8.2	250	
	2139	1.0	30		2054	0.3	10		○	2219	1.3	40		●	2211	0.0	0
11 Tu	0339	6.9	210	26 W	0319	7.9	240	11 F	0415	6.6	200	11 Sa	0430	7.5	230	
	0953	1.3	40		0926	0.3	10		1008	1.6	50		1041	0.7	20	
	1606	6.9	210		1526	8.2	250		1623	6.6	200		1649	7.9	240	
	○	2208	1.0	30	●	2136	0.0	0		2249	1.3	40		2300	0.3	10
12 W	0406	6.9	210	27 Th	0356	7.9	240	12 Sa	0453	6.2	190	12 Su	0515	7.5	230	
	1009	1.3	40		1008	0.3	10		1045	2.0	60		1121	0.7	20	
	1632	6.6	200		1611	8.5	260		1649	6.6	200		1734	7.5	230	
	2243	1.0	30		2219	0.0	0		2309	1.6	50		2353	0.3	10	
13 Th	0438	6.6	200	28 F	0438	7.9	240	13 Su	0519	5.9	180	13 M	0604	7.2	220	
	1028	1.6	50		1051	0.3	10		1115	2.0	60		1136	2.0	60	
	1641	6.6	200		1658	8.2	250		1721	6.6	200		1819	7.2	220	
	2306	1.3	40		2308	0.0	0		2336	1.6	50					
14 F	0508	6.2	190	29 Sa	0521	7.5	230	14 M	0541	5.9	180	14 Tu	0045	1.0	30	
	1100	1.6	50		1132	0.7	20		1143	2.3	70		0658	6.6	200	
	1702	6.6	200		1747	7.9	240		1800	6.2	190		1258	1.3	40	
	2323	1.6	50										1908	6.6	200	
15 Sa	0536	5.9	180	30 Su	0000	0.3	10	15 Tu	0013	2.0	60	15 W	0138	1.3	40	
	1132	2.0	60		0611	7.2	220		0613	5.6	170		0758	6.2	190	
	1736	6.2	190		1217	1.0	30		1213	2.6	80		1358	2.0	60	
	2349	2.0	60		1834	7.2	220		1841	5.9	180		2006	6.2	190	
31 M	0058	1.0	30	31 M	0708	6.6	200					16 F	0501	2.0	60	
					1311	1.6	50						0653	6.2	190	
					1930	6.6	200						1830	6.6	200	
													1909	6.2	190	

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Rio de Janeiro, Brazil, 2011

Times and Heights of High and Low Waters

January					February					March					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
1 Sa	0054	3.0	90	16 Su	0102	3.3	100	1 Tu	0153	3.6	110	16 W	0211	4.3	130
	0724	1.3	40		0651	1.3	40		0841	1.3	40		0804	1.0	30
	1215	3.0	90		1232	3.0	90		1336	3.9	120		1349	3.9	120
	1932	0.3	10		1906	0.7	20		2045	0.3	10		2021	0.0	0
2 Su	0124	3.3	100	17 M	0141	3.6	110	2 W	0217	3.9	120	17 Th	0241	4.3	130
	0813	1.3	40		0739	1.0	30		0911	1.3	40		0847	1.0	30
	1302	3.3	100		1315	3.3	100		1413	4.3	130		1419	4.3	130
	2017	0.3	10		1954	0.0	0		● 2119	0.0	0		2104	-0.3	-10
3 M	0158	3.6	110	18 Tu	0217	3.9	120	3 Th	0253	3.9	120	18 F	0308	4.3	130
	0900	1.3	40		0824	1.0	30		0945	1.0	30		0926	1.0	30
	1347	3.6	110		1356	3.6	110		1453	4.3	130		1453	4.6	140
	2100	0.0	0		2038	0.0	0		2153	0.3	10		○ 2151	0.0	0
4 Tu	0234	3.6	110	19 W	0254	3.9	120	4 F	0321	3.9	120	19 Sa	0334	4.3	130
	0941	1.3	40		0908	1.0	30		1013	1.0	30		1006	1.0	30
	1424	3.6	110		1432	3.9	120		1526	4.3	130		1523	4.6	140
	● 2141	0.0	0		○ 2121	-0.3	-10		2223	0.3	10		2236	0.0	0
5 W	0308	3.6	110	20 Th	0326	4.3	130	5 Sa	0356	3.9	120	20 Su	0400	3.9	120
	1013	1.3	40		0953	1.0	30		1039	1.3	40		1049	1.0	30
	1504	3.9	120		1506	4.3	130		1600	4.3	130		1558	4.6	140
	2217	0.0	0		2206	-0.3	-10		2251	0.7	20		2321	0.7	20
6 Th	0347	3.6	110	21 F	0400	3.9	120	6 Su	0424	3.9	120	21 M	0423	3.9	120
	1049	1.3	40		1034	1.0	30		1104	1.3	40		1130	1.0	30
	1545	3.9	120		1541	4.3	130		1634	3.9	120		1632	4.3	130
	2253	0.3	10		2254	-0.3	-10		2324	1.0	30		2221	1.0	30
7 F	0421	3.6	110	22 Sa	0430	3.9	120	7 M	0456	3.6	110	22 Tu	0013	1.0	30
	1119	1.3	40		1113	1.0	30		1130	1.3	40		0454	3.6	110
	1619	3.9	120		1613	4.3	130		1704	3.9	120		1213	1.3	40
	2328	0.7	20		2343	0.0	0		1706	3.9	120		1706	3.9	120
8 Sa	0458	3.6	110	23 Su	0500	3.6	110	8 Tu	0000	1.3	40	23 W	0113	1.6	50
	1147	1.3	40		1200	1.0	30		0524	3.6	110		0523	3.3	100
	1656	3.6	110		1653	3.9	120		1145	1.6	50		1053	1.6	50
	2258	0.0	0		1739	3.6	110		1739	3.6	110		1309	1.6	50
9 Su	0004	0.7	20	24 M	0038	0.7	20	9 W	0054	1.6	50	24 Th	0223	2.0	60
	0532	3.3	100		0530	3.3	100		0558	3.3	100		0600	3.0	90
	1223	1.6	50		1249	1.3	40		1243	1.6	50		1002	1.6	50
	1732	3.6	110		1730	3.9	120		1811	3.3	100		○ 1202	2.0	60
10 M	0049	1.0	30	25 Tu	0138	1.0	30	10 Th	0204	2.0	60	25 F	0032	3.0	90
	0606	3.3	100		0602	3.0	90		0632	3.0	90		0345	2.3	70
	1306	1.6	50		1345	1.6	50		1121	2.0	60		0647	3.0	90
	1808	3.3	100		1811	3.6	110		1421	1.6	50		1030	2.0	60
11 Tu	0147	1.3	40	26 W	0245	1.3	40	11 F	0317	2.0	60	26 Sa	0515	2.3	70
	0647	3.0	90		0643	3.0	90		0713	3.0	90		0500	2.3	70
	1409	1.6	50		1030	2.0	60		1545	1.6	50		0753	2.6	80
	1856	3.0	90		○ 1158	2.0	60		○ 2017	2.6	80		1104	2.3	70
12 W	0253	1.6	50	27 Th	0021	2.6	80	12 Sa	0221	2.6	80	27 Su	0256	2.3	70
	0724	3.0	90		0356	1.6	50		0428	2.0	60		0604	2.3	70
	1519	1.6	50		0724	2.6	80		0815	2.6	80		1002	2.6	80
	○ 1958	2.6	80		1058	2.0	60		1656	1.6	50		1809	1.3	40
13 Th	0356	1.6	50	28 F	0111	3.0	90	13 Su	0049	3.3	100	13 M	0149	3.3	100
	0819	2.6	80		0508	2.0	60		0536	2.0	60		0656	2.0	60
	1626	1.6	50		0834	2.6	80		1145	2.6	80		1158	3.3	100
	2139	2.6	80		1134	2.3	70		1756	1.0	30		1902	1.0	30
14 F	0458	1.6	50	29 Sa	0153	3.0	90	14 M	0113	3.6	110	14 Tu	0039	3.6	110
	0936	2.6	80		0617	1.6	50		0632	1.6	50		0511	2.0	60
	1726	1.3	40		1024	2.6	80		1243	3.0	90		1213	3.0	90
	2258	0.0	0		1826	1.0	30		1851	0.7	20		1732	1.3	40
15 Sa	0017	3.0	90	30 Su	0202	3.3	100	15 Tu	0143	3.9	120	15 Tu	0100	3.9	120
	0556	1.3	40		0713	1.6	50		0719	1.3	40		0608	1.6	50
	1124	2.6	80		1208	3.0	90		1315	3.6	110		1234	3.3	100
	1819	1.0	30		1919	0.7	20		1938	0.3	10		1828	0.7	20
31 M	0138	3.3	100	31 M	0800	1.6	50					29 Tu	0108	3.3	100
	0800	1.6	50		1256	3.3	100						0624	2.0	60
	1256	3.3	100		2004	0.3	10						1130	3.3	100
	2004	0.3	10										1838	1.3	40

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Rio de Janeiro, Brazil, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 F 0121 4.3 130		16 Sa 0139 4.3 130		1 Su 0119 3.9 120		16 M 0124 3.6 110		1 W 0154 3.9 120		16 Th 0209 3.6 110	
0806 1.3 40		0754 1.0 30		0802 1.0 30		0815 0.7 20		0849 0.3 10		0941 0.0 0	
1338 4.6 140		1338 4.6 140		1353 4.3 130		1358 4.3 130		1445 3.9 120		1508 3.9 120	
2023 1.0 30		2028 0.7 20		2024 1.0 30		2102 1.0 30		2117 1.0 30		2221 1.3 40	
2 Sa 0154 4.3 130		17 Su 0200 3.9 120		2 M 0153 4.3 130		17 Tu 0154 3.6 110		2 Th 0224 3.9 120		17 F 0253 3.6 110	
0836 1.0 30		0836 0.7 20		0834 0.7 20		0902 0.7 20		0928 0.3 10		1024 0.3 10	
1409 4.6 140		1409 4.6 140		1423 4.3 130		1436 4.3 130		1517 4.3 130		1545 3.9 120	
2053 1.0 30		O 2113 0.7 20		2058 1.0 30		O 2153 1.3 40		2200 1.3 40		2302 1.6 50	
3 Su 0221 4.3 130		18 M 0223 3.9 120		3 Tu 0219 4.3 130		18 W 0224 3.6 110		3 F 0300 3.9 120		18 Sa 0332 3.6 110	
0904 1.0 30		0917 0.7 20		0906 0.7 20		0951 0.7 20		1011 0.3 10		1106 0.3 10	
1445 4.6 140		1447 4.6 140		1456 4.3 130		1511 4.3 130		1556 3.9 120		1619 3.6 110	
● 2123 1.0 30		2202 1.0 30		● 2134 1.3 40		2241 1.6 50		2249 1.3 40		2347 1.6 50	
4 M 0253 4.3 130		19 Tu 0253 3.9 120		4 W 0251 3.9 120		19 Th 0300 3.6 110		4 Sa 0338 3.6 110		19 Su 0411 3.6 110	
0934 1.0 30		1002 0.7 20		0943 0.7 20		1039 0.7 20		1058 0.3 10		1149 0.7 20	
1513 4.6 140		1519 4.6 140		1526 4.3 130		1553 3.9 120		1634 3.9 120		1658 3.6 110	
2154 1.0 30		2253 1.3 40		2213 1.3 40		2328 2.0 60		2339 1.6 50			
5 Tu 0317 4.3 130		20 W 0319 3.9 120		5 Th 0317 3.9 120		20 F 0341 3.6 110		5 Su 0415 3.6 110		20 M 0028 1.6 50	
1002 1.0 30		1049 1.0 30		1021 1.0 30		1126 0.7 20		1149 0.7 20		0458 3.6 110	
1547 4.6 140		1600 4.3 130		1600 4.3 130		1630 3.9 120		1713 3.6 110		1230 1.0 30	
2230 1.3 40		2347 2.0 60		2258 1.6 50						1738 3.3 100	
6 W 0349 4.3 130		21 Th 0356 3.6 110		6 F 0353 3.9 120		21 Sa 0017 2.0 60		6 M 0034 1.6 50		21 Tu 0111 2.0 60	
1032 1.3 40		1139 1.0 30		1104 1.0 30		0421 3.6 110		0500 3.6 110		0543 3.3 100	
1613 4.3 130		1639 3.9 120		1638 3.9 120		1213 1.0 30		1245 0.7 20		1311 1.0 30	
2309 1.6 50				2354 2.0 60		1711 3.6 110		1800 3.3 100		1817 3.3 100	
7 Th 0411 3.9 120		22 F 0047 2.3 70		7 Sa 0424 3.6 110		22 Su 0111 2.3 70		7 Tu 0132 1.6 50		22 W 0202 2.0 60	
1108 1.3 40		0434 3.6 110		1156 1.0 30		0506 3.6 110		0551 3.3 100		0632 3.3 100	
1649 3.9 120		1238 1.3 40		1717 3.6 110		1306 1.3 40		1345 1.0 30		1400 1.3 40	
		1719 3.6 110				1800 3.3 100		1854 3.3 100		1902 3.0 90	
8 F 0004 2.0 60		23 Sa 0511 2.6 80		8 Su 0058 2.0 60		23 M 0208 2.3 70		8 W 0228 1.6 50		23 Th 0300 1.6 50	
0449 3.6 110		0511 3.3 100		0506 3.6 110		0558 3.3 100		0645 3.3 100		0726 3.0 90	
1156 1.6 50		1054 1.6 50		1300 1.3 40		1404 1.3 40		1451 1.0 30		1504 1.6 50	
1724 3.9 120		1341 1.6 50		1808 3.6 110		1854 3.0 90		● 1958 3.0 90		2000 2.6 80	
		1809* 3.3 100				2211 2.6 80					
9 Sa 0113 2.3 70		24 Tu 0256 2.6 80		9 M 0202 2.0 60		24 Tu 0002 2.6 80		9 Th 0326 1.6 50		24 F 0356 1.6 50	
0521 3.6 110		0604 3.3 100		0558 3.3 100		0306 2.3 70		0751 3.0 90		0839 2.6 80	
1315 1.6 50		1453 1.6 50		1408 1.3 40		0700 3.0 90		1558 1.0 30		1611 1.6 50	
1811 3.6 110		● 1917 3.0 90		1919 3.3 100		● 1508 1.6 50		2217 3.0 90		2108 2.6 80	
2151* 3.0 90		2143 2.6 80		2245 3.0 90		2000 3.0 90					
10 Su 0232 2.3 70		25 M 0034 3.0 90		10 Tu 0306 2.0 60		25 W 0402 2.0 60		10 F 0423 1.3 40		25 Sa 0451 1.3 40	
0604 3.3 100		0400 2.6 80		0700 3.0 90		0813 3.0 90		0913 3.0 90		1019 2.6 80	
1439 1.6 50		0715 3.0 90		1521 1.3 40		1613 1.6 50		1704 1.0 30		1713 1.6 50	
1924 3.3 100		1600 1.6 50		● 2328 3.3 100		2123 3.0 90		2334 3.0 90		2230 2.6 80	
2111* 3.0 90											
11 M 0343 2.3 70		26 Tu 0051 3.0 90		11 W 0406 2.0 60		26 F 0456 2.0 60		11 Sa 0521 1.3 40		26 Su 0538 1.3 40	
0708 3.0 90		0458 2.3 70		0826 3.0 90		0949 3.0 90		1123 3.3 100		1156 3.0 90	
1554 1.6 50		0900 3.0 90		1630 1.0 30		1711 1.6 50		1809 1.0 30		1806 1.3 40	
●		1706 1.6 50		2358 3.3 100		2241 3.0 90		2356 3.0 90		2336 3.0 90	
		2332 3.3 100									
12 Tu 0008 3.6 110		27 W 0547 2.0 60		12 Th 0502 1.6 50		27 F 0541 1.6 50		12 Su 0615 1.0 30		27 M 0621 1.0 30	
0447 2.0 60		1047 3.3 100		1045 3.3 100		1111 3.3 100		1239 3.3 100		1253 3.3 100	
0913 3.0 90		1800 1.3 40		1734 1.0 30		1802 1.3 40		1909 1.0 30		1856 1.3 40	
1702 1.3 40		2345 3.3 100				2332 3.3 100					
13 W 0036 3.9 120		28 Th 0624 1.6 50		13 F 0023 3.6 110		28 M 0619 1.3 40		13 F 0024 3.0 90		28 Tu 0021 3.0 90	
0539 1.6 50		1151 3.6 110		0554 1.3 40		1209 3.3 100		0709 0.7 20		0704 0.7 20	
1158 3.3 100		1845 1.3 40		1156 3.6 110		1845 1.3 40		1324 3.6 110		1334 3.6 110	
1802 1.0 30				1832 1.0 30				2002 1.0 30		1939 1.3 40	
14 Th 0058 3.9 120		29 F 0015 3.6 110		14 Sa 0041 3.6 110		29 Su 0011 3.3 100		14 Tu 0058 3.3 100		29 W 0100 3.3 100	
0624 1.3 40		0700 1.3 40		0643 1.0 30		0656 1.0 30		0802 0.3 10		0749 0.3 10	
1232 3.9 120		1236 3.9 120		1241 3.9 120		1256 3.6 110		1400 3.6 110		1408 3.6 110	
1854 0.7 20		1919 1.3 40		1923 0.7 20		1921 1.3 40		2054 1.3 40		2019 1.0 30	
15 F 0119 3.9 120		30 Sa 0051 3.9 120		15 Su 0102 3.6 110		30 M 0049 3.6 110		15 Tu 0132 3.3 100		30 Th 0138 3.6 110	
0709 1.3 40		0732 1.0 30		0728 0.7 20		0732 0.7 20		0854 0.3 10		0832 0.0 0	
1306 4.3 130		1313 4.3 130		1321 4.3 130		1336 3.9 120		1434 3.9 120		1443 3.9 120	
1943 0.3 10		1953 1.0 30		2013 1.0 30		1958 1.0 30		● 2139 1.3 40		2102 1.0 30	
31 Tu 0121 3.6 110											
0808 0.7 20											
1409 3.9 120											
2038 1.0 30											

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Rio de Janeiro, Brazil, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 F 0211	3.6	110		16 Sa 0241	3.9	120		1 Th 0317	4.3	130	
0915	0.0	0		1004	0.0	0		16 Tu 0343	4.3	130	
1515	3.9	120		1526	3.9	120		1141	0.7	20	
● 2147	1.0	30		2234	1.3	40		1634	3.6	110	
								2341	1.0	30	
2 Sa 0253	3.6	110		17 Su 0319	3.9	120		2 0453	3.9	120	
1000	0.0	0		1043	0.0	0		1234	1.3	40	
1553	3.9	120		1600	3.9	120		1700	3.3	100	
2230	1.0	30		2304	1.3	40					
3 Su 0328	3.9	120		18 M 0400	3.9	120		3 Sa 0038	1.0	30	
1047	0.0	0		1117	0.3	10		0532	3.6	110	
1624	3.9	120		1636	3.6	110		1236	1.6	50	
2313	1.0	30		2334	1.3	40		1724	3.3	100	
4 M 0408	3.9	120		19 Tu 0441	3.6	110		4 Su 0151	1.3	40	
1134	0.0	0		1145	0.7	20		0615	3.0	90	
1702	3.6	110		1706	3.6	110		0943	2.3	70	
				2336	1.3	40		1200	2.6	80	
								1454*	2.0	60	
5 Tu 0002	1.3	40		20 W 0517	3.6	110		5 M 0002	1.6	50	
0453	3.6	110		1209	1.0	30		0304	1.3	40	
1221	0.3	10		1745	3.3	100		0715	2.6	80	
1739	3.6	110		2247	1.6	50		0945	2.3	70	
								1254*	3.0	90	
6 W 0054	1.3	40		21 Th 0600	3.3	100		6 Tu 0036	2.0	60	
0534	3.6	110		1230	1.3	40		0419	1.3	40	
1315	0.7	20		1815	3.0	90		1328	3.0	90	
1813	3.3	100		2324	1.6	50		1736	2.0	60	
								2041*	2.3	70	
7 Th 0149	1.3	40		22 F 0645	3.0	90		7 W 0038	2.3	70	
0617	3.3	100		1341	1.6	50		0530	1.0	30	
1417	1.0	30		1854	3.0	90		1253	3.3	100	
1858	3.0	90						1745	1.6	50	
								2358	3.0	90	
8 F 0251	1.3	40		23 Sa 0251	1.6	50		8 Th 0049	2.0	60	
0709	3.0	90		0734	2.6	80		0441	1.3	40	
1528	1.3	40		1508	1.6	50		1253	3.0	90	
● 1945	2.6	80		○ 1939	2.6	80		1708	2.0	60	
								2106	2.3	70	
9 Sa 0354	1.3	40		24 Su 0356	1.3	40		24 Tu 2111*	2.3	70	
0817	3.0	90		0853	2.6	80		0419	1.3	40	
1647	1.6	50		1628	1.6	50		1258*	2.6	80	
2051	2.3	70		2047	2.6	80		1754	2.0	60	
								2111*	2.3	70	
10 Su 0458	1.0	30		25 M 0456	1.3	40		25 Th 0004	2.6	80	
1317	3.0	90		1238	2.6	80		0649	0.7	20	
1800	1.6	50		1738	1.6	50		1419	3.3	100	
2232	2.3	70		2245	2.6	80		1941	1.3	40	
								1900	1.3	40	
11 M 0600	1.0	30		26 W 0553	1.0	30		25 Th 0019	2.6	80	
1356	3.0	90		1313	3.0	90		0617	0.7	20	
1902	1.3	40		1832	1.3	40		1338	3.6	110	
								1900	1.3	40	
12 Tu 0000	2.6	80		27 F 0009	3.0	90		25 Sa 0019	2.6	80	
0700	0.7	20		0643	0.7	20		0649	0.7	20	
1415	3.3	100		1343	3.3	100		1419	3.3	100	
1956	1.3	40		1919	1.3	40		1941	1.3	40	
								2054	0.7	20	
13 W 0043	3.0	90		28 Th 0053	3.0	90		27 M 0117	3.6	110	
0754	0.3	10		0730	0.3	10		0823	0.0	0	
1415	3.6	110		1411	3.6	110		1409	3.6	110	
2039	1.3	40		2004	1.0	30		2054	1.0	30	
								0758	-0.3	-10	
14 Th 0121	3.3	100		29 F 0128	3.3	100		1421	3.9	120	
0841	0.0	0		0815	0.0	0		2023	0.7	20	
1430	3.6	110		1439	3.9	120					
2117	1.3	40		2047	0.7	20					
15 F 0200	3.6	110		30 Su 0204	3.6	110		29 M 0226	4.3	130	
0924	0.0	0		0900	-0.3	-10		0941	-0.3	-10	
1458	3.6	110		1508	3.9	120		1502	3.9	120	
○ 2158	1.3	40		● 2126	0.7	20		2156	1.0	30	
								● 2141	0.7	20	
31 Su 0243	3.9	120									
0945	-0.3	-10									
1538	4.3	130									
2206	0.7	20									

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Rio de Janeiro, Brazil, 2011

Times and Heights of High and Low Waters

October					November					December					
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height	
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm	
1 Sa	0436	3.9 120	16 Su	0441	3.6 110	1 Tu	0111	1.0 30	16 W	0039	0.7 20	1 Th	0149	1.0 30	
	1219	1.6 50		1134	1.6 50		0600	3.0 90		0556	3.3 100		0632	3.0 90	
	1634	3.3 100		1630	3.6 110		0900	2.3 70		1321	1.6 50		1004	2.3 70	
				2336	1.0 30		1104	2.6 80		1732	3.3 100		1132	2.3 70	
							1402*	2.3 70					1423*	2.0 60	
2 Su	0021	1.0 30	17 M	0513	3.3 100	2 W	0219	1.0 30	17 Th	0147	0.7 20	2 F	0251	1.0 30	
	0513	3.3 100		1236	1.6 50		0658	2.6 80		0654	3.0 90		0723	2.6 80	
	0909	2.3 70		1700	3.3 100		0924	2.3 70		1426	1.6 50		1058	2.3 70	
	1023	2.3 70					1200	2.6 80		1824	3.0 90		1209	2.3 70	
	1321*	2.0 60					1508*	2.3 70					1523*	2.0 60	
3 M	0134	1.3 40	18 Tu	0053	1.3 40	3 Th	0326	1.0 30	18 F	0254	0.7 20	3 Sa	0351	1.3 40	
	0604	3.0 90		0600	3.0 90		0809	2.6 80		0813	3.0 90		0826	2.6 80	
	0906	2.3 70		1347	2.0 60		1002	2.6 80		1530	1.6 50		1626	1.6 50	
	1145	2.6 80		1743	3.0 90		1239	2.6 80		1941	3.0 90		2058	3.0 90	
	1436*	2.3 70					1613*	2.0 60							
4 Tu	0249	1.3 40	19 W	0206	1.3 40	4 F	0430	1.0 30	19 Sa	0356	0.7 20	4 Su	0449	1.3 40	
	0706	2.6 80		0700	3.0 90		0954	2.6 80		1123	3.0 90		0941	2.6 80	
	0915	2.3 70		0941	2.6 80		1713	1.6 50		1632	1.3 40		1724	1.3 40	
	1230	3.0 90		1106	2.6 80		2153	3.0 90		2123	3.0 90		2226	3.0 90	
	1553*	2.3 70		1458*	2.0 60										
5 W	0400	1.0 30	20 Th	0319	1.0 30	5 Sa	0526	1.0 30	20 Su	0458	0.7 20	5 M	0543	1.3 40	
	1304	3.0 90		1151	3.0 90		1102	3.0 90		1147	3.0 90		1051	3.0 90	
	1702	2.0 60		1606	2.0 60		1804	1.3 40		1726	1.0 30		1813	1.0 30	
	2023	2.6 80		2000	2.6 80		2308	3.3 100		2308	3.3 100		2339	3.3 100	
6 Th	0502	1.0 30	21 F	0424	0.7 20	6 Su	0615	1.0 30	21 M	0558	0.7 20	6 Tu	0628	1.3 40	
	1321	3.0 90		1215	3.3 100		1143	3.3 100		1217	3.3 100		1147	3.0 90	
	1758	2.0 60		1708	1.6 50		1849	1.0 30		1817	1.0 30		1856	1.0 30	
	2249	3.0 90		2254	3.0 90								21	0009 3.3 100	
													W	0641 1.0 30	
													1219	3.0 90	
													1854	0.7 20	
7 F	0600	0.7 20	22 Sa	0524	0.7 20	7 M	0002	3.6 110	22 Tu	0008	3.6 110	7 W	0032	3.3 100	
	1241	3.0 90		1238	3.6 110		0700	1.0 30		0654	0.7 20		0708	1.0 30	
	1843	1.6 50		1802	1.3 40		1221	3.3 100		1245	3.3 100		1234	3.3 100	
	2347	3.3 100		2351	3.3 100		1923	0.7 20		1906	0.7 20		1930	0.7 20	
													22	0108 3.3 100	
													Th	0741 1.0 30	
													1258	3.0 90	
													1945	0.3 10	
8 Sa	0651	0.7 20	23 Su	0619	0.3 10	8 Tu	0049	3.6 110	23 W	0056	3.9 120	8 Th	0115	3.6 110	
	1234	3.3 100		1256	3.6 110		0739	1.0 30		0749	0.7 20		0749	1.0 30	
	1919	1.3 40		1849	1.0 30		1300	3.6 110		1313	3.3 100		1313	3.6 110	
							1956	0.7 20		1954	0.3 10		2002	0.3 10	
													23	0151 3.6 110	
													F	0832 1.0 30	
													1334	3.3 100	
													2034	0.0 0	
9 Su	0026	3.6 110	24 M	0032	3.9 120	9 W	0126	3.9 120	24 Th	0139	3.9 120	9 F	0158	3.6 110	
	0732	0.7 20		0711	0.0 0		0813	0.7 20		0841	0.7 20		0823	1.0 30	
	1300	3.6 110		1319	3.6 110		1338	3.9 120		1349	3.3 100		1354	3.6 110	
	1954	1.0 30		1930	0.7 20		2026	0.3 10		2041	0.0 0		2036	0.3 10	
													●	2117 0.0 0	
10 M	0106	3.9 120	25 Tu	0109	4.3 130	10 F	0206	3.9 120	25 Th	0219	3.9 120	10 O	0236	3.9 120	
	0808	0.7 20		0802	0.0 0		0847	1.0 30		0930	1.0 30		0902	1.0 30	
	1332	3.9 120		1345	3.9 120		1409	3.9 120		1419	3.6 110		1424	3.6 110	
	2024	0.7 20		2011	0.3 10		2054	0.3 10		2126	0.0 0		2111	0.0 0	
													25	0302 3.6 110	
													Su	1002 1.3 40	
													M	1447 3.6 110	
													Tu	2202 0.0 0	
11 Tu	0149	4.3 130	26 W	0149	4.3 130	11 F	0245	3.9 120	26 Sa	0302	3.9 120	11 Su	0309	3.9 120	
	0843	0.7 20		0853	0.3 10		0919	1.0 30		1015	1.0 30		0943	1.0 30	
	1404	3.9 120		1409	3.9 120		1445	3.9 120		1456	3.6 110		1458	3.6 110	
	2051	0.7 20		2054	0.3 10		2126	0.3 10		2213	0.0 0		2153	0.0 0	
													26	0336 3.6 110	
													M	1045 1.3 40	
													Tu	2249 0.0 0	
12 W	0223	4.3 130	27 Th	0226	4.3 130	12 Sa	0317	3.9 120	27 Su	0343	3.6 110	12 M	0347	3.6 110	
	0911	0.7 20		0939	0.7 20		0956	1.0 30		1102	1.3 40		1026	1.0 30	
	1439	4.3 130		1441	3.6 110		1511	3.9 120		1528	3.6 110		1528	3.6 110	
	2117	0.7 20		2138	0.3 10		2200	0.3 10		2302	0.3 10		2238	0.0 0	
													27	0408 3.6 110	
													Tu	1123 1.3 40	
													1600	3.9 120	
													2334	0.3 10	
13 Th	0300	4.3 130	28 F	0304	4.3 130	13 Su	0354	3.9 120	28 M	0419	3.6 110	13 Tu	0421	3.6 110	
	0941	1.0 30		1026	1.0 30		1039	1.3 40		1153	1.6 50		1111	1.3 40	
	1506	3.9 120		1508	3.6 110		1543	3.6 110		1606	3.6 110		1602	3.6 110	
	2139	0.7 20		2221	0.3 10		2243	0.7 20		2354	0.3 10		2324	0.3 10	
													28	0445 3.3 100	
													W	1200 1.6 50	
													1639	3.6 110	
14 F	0334	3.9 120	29 Sa	0347	3.9 120	14 M	0426	3.6 110	29 Tu	0502	3.3 100	14 W	0500	3.6 110	
	1011	1.0 30		1115	1.3 40		1126	1.3 40		1239	1.6 50		1202	1.3 40	
	1538	3.9 120		1543	3.6 110		1611	3.6 110		1649	3.3 100		1643	3.6 110	
	2208	0.7 20		2311	0.7 20		2336	0.7 20						29	0017 0.7 20
													Th	0519 3.3 100	
													1243	1.6 50	
													1717	3.6 110	
15 Sa	0406	3.9 120	30 Su	0424	3.6 110	15 Tu	0506	3.3 100</td							

Santos, Brazil, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 Sa	0108	3.9	120	16 Su	0108	4.3	130	1 Tu	0213	4.3	130
0728	2.0	60		0619	1.6	50		0806	2.0	60	
1351	3.6	110		1302	3.6	110		1419	4.3	130	
1854	0.7	20		1853	1.0	30		2008	0.0	0	
2 Su	0147	3.9	120	17 M	0156	4.6	140	2 W	0230	4.6	140
0738	2.0	60		0715	1.3	40		0828	1.6	50	
1411	3.6	110		1339	3.9	120		1436	4.6	140	
1939	0.3	10		1938	0.3	10		● 2051	0.0	0	
3 M	0217	4.3	130	18 Tu	0241	4.9	150	3 Th	0253	4.6	140
0811	1.6	50		0806	1.0	30		0858	1.3	40	
1424	3.9	120		1411	4.3	130		1458	4.6	140	
2023	0.0	0		2023	0.0	0		2130	0.0	0	
4 Tu	0243	4.3	130	19 W	0323	4.9	150	4 F	0313	4.9	150
0845	1.6	50		0856	1.0	30		0926	1.3	40	
1439	3.9	120		1439	4.3	130		1521	4.9	150	
● 2108	0.0	0		○ 2109	0.0	0		2208	0.0	0	
5 W	0306	4.3	130	20 Th	0402	4.9	150	5 Sa	0343	4.9	150
0913	1.6	50		0939	1.0	30		0954	1.3	40	
1458	4.3	130		1506	4.6	140		1549	4.9	150	
2153	0.0	0		2156	0.0	0		2249	0.3	10	
6 Th	0336	4.6	140	21 F	0434	4.9	150	6 Su	0408	4.6	140
0945	1.3	40		1019	1.0	30		1013	1.3	40	
1519	4.3	130		1538	4.6	140		1611	4.6	140	
2236	0.0	0		2239	0.0	0		2323	0.7	20	
7 F	0402	4.6	140	22 Sa	0500	4.6	140	7 M	0438	4.3	130
1008	1.3	40		1058	1.0	30		1026	1.3	40	
1547	4.3	130		1606	4.6	140		1641	4.3	130	
2313	0.3	10		2317	0.3	10		2358	1.3	40	
8 Sa	0434	4.3	130	23 Su	0517	3.9	120	8 Tu	0504	4.3	130
1026	1.3	40		1136	1.3	40		1036	1.6	50	
1611	3.9	120		1639	4.3	130		1709	3.9	120	
2356	0.7	20		2356	1.0	30					
9 Su	0504	4.3	130	24 M	0534	3.6	110	9 W	0036	1.6	50
1039	1.6	50		1209	1.6	50		0536	3.9	120	
1641	3.9	120		1713	3.9	120		1058	1.6	50	
								1747	3.6	110	
10 M	0038	1.0	30	25 Tu	0034	1.3	40	10 F	0119	2.0	60
0541	3.9	120		0549	3.3	100		0606	3.6	110	
1056	1.6	50		1258	1.6	50		1130	2.0	60	
1713	3.6	110		1758	3.6	110		2023	3.3	100	
11 Tu	0121	1.3	40	26 W	0109	2.0	60	11 F	0226	2.3	70
0615	3.6	110		0543	3.0	90		0653	3.3	100	
1124	2.0	60		0913	2.6	80		1306	2.3	70	
1821	3.0	90		● 1038	2.6	80		● 2317	3.6	110	
				1356*	2.0	60					
12 W	0211	1.6	50	27 Th	0204	2.3	70	12 M	0358	2.3	70
0700	3.3	100		0511	3.0	90		0809	3.0	90	
1209	2.0	60		0909	2.3	70		1713	2.0	60	
● 2213	3.3	100		1154	2.6	80		1513	2.0	60	
				1513	2.0	60					
13 Th	0311	1.6	50	28 F	0009	3.3	100	13 M	0017	3.9	120
0756	3.0	90		0338	2.6	80		0524	2.3	70	
1539	2.3	70		0500	3.0	90		1230	3.3	100	
2323	3.6	110		0856	2.3	70		1811	1.6	50	
				1243*	3.0	90					
14 F	0417	1.6	50	29 M	0102	3.6	110	14 M	0108	4.6	140
0921	3.0	90		0847	2.3	70		0632	2.0	60	
1726	1.6	50		1313	3.3	100		1306	3.6	110	
				1758	1.3	40		1854	1.0	30	
15 Sa	0019	3.9	120	30 Su	0138	3.9	120	15 Tu	0154	4.9	150
0521	1.6	50		0845	2.3	70		0723	1.3	40	
1215	3.3	100		1343	3.6	110		1343	4.3	130	
1809	1.3	40		1847	0.7	20		1938	0.7	20	
				31 M	0158	4.3	130				
				0817	2.0	60					
				1402	3.9	120					
				1928	0.3	10					

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Santos, Brazil, 2011

Times and Heights of High and Low Waters

April					May					June				
	Time	Height		Time	Height		Time	Height		Time	Height		Time	Height
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm
1 F	0134	4.9 150	16 Sa	0228	5.2 160	1 Su	0134	4.6 140	16 M	0236	4.6 140	1 W	0204	4.6 140
	0734	1.3 40		0756	1.0 30	1 Su	0736	1.3 40		0804	0.7 20	1 W	0823	1.0 30
	1400	5.2 160		1354	5.2 160	1 Su	1411	5.2 160		1415	4.9 150	1 W	1519	4.9 150
	1958	0.7 20		2023	1.0 30	1 Su	2004	1.0 30		2051	1.6 50	1 O	2102	1.3 40
2 Sa	0200	4.9 150	17 Su	0254	4.9 150	2 M	0200	4.9 150	17 Tu	0253	4.3 130	2 Th	0226	4.6 140
	0806	1.3 40		0832	0.7 20	2 M	0808	1.0 30		0849	0.7 20	2 Th	0906	0.7 20
	1432	5.2 160		1424	5.2 160	2 M	1449	5.2 160		1454	4.9 150	2 Th	1558	4.9 150
	2038	0.7 20		O 2102	1.0 30	2 M	2045	1.0 30		O 2128	2.0 60	2 Th	2145	1.3 40
3 Su	0224	4.9 150	18 M	0311	4.6 140	3 Tu	0221	4.6 140	18 W	0300	4.3 130	3 F	0254	4.6 140
	0838	1.0 30		0911	0.7 20	3 Tu	0841	1.0 30		0936	0.7 20	3 F	0954	0.7 20
	1502	5.2 160		1458	5.2 160	3 Tu	1521	5.2 160		1528	4.9 150	3 F	1638	4.9 150
	● 2113	0.7 20		2141	1.3 40	3 Tu	● 2121	1.0 30		2202	2.0 60	3 F	2223	1.3 40
4 M	0251	4.9 150	19 Tu	0315	4.3 130	4 W	0245	4.6 140	19 Th	0306	3.9 120	4 Sa	0323	4.3 130
	0909	1.0 30		0956	0.7 20	4 W	0917	1.0 30		1023	0.7 20	4 Sa	1047	0.7 20
	1532	5.2 160		1528	4.9 150	4 W	1554	4.9 150		1602	4.6 140	4 Sa	1721	4.6 140
	2149	1.0 30		2213	1.6 50	4 W	2156	1.3 40		2234	2.3 70	4 Sa	2304	1.6 50
5 Tu	0309	4.9 150	20 W	0324	4.3 130	5 Th	0306	4.6 140	20 F	0317	3.9 120	5 Su	0358	4.3 130
	0938	1.3 40		1041	0.7 20	5 Th	0958	1.0 30		1109	0.7 20	5 Su	1139	1.0 30
	1600	4.9 150		1604	4.9 150	5 Th	1628	4.9 150		1638	4.6 140	5 Su	1808	4.6 140
	2219	1.3 40		2251	2.3 70	5 Th	2232	1.6 50		2300	2.3 70	5 Su	2349	2.0 60
6 W	0334	4.6 140	21 Th	0336	3.9 120	6 F	0332	4.3 130	21 Sa	0334	3.9 120	6 M	0438	3.9 120
	1004	1.3 40		1126	1.0 30	6 F	1047	1.3 40		1158	1.0 30	6 M	1226	1.0 30
	1628	4.9 150		1641	4.6 140	6 F	1709	4.6 140		1711	4.3 130	6 M	1902	4.3 130
	2251	1.6 50		2315	2.6 80	6 F	2308	2.0 60		2319	2.6 80	6 M	2315	2.3 70
7 Th	0358	4.3 130	22 F	0339	3.9 120	7 Sa	0400	4.3 130	22 Su	0343	3.9 120	7 Tu	0036	2.3 70
	1036	1.3 40		1211	1.3 40	7 Sa	1141	1.3 40		1245	1.0 30	7 Tu	0530	3.6 110
	1702	4.6 140		1717	4.3 130	7 Sa	1802	4.3 130		1754	3.9 120	7 Tu	1313	1.0 30
	2323	2.0 60		2345	3.0 90	7 Sa	2356	2.3 70		2332	2.6 80	7 Tu	2026	3.9 120
8 F	0421	3.9 120	23 Sa	0334	3.6 110	8 Su	0432	3.6 110	23 M	0354	3.6 110	8 W	0139	2.3 70
	1123	1.6 50		0817	2.6 80	8 Su	1238	1.3 40		1330	1.3 40	8 W	0838	3.3 100
	1749	4.3 130		1304	1.3 40	8 Su	1924	3.9 120		1836	3.9 120	8 W	1404	1.3 40
				1804	3.9 120	8 Su				2326	3.0 90	8 O	2228	3.6 110
9 Sa	0006	2.3 70	24 Su	0332	3.6 110	9 M	0058	2.6 80	24 Tu	0402	3.3 100	9 Th	0317	2.3 70
	0449	3.6 110		0806	2.6 80	9 M	0519	3.3 100		0721	3.0 90	9 Th	0958	3.6 110
	1228	2.0 60		1000	3.0 90	9 M	1338	1.6 50		0932	3.3 100	9 O	1417	1.3 40
	1913	3.6 110		O 1400	1.6 50	9 M	2147	3.9 120		1928	3.6 110	9 O	2349	3.6 110
10 Su	0113	2.6 80	25 M	0328	3.6 110	10 Tu	0239	2.6 80	25 W	0017	3.0 90	10 F	0500	2.0 60
	0513	3.3 100		0721	3.0 90	10 Tu	0947	3.6 110		0404	3.0 90	10 F	1053	3.9 120
	1349	2.0 60		1039	3.3 100	10 Tu	1439	1.6 50		0639	3.0 90	10 F	1556	2.0 60
	2236	3.9 120		1458	1.6 50	10 Tu	● 2308	4.3 130		1021	3.6 110	10 F	2200	3.3 100
11 M	0526	3.0 90	26 Tu	0023	3.6 110	11 W	0524	2.3 70	26 Th	0613	2.6 80	11 Sa	0045	3.9 120
	1024	3.3 100		0700	2.6 80	11 W	1041	3.9 120		1104	3.9 120	11 Sa	0545	1.6 50
	1513	2.0 60		1109	3.6 110	11 W	1543	1.6 50		1606	1.6 50	11 Sa	1147	3.9 120
	● 2345	4.3 130		2111	3.3 100	11 W				1509*	1.6 50	11 Sa	1708	2.0 60
12 Tu	0558	2.3 70	27 W	0647	2.6 80	12 Th	0006	4.3 130	27 F	0602	2.3 70	12 Su	0126	3.9 120
	1119	3.6 110		1143	3.9 120	12 Th	0553	2.0 60		1151	4.3 130	12 Su	0623	1.3 40
	1649	1.6 50		1658	1.3 40	12 Th	1124	4.3 130		1704	1.6 50	12 Su	1243	4.3 130
						12 Th	1653	1.6 50		2354	3.9 120	12 Su	2015	1.6 50
13 W	0036	4.9 150	28 Th	0004	3.9 120	13 F	0056	4.6 140	28 Sa	0617	1.6 50	13 M	0202	3.9 120
	0624	2.0 60		0626	2.0 60	13 F	0619	1.6 50		1234	4.6 140	13 M	0704	1.0 30
	1204	4.3 130		1219	4.6 140	13 F	1209	4.6 140		1758	1.6 50	13 M	1339	4.3 130
	1808	1.3 40		1753	1.3 40	13 F	1808	1.6 50				13 M	2043	2.0 60
14 Th	0115	4.9 150	29 F	0034	4.3 130	14 Sa	0136	4.6 140	29 Su	0041	3.9 120	14 Tu	0232	3.9 120
	0653	1.6 50		0638	1.6 50	14 Sa	0649	1.3 40		0643	1.3 40	14 Tu	0747	0.7 20
	1245	4.6 140		1258	4.9 150	14 Sa	1253	4.6 140		1315	4.6 140	14 Tu	1430	4.6 140
	1856	1.0 30		1839	1.0 30	14 Sa	1917	1.6 50		1849	1.3 40	14 Tu	2106	2.0 60
15 F	0154	5.2 160	30 Sa	0104	4.6 140	15 Su	0208	4.6 140	30 M	0113	4.3 130	15 W	0251	3.9 120
	0721	1.3 40		0704	1.3 40	15 Su	0723	1.0 30		0711	1.0 30	15 W	0830	0.3 10
	1321	4.9 150		1336	4.9 150	15 Su	1334	4.9 150		1358	4.9 150	15 W	1509	4.6 140
	1939	1.0 30		1923	1.0 30	15 Su	2009	1.6 50		1936	1.3 40	15 W	2126	2.0 60
31 0141 4.3 130 0747 1.0 30 1439 4.9 150 2019 1.3 40														

Santos, Brazil, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0232	4.3	130	16 Sa 0304	4.3	130	1 M 0326	4.6	140	1 Th 0408	4.6	140
0900 0.3	10		0941 0.0	0		1019 0.0	0	0	1109 0.7	20	
1604 4.9	150		1543 4.6	140		1700 4.6	140		1602 4.3	130	
● 2139 1.0	30		2158 1.3	40		2245 0.7	20		2221 1.0	30	
2 Sa 0300	4.6	140	17 Su 0319	4.6	140	2 Tu 0356	4.6	140	2 F 0441	4.3	130
0949 0.3	10		1021 0.0	0		1100 0.0	0		1153 1.3	40	
1643 4.9	150		1604 4.6	140		1721 4.3	130		1658 3.3	100	
2217 1.0	30		2219 1.3	40		2315 0.7	20		2236 1.0	30	
3 Su 0326	4.6	140	18 M 0343	4.6	140	3 W 0423	4.6	140	3 Sa 0011	1.0	30
1038 0.3	10		1104 0.3	10		1141 0.7	20		0511 3.6	110	
1719 4.9	150		1632 4.6	140		1736 3.9	120		1232 2.0	60	
2258 1.3	40		2241 1.3	40		2354 1.0	30		1654 3.0	90	
4 M 0400	4.3	130	19 Tu 0404	4.3	130	4 Th 0458	4.3	130	4 Su 0102	1.3	40
1123 0.3	10		1147 0.7	20		1217 1.0	30		0558 3.0	90	
1753 4.6	140		1700 4.3	130		1751 3.3	100		0904 2.6	80	
2334 1.3	40		2253 1.3	40					● 1100 2.6	80	
5 Tu 0436	4.3	130	20 W 0428	3.9	120	5 F 0030	1.3	40	5 M 0213	1.6	50
1206 0.7	20		1226 1.0	30		0536 3.6	110		1206 3.0	90	
1821 3.9	120		1730 4.3	130		1300 1.6	50		1543 3.0	90	
			2254 1.6	50		1754 3.0	90		2043 2.0	60	
6 W 0009	1.6	50	21 Th 0453	3.6	110	6 Sa 0117	1.6	50	6 Tu 0000	2.6	80
0513 3.9	120		1308 1.3	40		0628 3.3	100		0406 1.3	40	
1251 1.0	30		1800 3.9	120		1351 2.3	70		1253 3.3	100	
1847 3.6	110		2302 1.6	50		● 1726 3.0	90		2024 2.0	60	
						● 2321 2.0	60				
7 Th 0058	2.0	60	22 F 0511	3.3	100	7 Su 0249	2.0	60	7 W 0041	3.0	90
0611 3.6	110		1356 1.6	50		1153 3.0	90		0536 1.0	30	
1330 1.3	40		1834 3.6	110		1458 2.6	80		1313 3.6	110	
1908 3.3	100		2321 2.0	60		1658 2.6	80		2023 2.0	60	
						2108 2.0	60				
8 F 0200	2.3	70	23 Sa 0513	2.6	80	8 M 0034	2.6	80	8 Th 0106	3.3	100
0815 3.3	100		1006 3.0	90		0451 1.6	50		0619 0.7	20	
1415 2.0	60		1449 2.0	60		1253 3.3	100		1332 3.9	120	
● 1917 3.0	90		● 1908 3.3	100		2100 2.0	60		2019 1.6	50	
2058* 3.0	90		2343 2.3	70							
9 Sa 0339	2.0	60	24 Su 0304	2.3	70	9 Tu 0109	3.3	100	9 F 0130	3.6	110
1047 3.3	100		0558 2.3	70		0606 1.0	30		0621 1.3	40	
1513 2.3	70		1115 3.3	100		1334 3.9	120		1249 3.9	120	
1808 2.6	80		1551 2.0	60		2102 2.0	60		1813 1.6	50	
2039 2.6	80		2000 3.0	90					1956 1.6	50	
10 Su 0045	3.3	100	25 M 0054	2.6	80	10 W 0143	3.6	110	10 Sa 0151	4.3	130
0519 1.6	50		0611 2.0	60		0645 0.7	20		0728 -0.3	-10	
1209 3.6	110		1208 3.6	110		1402 3.9	120		1353 4.3	130	
1753 2.6	80		1658 2.0	60		2104 2.0	60		2004 1.0	30	
2053 2.3	70										
11 M 0123	3.6	110	26 Tu 0058	3.0	90	11 Th 0204	3.9	120	11 Su 0209	4.6	140
0611 1.3	40		0632 1.3	40		0721 0.0	0		0804 -0.3	-10	
1317 3.9	120		1300 3.9	120		1426 4.3	130		1411 4.3	130	
2106 2.0	60		1808 2.0	60		2054 1.6	50		2028 0.7	20	
12 Tu 0158	3.6	110	27 W 0223	3.3	100	12 F 0223	4.3	130	12 M 0234	4.6	140
0654 0.7	20		0658 1.0	30		0758 0.0	0		0843 -0.3	-10	
1408 4.3	130		1347 4.3	130		1438 4.3	130		1438 4.3	130	
2119 2.0	60		1911 1.6	50		2049 1.3	40		● 2100 0.7	20	
13 W 0226	3.9	120	28 Th 0151	3.9	120	13 Sa 0238	4.3	130	13 Tu 0300	4.9	150
0736 0.3	10		0732 0.3	10		0836 -0.3	-10		0919 -0.3	-10	
1447 4.3	130		1432 4.6	140		1453 4.3	130		1502 4.3	130	
2119 2.0	60		2006 1.3	40		● 2106 1.3	40		2132 0.7	20	
14 Th 0245	3.9	120	29 F 0215	4.3	130	14 Su 0254	4.6	140	14 W 0251	4.9	150
0815 0.0	0		0809 0.0	0		0913 -0.3	-10		0958 0.0	0	
1511 4.6	140		1513 4.9	150		1511 4.6	140		1528 4.3	130	
2119 1.6	50		2051 1.0	30		2132 1.0	30		● 2151 0.3	10	
15 F 0254	4.3	130	30 Sa 0239	4.6	140	15 M 0311	4.6	140	15 Th 0313	4.9	150
0858 0.0	0		0853 0.0	0		0954 -0.3	-10		0956 -0.3	-10	
1524 4.6	140		1554 4.9	150		1538 4.6	140		1626 4.3	130	
● 2134 1.6	50		● 2132 0.7	20		2158 1.0	30		2223 0.3	10	
31 Su 0302	4.6	140	31 W 0341	4.9	150	31 Su 0302	4.6	140	31 W 1036	0.3	10
0938 -0.3	-10		0938 -0.3	-10		0954 -0.3	-10		1638 3.9	120	
1630 4.9	150		1630 4.9	150		1538 4.6	140		2300 0.3	10	
2208 0.7	20		2208 0.7	20							

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Santos, Brazil, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0424	3.9	120	16 Su 0438	3.9	120	1 Tu 0039	0.7	20	1 Th 0100	0.7	20
1121	1.6	50	1100	1.3	40	0541	3.0	90	0602	3.3	100
1608	3.0	90	1608	3.6	110	0900	2.6	80	1223	2.0	60
			2256	1.0	30	1015	2.6	80	1713	3.0	90
						1206*	2.6	80			
2 Su 0002	0.7	20	17 M 0513	3.3	100	2 W 0130	1.0	30	2 Th 0100	1.0	30
0502	3.6	110	1145	1.6	50	0641	2.6	80	0847	3.3	100
1202	2.3	70	1641	3.3	100	0909	2.6	80	1341	2.0	60
1558	3.0	90	2353	1.0	30	● 1126	2.6	80	2013	3.0	90
						1302*	2.6	80			
3 M 0056	1.0	30	18 Tu 0617	3.0	90	3 Th 0228	1.0	30	18 F 0202	1.0	30
0551	3.0	90	1249	2.0	60	1153	2.6	80	1023	3.3	100
0847	2.6	80	1717	3.0	90	1556	2.6	80	1523	2.0	60
1102	2.6	80				1858	2.3	70	● 2153	3.3	100
1258*	2.6	80				2247	3.0	90			
4 Tu 0158	1.0	30	19 W 0104	1.3	40	4 F 0334	1.0	30	19 Sa 0309	1.0	30
0711	2.6	80	0954	3.0	90	1121	3.0	90	1124	3.6	110
0823	2.6	80	1421	2.0	60	1832	2.0	60	1645	1.6	50
● 1200	3.0	90	● 2043	2.6	80	2321	3.3	100	2249	3.6	110
2000*	2.0	60							2324	3.6	110
5 W 0311	1.3	40	20 Th 0238	1.3	40	5 Sa 0432	0.7	20	5 M 0417	1.0	30
1224	3.3	100	1102	3.3	100	1123	3.3	100	1213	3.6	110
1939	2.0	60	1641	2.0	60	1730	1.6	50	1732	1.0	30
2349	3.0	90	2243	3.0	90	2358	3.6	110	2338	3.9	120
6 Th 0432	1.0	30	21 F 0419	1.0	30	6 Su 0524	0.7	20	21 M 0521	1.0	30
1239	3.3	100	1156	3.9	120	1154	3.3	100	1258	3.9	120
1932	2.0	60	1738	1.3	40	1800	1.3	40	1811	0.7	20
			2334	3.6	110						
7 F 0015	3.3	100	22 Sa 0528	0.7	20	7 M 0036	3.9	120	22 Tu 0024	3.9	120
0530	0.7	20	1241	4.3	130	0609	0.3	10	0617	1.0	30
1238	3.6	110	1815	1.0	30	1226	3.6	110	1338	3.9	120
1906	1.6	50			1832	1.0	30	1853	0.3	10	
									1847	0.7	20
8 Sa 0043	3.6	110	23 Su 0017	3.9	120	8 Tu 0111	4.3	130	23 W 0109	4.3	130
0611	0.3	10	0615	0.3	10	0654	0.3	10	0709	1.0	30
1247	3.6	110	1319	4.3	130	1300	3.9	120	1409	3.6	110
1847	1.3	40	1849	0.7	20	1908	0.7	20	1936	0.0	0
									1923	0.7	20
9 Su 0109	4.3	130	24 M 0056	4.3	130	9 W 0151	4.6	140	24 Th 0151	4.3	130
0653	0.0	0	0656	0.3	10	0734	0.3	10	0800	1.0	30
1308	3.9	120	1356	4.3	130	1330	3.9	120	1434	3.6	110
1911	1.0	30	1926	0.3	10	1945	0.3	10	2023	0.0	0
									2000	0.3	10
10 M 0141	4.6	140	25 Tu 0130	4.6	140	10 Th 0224	4.6	140	25 F 0228	4.3	130
0728	0.0	0	0738	0.3	10	0809	0.3	10	0847	1.3	40
1336	4.3	130	1428	3.9	120	1356	3.9	120	1445	3.6	110
1947	0.7	20	2006	0.0	0	● 2021	0.3	10	● 2109	0.0	0
11 Tu 0209	4.6	140	26 W 0204	4.6	140	11 F 0258	4.6	140	26 Sa 0304	4.3	130
0806	0.0	0	0819	0.3	10	0849	0.3	10	0928	1.3	40
1402	4.3	130	1451	3.9	120	1421	3.9	120	1456	3.3	100
○ 2021	0.3	10	● 2051	0.0	0	2058	0.3	10	2200	0.0	0
12 W 0243	4.6	140	27 Th 0238	4.6	140	12 Sa 0326	4.3	130	27 Su 0339	4.3	130
0847	0.0	0	0902	0.7	20	0924	0.7	20	1006	1.6	50
1428	4.3	130	1504	3.6	110	1449	3.9	120	1506	3.3	100
2056	0.3	10	2134	0.0	0	2138	0.3	10	2249	0.0	0
13 Th 0309	4.6	140	28 F 0308	4.6	140	13 Su 0400	4.3	130	28 M 0409	3.9	120
0921	0.3	10	0945	1.0	30	1002	1.0	30	1041	2.0	60
1454	3.9	120	1511	3.3	100	1513	3.9	120	1523	3.3	100
2128	0.3	10	2217	0.0	0	2219	0.7	20	2332	0.3	10
									2302	0.3	10
14 F 0339	4.3	130	29 M 0345	4.3	130	14 M 0434	3.9	120	29 Tu 0447	3.6	110
0956	0.7	20	1021	1.3	40	1043	1.3	40	1104	2.0	60
1517	3.9	120	1524	3.3	100	1547	3.6	110	1541	3.9	120
2154	0.7	20	2302	0.0	0	2306	0.7	20	2351	0.7	20
15 Sa 0404	4.3	130	30 W 0415	3.9	120	15 Tu 0517	3.6	110	15 W 0013	0.3	10
1026	1.0	30	1100	2.0	60	1126	1.6	50	0521	3.6	110
1545	3.6	110	1534	3.0	90	1621	3.3	100	1128	2.3	70
2221	0.7	20	2353	0.3	10				1558	3.3	100
31 M 0456	3.6	110									
1138	2.3	70									
1532	3.0	90									

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.

Heights are referred to the chart datum of soundings.

* See Page 308 for the remaining tides on this day.

Buenos Aires, Argentina, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0430 4.4 135	16 Su 0340 3.7 114	1 Tu 0102 2.2 67	16 W 0421 3.5 108	1 Tu 0500 3.5 106	16 W 0253 3.4 104						
1144 1.8 54	1043 2.0 61	0609 3.6 110	1124 1.6 49	1139 1.7 53	0945 1.8 54						
1640 3.4 104	1548 2.9 88	1259 1.5 46	1711 3.8 116	1812 3.8 117	1513 3.8 117						
2351 1.8 55	2208 2.0 61	1927 4.0 121			2243 2.0 62						
2 Su 0527 4.2 128	17 M 0419 3.7 112	2 0216 2.3 71	17 Th 0017 2.2 67	2 W 0103 2.2 68	17 Th 0352 3.3 102						
1233 1.7 51	1125 1.8 56	0659 3.4 103	0517 3.5 107	0601 3.3 100	1051 1.6 49						
1801 3.7 112	1657 3.2 97	1348 1.4 42	1223 1.4 43	1236 1.6 48	1634 4.1 124						
	2323 2.1 65	● 2024 4.1 126	1819 4.2 127	1923 4.0 121							
3 M 0103 2.0 60	18 Tu 0503 3.6 110	3 Th 0323 2.4 72	18 F 0135 2.2 68	3 Th 0216 2.3 70	18 F 0004 2.1 64						
0621 4.0 121	1210 1.6 56	0740 3.2 98	0612 3.5 106	0653 3.1 96	0454 3.4 103						
1321 1.5 47	1757 3.5 108	1433 1.3 39	1322 1.2 36	1329 1.4 44	1157 1.4 43						
1911 3.9 120		2111 4.2 128	○ 1920 4.5 137	2017 4.0 123	1750 4.4 133						
4 Tu 0214 2.1 65	19 W 0039 2.2 68	4 F 0416 2.4 73	19 Sa 0244 2.2 67	4 F 0312 2.3 71	19 O 0119 2.1 64						
0711 3.7 113	0549 3.6 109	0812 3.1 94	0705 3.5 107	0730 3.1 94	0553 3.5 106						
1407 1.4 43	1257 1.4 43	1515 1.2 37	1422 1.0 33	1416 1.4 42	1304 1.2 37						
● 2011 4.1 126	○ 1851 3.9 120	2150 4.2 128	2020 4.8 145	● 2100 4.1 124	○ 1858 4.6 140						
5 W 0321 2.2 68	20 Th 0154 2.2 68	5 Sa 0456 2.4 73	20 Su 0345 2.2 67	5 Sa 0348 2.3 71	20 W 0223 2.1 65						
0756 3.4 105	0637 3.5 107	0839 3.0 91	0756 3.5 108	0757 3.1 93	0648 3.6 110						
1450 1.3 40	1347 1.2 37	1552 1.2 36	1521 0.9 27	1458 1.3 40	1409 1.0 32						
2102 4.3 130	1943 4.3 130	2223 4.2 128	2122 4.9 150	2132 4.1 124	2001 4.8 146						
6 Th 0421 2.3 69	21 F 0303 2.2 67	6 Su 0523 2.4 72	21 M 0440 2.2 67	6 Su 0411 2.4 72	21 W 0319 2.1 65						
0834 3.2 98	0725 3.4 105	0907 2.9 89	0846 3.6 110	0820 3.1 94	0739 3.8 116						
1532 1.2 38	1439 1.0 32	1625 1.2 36	1620 0.8 24	1535 1.3 40	1513 0.9 28						
2149 4.3 131	2036 4.6 139	2254 4.2 128	2226 5.0 152	2158 4.0 123	2104 4.8 147						
7 F 0516 2.3 70	22 Sa 0406 2.2 66	7 M 0545 2.3 71	22 Tu 0531 2.2 67	7 M 0431 2.3 71	22 Tu 0409 2.2 66						
0909 3.0 92	0814 3.3 102	0935 2.9 89	0938 3.7 112	0843 3.1 96	0830 4.0 122						
1610 1.2 37	1532 0.9 28	1651 1.2 36	1719 0.8 24	1607 1.3 40	1614 0.9 27						
2232 4.3 131	2134 4.8 146	2327 4.2 127	2328 5.0 151	2224 4.0 122	2207 4.8 145						
8 Sa 0601 2.3 69	23 Su 0505 2.1 65	8 Tu 0611 2.3 69	23 W 0619 2.2 67	8 Tu 0457 2.3 69	23 W 0456 2.2 67						
0942 2.8 86	0904 3.3 100	1005 2.9 89	1033 3.8 115	0912 3.2 99	0922 4.2 127						
1644 1.2 36	1627 0.8 25	1712 1.2 37	1818 0.9 26	1636 1.3 40	1714 0.9 27						
2313 4.3 130	2236 4.9 150			2253 4.0 121	2309 4.6 141						
9 Su 0636 2.3 69	24 M 0600 2.1 64	9 W 0002 4.1 126	24 Th 0027 4.9 148	9 W 0524 2.2 68	24 Th 0542 2.2 67						
1013 2.7 82	0956 3.2 99	0639 2.2 68	0707 2.2 67	0942 3.3 101	1018 4.3 130						
1712 1.2 36	1724 0.8 24	1038 3.0 90	1132 3.8 117	1702 1.3 41	1812 1.0 30						
2354 4.2 129	2338 5.0 152	1736 1.2 38	○ 1917 1.0 31	2324 3.9 120							
10 M 0704 2.2 67	25 Tu 0653 2.1 63	10 Th 0036 4.1 124	25 F 0122 4.7 142	10 Th 0549 2.2 67	25 F 0007 4.4 135						
1042 2.6 80	1051 3.2 99	0708 2.2 67	0755 2.2 66	1014 3.4 103	0627 2.2 66						
1733 1.2 36	1820 0.9 26	1114 3.0 91	1235 3.9 118	1729 1.4 42	1118 4.3 131						
		1808 1.3 40	2018 1.3 39	2353 3.8 117	1912 1.1 35						
11 Tu 0034 4.2 127	26 W 0038 5.0 152	11 F 0108 4.0 121	26 Sa 0214 4.4 134	11 F 0612 2.2 66	26 W 0102 4.2 127						
0733 2.2 66	0744 2.1 63	0735 2.2 67	0846 2.1 64	1047 3.4 105	0714 2.1 64						
1112 2.6 78	1149 3.3 101	1153 3.0 92	1342 3.9 118	1800 1.4 44	1222 4.3 130						
1754 1.2 36	○ 1920 1.0 30	○ 1846 1.4 44	2121 1.5 47		○ 2012 1.4 42						
12 W 0114 4.1 125	27 Th 0134 4.9 149	12 Sa 0137 3.9 118	27 Su 0306 4.1 124	12 Sa 0020 3.8 115	27 W 0154 3.9 118						
0808 2.1 65	0835 2.1 63	0804 2.2 66	0941 2.0 61	0636 2.1 65	0803 2.0 62						
1147 2.5 77	1250 3.4 103	1237 3.1 93	1458 3.8 116	1122 3.5 106	1329 4.1 126						
● 1827 1.2 38	2021 1.2 36	1933 1.6 49	2229 1.8 56	○ 1837 1.5 47	2116 1.6 49						
13 Th 0152 4.0 122	28 F 0228 4.7 143	13 Su 0207 3.8 115	28 M 0400 3.7 114	13 M 0048 3.7 112	28 M 0246 3.5 108						
0847 2.1 65	0927 2.0 62	0841 2.1 64	1039 1.9 57	0707 2.1 63	0859 1.9 59						
1230 2.6 78	1356 3.4 105	1332 3.1 95	1633 3.8 115	1202 3.5 108	1443 4.0 121						
1908 1.4 42	2126 1.4 44	2029 1.8 55	2344 2.1 64	1921 1.6 50	2225 1.8 56						
14 F 0229 3.9 119	29 Sa 0321 4.4 135	14 M 0243 3.7 112									
0926 2.1 65	1020 1.9 59	0929 2.0 60									
1325 2.6 79	1510 3.5 107	1440 3.2 99									
1958 1.6 48	2234 1.7 53	2139 2.0 61									
15 Sa 0305 3.8 116	30 Tu 0416 4.2 127	15 M 0328 3.6 110									
1004 2.1 64	1113 1.8 56	1025 1.8 56									
1433 2.7 82	1639 3.6 111	1556 3.5 106									
2058 1.8 55	2346 2.0 61	2256 2.1 65									
16 M 0512 3.9 118	31 M 1207 1.7 51										
	1812 3.8 116										

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Buenos Aires, Argentina, 2011

Times and Heights of High and Low Waters

April				May				June															
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height												
1 F 0157 0644 1305 1950	h m 2.1 2.9 1.6 3.8	ft 65 89 48 117	cm 11 89 48 117	16 Sa 0434 1140 1729	h m 3.2 1.3 4.4	ft 99 41 134	cm 11 89 48 117	1 Su 0136 0646 1316 1942	h m 2.0 2.8 1.5 3.5	ft 60 85 47 106	cm 11 89 48 117	16 W 0036 0513 1242 1820	h m 1.8 3.5 1.1 4.2	ft 54 106 34 127	cm 11 96 44 92	16 Th 0143 0654 1403 1942	h m 1.8 3.1 1.4 3.0	ft 54 96 44 92	cm 11 123 33 102				
	0234 Sa 0718 1353 2029	2.2 3.0 1.5 3.8	66 90 45 116		0058 Su 0534 1251 O	1.9 3.4 1.2 4.5	59 105 37 137		0203 M 0711 1402 2009	1.9 3.0 1.5 3.4	59 91 46 105	0129 Tu 0610 1351 O	1.8 3.8 1.0 4.1	55 116 32 124	0213 Th 0725 1448 2008	1.7 3.4 1.4	52 103 43 90	0242 F 0751 1553 2105	1.6 4.1 1.1	48 126 35 96			
	0258 Su 0741 1435 ●	2.2 3.1 1.4 3.8	66 93 44 116		0157 M 0629 1359 ●	2.0 3.7 1.1	60 114 33 138		0232 Tu 0735 1443 ●	1.9 3.2 1.5 3.4	58 98 45 103	0219 W 0705 1456 2021	1.8 3.6 1.0 3.9	55 125 32 119	0242 F 0758 1532 2037	1.6 3.6 1.4 2.9	50 109 43 89	0331 Sa 0847 1653 2157	1.5 4.1 1.2	45 126 37 90			
	0319 M 0802 1513 2120	2.1 3.2 1.4 3.7	65 97 44 114		0248 Tu 0722 1504 2042	2.0 4.0 1.0 4.5	61 123 31 136		0302 W 0800 1521 2056	1.9 3.4 1.5 3.3	57 104 42 102	0306 Th 0800 1559 2121	1.8 4.3 1.1 3.7	54 131 32 112	0314 Sa 0831 1615 2112	1.5 3.7 1.4 2.9	47 113 42 87	0419 Su 0947 1748 2246	1.4 4.1 1.3 2.8	42 124 39 85			
5 Tu 0346 0825 1547 2144	2.1 3.3 1.4 3.7	64 102 44 113	102 W 0813 1606 2144	2.0 4.3 1.0 4.3	0336 Th 0829 1558 2121	1.8 3.6 1.5 3.3	61 109 45 100	5 Th 0330 0829 1558 2121	0330 F 0829 1558 2121	1.8 3.6 1.5 3.3	56 109 45 100	20 F 0353 0855 1700 2220	1.7 4.4 1.1 3.4	52 134 34 105	5 Su 0350 0907 1700 2153	0350 Su 0907 1700 2153	1.4 3.8 1.3 2.8	44 116 41 85	20 M 1046 1837 2330	0506 M 1046 1837 2330	1.3 3.9 1.3	40 119 41 81	
	0413 W 0853 1620 2210	2.1 3.5 1.4 3.6	64 107 44 111	0421 Th 0907 1707 2245	2.0 4.4 1.0 4.1	61 135 31 124	0355 F 0859 1635 2148		1.8 3.7 1.5 3.2	55 113 45 97	0439 Sa 0954 1758 2315	1.6 4.4 1.2 3.2	50 134 37 98	0432 M 0947 1745 2238	1.3 3.9 1.3 2.8	40 118 41 84	0550 Tu 1144 1918	1.2 3.7 1.4		37 114 44			
	0439 Th 0922 1651 2237	2.1 3.6 1.5 3.6	63 110 45 109	0507 F 1004 1806 2343	2.0 4.5 1.1	60 137 34 116	0421 Sa 0930 1712 2221		1.7 3.8 1.5 3.1	53 116 45 95	0525 Su 1056 1856	1.6 4.3 1.3	48 130 40	0518 Tu 1036 1834 2325	1.2 3.9 1.3 2.7	37 119 41 83	0010 W 0633 1239 1950	2.5 1.2 3.5		77 36 108 46			
	0502 F 0953 1723 2304	2.0 3.7 1.5 3.5	62 113 45 107	0552 Sa 1106 1904	1.9 4.5 1.2	58 136 38	0452 Su 1002 1753 2300		1.6 3.9 1.5 3.0	50 118 45 92	0005 M 0610 1159 1951	3.0 1.5 4.1 1.4	91 45 125 43	0609 W 1134 1925 ●	1.1 3.9 1.4	34 120 42 ●	0047 Th 0712 1332 ●	2.5 1.1 3.4		75 35 103 48			
9 Sa 0526 1022 1757 2334	2.0 3.8 1.5 3.4	60 115 46 104	24 Su 0637 1210 ●	3.5 1.8 4.3	0037 M 1041 1836 2342	1.05 3.9 1.3	108 56 132 90	9 M 0530 1041 1836 2342	0530 M 1041 1836 2342	1.5 3.9 1.5 3.0	47 120 45 90	24 Tu 0656 1301 ●	0052 Tu 0656 1301 ●	2.8 1.4 3.9	85 43 118 47	9 Th 0705 1241 ●	0013 Th 1241 2020	2.7 1.0 1.4	83 32 44	24 F 0751 1423 2052	0124 Th 1423 2052	2.4 3.2 1.6	73 97 50
	0554 Su 1057 1835	1.9 3.8 1.6	57 116 48	0128 M 0726 1316 2106	3.3 1.8 4.1	100 54 126 49	0613 Tu 1129 1926		1.5 4.0 1.5	45 121 46	0138 W 0742 1402 2133	2.6 1.4 3.6	79 42 111 50	0104 F 0805 1349 2117	2.8 1.0 1.5	85 31 46	0202 Sa 0833 1515 2135	2.4 3.0 1.7	73 92 52				
	0007 M 0631 1139 ●	3.3 1.8 3.9	101 55 118	0218 Tu 0817 1425 2211	3.0 1.7 3.9	92 52 119 53	0028 W 0704 1229 2023		2.9 1.4 4.0	88 43 122 48	0223 Th 0830 1505 2220	2.5 1.4 3.4	75 42 105 53	0156 Sa 0910 1455 2215	2.9 1.0 3.9	89 30 49	0245 Su 0921 1604 2223	2.5 1.2 2.9	75 37 88				
	0049 Tu 0717 1232 2017	3.2 1.7 3.9 1.7	98 53 120 52	0311 W 0914 1543 2319	2.8 1.7 3.7	85 51 113 57	0118 Th 0803 1338 2127		2.9 1.3 4.0	87 41 123 50	0312 F 0921 1609 2306	2.4 1.4 1.8	72 43 55	0252 Su 1018 1601 2312	3.1 1.0 1.6	94 30 50	0334 M 1018 1654 2311	2.6 1.3 2.8	78 39 85				
13 W 0814 1338 2125	3.1 1.7 4.0	96 51 122	28 Th 1017 1707	2.6 3.6	0412 F 1017 1707	2.6 3.6	80 51	13 F 0909 1451 2241	0211 M 1041 1451 1815	2.9 3.9 4.1	88 40 125 52	28 Tu 1018 1711 2350	0407 Tu 1018 1711 2350	2.4 1.4 3.2	72 44 56	13 M 1127 1704 1803	0352 M 1127 1704 1803	3.3 1.0 2.5	101 30 95	28 Th 1119 1739 2354	0427 Tu 1739 2354	2.7 2.7 1.8	83 83 54
	0230 Th 0918 1454 2241	3.1 1.6 4.1	95 48 125 57	0022 F 0518 1122 1815	1.9 2.6 1.6	59 79 50	0311 Sa 1018 1604 2337		3.0 1.2 4.2	91 38 127	0501 Su 1120 1803	2.5 1.4 3.1	76 44 95	0006 Tu 1236 1809	1.7 1.0 3.7	51 30 112	0516 W 1220 1816	2.9 1.3 2.7	89 41 82				
	0331 F 1028 1612 2354	3.1 1.5 4.2	95 45 129 58	0105 Sa 0610 1223 1904	2.0 2.7 1.6	60 81 48	0412 Su 1131 1714		3.2 1.2 4.2	98 36 128	0031 M 0546 1220 1843	1.8 2.7 3.1	55 81 94	0109 Tu 0622 1315 1916	1.8 2.9 1.4	55 89 44	0427 Th 1119 1739 1849	2.7 2.7 2.7	83 83 82				
	0032 Th 1028 1612 2354	3.1 1.5 4.2	95 45 129 58	0105 Sa 0610 1223 1904	2.0 2.7 1.6	60 81 48	0412 Su 1131 1714		3.2 1.2 4.2	98 36 128	0031 M 0546 1220 1843	1.8 2.7 3.1	55 81 94	0032 Th 1317 1849	1.7 3.2	52 97 82							

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Buenos Aires, Argentina, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 0110	1.6	49	16 0223	1.4	44	1 0207	1.3	39	16 0349	1.3	41
F 0642	3.4	104	Sa 0752	3.9	120	M 0740	3.9	120	Tu 0932	3.6	111
1411	1.3	40	1550	1.2	38	1533	1.2	38	1654	1.5	46
● 1924	2.7	82	2053	2.8	85	2020	2.7	83	2142	2.7	81
2 0151	1.5	45	17 0315	1.4	42	2 0308	1.1	34	17 0431	1.3	39
Sa 0722	3.6	109	Su 0847	3.9	118	Tu 0833	4.0	123	W 1010	3.5	107
1503	1.3	39	1644	1.3	40	1625	1.2	38	1715	1.5	46
2003	2.7	82	2137	2.7	82	2108	2.8	86	2211	2.7	83
3 0236	1.3	41	18 0404	1.3	39	3 W 0408	1.0	30	18 0510	1.3	39
Su 0803	3.7	114	M 0941	3.7	114	0932	4.1	124	Th 1051	3.4	104
1554	1.2	38	1729	1.4	42	1714	1.3	39	1737	1.5	46
2045	2.7	82	2215	2.6	80	2157	3.0	90	2241	2.8	86
4 0326	1.2	37	19 0450	1.2	37	4 Th 0507	0.9	27	19 0545	1.2	38
M 0847	3.8	117	Tu 1032	3.6	110	1039	4.0	123	F 1132	3.3	100
1644	1.2	38	1802	1.4	43	1802	1.3	40	1802	1.5	46
2131	2.7	82	2250	2.6	78	2248	3.1	95	2313	2.9	89
5 0419	1.1	33	20 0532	1.1	35	5 F 0606	0.8	24	20 0617	1.2	37
Tu 0938	3.9	118	W 1121	3.5	106	1148	4.0	121	Sa 1212	3.1	96
1734	1.2	38	1825	1.4	44	1848	1.4	43	1829	1.5	46
2219	2.7	83	2324	2.6	78	2339	3.3	101	2347	3.0	92
6 0513	1.0	30	21 0610	1.1	34	6 Sa 0706	0.7	22	21 0650	1.2	37
W 1039	3.9	119	Th 1209	3.3	102	1252	3.8	117	Su 1250	3.0	93
1823	1.3	39	1846	1.5	45	1934	1.5	46	1852	1.5	47
2308	2.8	84	2357	2.6	79	●			●		
7 0609	0.9	27	22 0645	1.1	33	7 Su 0033	3.5	107	22 0020	3.1	94
Th 1147	3.9	119	F 1255	3.2	97	0807	0.7	22	M 0726	1.2	38
1912	1.3	40	1915	1.5	46	1351	3.7	113	1323	2.9	87
2358	2.9	88	2021	1.6	48	2021	1.6	48	1914	1.6	48
8 0707	0.8	24	23 0031	2.6	80	8 M 0127	3.7	113	23 0058	3.2	97
F 1253	3.9	118	Sa 0719	1.1	33	0910	0.8	24	Tu 0810	1.3	40
2001	1.4	43	1340	3.1	93	1447	3.5	106	1353	2.7	83
●			● 1945	1.5	47	2113	1.6	50	1942	1.6	48
9 0048	3.1	93	24 0104	2.7	82	9 Tu 0225	3.8	117	24 0140	3.2	99
Sa 0808	0.8	23	Su 0757	1.1	34	1016	0.9	28	W 0901	1.4	42
1355	3.8	116	1422	2.9	88	1546	3.2	99	1428	2.6	79
2052	1.5	46	2017	1.6	50	2209	1.7	51	2021	1.6	48
10 0141	3.2	98	25 0144	2.8	84	10 W 0328	3.9	118	25 0228	3.3	102
Su 0912	0.8	24	0842	1.2	36	1123	1.0	32	Th 0959	1.4	44
1455	3.7	113	1504	2.7	83	1649	3.0	92	1514	2.5	77
2146	1.6	49	2048	1.7	52	2309	1.6	50	2115	1.6	48
11 0236	3.4	104	26 0228	2.9	87	11 Th 0438	3.9	119	26 0325	3.5	107
M 1017	0.8	25	0935	1.2	38	1233	1.2	36	F 1102	1.5	45
1555	3.5	108	1545	2.6	79	1757	2.9	87	1611	2.5	76
2241	1.6	50	2125	1.7	53	1904	2.7	83	2218	1.5	46
12 0336	3.6	110	27 0319	3.0	91	12 F 0010	1.6	48	27 0426	3.7	112
Tu 1125	0.9	28	1034	1.3	40	0554	3.9	119	Sa 1209	1.4	44
1658	3.4	103	1627	2.5	77	1344	1.3	39	1712	2.5	77
2338	1.6	50	2211	1.7	52	1904	2.7	83	2325	1.4	44
13 0440	3.7	114	28 0413	3.1	96	13 S 0110	1.5	46	28 0527	3.9	119
W 1233	1.0	31	1135	1.3	41	0703	3.9	118	Su 1314	1.4	43
1802	3.2	97	1712	2.5	76	1449	1.3	41	1810	2.6	80
●			2307	1.6	50	● 2001	2.7	82	2048	2.8	84
14 0034	1.6	49	29 0508	3.3	102	14 Su 0208	1.4	44	29 0034	1.3	41
Th 0546	3.9	118	1238	1.3	41	0801	3.8	117	W 0626	4.1	125
1341	1.1	33	1758	2.5	77	1544	1.4	42	M 1415	1.4	42
1904	3.1	93	● 1845	2.6	79	2043	2.7	81	● 1903	2.8	85
15 0129	1.5	47	30 0005	1.5	47	15 M 0301	1.4	42	15 0408	1.5	45
F 0651	3.9	120	0600	3.6	109	0850	3.7	114	W 0723	4.3	130
1448	1.2	36	1339	1.3	40	1626	1.4	44	Tu 1511	1.3	41
● 2003	2.9	88	● 1845	2.6	79	2115	2.6	80	1953	3.0	90
31 0105	1.4	43	31 Su 0650	3.8	115				31 0251	1.1	34
			1438	1.3	39				W 0821	4.3	132
			1933	2.7	81				1601	1.4	42
									2042	3.2	97

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Buenos Aires, Argentina, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
1 Sa 0448 1.1 33		16 Su 0452 1.7 53		1 Tu 0645 1.4 44		16 W 0547 2.0 60		1 Th 0744 1.8 55		16 F 0626 2.1 63	
1012 4.2 129		0958 3.3 102		1149 3.4 105		1010 3.0 92		1202 2.9 87		1024 2.9 87	
1706 1.6 49		1648 1.6 48		1809 1.5 45		1703 1.3 40		1829 1.2 38		1728 1.0 32	
2203 4.2 128		2208 3.6 109				2258 4.0 122				2340 4.4 133	
2 Su 0550 1.1 33		17 M 0526 1.8 54		2 W 0000 4.7 142		17 Th 0630 2.0 60		2 F 0058 4.6 140		17 O 0715 2.0 62	
1117 4.0 121		1022 3.2 98		0751 1.5 47		1050 2.9 88		0847 1.8 56		1111 2.8 85	
1750 1.6 49		1709 1.5 47		1244 3.1 96		1740 1.2 38		1252 2.7 81		1814 1.1 33	
2303 4.4 133		2241 3.7 112		1857 1.4 44		2339 4.1 125		1915 1.3 39		O	
3 M 0652 1.1 34		18 Tu 0601 1.8 54		3 Th 0107 4.6 140		18 F 0718 1.9 59		3 Sa 0158 4.4 135		18 Su 0032 4.5 137	
1218 3.7 113		1052 3.1 94		0858 1.6 57		1134 2.8 85		0947 1.9 57		0807 2.0 61	
1835 1.6 49		1731 1.5 45		1337 2.9 87		1821 1.2 37		1343 2.5 75		1203 2.8 84	
		2315 3.8 115		1946 1.4 44				1959 1.4 42		1907 1.1 35	
4 Tu 0006 4.5 136		19 W 0639 1.8 54		4 F 0214 4.4 135		19 Sa 0029 4.2 128		4 Su 0258 4.3 130		19 M 0127 4.6 140	
0756 1.2 37		1125 3.0 90		1006 1.7 52		0813 1.9 59		1046 1.9 58		0901 2.0 60	
1315 3.4 104		1800 1.4 43		1432 2.6 80		1224 2.7 82		1440 2.4 72		1300 2.8 86	
O 1923 1.6 48		2352 3.8 117		2040 1.5 45		1912 1.2 37		2045 1.5 46		2006 1.2 38	
5 W 0112 4.5 136		20 Th 0723 1.8 55		5 Sa 0324 4.3 130		20 Su 0126 4.3 132		5 M 0355 4.1 124		20 Tu 0223 4.7 142	
0902 1.3 41		1205 2.8 86		1115 1.7 53		0914 1.9 58		1137 1.9 58		0957 1.9 59	
1409 3.1 95		1837 1.3 41		1537 2.5 75		1320 2.7 82		1551 2.3 71		1402 3.0 90	
2015 1.6 48				2138 1.5 47		2010 1.3 39		2135 1.7 51		2114 1.4 42	
6 Th 0219 4.4 133		21 F 0036 3.9 120		6 Su 0436 4.1 125		21 M 0228 4.5 136		6 Tu 0448 3.9 119		21 W 0320 4.7 142	
1012 1.5 45		0816 1.8 55		1219 1.8 54		1016 1.9 57		1214 1.9 57		1052 1.9 57	
1507 2.8 86		1251 2.7 83		1656 2.4 73		1424 2.8 84		1714 2.4 74		1510 3.1 96	
2112 1.6 48		1926 1.3 41		2241 1.6 50		2118 1.3 41		2235 1.8 56		2228 1.5 47	
7 F 0333 4.2 129		22 Sa 0131 4.1 124		7 M 0540 4.0 122		22 Tu 0331 4.6 140		7 W 0537 3.8 115		22 Th 0417 4.6 140	
1124 1.6 48		0918 1.8 55		1308 1.8 54		1116 1.8 56		1243 1.8 55		1145 1.8 54	
1612 2.6 80		1345 2.7 81		1810 2.5 76		1531 2.9 89		1818 2.7 81		1620 3.5 106	
2216 1.6 48		2023 1.3 41		2347 1.7 53		2231 1.4 43		2343 2.0 60		2343 1.7 51	
8 Sa 0454 4.1 125		23 Su 0234 4.2 128		8 Tu 0632 3.9 119		23 W 0433 4.7 142		8 Th 0617 3.7 112		23 F 0515 4.5 136	
1235 1.6 49		1027 1.8 55		1339 1.8 54		1211 1.8 54		1312 1.7 53		1236 1.7 51	
1732 2.5 77		1449 2.7 81		1859 2.7 81		1639 3.2 98		1859 2.9 88		1732 3.8 116	
2322 1.6 49		2130 1.4 42				2348 1.5 45					
9 Su 0607 4.0 123		24 M 0343 4.4 133		9 W 0048 1.8 55		24 Th 0533 4.7 142		9 F 0048 2.1 63		24 Sa 0058 1.8 55	
1337 1.6 50		1134 1.8 54		0712 3.8 116		1302 1.7 52		0647 3.5 108		0611 4.3 130	
1843 2.6 78		1558 2.8 84		1402 1.7 53		1743 3.6 110		1342 1.7 51		1326 1.5 47	
		2242 1.4 42		1931 2.9 87				1928 3.1 96		1840 4.2 127	
10 M 0028 1.6 49		25 Tu 0450 4.5 138		10 Th 0140 1.9 57		25 F 0103 1.5 47		10 Sa 0145 2.1 65		25 Su 0210 1.9 58	
0704 4.0 121		1235 1.7 52		0741 3.7 113		0631 4.6 139		0712 3.4 105		0706 4.0 122	
1422 1.7 51		1704 3.0 91		1426 1.7 51		1351 1.6 50		1412 1.6 48		1415 1.4 43	
1929 2.7 81		2357 1.4 42		1954 3.1 94		1843 4.0 122		1954 3.4 104		1945 4.4 135	
11 Tu 0127 1.6 50		26 W 0552 4.7 142		11 F 0227 1.9 58		26 Sa 0215 1.6 48		11 Su 0236 2.2 66		26 M 0321 2.0 60	
0747 3.9 118		1329 1.7 51		0804 3.6 110		0727 4.4 133		0732 3.4 103		0759 3.7 113	
1450 1.7 51		1804 3.3 102		1453 1.6 50		1438 1.6 48		1439 1.5 46		1504 1.3 39	
O 2000 2.8 85				2018 3.3 101		1942 4.4 133		2024 3.6 111		2048 4.6 141	
12 W 0217 1.6 50		27 Th 0113 1.4 42		12 Sa 0309 1.9 59		27 Su 0324 1.6 50		12 M 0323 2.2 66		27 Tu 0429 2.0 61	
0820 3.8 115		0651 4.7 143		0825 3.5 107		0822 4.1 124		0756 3.3 100		0850 3.4 105	
1509 1.7 51		1419 1.7 51		1521 1.6 48		1525 1.5 45		1505 1.4 43		1552 1.2 37	
2020 2.9 89		1900 3.7 113		2044 3.5 107		2042 4.6 140		2056 3.8 117		2150 4.7 144	
13 Th 0301 1.7 51		28 F 0225 1.3 41		13 Su 0349 2.0 60		28 M 0431 1.7 51		13 Tu 0409 2.2 66		28 W 0533 2.0 62	
0845 3.7 112		0748 4.6 139		0843 3.4 103		0918 3.7 114		0826 3.2 97		0939 3.2 97	
1532 1.7 51		1506 1.6 50		1546 1.5 47		1612 1.4 43		1532 1.3 39		1637 1.1 35	
2042 3.1 95		1953 4.1 124		2114 3.7 112		2145 4.7 144		2131 4.0 121		2251 4.7 144	
14 F 0340 1.7 52		29 Sa 0332 1.3 41		14 M 0428 2.0 61		29 Tu 0536 1.7 53		14 W 0454 2.2 66		29 Th 0632 2.0 62	
0909 3.6 109		0847 4.4 133		0908 3.3 100		1014 3.4 104		0901 3.1 94		1027 3.0 90	
1558 1.6 50		1552 1.6 50		1609 1.5 45		1658 1.3 41		1606 1.2 36		1723 1.1 34	
2107 3.3 101		2049 4.4 133		2146 3.8 116		2250 4.8 145		2210 4.1 125		2349 4.7 142	
15 Sa 0417 1.7 53		30 Su 0437 1.3 41		15 Tu 0508 2.0 61		30 W 0640 1.8 54		15 Th 0539 2.1 64		30 F 0727 2.1 63	
0934 3.5 106		0947 4.1 124		0935 3.1 96		1110 3.1 95		0941 3.0 90		1113 2.8 84	
1625 1.6 49		1637 1.6 48		1633 1.4 43		1745 1.3 39		1644 1.1 34		1804 1.1 35	
2136 3.5 106		2148 4.6 139		2221 3.9 119				2253 4.2 129			
		31 M 1049 3.7 114								31 Sa 0043 4.6 139	
		1723 1.5 47								0817 2.1 63	
		2253 4.7 142								1157 2.6 80	
										1840 1.2 37	

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puerto Ingeniero White, Argentina, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0313	14.3	437	16 Su 0253	14.4	439	1 Tu 0512	14.3	435	16 Tu 0343	14.5	442
0916	1.7	51	0927	2.0	61	1059	1.9	58	W 1020	2.0	61
1553	13.4	407	1537	14.0	426	1804	13.1	399	1637	13.5	410
2130	4.1	125	2117	4.4	133	2330	4.8	145	2229	4.6	141
2 Su 0421	14.2	432	17 M 0342	14.4	439	2 0610	14.0	428	17 W 0435	14.2	434
1017	1.8	55	1014	2.0	61	1158	2.1	65	Th 1115	2.4	72
1701	13.0	396	1628	13.7	419	1912	13.3	406	1737	13.2	403
2237	4.7	142	2212	4.7	144	●			2330	4.6	140
3 M 0522	14.0	427	18 Tu 0431	14.3	437	3 Th 0031	4.5	136	18 F 0526	13.9	424
1117	1.9	59	1106	2.1	64	0705	13.8	421	1212	2.7	83
1812	12.8	391	1723	13.5	412	1254	2.2	66	1835	13.2	401
2343	4.8	147	2311	4.9	149	2007	13.6	416	○		
4 Tu 0618	13.8	422	19 W 0517	14.2	432	4 F 0125	4.0	123	19 Sa 0028	4.3	131
1214	2.0	62	1158	2.3	69	0759	13.7	418	0616	13.5	413
1923	12.9	393	1820	13.3	406	1347	2.1	63	1306	2.9	89
●			○			2052	14.0	428	1926	13.3	404
5 W 0043	4.7	142	20 Th 0006	4.8	147	5 Sa 0214	3.5	108	20 Su 0121	3.8	116
0711	13.7	417	0601	13.9	425	0851	13.7	418	0705	13.3	404
1310	2.0	61	1249	2.4	74	1435	1.9	58	1357	2.9	89
2020	13.2	401	1915	13.2	403	2131	14.3	437	2007	13.5	412
6 Th 0136	4.3	131	21 F 0058	4.6	139	6 Su 0301	3.1	94	21 M 0211	3.2	97
0803	13.6	414	0644	13.7	417	0939	13.8	421	0759	13.1	399
1403	1.9	57	1339	2.5	77	1520	1.7	53	1445	2.8	84
2108	13.5	412	2002	13.3	404	2206	14.6	444	2044	13.9	425
7 F 0226	3.8	117	22 Sa 0146	4.1	126	7 M 0345	2.7	82	22 Tu 0303	2.5	76
0857	13.6	414	0726	13.5	411	1025	14.0	426	0903	13.1	400
1453	1.6	50	1426	2.5	77	1601	1.7	53	1531	2.5	76
2149	13.9	424	2041	13.5	410	2237	14.6	446	2122	14.4	439
8 Sa 0314	3.4	104	23 Su 0233	3.6	110	8 Tu 0429	2.4	74	23 W 0355	1.8	55
0951	13.7	418	0812	13.4	407	1104	14.1	430	1014	13.3	405
1540	1.4	44	1511	2.4	72	1639	1.9	57	1617	2.3	69
2227	14.2	433	2115	13.8	420	2303	14.6	446	2206	14.8	450
9 Su 0401	3.0	92	24 M 0322	3.0	90	9 W 0511	2.2	68	24 Th 0448	1.2	38
1043	13.9	423	0908	13.4	407	1140	14.2	433	1120	13.5	413
1625	1.4	42	1555	2.1	64	1714	2.1	65	1704	2.2	68
2303	14.4	440	2152	14.2	434	2323	14.6	446	● 2301	14.9	455
10 M 0448	2.8	84	25 Tu 0412	2.3	70	10 Th 0551	2.1	63	25 F 0543	0.9	26
1131	14.1	429	1017	13.5	410	1212	14.3	435	1221	13.7	418
1707	1.5	46	1641	1.9	58	1746	2.5	75	1754	2.5	75
2338	14.5	443	2235	14.6	446	2347	14.7	447	● 2347	14.7	448
11 Tu 0535	2.6	79	26 W 0505	1.7	53	11 F 0631	1.9	58	10 Th 0442	1.9	57
1214	14.2	433	1130	13.6	416	1245	14.3	437	1106	14.2	432
1746	1.8	56	1728	1.9	57	1821	2.8	86	1640	2.6	78
●			2327	14.8	452	●			2233	14.7	448
12 W 0012	14.5	442	27 Th 0601	1.3	40	12 Sa 0020	14.7	449	12 F 0543	0.9	26
0622	2.5	75	1236	13.8	421	0711	1.7	52	1221	13.7	418
1253	14.3	435	1817	2.1	65	1321	14.3	437	1754	2.5	75
●			1859	3.2	97	1849	3.0	91	● 2331	15.0	456
13 Th 0045	14.5	441	28 F 0033	14.8	452	13 Su 0104	14.8	450	13 M 0139	14.8	450
0708	2.4	72	0658	1.1	34	0753	1.6	48	0738	0.9	26
1331	14.3	435	1337	13.8	421	1402	14.3	435	1423	13.6	415
1904	2.8	86	1910	2.7	83	1942	3.6	109	1948	3.7	112
14 F 0123	14.4	439	29 M 0151	14.7	449	14 Th 0154	14.8	450	12 Sa 0555	1.5	46
0754	2.2	68	0758	1.1	34	0838	1.5	47	1203	14.4	438
1410	14.2	434	1439	13.6	416	1449	14.1	429	1744	2.9	88
1943	3.3	102	2008	3.5	106	2031	4.0	123	● 2331	15.0	456
15 Sa 0206	14.4	439	30 Su 0305	14.6	445	15 Th 0248	14.7	448	13 Su 0632	1.3	39
0839	2.1	64	0858	1.3	40	0927	1.7	51	0837	1.2	36
1451	14.1	431	1543	13.4	407	1541	13.8	420	1530	13.4	409
2027	3.9	118	2112	4.2	129	2128	4.4	135	2055	4.3	119
31 M 0411	14.5	441	0958	1.6	49				● 2331	15.0	456
1653	13.1	400	1653	13.1	400				13 M 0108	15.0	456
2222	4.7	144	2222	4.7	144				0759	1.2	36

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puerto Ingeniero White, Argentina, 2011

Times and Heights of High and Low Waters

April				May				June			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm		h m	ft	cm		h m	ft	cm	
1 F 0533	14.2	434		16 Sa 0342	13.9	425		1 M 0553	14.0	428	
1115	2.6	78		1005	2.7	82		0428	13.2	402	
1823	14.4	439	Sa	1632	13.6	416	Su	1140	3.1	96	M 1039
2359	3.3	102		2240	3.5	107		1834	15.0	456	1170
											2321
2 Sa 0627	14.1	430		17 Su 0442	13.5	411		2 M 0022	2.4	72	
1212	2.7	81		1106	3.3	101		0644	14.0	426	
1912	14.8	450	Su	1732	13.7	417		1232	3.2	97	Tu 1802
			O	2341	3.1	96		1915	15.2	462	
3 Su 0051	2.8	85		18 M 0541	13.1	398		0110	2.0	60	
0719	14.1	429		1206	3.7	112		0734	14.0	426	
1304	2.6	80	M	1823	13.8	422		1318	3.2	98	
● 1954	15.0	458						● 1953	15.1	461	
4 M 0138	2.3	71		19 Tu 0038	2.7	81		0153	1.7	52	
0808	14.1	429		0640	12.8	389		0820	14.0	427	
1350	2.6	79	Tu	1302	3.8	115		1359	3.3	100	
2032	15.1	460		1904	14.1	429		2024	15.0	457	
5 Tu 0222	2.0	60		20 W 0132	2.1	65		0233	1.6	48	
0853	14.1	430		0743	12.6	385		0901	14.0	426	
1431	2.6	80	W	1353	3.6	110		1433	3.4	104	
2104	15.0	458		1941	14.4	439		2045	14.7	449	
6 W 0302	1.8	54		21 Th 0225	1.6	49		0310	1.5	47	
0932	14.1	431		0847	12.7	388		0935	13.9	425	
1506	2.8	84	Th	1442	3.4	103		1504	3.5	108	
2128	14.8	452		2019	14.7	448		2057	14.6	444	
7 Th 0339	1.7	51		22 F 0225	1.1	33		0344	1.5	46	
1006	14.1	430		0946	13.0	395		1003	13.9	423	
1537	2.9	89	F	1530	3.1	95		1534	3.5	108	
2138	14.7	447		2104	14.8	452		2113	14.6	445	
8 F 0414	1.6	49		23 Sa 0410	0.7	22		0417	1.4	42	
1033	14.1	430		1043	13.3	405		1027	13.9	425	
1607	3.1	93	Sa	1620	3.0	92		1607	3.4	105	
2150	14.7	448		2205	14.7	449		2141	14.7	449	
9 Sa 0446	1.5	45		24 Su 0503	0.5	15		0452	1.2	36	
1058	14.1	431		1139	13.5	412		1055	14.1	430	
1637	3.1	95	Su	1712	3.1	95		1644	3.2	99	
2215	14.9	453	O	2339	14.5	443		2219	14.8	452	
10 Su 0522	1.2	38		25 M 0557	0.5	16		0530	1.0	29	
1127	14.3	435		1239	13.7	417		1130	14.3	436	
1711	3.1	94	M	1808	3.4	104		1727	3.1	95	
2251	15.0	457						● 2308	14.8	452	
11 M 0558	1.0	31		26 Tu 0104	14.5	441		0612	0.8	25	
1201	14.4	439		0651	0.8	25		1212	14.4	440	
1751	3.1	94	Tu	1342	13.7	419		1816	3.1	93	
● 2336	15.0	458		1911	3.8	115					
12 Tu 0640	0.9	27		27 W 0211	14.4	440		0006	14.7	448	
1243	14.4	439		0747	1.3	41		0657	1.0	29	
1837	3.2	97	W	1447	13.8	422		1301	14.4	438	
				2019	4.0	122		1911	3.1	94	
13 W 0032	14.9	455		28 Th 0312	14.4	439		0114	14.4	440	
0725	1.0	30		0843	2.0	60		0747	1.4	43	
1331	14.3	435	Th	1552	14.0	428		1358	14.2	434	
1931	3.4	104		2129	3.9	118		2012	3.1	95	
14 Th 0135	14.7	447		29 F 0408	14.3	435		0221	14.1	429	
0814	1.4	42		0943	2.5	77		0839	2.1	64	
1426	14.0	428	F	1652	14.3	437		1503	14.1	429	
2031	3.6	110		2235	3.4	105		2116	3.1	94	
15 F 0240	14.3	437		30 Sa 0501	14.1	431		0326	13.6	416	
0908	2.0	61		1042	3.0	90		0937	2.9	89	
1528	13.8	420	Sa	1745	14.7	448		1610	14.0	426	
2135	3.7	112		2332	2.9	88		2220	2.9	89	

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puerto Ingeniero White, Argentina, 2011

Times and Heights of High and Low Waters

July			August			September					
Time	Height		Time	Height		Time	Height		Time	Height	
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0039	2.1	65	16 Sa 0044	2.2	68	1 M 0130	2.6	78	1 Th 0215	2.0	60
0658	13.2	403	0753	12.4	377	0756	13.0	395	0916	13.8	420
1237	4.6	139	1304	4.5	137	1329	4.2	129	1435	3.2	97
● 1849	14.6	444	1932	14.0	428	1926	14.0	427	2116	14.3	435
2 Sa 0124	2.1	63	17 Su 0139	2.0	61	2 Tu 0215	2.5	75	17 W 0301	1.6	49
0749	13.2	403	0847	12.8	389	0835	13.2	401	0952	14.1	431
1320	4.5	137	1356	4.1	125	1414	3.8	115	1521	2.8	84
1920	14.4	439	2024	14.0	428	2007	13.9	424	2201	14.5	441
3 Su 0206	2.0	62	18 M 0230	1.6	50	3 W 0256	2.2	68	18 Th 0343	1.4	42
0833	13.3	404	0931	13.2	403	0907	13.5	410	1026	14.4	439
1400	4.3	131	1446	3.6	111	1459	3.2	98	1606	2.4	74
1951	14.2	434	2118	14.1	430	2051	13.9	424	2242	14.6	445
4 M 0245	2.0	60	19 Tu 0318	1.3	39	4 Th 0337	1.9	58	19 F 0423	1.3	41
0908	13.3	406	1010	13.7	417	0938	13.9	423	1057	14.5	442
1439	4.0	122	1535	3.2	98	1546	2.6	80	1651	2.2	68
2023	14.1	431	2211	14.3	435	2142	14.0	427	2318	14.6	446
5 Tu 0323	1.8	55	20 W 0404	1.0	32	5 F 0417	1.6	48	20 Sa 0500	1.5	46
0935	13.5	412	1048	14.1	429	1013	14.4	438	1125	14.5	443
1520	3.6	109	1623	2.9	89	1636	2.1	64	1734	2.1	65
2100	14.2	432	2301	14.4	439	2239	14.1	429	2353	14.6	445
6 W 0401	1.5	47	21 Th 0446	1.0	30	6 Sa 0502	1.4	42	21 Su 0535	1.9	57
1005	13.8	422	1127	14.3	437	1057	14.7	449	1150	14.5	442
1604	3.1	94	1712	2.7	83	1729	1.7	52	1816	2.1	65
2147	14.2	434	2348	14.5	441	● 2339	14.1	430	●	●	●
7 Th 0441	1.2	38	22 F 0529	1.2	36	7 Su 0548	1.5	45	22 M 0025	14.5	442
1039	14.3	435	1206	14.4	440	1151	14.9	453	0609	2.3	70
1652	2.6	80	1802	2.6	80	1825	1.5	45	1219	14.5	442
2243	14.3	435	●	●	●	1857	2.2	66	1857	2.2	66
8 F 0524	1.1	34	23 Sa 0030	14.4	440	8 M 0040	13.9	425	23 Th 0100	14.3	436
1121	14.6	445	0610	1.6	50	0637	1.9	58	0645	2.8	84
1745	2.3	69	1247	14.4	440	1302	14.8	451	1259	14.5	443
● 2347	14.2	433	● 1851	2.6	80	1923	1.5	46	1940	2.2	67
9 Sa 0610	1.2	37	24 Su 0111	14.3	436	9 Tu 0141	13.6	414	24 W 0140	14.1	429
1213	14.7	449	0649	2.2	68	0731	2.7	81	0725	3.2	99
1841	2.1	63	1328	14.4	439	1421	14.7	447	1347	14.5	443
●	●	●	1940	2.6	80	2021	1.7	53	2024	2.3	69
10 Su 0052	14.0	428	25 M 0151	14.1	429	10 W 0247	13.1	398	25 Th 0224	13.7	419
0659	1.7	51	0729	2.9	88	0831	3.5	108	0810	3.7	114
1317	14.7	448	1412	14.4	438	1535	14.6	444	1440	14.6	444
1940	2.0	61	2028	2.6	79	2124	2.1	63	2112	2.4	74
11 M 0156	13.7	417	26 Tu 0233	13.8	421	11 Th 0401	12.6	383	10 Sa 0512	12.7	388
0752	2.5	75	0812	3.5	108	0938	4.3	131	1038	4.3	131
1431	14.6	444	1458	14.4	439	1641	14.4	440	1731	14.4	439
2041	2.0	62	2117	2.6	79	2226	2.4	73	2310	2.9	87
12 Tu 0300	13.2	401	27 W 0319	13.5	412	12 F 0522	12.3	375	11 Su 0624	13.1	398
0850	3.4	103	0900	4.1	125	1049	4.7	142	1145	4.0	123
1543	14.5	441	1544	14.5	441	1742	14.3	436	1829	14.3	437
2143	2.2	66	2207	2.6	78	2329	2.6	79	● 1924	14.3	437
13 W 0408	12.6	384	28 Th 0411	13.2	403	13 Sa 0641	12.5	380	12 M 0012	2.9	88
0954	4.2	128	0955	4.5	138	1156	4.6	139	0723	13.5	411
1646	14.4	438	1631	14.5	443	1840	14.2	432	1242	3.5	108
2245	2.3	69	2258	2.6	79	●	●	●	●	●	●
14 Th 0524	12.2	372	29 F 0508	13.0	396	14 Su 0029	2.6	78	12 Th 0414	13.0	397
1102	4.7	142	1053	4.8	145	0744	12.9	392	1006	4.5	136
1745	14.3	435	1717	14.5	442	1254	4.2	128	1628	14.4	440
2346	2.3	71	2351	2.6	79	1936	14.1	430	2300	2.9	89
15 F 0644	12.1	369	30 Sa 0608	12.9	392	14 W 0125	2.3	71	13 Su 0517	2.7	81
1206	4.7	144	1150	4.8	145	0834	13.3	406	0810	13.9	425
1840	14.1	431	1802	14.4	438	1347	3.7	113	1320	3.0	92
●	●	●	2028	14.2	432	●	●	●	2015	14.4	439
16 31 Su 0042	2.6	79	31 W 0706	12.9	392	14 Th 0142	3.0	92	13 Th 0108	2.7	81
●	●	●	1242	4.6	139	0758	13.1	400	0810	13.9	425
1844	14.2	433	1844	14.2	433	1350	3.3	101	1233	3.2	98
●	●	●	●	●	●	1952	13.7	417	1839	13.6	414
17 31 W 0758	12.9	392	31 W 0758	13.1	400	14 Th 0241	2.0	62	13 Th 0110	3.6	110
●	●	●	1350	3.3	101	0714	12.9	393	0717	13.3	405
1844	14.2	433	1902	13.8	421	1504	2.2	67	1326	2.7	83
●	●	●	2143	14.6	446	2102	14.5	442	1934	13.4	409
18 31 W 0758	12.9	392	31 W 0758	13.1	400	14 Th 0157	2.3	71	13 Th 0110	3.6	110
●	●	●	1350	3.3	101	0852	14.3	435	0717	13.3	405
1844	14.2	433	1952	13.7	417	1420	2.6	78	1326	2.7	83
●	●	●	●	●	●	2102	14.5	442	1934	13.4	409
19 31 W 0758	12.9	392	31 W 0758	13.1	400	14 Th 0157	2.3	71	13 Th 0110	3.6	110
●	●	●	1350	3.3	101	0928	14.5	442	0717	13.3	405
1844	14.2	433	1952	13.7	417	1504	2.2	67	1326	2.7	83
●	●	●	●	●	●	2102	14.5	442	1934	13.4	409
20 31 W 0758	12.9	392	31 W 0758	13.1	400	14 Th 0157	2.3	71	13 Th 0110	3.6	110
●	●	●	1350	3.3	101	0928	14.5	442	0717	13.3	405
1844	14.2	433	1952	13.7	417	1504	2.2	67	1326	2.7	83
●	●	●	●	●	●	2102	14.5	442	1934	13.4	409

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Puerto Ingeniero White, Argentina, 2011

Times and Heights of High and Low Waters

October				November				December			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa 0245	3.0	91	16 Su 0331	2.6	79	1 Tu 0356	2.8	85	1 Th 0402	3.3	102
0831	14.1	429	0950	14.3	437	0938	14.4	438	0943	14.0	426
1509	1.6	50	1601	1.6	50	1634	0.9	28	1641	1.7	51
2124	13.5	413	2224	14.6	446	2257	13.7	418	2245	14.4	440
2 Su 0331	2.6	78	17 M 0401	2.7	83	2 W 0446	2.6	80	17 Th 0436	3.1	95
0912	14.5	441	1000	14.2	434	1106	14.3	436	1018	14.2	432
1600	1.2	37	1636	1.6	50	1728	0.9	27	1715	1.5	46
2217	13.7	419	2248	14.6	445	2355	13.8	422	2314	14.6	445
3 M 0417	2.3	69	18 Tu 0431	2.8	86	3 Th 0542	2.7	82	18 F 0514	2.8	86
1002	14.7	448	1017	14.3	436	1237	14.4	438	1104	14.4	439
1653	0.9	28	1710	1.6	49	1821	1.1	34	1753	1.4	42
2312	13.9	423	2313	14.6	445	2350	14.7	449	2350	14.7	449
4 Tu 0506	2.2	67	19 W 0503	2.8	86	4 F 0058	13.8	422	19 Sa 0559	2.6	78
1113	14.7	447	1048	14.5	441	0641	2.9	89	1158	14.5	443
1748	0.9	27	1745	1.5	47	1347	14.5	443	1835	1.4	43
○			○ 2343	14.6	446	1917	1.6	48	1951	1.6	50
5 W 0010	13.8	422	20 Th 0539	2.8	84	5 Sa 0206	13.8	420	20 Su 0032	14.7	449
0558	2.5	75	1130	14.6	446	0746	3.1	95	0649	2.4	73
1244	14.6	444	1823	1.5	45	1449	14.6	445	1258	14.6	445
1843	1.1	33				2014	2.2	67	1921	1.7	51
6 Th 0113	13.6	416	21 F 0020	14.6	446	6 Su 0315	13.8	421	21 M 0122	14.6	445
0656	3.0	90	0621	2.8	84	0855	3.1	96	0744	2.3	70
1403	14.6	444	1221	14.7	449	1546	14.6	445	1359	14.5	442
1941	1.6	48	1904	1.5	47	2114	2.9	87	2011	2.2	68
7 F 0223	13.4	408	22 Sa 0103	14.5	441	7 M 0419	13.9	425	22 Tu 0219	14.3	437
0801	3.5	106	0709	2.8	86	1002	3.0	90	0843	2.3	69
1510	14.6	445	1320	14.7	448	1642	14.5	442	1459	14.3	435
2040	2.2	66	1951	1.8	55	2216	3.3	102	2106	3.0	92
8 Sa 0338	13.3	404	23 Su 0153	14.2	432	8 Tu 0520	14.2	432	23 W 0320	14.1	429
0912	3.8	115	0804	3.0	90	1103	2.6	79	0945	2.2	68
1612	14.6	444	1421	14.6	445	1735	14.4	439	1557	13.8	422
2142	2.7	83	2042	2.3	71	2317	3.6	109	2205	3.8	115
9 Su 0451	13.4	407	24 M 0250	13.8	421	9 W 0613	14.4	439	24 Th 0421	13.9	423
1024	3.7	112	0905	3.1	93	1157	2.2	67	1045	2.2	66
1711	14.5	442	1521	14.4	438	1828	14.4	438	1656	13.4	408
2247	3.1	95	2137	3.0	92				2307	4.3	132
10 M 0556	13.7	417	25 Tu 0352	13.5	412	10 Th 0014	3.6	109	25 F 0517	13.7	419
1128	3.3	100	1007	3.0	92	0659	14.6	444	1144	2.1	64
1807	14.4	440	1620	14.0	428	1247	1.9	58	1756	13.0	395
2349	3.2	97	2237	3.6	111	○ 1919	14.4	438	●		
11 Tu 0652	14.1	429	26 W 0454	13.4	408	11 Sa 0104	3.4	105	26 Th 0009	4.6	139
1224	2.8	85	1109	2.9	87	0741	14.6	445	0605	13.7	419
1902	14.4	440	1718	13.6	416	1333	1.7	51	1241	2.0	61
○			● 2339	4.0	123	2007	14.4	440	1859	12.7	387
12 W 0045	3.1	93	27 Th 0550	13.4	409	12 Sa 0149	3.3	102	27 Su 0104	4.5	136
0739	14.4	439	1208	2.6	78	0818	14.5	442	0647	13.8	420
1314	2.3	71	1816	13.3	405	1417	1.6	54	1336	1.8	56
1952	14.5	442				2050	14.5	442	2004	12.7	387
13 Th 0134	2.8	86	28 F 0037	4.1	126	13 Su 0228	3.3	102	28 M 0154	4.1	125
0820	14.6	444	0637	13.5	413	0850	14.3	435	0806	14.0	426
1400	2.0	60	1303	2.2	68	1457	1.6	49	1426	1.8	56
2037	14.6	445	1915	13.1	399	2127	14.5	441	2057	14.1	431
14 F 0218	2.6	80	29 M 0131	3.9	120	14 M 0301	3.4	103	29 W 0248	3.7	112
0857	14.6	445	0718	13.8	420	0910	14.0	427	0820	13.9	424
1443	1.7	53	1356	1.9	57	1534	1.7	51	1523	1.3	41
2119	14.7	447	2014	13.1	398	2158	14.4	439	2155	13.3	405
15 Sa 0256	2.6	78	30 Su 0220	3.6	109	15 Tu 0332	3.4	104	30 W 0339	3.2	98
0928	14.5	442	0756	14.1	429	0922	13.9	424	0931	13.9	424
1524	1.6	50	1449	1.5	45	1608	1.7	52	1615	1.1	34
2154	14.7	448	2110	13.2	403	2222	14.4	438	2247	13.7	417
31 M 0308	3.1	96									
0841	14.3	436									
1541	1.1	35									
2203	13.5	411									

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Comodoro Rivadavia, Argentina, 2011

Times and Heights of High and Low Waters

January				February				March			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 Sa	0128	16.2	495	16 Su	0112	14.6	444	1 Tu	0333	16.2	494
0732	4.3	130		0725	5.2	157		0913	5.6	170	
1355	16.8	513		1329	15.3	467		1547	16.4	499	
2020	3.6	109		2014	4.5	137		2220	3.5	108	
2 Su	0242	16.4	501	17 M	0218	14.8	452	2 W	0432	16.8	511
0835	4.7	144		0822	5.4	166		1017	5.5	169	
1501	17.0	519		1428	15.6	474		1643	16.8	513	
2128	3.3	101		2113	4.3	130	●	2322	3.2	99	
3 M	0349	16.9	516	18 Tu	0321	15.5	471	3 Th	0522	17.3	527
0935	5.0	152		0920	5.5	167		1115	5.3	162	
1602	17.4	530		1525	16.1	491		1731	17.2	525	
2233	3.1	93		2211	3.8	117					
4 Tu	0446	17.5	534	19 W	0417	16.3	497	4 F	0007	3.1	93
1035	5.1	156		1016	5.3	163		0607	17.7	539	
1656	17.7	541		1618	16.8	513		1205	5.0	151	
● 2332	2.8	85		2307	3.3	100		1814	17.5	533	
5 W	0539	17.9	547	20 Th	0508	17.2	525	5 Sa	0046	2.9	87
1130	5.1	156		1111	5.0	153		0647	17.9	546	
1745	17.9	547		1709	17.7	538		1248	4.5	138	
				2359	2.7	81		1852	17.7	538	
6 Th	0020	2.6	79	21 F	0556	18.1	552	6 Su	0120	2.7	82
0626	18.2	555		1204	4.5	137		0723	18.1	551	
1219	5.0	151		1757	18.5	563		1329	4.0	122	
1829	18.0	549						1928	17.7	540	
7 F	0102	2.4	74	22 Sa	0047	2.0	61	7 M	0154	2.5	76
0709	18.3	558		0641	18.9	575		0757	18.1	551	
1304	4.6	141		1254	3.8	117		1407	3.5	107	
1910	18.0	548		1844	19.2	586		2003	17.7	538	
8 Sa	0139	2.3	69	23 Su	0131	1.4	43	8 Tu	0228	2.4	72
0748	18.3	558		0725	19.5	594		0829	18.0	549	
1346	4.2	129		1339	3.1	95		1446	3.2	97	
1949	17.8	544		1929	19.8	602		2037	17.5	533	
9 Su	0215	2.1	64	24 M	0210	1.0	30	9 W	0303	2.4	74
0825	18.2	555		0808	19.8	604		0901	17.7	541	
1426	3.8	116		1423	2.5	76		1524	3.1	93	
2026	17.6	536		2017	19.9	607		2114	17.1	522	
10 M	0251	2.0	62	25 Tu	0250	0.8	25	10 Th	0337	2.7	82
0900	17.9	547		0851	19.8	605		0935	17.3	527	
1506	3.5	107		1506	2.1	64		1602	3.1	96	
2103	17.2	525		2104	19.7	600		2153	16.6	505	
11 Tu	0328	2.2	66	26 W	0330	1.0	32	11 F	0413	3.2	97
0935	17.6	536		0935	19.4	592		1010	16.7	509	
1547	3.4	105		1552	2.1	63		1643	3.5	107	
2143	16.7	508	●	2155	19.0	578		2237	15.9	484	
12 W	0406	2.5	77	27 Th	0414	1.7	52	12 Sa	0452	3.8	117
1013	17.1	521		1024	18.7	569		1051	16.0	488	
1632	3.6	110		1643	2.4	73		1729	3.9	120	
● 2226	16.0	488		2250	17.9	546		2328	15.2	463	
13 Th	0446	3.1	96	28 F	0504	2.7	82	13 Su	0539	4.6	139
1054	16.5	502		1117	17.7	539		1140	15.4	469	
1720	4.0	121		1743	3.0	90		1823	4.3	131	
2314	15.3	467		2354	16.8	513					
14 F	0534	3.9	118	29 M	0602	3.8	115	14 M	0029	14.7	449
1140	15.9	484		1218	16.7	510		0634	5.1	156	
1815	4.3	132		1848	3.4	105		1240	15.0	458	
15 Sa	0010	14.8	450					1923	4.4	135	
0628	4.6	140		30 Su	0105	16.0	489	15 Tu	0136	14.7	449
1232	15.5	471		0705	4.7	143		0733	5.4	165	
1914	4.5	138		1328	16.1	492		1345	15.2	462	
				1956	3.7	114		2025	4.3	130	
16 M	0223	15.8	483								
				0809	5.3	162					
				1441	16.1	490					
				2107	3.7	114					

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
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Comodoro Rivadavia, Argentina, 2011

Times and Heights of High and Low Waters

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to the chart datum of soundings.

Comodoro Rivadavia, Argentina, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0426	16.7	510	16 Sa 0512	17.9	547	1 M 0531	17.6	535	1 Th 0020	3.7	114
1108	3.1	95	1140	2.2	66	1214	2.0	62	0628	19.5	593
1712	17.1	520	1757	18.4	562	1814	18.2	556	1250	2.1	65
● 2318	5.1	156	2346	4.6	141	1858	18.0	550	1858	19.7	601
2 Sa 0508	16.9	516	17 Su 0600	17.9	547	2 Tu 0025	3.8	116	17 W 0102	3.4	104
1155	3.0	91	1229	2.2	67	0616	18.1	553	0705	17.3	528
1756	17.4	531	1842	18.5	563	1258	1.7	51	1325	2.2	67
3 Su 0004	5.1	156	18 M 0036	4.5	136	1338	1.4	43	1933	17.9	546
0551	17.2	523	0645	17.8	542	0701	18.6	567	0143	3.1	93
1241	2.8	86	1313	2.2	68	0742	17.1	521	0133	1.3	40
1837	17.7	541	1925	18.3	559	1401	2.3	70	0730	19.6	598
4 M 0051	4.9	149	19 Tu 0123	4.2	128	2006	17.7	538	1354	0.9	27
0634	17.4	531	0728	17.6	535	0747	18.8	573	1954	19.7	599
1323	2.6	78	1353	2.3	70	1417	1.3	39	0153	2.7	82
1920	18.0	549	2004	18.1	553	2020	19.1	581	0223	2.8	85
5 Tu 0134	4.5	137	20 W 0207	3.8	117	0747	18.8	573	0305	1.0	29
0718	17.7	539	0809	17.2	524	0835	18.7	570	0818	18.6	567
1402	2.3	69	1432	2.3	71	1458	1.4	43	0857	16.3	496
2002	18.2	555	2042	17.8	543	2105	18.8	572	1515	2.8	85
6 W 0214	4.0	122	21 Th 0250	3.5	108	0323	2.0	61	0355	1.3	39
0804	17.8	544	0849	16.8	511	0926	18.2	554	0350	2.7	83
1439	2.0	62	1510	2.5	76	1542	1.9	58	1003	17.5	532
2045	18.3	557	2120	17.4	530	● 2152	18.1	553	1612	2.7	82
7 Th 0254	3.5	108	22 F 0334	3.3	102	0323	2.0	61	2114	16.7	508
0852	17.8	543	0931	16.2	494	0938	15.6	476	0452	1.9	57
1517	2.0	61	1551	2.8	86	1555	3.3	100	1106	16.2	494
2131	18.1	553	2159	16.9	514	● 2152	15.9	486	1710	3.7	113
8 F 0340	3.2	98	23 Sa 0419	3.3	102	0516	2.4	73	0452	1.9	57
0943	17.6	535	1016	15.6	474	1125	16.4	501	0938	15.6	476
1602	2.2	68	1635	3.3	101	1735	3.5	107	1555	3.3	100
● 2220	17.8	544	● 2240	16.2	495	2346	16.4	500	● 2152	15.9	486
9 Sa 0434	3.1	94	24 Su 0510	3.5	107	0622	2.7	82	0345	2.8	85
1041	17.1	521	1106	14.9	455	1239	15.8	482	0938	15.6	476
1657	2.8	84	1724	3.9	119	1841	4.2	129	1221	14.9	453
2314	17.5	532	2327	15.6	476	2245	17.3	527	1817	15.3	467
10 Su 0537	3.1	93	25 M 0605	3.7	112	0516	2.4	73	0559	2.5	75
1146	16.6	507	1203	14.5	441	1125	16.4	501	1141	13.7	418
1759	3.3	102	1819	4.4	135	1735	3.5	107	1742	5.0	153
11 M 0013	17.1	521	● 2020	15.2	462	1239	15.8	482	2340	13.6	414
0643	3.0	91	0702	3.7	114	1841	4.2	129	● 2246	2.3	70
1256	16.5	503	1305	14.4	438	2327	15.6	476	0034	14.8	452
1902	3.9	118	1916	4.8	147	0622	2.7	82	0711	2.8	86
12 Tu 0118	17.0	518	27 W 0316	15.0	457	1239	15.8	482	1341	15.1	461
0747	2.8	85	0800	3.6	111	1841	4.2	129	2325	14.4	439
1407	16.7	510	1409	14.7	448	2346	16.4	500	1929	4.8	147
2003	4.2	128	2012	5.0	151	● 2311	3.1	96	● 2246	2.3	70
13 W 0223	17.2	523	28 Th 0214	15.2	462	0209	15.8	482	0157	14.7	449
0849	2.5	77	0855	3.4	103	0839	2.6	80	0827	2.8	84
1513	17.2	525	1508	15.4	468	1505	16.3	496	1450	15.6	476
2101	4.4	134	2106	4.9	150	2050	4.7	142	2042	4.7	142
14 Th 0324	17.5	532	29 F 0309	15.6	476	0209	15.8	482	0157	14.7	449
0947	2.3	70	0949	3.0	92	0839	2.6	80	0827	2.8	84
1612	17.8	543	1600	16.1	492	1505	16.3	496	1450	15.6	476
2157	4.5	138	2158	4.8	146	2050	4.7	142	2042	4.7	142
15 F 0419	17.8	542	30 Sa 0359	16.2	495	0209	15.8	482	0157	14.7	449
1046	2.2	67	1039	2.7	82	0839	2.6	80	0827	2.8	84
1707	18.2	556	1646	16.9	516	1505	17.6	535	1450	15.6	476
● 2252	4.6	141	● 2249	4.6	139	2247	4.3	131	2042	4.7	142
16 Su 0444	16.9	515	31 Su 0444	16.9	515	0415	16.7	510	0034	14.7	449
1128	2.4	72	1128	2.4	72	1044	2.1	65	0607	17.2	523
1731	17.7	538	1731	17.7	538	1654	17.6	515	1222	2.2	68
2338	4.2	129	2338	4.2	129	2247	4.3	131	1828	17.8	544

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Comodoro Rivadavia, Argentina, 2011

Times and Heights of High and Low Waters

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time. Heights are referred to the chart datum of soundings.

Punta Loyola, Argentina, 2011

Times and Heights of High and Low Waters

January				February				March						
	Time	Height			Time	Height			Time	Height				
	h m	ft cm		h m	ft cm			h m	ft cm					
1 Sa	0210	11.8 360	16 Su	0044	15.1 460	1 Tu	0354	9.8 300	16 W	0244	10.8 330	1 Tu	0241	12.5 380
	0757	35.8 1090		0651	32.5 990		0943	36.7 1120		0839	35.8 1090		0838	34.1 1040
	1448	9.5 290		1317	12.8 390		1623	5.9 180		1523	7.2 220		1511	8.5 260
	2044	35.8 1090		1937	32.5 990		2215	37.7 1150		2120	37.4 1140		2110	36.1 1100
2 Su	0312	10.8 330	17 M	0148	13.5 410	2 W	0441	7.9 240	17 Th	0346	7.5 230	2 W	0333	10.2 310
	0856	36.7 1120		0752	34.1 1040		1028	37.4 1140		0938	38.4 1170		0928	35.8 1090
	1547	7.5 230		1426	10.5 320		1707	4.6 140		1620	3.9 120		1559	6.6 200
	2139	37.1 1130		2037	34.8 1060		● 2255	38.4 1170		2212	39.7 1210		2153	37.4 1140
3 M	0407	9.5 290	18 Tu	0254	11.2 340	3 Th	0524	6.9 210	18 F	0440	4.9 150	3 Th	0417	8.2 250
	0947	37.4 1140		0852	36.1 1100		1107	37.7 1150		1031	41.0 1250		1010	36.7 1120
	1639	5.9 180		1532	7.5 230		1748	3.9 120		1711	1.6 50		1641	5.6 170
	2228	38.1 1160		2134	37.1 1130		2330	38.4 1170		○ 2300	41.7 1270		2230	38.1 1160
4 Tu	0457	8.2 250	19 W	0357	8.5 260	4 F	0602	6.6 200	19 Sa	0531	3.0 90	4 F	0458	7.2 220
	1035	38.1 1160		0949	38.4 1170		1140	37.4 1140		1120	42.3 1290		1045	37.1 1130
	1726	4.6 140		1633	4.9 150		1824	4.6 140		1800	0.3 10		1719	5.2 160
	● 2311	38.4 1170		○ 2227	39.0 1190					2345	42.7 1300		● 2300	38.1 1160
5 W	0543	7.5 230	20 Th	0455	5.9 180	5 Sa	0000	37.7 1150	20 Su	0619	2.0 60	5 Sa	0532	6.9 210
	1118	38.1 1160		1042	40.4 1230		0634	6.9 210		1206	43.0 1310		1114	37.1 1130
	1810	3.9 120		1728	2.6 80		1210	36.7 1120		1845	0.3 10		1750	5.9 180
	2351	38.1 1160		2317	40.7 1240		1853	5.6 170					2326	37.7 1150
6 Th	0626	7.2 220	21 F	0548	4.3 130	6 Su	0028	37.1 1130	21 M	0029	42.7 1300	6 Su	0559	7.2 220
	1156	37.4 1140		1133	41.3 1260		0659	7.9 240		0705	2.0 60		1140	36.7 1120
	1850	4.3 130		1819	1.0 30		1239	36.1 1100		1252	42.3 1290		1814	6.9 210
							1917	7.2 220		1932	2.0 60		2352	37.4 1140
7 F	0027	37.4 1140	22 Sa	0004	41.3 1260	7 M	0056	36.4 1110	22 Tu	0112	42.0 1280	7 M	0622	7.5 230
	0703	7.5 230		0638	3.3 100		0722	8.9 270		0750	3.6 110		1210	36.4 1110
	1231	36.7 1120		1223	42.0 1280		1311	35.1 1070		1336	41.0 1250		1837	8.2 250
	1926	5.6 170		1907	0.7 20		1940	8.9 270		2016	4.3 130			
8 Sa	0058	36.4 1110	23 Su	0052	41.3 1260	8 Tu	0127	35.4 1080	23 W	0154	40.4 1230	8 Tu	0021	37.1 1130
	0734	8.5 260		0726	3.3 100		0749	10.2 310		0835	5.9 180		0647	8.2 250
	1305	35.4 1080		1310	41.3 1260		1344	34.1 1040		1421	38.7 1180		1242	35.8 1090
	1954	7.2 220		1954	1.6 50		2009	10.5 320		2100	7.5 230		1906	9.2 280
9 Su	0130	35.4 1080	24 M	0137	40.7 1240	9 W	0200	34.8 1060	24 Th	0236	38.1 1160	9 W	0054	36.7 1120
	0758	9.8 300		0813	4.6 140		0821	11.2 340		0921	8.5 260		0647	8.2 270
	1339	34.1 1040		1358	40.0 1220		1420	33.1 1010		1509	36.1 1100		1316	35.1 1070
	2018	9.2 280		2041	3.9 120		2043	12.5 380		○ 2147	10.8 330		1937	10.5 320
10 M	0203	34.1 1040	25 Tu	0223	39.4 1200	10 Th	0234	33.8 1030	25 F	0321	35.8 1090	10 Th	0127	36.1 1100
	0824	11.5 350		0900	6.6 200		0857	12.5 380		1016	11.2 340		0752	9.8 300
	1415	32.8 1000		1447	38.1 1160		1500	32.2 980		1607	33.8 1030		1351	34.4 1050
	2045	10.8 330		2129	6.9 210		2122	14.1 430		2247	13.8 420		2014	11.8 360
11 Tu	0238	33.1 1010	26 W	0310	37.4 1140	11 F	0314	32.8 1000	26 Sa	0415	33.5 1020	11 F	0200	35.1 1070
	0856	12.8 390		0950	9.2 280		0939	13.5 410		1141	12.8 390		0829	10.8 330
	1455	31.5 960		1540	35.8 1090		1546	31.2 950		1736	31.8 970		1430	33.5 1020
	2120	12.8 390		○ 2221	10.2 310		○ 2208	15.4 470					2052	13.1 400
12 W	0318	32.2 980	27 Th	0402	35.4 1080	12 Sa	0400	31.8 970	27 Su	0019	15.4 470	12 Sa	0236	34.1 1040
	0934	14.1 430		1049	11.5 350		1031	14.1 430		0541	31.8 970		0910	11.8 360
	1539	30.5 930		1642	33.8 1030		1645	30.5 930		1309	12.5 380		1515	32.5 990
	● 2201	14.4 440		2324	12.8 390		2304	16.1 490		1917	32.5 990		● 2137	14.4 440
13 Th	0402	31.5 960	28 F	0502	33.8 1030	13 Su	0501	31.5 960	28 M	0139	14.4 440	13 Su	0319	33.1 1010
	1018	14.8 450		1206	12.8 390		1135	14.4 440		0736	32.5 990		1001	12.8 390
	1631	29.9 910		1803	32.5 990		1757	30.5 930		1416	10.5 320		1612	31.5 960
	2249	15.4 470								2020	34.1 1040		2234	15.4 470
14 F	0452	31.2 950	29 Sa	0041	14.1 430	14 M	0012	15.7 480	14 M	0419	31.8 970	14 M	0109	14.4 440
	1112	15.1 460		0620	33.1 1010		0615	31.5 960		0628	34.1 1040		0710	31.5 960
	1729	29.9 440		1329	12.1 370		1255	13.1 400		1729	30.8 940		1344	11.2 340
	2344	15.7 480		1931	33.1 1010		1912	31.8 970		2353	15.4 470		1950	33.5 1020
15 Sa	0550	31.5 960	30 Su	0157	13.5 410	15 Tu	0131	13.8 420	15 Tu	0547	31.2 950	15 Tu	0210	13.1 400
	1212	14.4 440		0746	33.8 1030		0731	33.1 1010		1246	12.5 380		0813	32.8 1000
	1834	30.8 940		1437	10.2 310		1416	10.5 320		2021	34.4 1050		1439	9.8 300
				2037	34.8 1060								2039	35.1 1070
31 M	0300	11.8 360	31 M	0851	35.1 1070								0303	11.2 340
				1533	7.9 240									

Punta Loyola, Argentina, 2011

Times and Heights of High and Low Waters

April				May				June				
	Time	Height			Time	Height			Time	Height		
	h m	ft cm		h m	ft cm		h m	ft cm		h m	ft cm	
1 F	0348	9.8 300		16 Sa	0306	7.5 230	1 Su	0333	11.5 350	16 M	0341	7.2 220
	0941	35.1 1070			0903	38.1 1160		0924	33.5 1020		0934	38.1 1160
	1607	8.2 250			1536	5.2 160		1543	11.5 350		1607	7.2 220
	2153	36.7 1120			2127	39.7 1210		2129	35.4 1080		2150	39.7 1210
2 Sa	0425	8.9 270		17 Su	0400	5.6 170	2 M	0359	10.5 320	17 Tu	0436	5.6 170
	1012	35.4 1080			0954	40.0 1220		0956	34.1 1040		1025	39.0 1190
	1640	8.2 250			1627	4.3 130		1612	10.8 330		1659	6.9 210
	2219	37.1 1130		O	2214	41.3 1260		2203	36.1 1100		2237	40.4 1230
3 Su	0454	8.5 260		18 M	0451	3.9 120	3 Tu	0432	9.5 290	18 W	0529	4.6 140
	1038	35.8 1090			1042	41.0 1250		1031	35.1 1070		1113	39.4 1200
	1706	8.2 250			1716	3.9 120		1649	10.5 320		1750	6.9 210
	● 2245	37.1 1130			2258	42.0 1280	●	2239	36.7 1120		2321	40.4 1230
4 M	0518	8.2 250		19 Tu	0541	3.3 100	4 W	0509	8.5 260	19 Th	0619	3.9 120
	1107	36.1 1100			1128	41.3 1260		1109	35.8 1090		1200	39.0 1190
	1732	8.9 270			1804	4.3 130		1728	10.2 310		1839	7.2 220
	2316	37.4 1140			2341	42.0 1280		2317	37.4 1140			
5 Tu	0544	8.2 250		20 W	0629	3.0 90	5 Th	0550	7.5 230	20 F	0004	39.7 1210
	1139	36.1 1100			1213	40.7 1240		1149	36.4 1110		0707	3.9 120
	1801	9.2 280			1851	5.6 170		1810	9.8 300		1245	38.4 1170
	2348	37.4 1140						2357	37.7 1150		1925	7.5 230
6 W	0617	7.9 240		21 Th	0021	41.0 1250	6 F	0633	6.9 210	21 Sa	0047	38.7 1180
	1214	36.1 1100			0716	3.6 110		1230	36.7 1120		0753	4.6 140
	1835	9.5 290			1257	39.7 1210		1854	9.5 290		1329	37.4 1140
					1936	7.2 220				2009	8.5 260	
7 Th	0022	37.4 1140		22 F	0102	39.7 1210	7 Sa	0037	37.4 1140	22 Su	0129	37.1 1130
	0652	7.9 240			0802	4.9 150		0718	6.9 210		0837	5.9 180
	1251	36.1 1100			1341	38.1 1160		1313	36.4 1110		1414	36.1 1100
	1912	10.2 310			2019	8.9 270		1939	9.8 300		2051	9.8 300
8 F	0058	37.1 1130		23 Sa	0142	37.7 1150	8 Su	0118	37.1 1130	23 M	0211	35.4 1080
	0730	8.2 250			0847	6.9 210		0805	7.2 220		0920	7.5 230
	1329	35.8 1090			1426	36.1 1100		1358	36.1 1100		1500	34.8 1060
	1952	11.2 340			2104	10.8 330		2026	10.2 310		2131	11.5 350
9 Sa	0135	36.4 1110		24 Su	0225	35.8 1090	9 M	0203	36.1 1100	24 Tu	0300	33.8 1030
	0810	8.9 270			0939	8.9 270		0855	7.9 240		0946	6.6 200
	1410	34.8 1060			1519	34.1 1040		1449	35.1 1070		1500	36.1 1100
	2034	12.1 370		O	2155	12.8 390		2117	11.2 340		2207	9.8 300
10 Su	0213	35.1 1070		25 M	0316	33.5 1020	10 Tu	0254	35.1 1070	24 F	0354	35.4 1080
	0856	10.2 310			1042	10.8 330		0954	8.9 270		0947	8.2 250
	1457	33.8 1030			1629	32.5 990		1548	34.1 1040		1549	33.5 1020
	2121	13.1 400			2306	14.1 430	O	2218	12.1 370	O	2212	13.1 400
11 M	0257	33.8 1030		26 Tu	0425	31.2 950	11 W	0400	33.8 1030	26 Sa	0457	30.5 930
	0951	11.2 340			1152	11.8 360		1101	9.8 300		0612	11.5 350
	1556	32.5 990			1757	32.2 980		1658	33.8 1030		0611	34.1 1040
	● 2221	14.1 430						2329	12.5 380		1247	10.5 320
12 Tu	0400	32.5 990		27 W	0020	14.8 450	12 Th	0521	33.1 1010	27 M	0601	29.9 910
	1108	12.1 370			0618	30.5 930		1211	10.2 310		1222	14.1 430
	1714	32.2 980			1257	12.1 370		1809	34.1 1040		1829	31.8 970
	2344	14.1 430			1903	32.5 990					1941	36.1 1100
13 W	0534	31.8 970		28 Th	0125	14.1 430	13 F	0039	11.8 360	28 Tu	0043	15.1 460
	1233	11.5 350			0729	31.2 950		0638	33.8 1030		0658	30.2 920
	1835	33.1 1010			1352	12.1 370		1316	9.5 290		1307	14.4 440
					1952	33.1 1010		1912	35.4 1080		1915	32.2 980
14 Th	0103	12.8 390		29 F	0219	13.1 400	14 Sa	0144	10.5 320	29 W	0130	14.4 440
	0701	33.1 1010			0818	31.8 970		0743	35.4 1080		0747	30.8 940
	1343	9.5 290			1438	11.8 360		1415	8.9 270		1455	10.5 320
	1941	35.1 1070			2029	34.1 1040		2009	37.1 1130		2037	37.1 1130
15 F	0208	10.2 310		30 Sa	0302	12.5 380	15 Su	0244	8.9 270	30 W	0426	6.9 210
	0807	35.8 1090			0855	32.8 1000		0841	37.1 1130		1014	37.4 1140
	1442	7.2 220			1514	11.5 350		1512	7.9 240		1646	8.9 270
	2037	37.7 1150			2059	34.8 1060		2101	38.7 1180		2223	38.4 1170
31 Tu	0302	12.1 370		31 Tu	0914	33.1 1010	31 Tu	0302	12.1 370	29 W	0217	12.5 380
					1522	12.8 390		1351	14.1 430		0837	32.5 990
					2123	35.1 1070		1958	33.1 1010		1442	13.5 410
											2048	34.4 1050

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Punta Loyola, Argentina, 2011

Times and Heights of High and Low Waters

July				August				September			
Time	Height	Time	Height	Time	Height	Time	Height	Time	Height	Time	Height
h m	ft	cm	h m	ft	cm	h m	ft	cm	h m	ft	cm
1 F 0419	8.2	250	16 Sa 0552	3.9	120	1 M 0554	2.3	70	1 Th 0001	37.4	1140
1020	35.8	1090	1137	38.1	1160	1141	40.0	1220	0644	4.9	150
1642	9.8	300	1809	6.9	210	1812	4.3	130	1219	37.4	1140
● 2232	37.4	1140	2346	38.1	1160	2359	41.0	1250	1854	7.2	220
2 Sa 0518	5.9	180	17 Su 0635	3.6	110	2 Tu 0643	1.3	40	17 W 0032	36.4	1110
1110	37.4	1140	1216	38.1	1160	1229	41.0	1250	0713	6.6	200
1737	7.9	240	1851	6.6	200	1901	3.6	110	1248	36.7	1120
2323	38.7	1180							1920	8.5	260
3 Su 0611	3.9	120	18 M 0025	37.7	1150	3 W 0048	41.7	1270	18 Th 0103	35.4	1080
1159	38.7	1180	0715	3.9	120	0731	1.3	40	0737	8.2	250
1829	6.2	190	1252	37.4	1140	1315	41.0	1250	1318	35.8	1090
			1928	7.2	220	1949	3.9	120	1945	9.8	300
4 M 0012	39.7	1210	19 Tu 0101	36.7	1120	4 Th 0136	41.0	1250	19 F 0136	34.4	1050
0702	2.6	80	0749	5.2	160	0817	2.6	80	0802	10.2	310
1248	39.4	1200	1325	36.7	1120	1401	40.4	1230	1351	34.8	1060
1920	5.2	160	1958	8.2	250	2036	5.2	160	2012	10.8	330
5 Tu 0103	40.0	1220	20 W 0134	35.8	1090	5 F 0224	39.7	1210	20 Sa 0211	33.1	1010
0750	2.3	70	0817	7.2	220	0904	5.2	160	0833	11.8	360
1336	39.4	1200	1357	35.8	1090	1447	39.0	1190	1426	34.1	1040
2008	5.6	170	2023	9.8	300	2124	7.2	220	2046	12.1	370
6 W 0152	39.7	1210	21 Th 0208	34.4	1050	6 Sa 0314	37.7	1150	21 F 0250	32.2	980
0838	3.3	100	0841	9.2	280	0953	8.2	250	0909	13.5	410
1424	39.0	1190	1430	34.8	1060	1535	37.4	1140	1503	33.1	1010
2057	6.6	200	2049	11.2	340	● 2218	9.5	290	● 2126	13.1	400
7 Th 0243	38.7	1180	22 F 0246	33.1	1010	7 Su 0410	35.4	1080	21 W 0250	32.2	980
0927	4.9	150	0909	11.2	340	1048	11.2	340	0909	14.8	450
1514	38.1	1160	1506	33.8	1030	1629	35.4	1080	1545	32.2	980
2147	8.2	250	2122	12.8	390	2324	11.5	350	2211	14.1	430
8 F 0337	37.1	1130	23 Sa 0326	31.8	970	8 M 0518	33.8	1030	23 Tu 0423	30.5	930
1018	7.5	230	0943	13.1	400	1157	13.1	400	1039	15.7	480
1607	36.7	1120	1546	32.8	1000	1735	34.1	1040	1636	31.5	960
● 2242	10.2	310	● 2201	13.8	420				2306	14.1	430
9 Sa 0436	35.4	1080	24 W 0412	30.5	930	9 Tu 0045	12.1	370	24 F 0525	30.2	920
1115	9.8	300	1026	14.8	450	0643	33.1	1010	1137	15.7	480
1704	35.8	1090	1631	31.8	970	1315	13.8	420	1739	31.5	960
2346	11.5	350	2247	14.8	450	1859	33.5	1020			
10 Su 0543	34.1	1040	25 M 0504	29.9	910	10 W 0200	10.8	330	25 Th 0012	13.8	420
1219	11.8	360	1114	15.7	480	0800	33.8	1030	0636	31.2	950
1807	34.8	1060	1720	31.5	960	1425	12.8	390	1246	14.4	440
			2340	14.8	450	2015	34.4	1050	1852	32.2	980
11 M 0058	11.8	360	26 Tu 0602	29.9	910	11 Th 0302	8.9	270	26 F 0132	11.8	360
0656	33.8	1030	1209	15.7	480	0859	35.4	1080	0745	32.8	1000
1329	12.8	390	1818	31.5	960	1523	10.8	330	1400	12.5	380
1915	34.8	1060				2114	35.8	1090	2003	34.1	1040
12 Tu 0211	11.2	340	27 W 0040	14.1	430	12 F 0355	6.9	210	27 Sa 0244	9.2	280
0808	34.1	1040	0705	30.8	940	0949	36.7	1120	0846	35.4	1080
1438	12.1	370	1309	15.1	460	1615	8.9	270	1507	9.5	290
2021	35.4	1080	1919	32.5	990	2203	37.1	1130	2105	36.7	1120
13 W 0318	9.2	280	28 Th 0147	12.5	380	12 F 0355	6.9	210	27 M 0457	5.2	160
0910	35.4	1080	0807	32.5	990	0949	36.7	1120	1040	38.1	1160
1539	11.2	340	1415	13.5	410	1615	8.9	270	1714	7.2	220
2122	36.4	1110	2020	34.1	1040	2203	37.1	1130	● 2257	37.4	1140
14 Th 0415	7.2	220	29 F 0258	10.2	310	14 W 0528	4.3	130	12 F 0457	5.2	160
1005	36.4	1110	0906	34.4	1050	1112	38.1	1160	1006	41.0	1250
1634	9.5	290	1523	10.8	330	1744	6.6	200	1637	3.9	120
2215	37.4	1140	2120	36.1	1100	2326	37.7	1150	● 2231	41.7	1270
15 F 0506	5.2	160	30 Sa 0404	7.2	220	14 Th 0608	4.3	130	12 F 0415	3.6	110
1053	37.4	1140	1001	36.7	1120	1148	38.1	1160	1006	41.0	1250
1724	7.9	240	1625	8.5	260	1823	6.6	200	1637	3.9	120
● 2303	37.7	1150	● 2216	38.1	1160	● 2251	41.3	1260	● 2231	41.7	1270
16 W 0501	4.6	140	31 Su 0501	4.6	140	14 Th 0640	3.6	110	12 F 0415	3.6	110
1052	38.7	1180	1052	38.7	1180	1139	37.4	1140	1006	41.0	1250
1720	5.9	180	1720	5.9	180	1816	8.2	250	1637	3.9	120
			2309	40.0	1220	2358	36.1	1100	1840	8.9	270

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

Punta Loyola, Argentina, 2011

Times and Heights of High and Low Waters

October				November				December			
	Time	Height			Time	Height			Time	Height	
1 Sa	0052	40.7	1240	16 Su	0034	34.4	1050	1 Tu	0210	36.1	1100
	0732	5.6	170		0655	11.8	360		0854	10.2	310
	1306	40.4	1230		1241	35.1	1070		1413	35.8	1090
	1956	5.2	160		1912	9.8	300		2129	8.2	250
2 Su	0139	38.7	1180	17 M	0112	33.8	1030	2 W	0307	34.4	1050
	0818	7.9	240		0734	12.5	380		0949	11.8	360
	1349	38.4	1170		1318	34.4	1050		1508	33.8	1030
	2046	7.2	220		1954	10.5	320	○	2229	9.5	290
3 M	0229	36.7	1120	18 Tu	0153	33.1	1010	3 Th	0416	33.5	1020
	0910	10.2	310		0816	13.1	400		1052	12.8	390
	1435	36.4	1110		1357	33.8	1030		1625	32.5	990
	2144	9.2	280		2039	11.2	340		2332	10.5	320
4 Tu	0326	34.4	1050	19 W	0238	32.5	990	4 F	0533	33.1	1010
	1009	12.5	380		0903	13.8	420		1158	13.1	400
	1529	34.1	1040		1441	33.1	1010		1757	32.2	980
	2254	10.5	320	○	2132	11.8	360				
5 W	0444	33.1	1010	20 Th	0333	31.8	970	5 Sa	0033	10.5	320
	1123	13.5	410		0958	14.1	430		0637	33.8	1030
	1651	32.5	990		1539	32.2	980		1300	12.5	380
					2238	12.1	370		1904	32.8	1000
6 Th	0007	10.8	330	21 F	0442	31.8	970	6 Su	0129	10.5	320
	0613	33.1	1010		1108	13.8	420		0729	34.4	1050
	1235	13.5	410		1700	32.2	980		1355	11.8	360
	1835	32.5	990		2355	11.5	350		1957	33.5	1020
7 F	0112	10.2	310	22 Sa	0558	32.8	1000	7 M	0218	10.5	320
	0717	34.1	1040		1223	12.5	380		0810	35.1	1070
	1337	12.1	370		1823	33.1	1010		1442	11.2	340
	1939	33.8	1030			2039	34.1	1040		2039	37.1	1130
8 Sa	0208	8.9	270	23 Su	0104	9.8	300	8 Tu	0300	10.5	320
	0808	35.4	1080		0705	34.8	1060		0845	35.8	1090
	1431	10.5	320		1329	10.5	320		1522	10.5	320
	2029	35.1	1070		1931	35.8	1090		2113	34.8	1060
9 Su	0257	7.9	240	24 M	0205	7.9	240	9 W	0333	10.8	330
	0852	36.7	1120		0802	37.4	1140		0914	36.1	1100
	1519	9.2	280		1428	8.2	250		1551	10.2	310
	2114	36.1	1100		2029	38.1	1160		2143	34.8	1060
10 M	0341	7.5	230	25 Tu	0300	5.9	180	10 Th	0400	10.8	330
	0929	37.4	1140		0854	39.4	1200		0947	36.4	1110
	1601	8.5	260		1523	6.2	190		1618	9.8	300
	2151	36.4	1110		2121	39.7	1210	○	2216	35.1	1070
11 Tu	0419	7.5	230	26 W	0352	4.9	150	11 F	0431	11.2	340
	1001	37.4	1140		0942	41.0	1250		1021	36.4	1110
	1637	8.2	250		1617	4.6	140		1650	9.5	290
	2222	36.4	1110	●	2211	41.0	1250		2251	35.1	1070
12 W	0452	8.2	250	27 Th	0444	4.6	140	12 Sa	0508	11.2	340
	1029	37.4	1140		1029	41.7	1270		1058	36.1	1100
	1706	8.5	260		1709	3.9	120		1729	9.2	280
	2252	36.1	1100		2259	41.3	1260		2329	35.1	1070
13 Th	0519	9.2	280	28 F	0535	4.9	150	13 Su	0548	11.2	340
	1059	37.1	1130		1114	41.7	1270		1136	36.1	1100
	1732	8.9	270		1801	3.6	110		1811	8.9	270
	2323	35.4	1080		2346	40.7	1240				
14 F	0547	10.2	310	29 Sa	0625	5.6	170	14 M	0009	35.1	1070
	1131	36.4	1110		1158	41.0	1250		0631	11.2	340
	1801	9.2	280		1852	4.3	130		1216	35.8	1090
	2358	35.1	1070						1854	8.5	260
15 Sa	0619	10.8	330	30 Su	0033	39.4	1200	15 Tu	0051	34.8	1160
	1206	35.8	1090		0714	6.9	210		0716	11.2	340
	1835	9.5	290		1242	39.4	1200		1256	35.4	1080
					1943	4.9	150		1942	8.5	260
31 M	0121	38.1	1160	31 M	0121	38.1	1160				
	0803	8.5	260		0803	8.5	260				
	1326	37.7	1150		1326	37.7	1150				
	2034	6.6	200		2034	6.6	200				

Time meridian 45° W. 0000 is midnight. 1200 is noon. Times are not adjusted for Daylight Saving Time.
Heights are referred to the chart datum of soundings.

EXTRA TIDES, 2011

TABLE 2. - TIDAL DIFFERENCES AND OTHER CONSTANTS

EXPLANATION OF TABLE

The publication of full daily predictions is necessarily limited to a comparatively small number of stations. Tide predictions for many other places, however, can be obtained by applying certain differences to the predictions for the reference stations in table 1. The following pages list the places called "subordinate stations" for which such predictions can be made, and the differences or ratios to be used. These differences or ratios are to be applied to the predictions for the proper reference station which is listed in table 2 in boldface type above the differences for the subordinate station. The stations in this table are arranged in geographical order. The index to stations at the end of this volume will assist in locating a particular station.

Caution.—The time and height differences listed in Table 2 are average difference derived from comparisons of simultaneous tide observations at the subordinate location and its reference station. Because these figures are constant, they may not always provide for the daily variations of the actual tide, especially if the subordinate station is some distance from the reference station. Therefore, although the application of the time and height differences will generally provide reasonable accurate approximations, they cannot result in predictions as accurate as those listed for the reference stations which are based upon much larger periods of analyses and which do provide for daily variations.

Time differences.—To determine the time of high water or low water at any station listed in this table there is given in the columns headed "Differences, Time" the hours and minutes to be added to or subtracted from the time of high or low water at some reference station. A plus (+) sign indicates that the tide at the subordinate station is later than at the reference station and the difference should be added; a minus (-) sign indicates that it is earlier and should be subtracted.

To obtain the tide at a subordinate station on any date, apply the difference to the tide at the reference station for that same date. In some cases, however, to obtain an a.m. tide it may be necessary to use the preceding day's p.m. tide at the reference station (or to obtain a p.m. tide it may be necessary to use the following day's a.m. tide). For example, if a high water at a reference station occurs at 0200 on July 17, and the tide at the subordinate station occurs 5 hour earlier, the high water at the subordinate station will occur at 2100 on July 16. For the second case, if a high water occurs at a reference station at 2200 on July 2, and the tide at the subordinate station occurs 3 hours later, then high water will occur at 0100 on July 3 at the subordinate station. The necessary allowance for change in date when the international date line is crossed is included in the time difference. In such cases use the same date at the reference station as desired for the subordinate station as explained above.

The results obtained by the application of the time differences will be in the kind of time indicated by the time meridian shown above the name of the subordinate station. Differences in time meridians between a subordinate station and its reference station have been accounted for and no further adjustment by the reader is necessary. Summer or daylight-saving time is not used in the tide tables.

Height differences.—The height of the tide, referred to the datum of charts, is obtained by means of the height differences or ratios. A plus (+) sign indicates that the difference should be added to the height at the reference station, and a minus (-) sign indicates that it should be subtracted. All height differences, ranges, and levels in Table 2 are in feet but may be converted to centimeters by the use of table 7.

Ratio.—For some stations, use of predicted height difference would give unsatisfactory predictions. In such cases they have been omitted and one or two ratios are given (*). Where two ratios are given, one in the "height of high water" column and one in the "height of low water" column, the high waters and

TABLE 2. - TIDAL DIFFERENCES AND OTHER CONSTANTS

low waters at the reference station should be multiplied by these respective ratios. Where only one is given, the omitted ratio is either unreliable or unknown.

For some subordinate stations there is given in parentheses a ratio as well as a correction in feet. In those instances, each predicted high and low water at the reference station should first be multiplied by the ratio and then the correction in feet is added to or subtracted from each product as indicated.

As an example, at Port of Spain, Trinidad, the values in the time and height difference columns in Table 2 are given as -0 44, -1 12, and (*0.31 + 1.4) as referred to the reference station at Punta Gorda, Venezuela. If we assume that the tide predictions in column (1) below are those of Ketchikan on a particular day, application of the time and height correction in columns (2) and (3) would result in the tide predictions for Treadwell Bay in column (4).

(1)		(2)		(3)		(4)	
Time h.m.	Height ft.	Time Corrections	Height Corrections	Time h.m.	ft.	Height centimeters	
0326	0.6	-1 12	x0.31 + 1.4	0214	1.6	49	
0900	5.1	-0 44	x0.31 + 1.4	0816	3.0	91	
1608	-0.3	-1 12	x0.31 + 1.4	1456	1.3	40	
2148	5.4	-0 44	x0.31 + 1.4	2104	3.1	94	

Range. —The *mean range* is the difference in height between mean high water (MHW) and mean low water (MLW). The *spring range* is the average semidiurnal range occurring semimonthly as a result of the Moon being new or full. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of not practical significance where the type of tide is diurnal. Where the tide is chiefly of the diurnal type the table gives the *diurnal range*, which is the difference in height between mean higher high water and mean lower low water.

Datum. — The datum of the predictions obtained through the height differences or ratios is also the datum of the largest scale chart for the locality. To obtain the depth at the time of high or low water, the predicted height should be added to the depth on the chart unless such height is negative (-), when it should be subtracted. To find the height at times between high and low water see table 3. On some charts the depths are given in meters or centimeters and in such cases the heights of the tide can be converted to other units by the use of table 7. Chart datums for the portion of the world covered by these tables are approximately as follows: *Mean lower low water* for the Pacific coast of the United States, Alaska, and the Hawaiian Islands, *mean low water springs* for Central American and Mexico. For the rest of the area covered by these tables the datums generally used are approximately *mean low water springs*, *Indian spring low water*, or the *lowest possible low water*.

Mean Tide Level (Half-Tide Level). — The mean tide level is a plane midway between mean low water and mean high water. Tabular values are reckoned from chart depth.

Observations Supporting Predictions. — All tidal predictions made by the National Ocean Service are based upon observations taken at the location in question. For most reference stations these observations often are of a continuing nature. As such, they are used to quality control the predictions and to update the harmonic constants used in generating annual predictions. For subordinate stations, the age and duration of their observations vary from a few days of observation taken decades ago to the most recent survey data.

The precision with which the position, ranges and mean tide level are reported in Table 2 is an indication of the age and analytical history of the supporting observation. Stations whose position is reported to the nearest tenth minute of latitude and longitude and whose ranges and mean tide level are reported to the nearest hundredth foot are supported by the most recent observations, analyzed with regard to current chart datums and the 1960-1978 National Tidal Datum Epoch. Stations whose position

TABLE 2. - TIDAL DIFFERENCES AND OTHER CONSTANTS

is reported to the nearest tenth minute but whose ranges and mean tide level are reported to the nearest tenth foot are typically supported by observations taken in the 1960's and 1970's with analysis based upon the 1941-1959 National Tidal Datum Epoch. Finally, stations whose positions are reported to the nearest minute and whose ranges and mean tide level are reported to the nearest tenth foot indicated either older supporting observations or simply data not yet reviewed and entered into the Tables with full published precision. NOS is in the continuous process of updating the Tables with all available data.

Old observations are not in and of themselves an indication of poor present predictions. Certain coastal areas do not undergo much human or natural modification while other coastal areas are subject to nearly constant modification by both agents. Local knowledge of conditions is still very important to the wise use of these astronomical predictions.

NOTE. — Dashes are entered in the place of data which are unknown, unreliable, or not applicable.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	ARCTIC ARCHIPELAGO Time meridian, local			North	West	h m	h m	ft	ft	ft	
on Hampton Roads, p.120											
1	Princess Royal Islands	72° 45'	117° 45'	+3 14	+3 32	0.0	+0.2	2.3	3.0	1.4	
3	Mercy Bay, Banks Island	74° 07'	118° 15'	+4 05	+4 05	-0.8	+0.1	1.6	2.0	1.0	
5	Winter Harbour, Melville Island	74° 47'	110° 48'	+4 44	+4 40	+0.2	+0.2	2.5	3.2	1.6	
7	Bridport Inlet, Melville Island	74° 56'	108° 49'	+4 33	+4 33	+1.3	+1.0	2.8	4.1	2.5	
9	Byam Martin Island	75° 10'	103° 34'	+3 42	+3 42	+1.8	+1.5	2.8	3.7	3.0	
11	Cambridge Bay, Dease Strait	69° 07'	105° 07'	+2 35	+2 30	-0.4	+1.2	1.0	1.3	1.7	
Time meridian, 75° W											
13	Igloolik, Fury and Hecla Strait	69° 21'	81° 37'	+9 12	+9 12	+1.6	+0.8	4.6	6.0	4.7	
15	Hall Beach, Foxe Basin	68° 45'	81° 13'	+9 45	+10 15	(*0.45+0.5)		1.7	2.0	2.1	
Time meridian, local											
17	Port Kennedy, Bellot Strait	72° 01'	94° 12'	+1 35	+1 44	+0.5	+0.8	3.5	4.5	4.2	
19	Port Bowen, Prince Regent Inlet	73° 14'	88° 55'	+1 01	+1 06	+0.9	+1.3	3.4	4.5	4.6	
21	Port Leopold, Prince Regent Inlet	73° 48'	90° 15'	+0 50	+0 45	+0.9	+0.1	4.6	5.9	4.0	
23	Beechy Island, Barrow Strait	74° 43'	91° 54'	+1 30	+1 35	+1.0	-0.1	4.9	6.4	4.0	
25	Assistance Bay, Barrow Strait	74° 37'	94° 15'	+1 56	+1 57	-0.1	+0.6	3.1	4.1	3.8	
27	Griffith Island, Barrow Strait	74° 35'	95° 30'	+2 12	+2 13	-0.3	+0.5	3.0	3.9	3.6	
29	Refuge Cove, Wellington Channel	75° 31'	92° 10'	+1 23	+1 38	+0.6	+0.2	4.2	5.5	3.9	
31	Penny Strait	76° 52'	97° 00'	+1 53	+2 03	*0.39	*0.38	1.5	1.9	1.4	
on Hampton Roads, p.120											
33	Cape Columbia, Lincoln Sea	83° 14'	69° 55'	-0 55	-0 55	-1.8	0.0	0.8	1.1	0.5	
35	Alert, Lincoln Sea	82° 30'	62° 20'	+1 26	+1 17	-0.4	+0.6	1.6	2.2	1.5	
37	Cape Sheridan, Lincoln Sea	82° 29'	61° 30'	+1 37	+1 28	-0.5	+0.2	1.8	2.5	1.2	
39	Cape Bryant, North Greenland	82° 21'	55° 30'	+3 33	+3 35	-1.4	+0.2	1.1	1.5	0.7	
41	Cape Morris Jesup, North Greenland	83° 40'	34° 15'	+1 51	+1 43	-2.0	0.0	0.4	0.6	0.3	
GREENLAND, East Coast											
43	Danmarks Havn	76° 46'	18° 46'	-12 41	-12 32	-0.8	-0.6	3.6	4.7	2.8	
45	Cape Borgen	75° 26'	18° 05'	-11 04	-11 03	*0.80	*0.81	3.0	3.9	2.8	
47	Lille Pendulum	74° 37'	18° 29'	-11 40	-11 39	*0.80	*0.81	3.0	4.0	2.8	
49	Finsch Islands	73° 59'	21° 08'	-12 18	-12 18	*0.81	*0.75	3.2	4.3	2.8	
51	Myggbukta, Foster Bay	73° 28'	21° 33'	-11 57	-12 00	-0.9	-0.5	3.4	4.4	2.8	
53	Bomsterbugten	73° 21'	25° 17'	-12 15	-12 27	-0.4	-0.3	3.7	4.8	3.2	
Time meridian, 30° W											
55	Danmarks Island, Scoresby Sound	70° 27'	26° 12'	-11 45	-11 45	*0.63	*0.62	2.4	3.3	2.2	
Time meridian, 45° W											
57	Angmagssalik (Kulusuk)	65° 36'	37° 09'	-7 00	-6 50	(*1.71-0.8)		6.5	8.8	5.2	
on Argentia, p.4											
59	Finnsbu	63° 24'	41° 17'	-4 09	-3 42	+0.8	-0.4	6.1	8.1	4.6	
61	Kap Farvel	59° 45'	43° 53'	-2 21	-1 53	+0.2	-0.9	6.0	8.0	4.0	
GREENLAND, West Coast											
63	Frederiks dal	60° 00'	44° 40'	-2 10	-1 41	+1.5	-0.7	7.1	9.5	4.7	
65	Nanortalik	60° 07'	45° 15'	-2 43	-2 16	+0.5	-0.9	6.3	8.4	4.2	
67	Julianehaab	60° 43'	46° 01'	-2 09	-1 46	+0.3	-0.9	6.1	8.0	4.0	
69	Narsarsuaq	61° 08'	45° 25'	-2 15	-1 46	+1.8	+0.1	6.6	8.6	5.3	
71	Ivigtut, Arsuk Fjord	61° 12'	48° 11'	-1 49	-1 24	+0.7	-0.9	6.5	8.6	4.3	
73	Frederikshaab	62° 00'	49° 43'	-1 22	-1 00	+3.0	-0.6	8.5	11.1	5.6	
75	Godthaab	64° 10'	51° 44'	-1 21	-0 46	(*2.00-2.1)		9.8	13.0	6.5	
77	Fishmaster's Harbour, Sondre Stromfjord	66° 01'	53° 29'	-1 41	-1 16	+3.6	-0.1	8.6	10.2	6.1	
79	Camp Lloyd, Sondre Stromfjord	66° 58'	50° 57'	+2 21	+2 51	+1.7	-1.1	7.7	9.4	4.7	
81	Holsteinsborg	66° 56'	53° 42'	-1 29	-1 00	+2.0	-0.8	7.7	10.0	5.0	
83	Camp Michigan, Malmiak Fjord	66° 56'	52° 37'	-0 22	+0 10	+2.2	-0.8	7.9	10.2	5.1	
on Harrington Harbour, p.12											
85	Aningaq, Rikkol	67° 55'	53° 50'	-1 42	-1 42	+1.0	-0.8	5.6	7.4	3.6	
87	Nunarsuaq, Kronprinsens Ejlanden	68° 59'	53° 21'	-0 48	-0 52	-0.5	-0.9	4.2	5.7	2.8	
89	Godhavn, Disko Island	69° 15'	53° 33'	-1 37	-1 32	-0.4	-0.9	4.3	5.7	2.9	
91	Ingnerit, Umanak Fjord	71° 00'	51° 00'	+0 00	+0 00	-1.6	-1.1	3.3	4.3	2.2	
Time meridian, local											
93	North Star Bay, Wolstenholme Fjord	76° 32'	68° 50'	+0 30	+0 32	*1.33	*1.12	5.4	7.0	4.5	
95	Port Foulke	78° 18'	72° 45'	+0 28	+0 26	(*2.08-0.8)		7.9	10.7	6.5	
97	Rensselaer Bugt	78° 37'	70° 53'	+1 05	+0 58	(*2.08-1.1)		7.9	10.8	6.2	
99	Thank God Harbor, Polaris Bugt	81° 36'	61° 40'	+1 34	+1 31	-0.3	-0.4	3.9	5.4	3.2	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
	NORTHERN CANADA Time meridian, local			on Halifax, p.20							
101	Baffin Bay, etc., West Side Fort Conger, Discovery Harbor	81° 44'	64° 44'	+3 48	+3 25	-1.4	-1.3	4.3	5.9	3.0	
103	Cape Lawrence	80° 21'	69° 15'	+3 46	+3 40	-0.2	-1.3	5.5	7.2	3.6	
105	Payer Harbour, Cape Sabine	78° 43'	74° 25'	+3 36	+3 30	+1.7	-0.9	7.0	9.4	4.7	
107	Cape Adair	71° 33'	71° 30'	+3 06	+3 06	+0.4	-1.2	6.0	7.8	3.9	
109	Cape Hewett	70° 16'	67° 47'	+2 56	+2 56	+0.6	-0.5	5.5	7.2	4.4	
	Davis Strait, West Side Time meridian, 60° W			on Pictou, p.8							
111	Cape Hooper, Baffin Island	68° 23'	66° 45'	-5 52	-5 41	*0.47	*0.43	1.6	1.9	1.8	
113	Kivitoo, Baffin Island	67° 56'	64° 56'	-5 17	-5 10	*0.51	*0.43	1.8	2.4	1.9	
				on Saint John, N. B., p.24							
115	Cape Dyer, Baffin Island	66° 34'	61° 40'	-6 19	-6 21	*0.31	*0.45	5.8	7.3	4.7	
117	Clearwater Fiord, Cumberland Sound	66° 36'	67° 20'	-5 36	-5 38	-5.5	-0.6	15.9	20.6	11.4	
119	Frobisher Bay	63° 29'	68° 02'	-4 13	-4 15	+5.5	+3.3	23.0	29.8	18.8	
	Hudson Strait and Bay										
121	Pikyulik Island, Payne River	60° 00'	69° 55'	-2 15	-1 54	+3.7	+3.2	21.3	26.8	17.9	
	Time meridian, 75° W										
123	Sorry Harbor, Resolution Island	61° 37'	64° 44'	-5 30	-5 30	-8.3	-0.9	13.4	17.6	9.8	
125	Lower Savage Islands	61° 46'	65° 51'	-4 46	-4 55	-1.2	+2.0	17.6	25.4	14.8	
127	Ashe Inlet, Big Island	62° 33'	70° 35'	-3 46	-3 43	+4.2	+2.2	22.8	30.9	17.6	
129	Schooner Harbour, Baffin Island	64° 24'	77° 52'	-0 49	-0 44	-6.2	+0.4	14.2	18.9	11.5	
131	Winter Island, Foxe Basin	66° 11'	83° 10'	+1 02	+1 10	-12.1	-0.8	9.5	12.4	8.0	
	Time meridian, 90° W										
133	Coral Harbour, Southampton Island	64° 08'	83° 10'	-0 25	+0 04	-14.4	-1.5	7.9	10.3	6.5	
135	Chesterfield Inlet	63° 20'	90° 42'	-8 17	-8 20	-12.4	-0.8	9.2	11.8	7.8	
137	Churchill	58° 47'	94° 12'	-4 25	-4 36	-11.5	-1.4	10.7	13.4	7.9	
				on Quebec, p.16							
139	Port Nelson, Nelson River entrance	57° 05'	92° 36'	+3 56	+4 35	-3.1	-0.9	11.5	12.9	6.4	
	Time meridian, 75° W										
141	Moosonee, James Bay	51° 17'	80° 38'	+9 29	+9 32	*0.48	*1.81	4.5	5.4	5.2	
143	Moose Factory, James Bay	51° 16'	80° 35'	+9 33	+10 37	*0.42	*1.56	4.0	5.4	4.5	
145	Charlton Island, James Bay	51° 57'	79° 16'	+8 00	+6 38	*0.39	*1.06	4.3	5.3	3.9	
				on Saint John, N. B., p.24							
147	Digges Harbour	62° 30'	77° 42'	-2 11	-2 05	*0.39	*0.62	7.1	9.3	6.1	
149	Port de Boucherville, Nottingham Island	63° 12'	77° 28'	-2 07	-2 02	-11.6	-1.2	10.4	14.0	8.0	
151	Wakeham Bay	61° 43'	71° 57'	-3 52	-3 55	-0.4	+2.2	18.2	27.0	15.3	
153	Stupart Bay	61° 35'	71° 32'	-4 10	-4 17	0.0	+2.4	18.4	27.2	15.6	
155	Diana Bay	60° 52'	70° 04'	-4 00	-4 03	+2.8	+3.1	20.5	26.8	17.4	
157	Hopes Advance Bay, Ungava Bay	59° 21'	69° 38'	-3 59	-4 00	*1.44	*2.20	27.0	34.4	22.3	
159	Leaf Bay, Ungava Bay	58° 55'	69° 00'	-4 00	-4 00	*1.49	*2.25	28.0	36.0	23.0	
161	Leaf Lake, Ungava Bay	58° 45'	69° 40'	-3 00	-3 00	(*1.54+5.8)	32.0	40.0	28.0		
163	Koksoak River entrance	58° 32'	68° 11'	-3 50	-3 53	*1.47	*2.00	28.5	36.4	22.3	
165	Port Burwell, Ungava Bay	60° 25'	64° 52'	-4 13	-4 13	-6.5	-0.9	15.2	19.9	10.7	
	LABRADOR Time meridian, 52° 30' W										
167	Button Islands	60° 37'	64° 44'	-2 38	-2 38	-9.5	-0.3	11.6	15.4	9.5	
169	Williams Harbour	60° 00'	64° 19'	-3 07	-3 27	*0.32	*0.30	6.8	8.2	4.6	
				on Halifax, p.20							
171	Eclipse Harbour	59° 48'	64° 09'	+0 25	+0 02	-2.4	-1.0	3.0	3.7	2.6	
173	Kangalaksiorvik Fiord	59° 23'	63° 47'	+1 00	+0 42	-2.6	-1.5	3.3	4.1	2.2	
175	Nachivak Bay	59° 03'	63° 35'	+0 04	-0 20	-1.5	-1.1	4.0	5.0	3.0	
177	Port Manvers	56° 57'	61° 25'	-0 55	-0 55	-2.3	-1.2	3.3	4.2	2.6	
179	Hebron, Hebron Fjord	58° 12'	62° 38'	-0 49	-1 05	-1.4	-0.9	3.9	4.7	3.2	
181	Nain	56° 33'	61° 41'	-0 32	-0 54	+0.3	-0.5	5.2	6.5	4.2	
183	Hopedale Harbour	55° 27'	60° 13'	-0 46	-1 09	-0.4	-0.3	4.3	5.6	4.0	
185	Webeck Harbour	54° 54'	58° 02'	-1 07	-1 38	-1.3	-0.8	3.9	5.0	3.3	
	Hamilton Inlet and Lake Melville										
187	Indian Harbour	54° 27'	57° 12'	-0 37	-1 33	-1.0	-0.9	4.3	5.7	3.4	
189	Ticorak Island	54° 17'	58° 12'	-0 35	-0 55	-0.9	-0.5	4.0	4.9	3.7	
191	Rigot	54° 11'	58° 25'	-0 02	-0 17	-1.9	-1.0	3.5	4.5	2.8	
193	Goose Bay	53° 21'	60° 24'	+4 22	+4 24	(*0.27+0.4)	1.2	1.7	1.6		
195	Cartwright Harbour	53° 42'	57° 02'	-0 03	-0 34	-1.3	-0.6	3.7	4.9	3.4	
197	Curlew Harbour	53° 45'	56° 33'	-0 07	-0 38	-1.6	-0.9	3.7	4.9	3.1	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h m	h m	ft	ft	ft	ft	ft	
LABRADOR—cont. Time meridian, 52° 30' W											
199	Comfort Bight	53° 09'	55° 46'	-0 32	-1 03	-1.9	-1.0	3.5	4.6	2.9	
201	Square Island Harbour	52° 44'	55° 49'	-0 34	-1 05	-2.0	-1.1	3.5	4.7	2.8	
203	Port Marnham	52° 23'	55° 44'	-0 43	-1 14	-2.7	-1.0	2.7	3.6	2.5	
205	Battle Harbour	52° 16'	55° 36'	-1 03	-1 30	-2.1	-0.3	2.6	3.8	3.1	
Strait of Bell Isle											
207	Chateau Bay	52° 00'	55° 50'	-3 08	-3 19	*0.69	*0.81	2.4	3.1	2.5	
209	Red Bay	51° 43'	56° 25'	-2 00	-1 55	*0.56	*0.56	2.1	2.6	2.0	
211	Forteau Bay	51° 27'	56° 53'	-0 26	-0 17	*0.78	*0.81	2.9	3.7	2.8	
NEWFOUNDLAND, East Coast											
213	Pistolet Bay	51° 30'	55° 44'	-0 14	-0 28	*0.46	*0.29	2.4	3.1	1.8	
215	Ariège Bay	51° 10'	56° 00'	-0 34	-0 34	-2.6	-1.5	3.3	4.3	2.3	
217	Wild Cove	50° 42'	56° 10'	-0 49	-1 01	-2.0	-1.1	3.5	4.7	2.8	
219	Sops Island, White Bay	49° 50'	56° 46'	-0 49	-1 24	*0.46	*0.29	2.4	3.4	1.8	
221	Exploits Lower Harbour	49° 32'	55° 04'	-0 34	-1 09	-3.1	-1.3	2.6	3.5	2.1	
223	Fogo Harbour	49° 43'	54° 16'	-0 34	-0 42	-2.6	-1.3	3.1	4.2	2.4	
225	Valleyfield	49° 10'	53° 37'	-0 46	-1 13	*0.45	*0.33	2.2	2.9	1.8	
227	Port Union	48° 30'	53° 05'	-0 53	-1 15	*0.49	*0.48	2.2	3.0	2.1	
229	Random Head Harbour, Trinity Bay	48° 06'	53° 34'	-0 53	-1 05	*0.48	*0.33	2.4	3.2	1.9	
231	Harbour Grace, Conception Bay	47° 41'	53° 12'	-0 28	-0 46	*0.51	*0.33	2.6	3.5	2.0	
233	St. John's	47° 34'	52° 42'	-0 34	-0 46	*0.52	*0.38	2.6	3.5	2.1	
NEWFOUNDLAND, South Coast											
235	Trepassey Harbour	46° 43'	53° 23'	-0 19	-0 11	-1.2	-0.5	4.2	5.6	3.5	
237	St. Mary Harbour, St. Mary Bay	46° 55'	53° 35'	-0 14	-0 06	-1.2	-0.5	4.2	5.6	3.5	
<i>Placentia Bay</i>											
239	ARGENTIA	47° 18'	53° 59'	Daily predictions				4.9	6.3	4.4	
241	Woody Island	47° 47'	54° 10'	+0 09	+0 09	-0.5	-0.3	4.7	6.0	4.0	
243	Mortier Bay	47° 10'	55° 09'	+0 15	+0 26	-1.0	-0.8	4.7	6.0	3.5	
245	Great St. Lawrence Harbour	46° 55'	55° 22'	+0 28	+0 55	-0.7	+0.3	3.9	5.0	4.2	
Time meridian, 60° W											
247	St. Pierre Harbor, St. Pierre Island	46° 47'	56° 10'	-0 09	+0 13	-0.8	+0.2	3.9	5.0	4.1	
Time meridian, 52° 30' W											
<i>Fortune Bay</i>											
249	Grande le Pierre Harbour	47° 40'	54° 47'	+1 09	+1 09	-1.0	+0.2	3.7	4.8	4.0	
251	Belleoram	47° 32'	55° 25'	+0 57	+0 57	(*0.67+0.8)		3.3	4.3	3.8	
253	Ship Cove, Bay d'Espoir	47° 52'	55° 50'	+0 45	+0 53	-0.4	0.0	4.5	5.5	4.2	
255	Great Jervis Harbour, Bay d'Espoir	47° 39'	56° 11'	+0 38	+1 05	-1.1	+0.1	3.7	4.8	3.9	
257	Hare Bay	47° 37'	56° 32'	+0 41	+1 08	(*0.67+0.6)		3.3	4.3	3.6	
259	Grey River	47° 34'	57° 07'	+0 45	+1 12	(*0.63+0.7)		3.1	4.0	3.5	
261	Connoire Bay	47° 40'	57° 54'	+0 50	+0 50	(*0.59+0.7)		2.9	3.8	3.3	
263	La Poile Bay	47° 40'	58° 24'	+1 15	+1 15	(*0.63+0.6)		3.1	4.0	3.4	
on Harrington Harbour, p.12											
265	Port Aux Basques	47° 35'	59° 09'	-1 24	-1 28	*0.80	*0.75	3.1	4.0	2.8	
267	Codroy Road	47° 53'	59° 24'	-1 22	-1 27	*0.74	*0.75	2.8	3.7	2.6	
NEWFOUNDLAND, West Coast											
269	St. Georges Harbour	48° 27'	58° 30'	-0 28	-0 38	*0.78	*0.88	2.8	3.5	2.8	
271	Port-au-Port	48° 33'	58° 45'	+0 05	+0 10	-1.3	-1.0	3.5	4.5	2.4	
273	Frenchman's Cove, Bay of Islands	49° 04'	58° 10'	+0 10	+0 10	-0.5	0.0	3.3	4.2	3.3	
275	Norris Cove, Bonne Bay	49° 31'	57° 52'	+0 10	+0 10	-0.7	-0.4	3.5	4.4	3.0	
277	Portland Cove	50° 11'	57° 36'	+0 19	+0 19	-0.6	-0.4	3.6	4.6	3.0	
279	Port Saunders	50° 39'	57° 18'	+0 07	+0 03	-0.3	-0.3	3.8	4.9	3.2	
281	Castors Harbour, St. John Bay	50° 55'	56° 59'	+0 10	+0 10	*0.78	*0.75	3.0	4.1	2.7	
283	St. Barbe Bay	51° 12'	56° 46'	+0 00	+0 00	*0.78	*0.56	3.3	4.4	2.6	
QUEBEC, Gulf of St. Lawrence Time meridian, 60° W											
285	Bradore Bay	51° 28'	57° 15'	-0 35	-0 30	-0.6	-0.1	3.3	4.4	3.1	
287	Mistanoque Harbour	51° 16'	58° 12'	-0 15	-0 15	-0.4	-0.1	3.5	4.6	3.3	
289	HARRINGTON HARBOUR	50° 30'	59° 28'	Daily predictions				3.8	4.9	3.5	
291	Wapitagan Harbour	50° 12'	60° 01'	+0 15	+0 15	-0.3	+0.1	3.4	4.4	3.4	
293	Kegaska	50° 12'	61° 14'	+0 40	+0 40	-0.9	-0.2	3.1	4.0	3.0	
295	Natashquan	50° 12'	61° 50'	+1 00	+1 10	-0.8	-0.1	3.1	4.0	3.1	
297	Betchewun Harbour	50° 14'	63° 11'	+2 09	+2 13	-0.7	-0.4	3.5	4.6	3.0	
299	Havre St. Pierre	50° 14'	63° 36'	+2 23	+2 32	0.0	-0.1	3.9	4.8	3.5	
301	Mingan	50° 18'	64° 03'	+2 35	+2 40	+0.9	0.0	4.7	5.8	3.9	
<i>Anticosti Island</i>											
303	Heath Point	49° 05'	61° 42'	+0 51	+0 52	(*0.61+0.3)		2.3	3.0	2.4	
305	Southwest Point	49° 24'	63° 36'	+3 21	+3 26	-0.3	0.0	3.5	4.4	3.4	
307	Ellis Bay	49° 48'	64° 22'	+3 37	+3 38	+0.3	-0.5	4.6	5.7	3.4	
309	Moisie Bay	50° 12'	66° 05'	+3 43	+3 49	+2.3	+0.5	5.6	7.2	4.9	
311	Sept Iles	50° 13'	66° 24'	+3 54	+3 58	+2.7	-0.1	6.6	8.6	4.8	
313	Cawee Islands	49° 50'	67° 00'	+4 01	+4 07	+3.0	+0.6	6.2	8.0	5.3	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	QUEBEC, St. Lawrence River Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Harrington Harbour, p.12											
315	Ste. Anne des Monts	49° 08'	66° 29'	+3 17	+3 19	+3.4	+0.6	6.6	8.6	5.5	
317	Cap Chat	49° 06'	66° 45'	+3 17	+3 21	+4.2	+1.0	7.0	9.0	6.1	
319	Pointe des Monts	49° 20'	67° 22'	+3 10	+3 16	+4.3	+0.8	7.3	9.6	6.1	
321	Matane	48° 51'	67° 32'	+3 18	+3 22	+4.7	+0.9	7.6	9.9	6.3	
323	Metis-sur-Mer	48° 41'	68° 02'	+3 24	+3 28	+5.4	+1.1	8.1	10.6	6.8	
on Quebec, p.16											
325	Betsiamites River	48° 53'	68° 39'	-4 20	-5 08	-3.8	+1.4	8.5	11.2	7.3	
327	Father Point	48° 31'	68° 28'	-4 22	-5 29	-3.4	+1.4	8.9	11.7	7.5	
329	Old Bic Harbour	48° 22'	68° 44'	-4 12	-5 14	-3.3	+1.4	9.0	11.8	7.5	
331	Tadoussac, Saguenay River	48° 08'	69° 43'	-3 47	-4 54	-1.8	+0.8	11.1	14.0	8.0	
333	Chicoutimi, Saguenay River	48° 26'	71° 03'	-3 28	-3 40	-1.4	+1.3	11.0	14.4	8.4	
335	Brandyot Islands	47° 52'	69° 41'	-3 36	-4 40	-0.5	+2.2	11.0	14.5	9.3	
337	Murray Bay	47° 39'	70° 08'	-3 20	-4 22	+0.4	+2.3	11.8	15.3	9.8	
339	Pointe aux Orignaux	47° 29'	70° 00'	-2 47	-3 41	-0.3	+2.2	11.2	14.7	9.4	
341	Ile aux Coudres	47° 26'	70° 19'	-2 10	-3 21	+1.2	+2.0	12.9	15.8	10.1	
343	L' Islet	47° 08'	70° 22'	-1 17	-2 05	0.0	+0.9	12.8	15.3	9.0	
345	Beaujeu Channel	47° 05'	70° 29'	-1 10	-1 43	+0.6	+0.5	13.8	15.7	9.0	
347	Grosse Ile	47° 02'	70° 40'	-0 57	-1 19	+1.3	0.0	15.0	17.1	9.1	
349	Berthier	46° 56'	70° 44'	-0 47	-1 08	+1.3	0.0	15.0	16.9	9.1	
351	St. Laurent d' Orleans	46° 52'	71° 00'	-0 20	-0 30	+0.3	+0.2	13.8	15.6	8.7	
353	QUEBEC	46° 49'	71° 11'	Daily predictions				13.7	15.5	8.5	
355	St. Nicolas	46° 43'	71° 24'	+0 35	+0 32	-0.7	---	12.6	14.3	---	
357	St. Augustin	46° 43'	71° 28'	+0 54	+0 53	-1.6	---	11.8	13.3	---	
359	Ste. Croix <1>	46° 37'	71° 45'	+1 31	+2 00	---	---	11.8	13.3	---	
361	Pointe Platon <1>	46° 40'	71° 51'	+1 43	+2 11	---	---	11.4	12.9	---	
363	Grondines <1>	46° 36'	72° 04'	+2 14	+3 18	---	---	6.7	8.1	---	
365	Cap a la Roche <1>	46° 33'	72° 10'	+2 37	+3 48	---	---	5.4	6.7	---	
367	Batiscan <1>	46° 31'	72° 15'	+3 32	+4 49	---	---	2.3	3.3	---	
369	Champlain <1>	46° 26'	72° 21'	+4 08	+5 30	---	---	1.8	2.8	---	
371	Trois Rivieres <1>	46° 20'	72° 33'	+4 45	+6 15	---	---	0.7	1.0	---	
on Pictou, p.8											
373	Gaspé Bay	48° 50'	64° 29'	+4 43	+4 58	-1.1	-0.5	2.6	3.3	3.1	
375	Point St. Peter	48° 38'	64° 10'	+4 59	+5 11	*0.67	*0.52	2.5	3.2	2.5	
377	Chaleur Bay Port Daniel	48° 10'	64° 57'	+5 27	+5 42	-0.7	-0.6	3.1	3.8	3.3	
379	Paspébiac	48° 01'	65° 14'	+5 22	+5 34	-0.4	-1.0	3.8	4.6	3.2	
381	Carlton Point	48° 05'	66° 07'	+5 31	+5 36	+0.8	-0.7	4.7	6.2	4.0	
NEW BRUNSWICK, Gulf of St. Lawrence											
Chaleur Bay-cont.											
383	Campbellton	48° 01'	66° 40'	+6 04	+6 40	+3.5	+0.9	5.8	7.2	6.1	
385	Dalhousie	48° 04'	66° 22'	+5 42	+5 52	+2.2	-0.2	5.6	7.1	4.9	
387	Bathurst	47° 37'	65° 39'	+6 04	+6 50	-0.3	-1.1	4.0	4.8	3.2	
389	Caraqet Harbour	47° 48'	64° 56'	+5 49	+5 50	-1.0	-1.1	3.3	4.0	2.9	
391	Miscou Harbour	47° 54'	64° 35'	+5 45	+5 57	-0.5	-1.1	3.8	5.0	3.1	
393	Old Tracadie Gully entrance	47° 31'	64° 52'	+6 25	+6 36	-1.6	-1.2	2.8	3.5	2.5	
395	Tracadie	47° 31'	64° 55'	+6 55	+7 06	*0.55	*0.35	2.2	2.8	1.9	
Mean Diurnal											
397	Portage Island, Miramichi Bay †	47° 09'	65° 03'	-5 11	-4 59	-1.7	-0.8	---	3.3	2.2	
399	Newcastle, Miramichi River †	47° 00'	65° 34'	-3 53	-3 13	-0.7	-0.5	---	4.0	---	
401	Richibucto River entrance †	46° 43'	64° 48'	-4 45	---	-2.7	-0.8	---	2.3	1.8	
403	Shediac Bay †	46° 15'	64° 32'	---	+0 18	-1.9	-0.5	---	2.8	2.8	
405	Cape Tormentine	46° 08'	63° 47'	+0 41	+1 03	+1.5	-0.1	4.8	5.7	4.6	
407	Tidnish Head, Baie Verte	46° 01'	64° 01'	+0 33	+0 54	+1.7	-0.2	5.1	6.3	4.7	
PRINCE EDWARD ISLAND											
409	Tignish †	46° 58'	64° 00'	-4 59	-5 27	-2.5	-0.8	---	2.5	1.7	
411	Alberton †	46° 49'	64° 03'	-4 27	-4 10	-2.8	-0.7	---	2.1	1.7	
413	Malpeque Bay †	46° 35'	63° 40'	-3 29	-3 13	-2.5	-0.8	---	2.5	1.8	
415	North Rustico †	46° 28'	63° 17'	-4 10	-4 04	-2.7	-1.0	---	2.5	1.6	
417	St. Peters Bay †	46° 26'	62° 44'	-3 52	-3 37	-3.3	-1.0	---	1.9	1.5	
419	Naufrage †	46° 28'	62° 25'	-3 09	-3 27	-2.6	-0.8	---	2.4	2.0	
Mean Spring											
421	Souris Head	46° 20'	62° 17'	-1 23	-1 25	-0.6	-0.2	2.8	3.5	3.5	
423	Georgetown Harbour	46° 11'	62° 32'	-1 03	-1 00	-0.5	-0.1	2.8	3.5	3.6	
425	Cape Bear	46° 00'	62° 27'	-0 42	-0 40	-0.6	-0.5	3.1	4.0	3.4	
427	Charlottetown	46° 13'	63° 08'	+0 33	+0 42	+2.5	+0.5	5.2	6.4	5.4	
429	Summerside Harbour	46° 24'	63° 47'	+0 57	+1 19	+0.9	+0.3	3.8	4.5	4.5	
ISLANDS, Gulf of St. Lawrence											
431	St. Paul Island	47° 12'	60° 09'	-1 25	-1 22	*0.64	*0.57	2.2	2.8	2.4	
433	Amherst Harbour, Magdalen Islands	47° 14'	61° 50'	-1 05	-1 07	*0.53	*0.57	1.6	2.0	2.1	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	NOVA SCOTIA, Gulf of St. Lawrence Time meridian, 60° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Pictou, p.8											
435	Pugwash	45° 51'	63° 40'	+1 00	+1 03	+1.8	0.0	5.0	6.0	4.8	
437	PICTOU	45° 41'	62° 42'			Daily predictions		3.2	3.9	3.9	
439	Merigomish Harbour	45° 39'	62° 27'	-0 13	-0 01	-0.3	0.0	2.9	3.4	3.8	
441	Cape George	45° 53'	61° 53'	-0 54	-0 51	-1.6	-0.8	2.4	3.2	2.7	
443	Antigonish Harbour	45° 40'	61° 53'	+0 09	+0 17	-1.7	-0.5	2.0	2.5	2.8	
445	Cape Jack	45° 42'	61° 33'	-1 11	-1 18	-1.8	-0.7	2.1	2.6	2.7	
447	Auld Cove	45° 39'	61° 26'	-0 27	-0 33	(*0.62+1.3)		2.0	2.6	3.7	
	<i>Cape Breton Island</i>										
449	Port Hood	46° 01'	61° 32'	-0 46	-0 45	-1.6	-0.9	2.5	3.2	2.7	
451	Mabou River entrance	46° 06'	61° 28'	-0 53	-1 04	*0.66	*0.61	2.2	2.9	2.5	
453	Cheticamp	46° 37'	61° 02'	-1 23	-1 20	*0.56	*0.74	1.4	1.8	2.4	
NOVA SCOTIA, Outer Coast											
<i>Cape Breton Island—cont.</i>											
455	Neil Harbour	46° 48'	60° 20'	-1 44	-1 45	*0.69	*0.65	2.4	3.1	2.7	
457	Ingonish Island	46° 40'	60° 23'	-1 40	-1 33	-1.5	-0.9	2.6	3.2	2.7	
459	St. Anns Harbour	46° 15'	60° 34'	-1 37	-1 40	-1.4	-1.0	2.8	3.5	2.7	
461	North Sydney	46° 13'	60° 15'	-1 54	-1 49	*0.73	*0.61	2.6	3.2	2.7	
463	Glace Bay	46° 12'	59° 55'	-1 59	-1 54	-1.6	-0.9	2.5	3.2	2.7	
on Halifax, p.20											
465	Louisburg Harbour	45° 54'	59° 59'	-0 08	-0 14	-1.6	-0.7	3.5	4.2	3.2	
467	Garaburis Cove	45° 51'	60° 10'	+0 08	+0 10	-1.4	-0.7	3.7	4.4	3.3	
469	St. Peter Bay	45° 38'	60° 52'	-0 12	-0 07	-0.6	-0.4	4.2	5.1	3.8	
471	Arichat	45° 31'	61° 02'	-0 25	-0 14	-0.9	-0.5	4.0	4.8	3.6	
473	Port Hastings, Strait of Canso	45° 39'	61° 24'	-0 16	-0 12	0.0	+0.2	4.2	5.1	4.4	
475	Guysborough	45° 23'	61° 29'	+0 06	+0 18	-1.1	-0.5	3.8	4.6	3.5	
477	Canso Harbour	45° 21'	61° 00'	-0 05	-0 04	-1.1	-0.6	3.9	4.7	3.5	
479	Whitehaven Harbour	45° 14'	61° 12'	-0 10	-0 02	-1.1	-0.4	3.7	4.7	3.6	
481	Iсаacs Harbour	45° 11'	61° 40'	-0 03	+0 04	-0.6	-0.1	3.9	4.6	4.0	
483	Sonora, St. Mary River	45° 03'	61° 55'	-0 02	+0 09	-0.7	-0.6	4.3	5.2	3.7	
485	Liscomb Harbour	45° 00'	62° 02'	-0 11	-0 05	-0.6	-0.4	4.2	5.0	3.8	
487	Sheet Harbour	44° 54'	62° 30'	-0 08	-0 04	-1.1	-0.9	4.2	5.0	3.3	
489	Ship Harbour	44° 47'	62° 49'	-0 07	-0 04	-0.6	-0.4	4.2	5.1	3.8	
491	Jeddore Harbour	44° 45'	63° 01'	-0 06	-0 03	-0.5	-0.4	4.3	5.2	3.9	
493	HALIFAX	44° 40'	63° 34'			Daily predictions		4.4	5.3	4.3	
495	Sable Island, north side	43° 57'	60° 06'	-0 06	-0 12	-2.7	-0.9	2.6	3.2	2.5	
497	Sable Island, south side	43° 56'	59° 54'	-0 02	-0 06	-2.1	-1.6	3.9	4.8	2.5	
499	St. Margarets Bay	44° 31'	63° 56'	+0 08	+0 07	-0.5	-0.3	4.2	4.9	3.9	
501	Chester, Mahone Bay	44° 34'	64° 18'	+0 01	-0 04	-0.2	-0.2	4.4	5.3	4.1	
503	Mahone Harbour, Mahone Bay	44° 27'	64° 22'	+0 03	-0 01	-0.1	-0.2	4.5	5.5	4.2	
505	Lunenburg	44° 22'	64° 19'	+0 07	+0 07	-0.1	+0.1	4.2	4.9	4.3	
507	Riverport, La Have River	44° 17'	64° 20'	+0 12	+0 05	-0.3	-0.4	4.5	5.3	4.0	
509	Bridgewater, La Have River	44° 23'	64° 31'	+0 09	+0 06	-0.2	-0.3	4.5	5.5	4.1	
511	Liverpool Bay	44° 02'	64° 41'	+0 14	+0 04	-0.5	-0.4	4.3	5.1	3.9	
513	Lockeport	43° 44'	65° 05'	+0 27	+0 02	-0.2	-0.4	4.6	5.4	4.0	
515	Shelburne	43° 45'	65° 18'	+0 30	+0 35	+0.1	-0.3	4.8	5.8	4.2	
517	Barrington Passage	43° 32'	65° 36'	+0 51	+0 30	+1.6	+0.6	5.4	6.2	5.4	
519	Swim Point	43° 26'	65° 38'	+1 41	+1 03	+2.9	+0.1	7.2	8.4	5.8	
on Saint John, N. B., p.24											
NOVA SCOTIA, Bay of Fundy											
521	Lower East Pubnico	43° 38'	65° 46'	-1 52	-2 07	*0.43	*0.48	8.7	10.0	6.3	
523	Yarmouth Harbour	43° 48'	66° 08'	-1 07	-1 15	*0.53	*0.42	11.5	13.4	7.5	
525	Westport, St. Mary Bay	44° 16'	66° 21'	-0 35	-0 30	*0.72	*0.72	15.0	16.7	10.4	
527	Tiverton, St. Mary Bay	44° 24'	66° 13'	-0 38	-0 30	-5.6	-0.7	15.9	18.3	11.3	
529	Weymouth, St. Mary Bay	44° 27'	66° 01'	-0 26	-0 22	-6.5	-0.7	15.0	17.0	10.8	
531	Digby, Annapolis Basin	44° 38'	65° 45'	-0 09	-0 07	+0.7	+0.3	21.2	24.6	14.9	
533	Annapolis Royal, Annapolis River	44° 45'	65° 30'	+0 06	+0 10	+2.2	+0.4	22.6	25.7	15.7	
535	Port George	45° 01'	65° 10'	-0 06	-0 06	+6.7	+0.8	26.7	30.5	18.2	
537	Ile Haute	45° 15'	65° 00'	-0 02	-0 02	+7.4	+0.7	27.5	31.5	18.5	
539	Spencer Island	45° 20'	64° 42'	+0 17	+0 21	*1.47	*1.50	30.5	35.0	21.2	
<i>Minas Basin</i>											
541	Parrsboro (Partridge Island) <2>	45° 22'	64° 20'	+0 51	+0 49	+14.7	--	34.4	39.0	22.3	
543	Horton Bluff, Avon River	45° 06'	64° 08'	+0 58	+1 02	*1.76	*1.38	38.1	43.6	24.6	
545	Windsor <2>	45° 00'	64° 08'	+1 03	--	+19.5	--	--	--	--	
547	Burntcoat Head	45° 18'	63° 49'	+1 06	+1 12	*1.90	*2.18	38.4	43.5	27.9	
549	Truro <2>	45° 22'	63° 20'	+1 43	--	+26.1	--	--	--	--	
551	Spicer Cove, Chignecto Bay	45° 26'	64° 54'	+0 12	+0 16	+7.0	+0.8	27.0	30.0	18.3	
553	Joggins <2>	45° 41'	64° 28'	+0 14	+0 26	+14.2	+1.8	33.2	37.0	22.4	
555	Amherst Point, Cumberland Basin	45° 50'	64° 17'	+0 33	+0 45	*1.69	*1.55	35.6	40.5	24.0	
NEW BRUNSWICK, Bay of Fundy											
<i>Petitcodiac River <3></i>											
557	Grindstone Island	45° 43'	64° 37'	+0 21	+0 28	*1.49	*1.45	31.1	35.6	21.4	
559	Hopewell Cape	45° 52'	64° 35'	+0 14	+0 39	*1.64	*1.85	33.2	38.0	24.0	
561	Moncton <2> <3>	46° 05'	64° 46'	+0 46	--	+17.2	--	--	--	--	
563	Salisbury	46° 01'	65° 03'	+1 31	--	+18.2	--	--	--	--	
565	Herring Cove	45° 35'	64° 58'	+0 22	+0 20	+8.4	+0.9	28.3	32.4	19.1	
567	Quaco Bay	45° 20'	65° 32'	+0 11	+0 12	+2.0	-0.3	23.1	26.3	15.3	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h m	h m	ft	ft	ft	ft	ft	
NEW BRUNSWICK, Bay of Fundy—cont. Time meridian, 60° W											
569	SAINT JOHN <4>	45° 15'	66° 04'								
571	Indianstown, St. John River	45° 16'	66° 05'	+1 30	+2 25	---	---	1.2	1.4	2.4	
573	Lepreau Harbour	45° 07'	66° 29'	-0 01	+0 03	-2.3	-0.5	19.0	21.7	13.0	
575	L' Etang Harbour	45° 02'	66° 49'	+0 01	+0 05	-3.2	-0.8	18.4	21.0	12.4	
577	North Head, Grand Manan Island	44° 46'	66° 45'	-0 05	-0 05	-4.5	-0.9	17.2	19.3	11.7	
579	Seal Cove, Grand Manan Island	44° 37'	66° 51'	-0 15	-0 17	*0.68	*0.65	14.3	16.3	9.8	
581	Outer Wood Island <5>	44° 36'	66° 48'	-0 25	-0 27	-7.8	-0.8	13.8	16.2	10.1	
583	Machias Seal Island <5>	44° 30'	67° 06'	-0 01	---	-9.6	-1.7	12.9	14.5	8.8	
585	Welshpool, Campobello Island <5>	44° 53'	66° 57'	-0 01	+0 06	-3.5	-1.0	18.3	21.2	12.1	
587	Wilsons Beach, Campobello Island <5>	44° 56'	66° 56'	+0 00	+0 01	-3.7	+0.1	17.0	19.4	12.6	
589	Back Bay, Letite Harbour <5>	45° 03'	66° 52'	+0 00	-0 03	-3.5	0.0	17.3	20.1	12.6	
591	Midjik Bluff, Passamaquoddy Bay <5>	45° 07'	66° 54'	+0 12	+0 17	-2.0	-0.5	19.3	22.0	13.1	
593	St. Andrews, Passamaquoddy Bay <5>	45° 04'	67° 03'	+0 14	+0 20	-2.3	0.0	18.5	21.2	13.2	
MAINE Time meridian, 75° W											
595	EASTPORT	44° 54.2'	66° 59.1'								
	Cobscook Bay										
597	Garnet Point, Pennamquan River	44° 55.4'	67° 07.8'	+0 11	+0 14	*1.04	*1.00	19.17	22.05	10.04	
599	Coffins Point	44° 52.2'	67° 06.5'	+0 31	+0 33	*0.94	*0.77	17.3	19.7	9.0	
601	Birch Islands	44° 52.5'	67° 09.5'	+0 59	+1 13	*0.94	*0.75	17.4	19.8	9.0	
603	Cutter, Little River	44° 39.4'	67° 12.6'	-0 10	-0 19	*0.74	*0.74	13.5	15.4	7.1	
605	Cutter, Naval Radio Station	44° 38.5'	67° 17.8'	-0 07	-0 14	*0.70	*0.84	12.78	14.67	6.76	
607	Stone Island, Machias Bay	44° 36.2'	67° 22.1'	-0 11	-0 28	*0.68	*0.68	12.4	14.1	6.5	
609	Machiapoach, Machias River	44° 41.9'	67° 23.6'	+0 01	-0 09	*0.69	*0.69	12.6	14.4	6.6	
611	Shoppee Point, Englishman Bay	44° 36.9'	67° 29.8'	-0 05	-0 13	*0.66	*0.66	12.1	13.8	6.2	
on Portland, p.36											
613	Steele Harbor Island	44° 29.6'	67° 32.6'	-0 28	-0 20	*1.27	*1.27	11.6	13.3	6.2	
615	Millbridge, Narraguagus River, Maine	44° 32.4'	67° 52.5'	-0 15	+0 05	*1.23	*1.09	11.31	12.89	6.03	
617	Green Island, Petit Manan Bar	44° 22.3'	67° 52.2'	-0 28	-0 24	*1.16	*1.16	10.6	12.2	5.7	
619	Prospect Harbor	44° 24'	68° 01'	-0 24	-0 15	*1.15	*1.15	10.5	12.1	5.7	
on Bar Harbor, p.32											
621	Winter Harbor, Frenchman Bay	44° 23.3'	68° 05.2'	-0 01	+0 10	*0.95	*0.95	10.1	11.6	5.4	
	Mount Desert Island										
623	BAR HARBOR	44° 23.5'	68° 12.3'								
625	Southwest Harbor	44° 16.5'	68° 18.8'	+0 00	-0 27	*0.96	*0.95	10.2	11.7	5.5	
627	Bass Harbor	44° 14.5'	68° 21.2'	+0 04	-0 27	*0.93	*0.93	9.9	11.3	5.4	
	Blue Hill Bay										
629	Blue Hill Harbor	44° 24.5'	68° 33.8'	+0 09	+0 11	*0.95	*0.95	10.1	11.6	5.4	
631	Mackerel Cove	44° 10.2'	68° 26.1'	+0 02	-0 27	*0.94	*0.93	10.0	11.5	5.4	
633	Ellsworth, Union River	44° 32.1'	68° 25.3'	+0 15	+0 16	*1.00	*0.97	10.59	12.07	5.67	
635	Burnt Coat Harbor, Swans Island	44° 08.7'	68° 27.0'	-0 01	+0 06	*0.89	*0.88	9.5	10.8	5.1	
Penobscot Bay											
	Eggemoggin Reach										
637	Center Harbor	44° 15.8'	68° 35.2'	+0 09	+0 12	*0.95	*0.95	10.1	11.5	5.4	
639	Little Deer Isle	44° 17.5'	68° 41.6'	+0 16	+0 14	*0.94	*0.93	10.0	11.5	5.4	
641	Isle Au Haut	44° 04.4'	68° 38.2'	-0 01	-0 27	*0.87	*0.88	9.3	10.7	5.0	
643	Stonington, Deer Isle	44° 09.2'	68° 39.7'	+0 08	+0 06	*0.91	*0.90	9.7	11.2	5.2	
645	Matinicus Harbor, Wheaton Island	43° 51.7'	68° 52.9'	+0 05	-0 27	*0.85	*0.85	9.0	10.4	4.8	
647	Vinalhaven, Vinalhaven Island	44° 02.6'	68° 50.4'	+0 09	+0 10	*0.87	*0.88	9.3	10.7	5.0	
649	North Haven	44° 07.6'	68° 52.4'	+0 13	+0 10	*0.91	*0.90	9.7	11.2	5.3	
651	Pulpit Harbor, North Haven Island	44° 09.4'	68° 53.2'	+0 12	+0 10	*0.93	*0.97	9.85	11.43	5.30	
653	Castine	44° 23.2'	68° 47.8'	+0 15	+0 11	*0.95	*1.00	10.1	11.6	5.4	
	Penobscot River										
655	Gross Point, Eastern Channel	44° 32.2'	68° 45.5'	-0 06	+0 10	*0.99	*0.98	10.4	12.0	5.6	
657	Bucksport	44° 34.3'	68° 48.1'	-0 04	+0 11	*1.01	*1.00	10.8	12.4	5.8	
659	Winterport	44° 38.2'	68° 50.5'	-0 09	+0 04	*1.11	*0.92	11.76	13.64	6.22	
661	Sandy Point	44° 40.3'	68° 48.3'	+0 06	+0 08	*0.99	*0.98	10.5	12.1	5.6	
663	Bangor	44° 47.7'	68° 46.3'	-0 06	+0 18	*1.25	*0.87	13.40	14.97	7.03	
665	Belfast	44° 25.6'	69° 00.3'	+0 09	+0 04	*0.97	*1.03	10.23	11.66	5.51	
667	Rockland	44° 06.3'	69° 06.1'	+0 09	+0 06	*0.93	*1.03	9.78	11.15	5.28	
on Portland, p.36											
669	Tenants Harbor	43° 57.9'	69° 13.0'	-0 11	-0 11	*1.02	*1.02	9.3	10.6	5.0	
671	Nomhegan Island	43° 45.9'	69° 19.3'	-0 13	-0 09	*0.97	*0.97	8.8	10.1	4.7	
673	Burnt Island, Georges Islands	43° 52.3'	69° 17.7'	-0 13	-0 12	*0.98	*0.98	8.9	10.2	4.8	
	St. George River										
675	Port Clyde	43° 55.5'	69° 15.6'	-0 11	-0 07	*0.98	*0.98	8.9	10.2	4.8	
677	Otis Cove	43° 59.2'	69° 14.2'	-0 15	-0 14	*1.00	*1.00	9.1	10.5	4.9	
679	Thomaston	44° 04.3'	69° 10.9'	-0 04	-0 03	*1.03	*1.03	9.4	10.8	5.0	
681	New Harbor, Muscongus Bay	43° 52.5'	69° 29.4'	-0 10	-0 08	*0.97	*0.97	8.8	10.1	4.7	
683	Muscongus Harbor, Muscongus Sound	43° 58.0'	69° 26.5'	-0 09	-0 03	*0.99	*0.99	9.0	10.4	4.8	
685	Friendship Harbor	43° 58.2'	69° 20.5'	-0 18	-0 11	*0.99	*0.99	9.0	10.4	4.8	
	Medomak River										
687	Jones Neck	44° 00.9'	69° 22.8'	-0 10	-0 05	*1.00	*1.00	9.1	10.5	4.9	
689	Waldoboro	44° 05.6'	69° 22.6'	-0 16	-0 04	*1.04	*1.04	9.5	10.9	5.1	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
on Portland, p.36											
691	MAINE, outer coast—cont. Time meridian, 75° W Pemaquid Harbor, Johns Bay	43° 52.6'	69° 31.5'	-0 05	-0 04	*0.97	*0.97	8.8	10.1	4.7	
693	Damariscotta River East Boothbay	43° 51.9'	69° 35.0'	-0 02	+0 01	*0.98	*0.98	8.9	10.2	4.8	
695	Walpole	43° 56.0'	69° 34.8'	+0 06	+0 14	*1.03	*1.06	9.35	10.66	5.05	
697	Newcastle	44° 02.0'	69° 32.2'	+0 16	+0 25	*1.02	*1.02	9.3	10.7	5.0	
699	Damariscotta Harbor, Damariscotta Island	43° 45.5'	69° 36.9'	-0 09	-0 10	*0.97	*0.97	8.8	10.1	4.7	
701	Boothbay Harbor	43° 51.1'	69° 37.7'	-0 06	-0 08	*0.97	*0.97	8.8	10.1	4.7	
703	Southport, Townsend Gut	43° 50.8'	69° 39.7'	+0 01	+0 01	*0.98	*0.98	8.9	10.2	4.8	
705	Sheepshead River Isle of Springs	43° 51.6'	69° 41.2'	-0 02	-0 04	*0.98	*0.98	8.9	10.3	4.8	
707	Cross River entrance	43° 55.5'	69° 40.2'	+0 07	+0 04	*1.00	*1.00	9.1	10.5	4.9	
709	Wiscasset	44° 00.0'	69° 40.0'	+0 16	+0 04	*1.03	*1.03	9.4	10.8	5.0	
711	Sheepshead (below rapids)	44° 03.0'	69° 37.1'	+0 20	+0 20	*1.05	*1.05	9.6	11.0	5.2	
713	Back River	43° 57.5'	69° 41.1'	+0 34	+0 31	*1.00	*1.00	9.1	10.5	4.9	
715	Robinhood, Sasanoa River	43° 51.2'	69° 44.0'	+0 14	+0 14	*0.97	*0.97	8.8	10.1	4.7	
717	Mill Point, Sasanoa River	43° 53.2'	69° 45.8'	+0 35	+0 43	*0.97	*0.97	8.8	10.1	4.7	
719	Kennebec River Fort Popham, Hunniwell Point	43° 45.3'	69° 47.3'	+0 09	+0 04	*0.92	*0.92	8.4	9.7	4.5	
721	Phippsburg	43° 49.1'	69° 48.6'	+0 26	+0 28	*0.88	*0.88	8.0	9.2	4.3	
723	Bath	43° 55.1'	69° 48.8'	+1 01	+1 17	*0.70	*0.70	6.4	7.4	3.4	
725	Sturgeon Island, Merrymeeting Bay	43° 58.9'	69° 50.1'	+2 00	+2 04	*0.58	*0.58	5.3	6.1	2.8	
727	Androscoggin River entrance	43° 57.0'	69° 53.3'	+2 24	+3 26	*0.52	*0.52	4.7	5.4	2.5	
729	Brunswick, Androscoggin River	43° 55.3'	69° 57.8'	+2 35	+4 36	*0.42	*0.42	3.8	4.4	2.0	
731	Bowdoinham, Cathance River	44° 00.5'	69° 53.7'	+2 34	+2 42	*0.63	*0.63	5.7	6.6	3.1	
Casco Bay											
733	Cundy Harbor, New Meadows River	43° 47.3'	69° 53.6'	-0 01	-0 02	*0.98	*0.98	8.9	10.2	4.8	
735	Howard Point, New Meadows River	43° 53.4'	69° 53.0'	-0 05	+0 01	*0.99	*0.99	9.0	10.3	4.8	
737	South Harpswell, Potts Harbor	43° 44.3'	70° 01.4'	+0 02	+0 01	*0.98	*0.98	8.9	10.2	4.8	
739	Wilson Cove, Middle Bay	43° 49.5'	69° 58.6'	+0 02	+0 02	*1.00	*1.00	9.1	10.5	4.9	
741	South Freeport	43° 49.2'	70° 06.2'	+0 12	+0 10	*0.99	*0.99	9.0	10.3	4.8	
743	Prince Point	43° 45.7'	70° 10.4'	+0 00	+0 01	*1.00	*0.99	9.19	10.57	4.90	
745	Doyle Point	43° 45.1'	70° 08.4'	-0 02	-0 03	*1.00	*0.88	9.2	10.5	4.9	
747	Falmouth Foreside	43° 43.9'	70° 12.3'	+0 01	+0 01	*1.00	*0.97	9.16	10.53	4.91	
749	Great Chebeague Island	43° 43.3'	70° 08.5'	+0 02	+0 02	*1.00	*1.03	9.11	10.48	4.91	
751	Cliff Island, Luckse Sound	43° 41.7'	70° 06.6'	-0 02	-0 02	*1.00	*1.00	9.1	10.4	4.9	
753	Vaill Island	43° 40.6'	70° 09.3'	+0 05	+0 01	*0.98	*1.03	9.0	10.3	4.8	
755	Long Island	43° 41.4'	70° 10.2'	-0 01	-0 01	*1.00	*1.00	9.09	10.45	4.89	
757	Cow Island	43° 41.4'	70° 11.4'	-0 01	+0 00	*1.00	*1.00	9.11	10.48	4.89	
759	Presumpscot River Bridge	43° 41.4'	70° 14.8'	+0 01	+0 04	*1.01	*1.06	9.2	10.6	5.0	
761	Back Cove	43° 41'	70° 15'	+0 02	+0 06	*0.97	*0.97	9.1	10.5	4.9	
763	Great Diamond Island	43° 40.2'	70° 12.0'	+0 00	+0 00	*1.00	*1.03	9.08	10.44	4.89	
765	Peak Island	43° 39.3'	70° 12.0'	-0 04	-0 08	*0.99	*0.99	9.0	10.4	4.8	
767	Cushing Island	43° 38.7'	70° 11.9'	+0 01	+0 01	*0.99	*1.03	9.02	10.37	4.87	
769	PORTLAND	43° 39.6'	70° 14.8'	+0 02	+0 02	Daily predictions		9.12	10.53	4.91	
771	Fore River	43° 38.5'	70° 17.1'	+0 02	+0 02	*1.00	*1.03	9.16	10.53	4.93	
773	Portland Head Light	43° 37.4'	70° 12.4'	-0 02	-0 01	*0.97	*1.00	8.89	10.13	4.78	
MAINE, outer coast—cont.											
775	Old Orchard Beach	43° 31'	70° 22'	+0 00	-0 06	*0.97	*0.97	8.8	10.1	4.7	
777	Camp Ellis, Saco River Entrance	43° 27.7'	70° 22.9'	+0 03	+0 10	*0.97	*1.00	8.92	10.17	4.79	
779	Biddeford, Saco River	43° 29.5'	70° 26.8'	+0 12	+0 26	*0.99	*0.97	9.06	10.33	4.86	
781	Cape Porpoise	43° 22.0'	70° 25.9'	+0 12	+0 14	*0.95	*0.95	8.7	9.9	4.7	
783	Kennebunkport	43° 21.5'	70° 28.6'	+0 07	+0 05	*0.97	*1.00	8.84	10.08	4.76	
785	Wells, Webhannet River	43° 19.2'	70° 33.8'	+0 06	+0 02	*0.96	*1.00	8.77	10.09	4.72	
787	Cape Neddick	43° 10.0'	70° 35.6'	+0 02	+0 08	*0.95	*1.00	8.69	9.99	4.68	
789	York Harbor	43° 07.9'	70° 38.5'	+0 03	+0 13	*0.95	*0.95	8.6	9.9	4.6	
791	Fort Point, York Harbor	43° 07.8'	70° 38.3'	-0 04	+0 10	*0.95	*0.94	8.69	9.99	4.66	
793	Seapoint, Cutts Island	43° 05.1'	70° 39.7'	+0 01	-0 04	*0.96	*0.96	8.8	10.1	4.7	
MAINE and NEW HAMPSHIRE											
795	Portsmouth Harbor Jaffrey Point	43° 03.4'	70° 43.9'	-0 03	-0 05	*0.95	*0.95	8.7	10.0	4.7	
797	Gerrish Island	43° 04.0'	70° 41.7'	-0 02	-0 03	*0.95	*0.95	8.7	10.0	4.7	
799	Fort Point	43° 04.3'	70° 42.7'	+0 09	+0 05	*0.95	*1.00	8.63	9.92	4.65	
801	Kittery Point	43° 04.9'	70° 42.2'	-0 07	+0 01	*0.96	*0.96	8.7	10.0	4.7	
803	Seavey Island	43° 05'	70° 45'	+0 20	+0 18	*0.89	*0.89	8.1	9.4	4.4	
805	Portsmouth	43° 04.7'	70° 45.1'	+0 22	+0 17	*0.86	*0.86	7.8	9.0	4.2	
807	Piscataqua River Atlantic Heights	43° 05.4'	70° 46.0'	+0 37	+0 28	*0.82	*0.82	7.5	8.6	4.0	
809	Dover Point	43° 07'	70° 50'	+1 33	+1 27	*0.70	*0.70	6.4	7.4	3.4	
811	Dover, Cocheco River	43° 11.9'	70° 52.1'	+1 45	+1 39	*0.77	*0.76	7.04	8.03	3.78	
813	Salmon Falls River	43° 11.4'	70° 49.5'	+1 35	+1 52	*0.75	*0.75	6.8	7.8	3.6	
815	Squamscott River RR. Bridge	43° 03.2'	70° 54.8'	+2 19	+2 41	*0.75	*0.75	6.8	7.8	3.6	
817	Gosport Harbor, Isles of Shoals	42° 58.7'	70° 36.9'	+0 02	-0 02	*0.93	*0.93	8.5	9.8	4.5	
819	Hampton Harbor	42° 54'	70° 49'	+0 14	+0 32	*0.91	*0.91	8.3	9.5	4.5	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	MASSACHUSETTS, outer coast Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Portland, p.36											
821	Merrimack River Plum Island, Merrimack River Entrance	42° 49.0'	70° 49.2'	+0 06	+0 29	*0.88	*0.88	8.00	9.12	4.30	
823	Newburyport	42° 48.7'	70° 51.9'	+0 31	+1 11	*0.86	*0.86	7.8	9.0	4.2	
825	Salisbury Point	42° 50.3'	70° 54.5'	+0 55	+1 18	*0.83	*0.56	7.64	8.71	4.01	
827	Merrimacport	42° 49.5'	70° 59.3'	+1 26	+2 08	*0.76	*0.50	7.05	8.04	3.70	
829	Riverside	42° 45.8'	71° 04.6'	+1 56	+3 30	*0.62	*0.35	5.72	6.52	2.80	
831	Plum Island Sound (south end)	42° 42.6'	70° 47.3'	+0 12	+0 37	*0.94	*0.94	8.6	9.9	4.6	
833	Essex	42° 37.9'	70° 46.6'	+0 22	+0 31	*1.00	*0.94	9.18	10.47	4.90	
835	Annisquam, Lobster Cove	42° 39.3'	70° 40.6'	+0 11	+0 03	*0.97	*0.97	8.81	10.04	4.74	
837	Rockport	42° 39.5'	70° 36.9'	+0 06	+0 06	*0.95	*0.97	8.70	9.92	4.71	
on Boston, p.40											
839	Gloucester Harbor	42° 36.6'	70° 39.6'	+0 00	-0 04	*0.93	*0.97	8.80	10.03	4.73	
841	Salem, Salem Harbor	42° 31.4'	70° 52.6'	-0 02	-0 05	*0.94	*0.97	8.93	10.18	4.79	
843	Lynn, Lynn Harbor	42° 27.5'	70° 56.6'	+0 01	-0 03	*0.97	*1.00	9.16	10.44	4.92	
Boston Harbor											
845	Boston Light	42° 19.7'	70° 53.5'	-0 01	-0 02	*0.95	*0.97	9.05	10.03	4.85	
847	Deer Island (south end)	42° 20.7'	70° 57.5'	+0 01	+0 00	*0.97	*0.97	9.3	10.8	4.9	
849	BOSTON	42° 21.3'	71° 03.1'	<i>Daily predictions</i>				9.49	11.07	5.09	
851	Charlestown, Charles River entrance	42° 22.5'	71° 03.0'	+0 00	+0 01	*1.00	*1.00	9.5	11.0	5.0	
853	Amelia Earhart Dam, Mystic River	42° 23.7'	71° 04.6'	+0 01	+0 02	*1.01	*0.97	9.56	10.89	5.11	
855	Chelsea St. Bridge, Chelsea River	42° 23.2'	71° 01.4'	+0 01	+0 06	*1.01	*1.01	9.6	11.1	5.1	
857	Neponset, Neponset River	42° 17.1'	71° 02.4'	-0 02	+0 03	*1.00	*1.00	9.5	11.0	5.0	
859	Moon Head	42° 18.5'	70° 59.3'	+0 01	+0 04	*0.99	*0.99	9.4	10.9	5.0	
Hingham Bay											
861	Nut Island, Quincy Bay	42° 16.8'	70° 57.3'	+0 01	+0 01	*0.99	*1.00	9.42	10.74	5.05	
863	Weymouth Fore River Bridge	42° 14.7'	70° 58.1'	+0 09	+0 06	*1.00	*1.00	9.5	11.0	5.0	
865	Crow Point, Hingham Harbor entrance	42° 15.7'	70° 53.6'	+0 02	+0 05	*0.99	*0.99	9.4	10.9	5.0	
867	Hingham	42° 14.8'	70° 53.1'	+0 09	+0 08	*1.00	*1.00	9.5	11.0	5.0	
869	Nantasket Beach, Weir River	42° 16.2'	70° 51.6'	+0 06	+0 07	*0.99	*0.99	9.4	10.9	5.0	
871	Hull	42° 18.2'	70° 55.2'	+0 05	+0 07	*0.97	*0.97	9.3	10.8	5.0	
Cohasset Harbor to Davis Bank											
873	Cohasset Harbor (White Head)	42° 14.9'	70° 47.0'	+0 04	-0 02	*0.92	*0.92	8.8	10.2	4.7	
875	Scituate, Scituate Harbor	42° 12.1'	70° 43.6'	+0 03	-0 01	*0.95	*1.03	8.94	10.19	4.83	
877	Damons Point, North River	42° 09.6'	70° 44.0'	+0 20	+0 36	*0.89	*0.89	8.5	9.9	4.5	
879	Brant Rock, Green Harbor River	42° 05.0'	70° 38.8'	+0 05	+0 03	*0.96	*1.03	9.08	10.35	4.89	
Cape Cod Bay											
881	Duxbury, Duxbury Harbor	42° 02.3'	70° 40.2'	+0 06	+0 33	*1.04	*1.03	9.89	11.27	5.30	
883	Plymouth	41° 57.6'	70° 39.7'	+0 04	+0 18	*1.03	*1.00	9.76	11.13	5.22	
885	Cape Cod Canal, east entrance	41° 46.3'	70° 30.4'	-0 01	-0 03	*0.91	*0.68	8.74	9.96	4.59	
887	Cape Cod Canal, Sagamore (Sta. 115)	41° 46.5'	70° 32.1'	-0 15	-0 06	*0.83	*0.88	7.90	9.01	4.25	
889	Cape Cod Canal, Bourne (Sta. 200)	41° 46.2'	70° 33.7'	-0 29	-0 21	*0.66	*0.79	6.18	7.05	3.37	
891	Cape Cod Canal, Bourne Bridge (Sta. 320)	41° 44.7'	70° 35.6'	-1 13	-0 24	*0.46	*0.79	4.29	4.89	2.42	
893	Barnstable Harbor, Beach Point	41° 43.3'	70° 17.1'	+0 11	+0 30	*1.00	*1.00	9.5	11.0	5.0	
895	Sesuit Harbor, East Dennis	41° 45.1'	70° 09.3'	+0 02	-0 01	*1.02	*0.82	9.73	11.09	5.14	
897	Wellfleet	41° 55.8'	70° 02.5'	+0 14	+0 30	*1.05	*1.05	10.0	11.6	5.4	
899	Provincetown	42° 03'	70° 11'	+0 16	+0 18	*0.95	*0.95	9.1	10.6	4.8	
Cape Cod											
901	Chatham, Stage Harbor	41° 40.0'	69° 58.0'	+0 46	+0 19	*0.43	*0.43	3.95	4.50	2.23	
903	Chatham Harbor, Aunt Lydia's Cove	41° 41.6'	69° 57.0'	+1 08	+1 57	*0.48	*0.35	4.63	5.27	2.43	
905	Pleasant Bay	41° 44.2'	69° 58.9'	+2 28	+3 27	*0.34	*0.34	3.2	3.7	1.7	
907	Georges Shoal, Texas Tower	41° 41.3'	67° 45.6'	-0 47	-0 43	*0.44	*0.44	4.2	4.8	2.2	
Nantucket Sound, north side											
909	Saquatucket Harbor	41° 40.1'	70° 03.4'	+0 46	+0 16	*0.41	*0.41	3.72	4.24	2.14	
911	Wychmere Harbor	41° 39.9'	70° 03.9'	+0 52	+0 25	*0.39	*0.39	3.7	4.3	1.9	
913	Dennisport	41° 39.5'	70° 06.9'	+1 03	+0 38	*0.36	*0.36	3.4	4.1	1.8	
915	South Yarmouth, Bass River	41° 39.9'	70° 11.0'	+1 48	+1 46	*0.29	*0.29	2.8	3.4	1.5	
917	Hyannis Port	41° 37.9'	70° 18.0'	+1 00	+0 26	*0.35	*0.74	3.20	3.80	1.85	
919	Cotuit Highlands	41° 36.5'	70° 26.2'	+1 17	+0 47	*0.26	*0.26	2.5	3.0	1.3	
921	Poponesset Island, Poponesset Bay	41° 35.2'	70° 27.8'	+2 03	+1 52	*0.24	*0.24	2.3	2.8	1.2	
923	Falmouth Heights	41° 32.7'	70° 35.9'	-0 16	-0 09	*0.14	*0.14	1.3	1.6	0.6	
Nantucket Island											
925	Great Point	41° 23.2'	70° 02.8'	+0 43	+0 28	*0.32	*0.32	3.1	3.7	1.6	
927	NANTUCKET	41° 17.1'	70° 05.8'	<i>Daily predictions, p.44</i>				3.0	3.36	1.7	
929	Eel Point	41° 17.5'	70° 12.5'	+0 39	+0 07	*0.24	*0.24	2.3	2.7	1.2	
931	Muskeget Island, north side	41° 20.2'	70° 18.3'	+0 25	+0 15	*0.21	*0.21	2.0	2.4	1.1	

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No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level		
				Time		Height						
		Latitude	Longitude	High Water	Low Water	High Water	Low Water	Mean	Spring			
	MASSACHUSETTS Martha's Vineyard Time meridian, 75° W	North		West		on Newport, p.52						
933	Wasque Point, Chappaquiddick Island	41° 21.8'	70° 27.0'	+2 02	+3 20	*0.31	*0.31	1.1	1.4	0.6		
935	Squibnocket Point	41° 18.7'	70° 46.1'	-0 45	-0 02	*0.82	*0.82	2.9	3.7	1.6		
937	Nomans Land	41° 15.7'	70° 49.0'	-0 19	+0 18	*0.85	*0.85	3.0	3.6	1.6		
939	Gay Head	41° 21.2'	70° 49.8'	-0 06	+0 45	*0.82	*0.82	2.9	3.5	1.5		
941	Cedar Tree Neck	41° 26.1'	70° 41.8'	+0 10	+1 32	*0.62	*0.62	2.2	2.8	1.2		
						on Boston, p.40						
943	Oak Bluffs	41° 27.5'	70° 33.3'	+0 32	-0 12	*0.18	*0.18	1.7	2.0	0.9		
945	Edgartown	41° 23.3'	70° 30.7'	+0 57	+0 18	*0.20	*0.20	1.9	2.3	1.0		
	Vineyard Sound					on Newport, p.52						
947	<i>Woods Hole</i>	41° 31.2'	70° 39.9'	+0 32	+2 21	*0.40	*0.40	1.4	1.8	0.8		
949	Little Harbor	41° 31.4'	70° 40.3'	41° 30.9'	+0 22	Daily predictions, p.48	Daily predictions, p.48	1.8	2.33	1.0		
951	OCEANOGRAPHIC INSTITUTION	41° 30.9'	70° 42.2'	+0 12	+0 22	*1.02	*1.02	3.6	4.5	1.9		
953	Uncatena Island (south side)	41° 26.9'	70° 51.4'	-0 08	-0 08	*0.99	*0.99	3.5	4.4	1.8		
955	Quicks Hole, North side	41° 25.5'	70° 55.0'	+1 20	+1 15	*0.97	*0.93	3.37	4.25	1.81		
	Buzzards Bay											
957	Penikese Island	41° 27.0'	70° 55.3'	-0 17	-0 16	*0.97	*0.97	3.4	4.2	1.8		
959	Chappaquoit Point, West Falmouth Harbor	41° 36.3'	70° 39.1'	+0 06	+0 08	*1.11	*1.14	3.82	4.70	2.07		
961	Monument Beach	41° 42.9'	70° 37.0'	+0 16	+0 30	*1.15	*1.15	3.97	5.00	2.17		
963	Gray Gables	41° 44.1'	70° 37.4'	+0 37	+1 16	*1.05	*1.21	3.62	4.45	1.98		
965	Cape Cod Canal, RR. bridge <6>	41° 44.5'	70° 37.0'	+1 17	+2 50	*1.01	*1.01	3.43	4.22	1.93		
967	Onset Beach, Onset Bay	41° 44.5'	70° 39.5'	+0 41	+1 25	*1.03	*1.03	3.50	4.41	1.97		
969	Onset Beach, Onset Bay	41° 42.7'	70° 42.9'	+0 12	+0 12	*1.14	*1.21	3.96	4.99	2.15		
971	Great Hill	41° 43.2'	70° 45.6'	+0 10	+0 12	*1.13	*1.29	4.0	4.9	2.2		
973	Marion, Sippican Harbor	41° 41.7'	70° 43.2'	+0 10	+0 10	*1.13	*1.21	3.91	4.81	2.13		
975	Piney Point	41° 39'	70° 49'	+0 11	+0 20	*1.09	*1.00	3.9	4.8	2.1		
977	Mattapoisett, Mattapoisett Harbor	41° 35.6'	70° 54.0'	+0 14	+0 23	*1.03	*1.07	3.56	4.49	1.93		
979	Clarks Point	41° 38.4'	70° 55.1'	+0 07	+0 07	*1.05	*1.05	3.7	4.6	1.9		
981	New Bedford	41° 32.3'	70° 55.7'	+0 14	+0 22	*0.99	*1.00	3.43	4.32	1.85		
	Round Hill Point											
983	Westport River	41° 31'	71° 05'	+0 09	+0 33	*0.85	*0.85	3.0	3.7	1.6		
985	Hix Bridge, East Branch	41° 34.2'	71° 04.4'	+1 40	+2 30	*0.77	*0.77	2.7	3.4	1.4		
	RHODE ISLAND, and MASSACHUSETTS Narragansett Bay											
987	<i>Sakonnet River</i>	41° 27.9'	71° 11.6'	-0 09	+0 13	*0.91	*0.86	3.17	3.99	1.70		
989	Sachuest, Flint Point	41° 29.2'	71° 14.3'	-0 05	+0 15	*0.90	*0.93	3.13	3.94	1.69		
991	The Glen	41° 33.5'	71° 14.2'	-0 13	-0 03	*0.98	*1.00	3.40	4.28	1.84		
993	Nannaquaket Neck	41° 37.1'	71° 12.2'	-0 12	-0 13	*1.01	*1.01	3.50	4.41	1.91		
995	Anthony Point	41° 38.3'	71° 12.7'	+0 00	-0 01	*1.09	*1.09	3.75	4.73	2.05		
997	North End, Bay Oil pier	41° 39.1'	71° 12.6'	+0 20	+0 01	*1.20	*1.07	4.17	5.25	2.24		
999	Castle Hill	41° 27.8'	71° 21.7'	-0 05	+0 13	*0.94	*1.00	3.25	4.10	1.77		
1001	NEWPORT	41° 30.3'	71° 19.6'			Daily predictions				3.47	4.38	1.87
	<i>Conanicut Island</i>											
1003	Beavertail Point	41° 27.1'	71° 24.1'	-0 05	+0 04	*0.98	*0.98	3.34	4.21	1.86		
1005	West Jamestown, Dutch Island Harbor	41° 29.8'	71° 23.2'	+0 05	+0 04	*1.00	*1.00	3.46	4.36	1.87		
1007	Conanicut Point	41° 34.4'	71° 22.3'	+0 07	-0 06	*1.07	*1.07	3.8	4.7	2.0		
1009	Prudence Island, (south end)	41° 34.8'	71° 19.3'	+0 08	-0 03	*1.08	*1.14	3.74	4.71	2.03		
1011	Bristol Ferry	41° 38.2'	71° 15.3'	+0 15	+0 00	*1.17	*1.14	4.08	5.14	2.20		
1013	Bristol, Bristol Harbor	41° 40.1'	71° 16.6'	+0 13	+0 00	*1.16	*1.14	4.1	5.1	2.2		
1015	Bristol Highlands	41° 41.8'	71° 17.6'	+0 08	-0 07	*1.18	*1.21	4.2	5.2	2.2		
1017	Fall River, Massachusetts	41° 42.3'	71° 09.8'	+0 18	+0 03	*1.25	*1.21	4.36	5.41	2.35		
1019	Steep Brook, Taunton River	41° 44.4'	71° 07.9'	+0 26	+0 05	*1.30	*1.29	4.51	5.68	2.44		
1021	Bay Spring, Bullock Cove	41° 45.1'	71° 21.1'	+0 12	+0 01	*1.22	*1.21	4.25	5.23	2.30		
1023	Pawtuxet, Pawtuxet Cove	41° 45.7'	71° 23.3'	+0 06	-0 11	*1.25	*1.29	4.35	5.35	2.35		
1025	Providence, State Pier no.1	41° 48.4'	71° 24.1'	+0 13	+0 00	*1.27	*1.29	4.41	5.63	2.40		
1027	Rumford, Seekonk River	41° 50.4'	71° 22.4'	+0 12	+0 06	*1.34	*1.29	4.66	5.73	2.51		
1029	Pawtucket, Seekonk River	41° 52.1'	71° 22.8'	+0 18	+0 09	*1.31	*1.29	4.6	5.8	2.5		
1031	East Greenwich	41° 39.9'	71° 26.7'	+0 13	+0 03	*1.14	*1.14	4.0	5.0	2.1		
1033	Wickford	41° 34.3'	71° 26.7'	+0 03	-0 06	*1.07	*1.07	3.71	4.56	2.01		
1035	Watson Pier, Boston Neck	41° 27.6'	71° 25.7'	-0 03	+0 16	*0.96	*0.93	3.32	4.18	1.79		
1037	Narragansett Pier	41° 25.3'	71° 27.3'	-0 11	+0 11	*0.91	*0.93	3.2	4.0	1.7		
	RHODE ISLAND, Outer Coast											
1039	Point Judith, Harbor of Refuge	41° 21.8'	71° 29.4'	+0 00	+0 33	*0.87	*0.93	3.00	3.13	1.63		
1041	Block Island (Old Harbor)	41° 10.4'	71° 33.4'	-0 13	+0 15	*0.82	*0.86	2.85	3.51	1.54		
1043	Southwest Point, Block Island	41° 09.8'	71° 36.6'	+0 05	+0 42	*0.75	*0.79	2.60	3.20	1.41		
1045	Weekapaug Point, Block Island Sound	41° 19.7'	71° 45.7'	+0 41	+1 06	*0.74	*0.93	2.53	3.11	1.39		
1047	Watch Hill Point	41° 18.3'	71° 51.6'	+0 41	+1 16	*0.74	*0.71	2.6	3.2	1.4		
						on New London, p.60						
1049	Westerly, Pawcatuck River	41° 22.9'	71° 49.9'	-0 21	+0 03	*1.02	*1.00	2.6	3.1	1.5		

Endnotes can be found at the end of table 2.

CAUTION**Cape Cod Canal, Railroad Bridge, No. 967**

Predictions of the times of low water must be used with caution because of the peculiarities in the behavior of the tide. Since the tide may be practically at a stand for as much as two hours before or after the predicted times of low water, the levels at other than high and low water times cannot be obtained in the usual way as in Table 3 (Height of Tide at Any Time). The peculiar behavior of the tide near low water, which is prevalent at this place, is illustrated by the first three curves; however there are brief periods each month when the behavior is as depicted by the fourth curve.

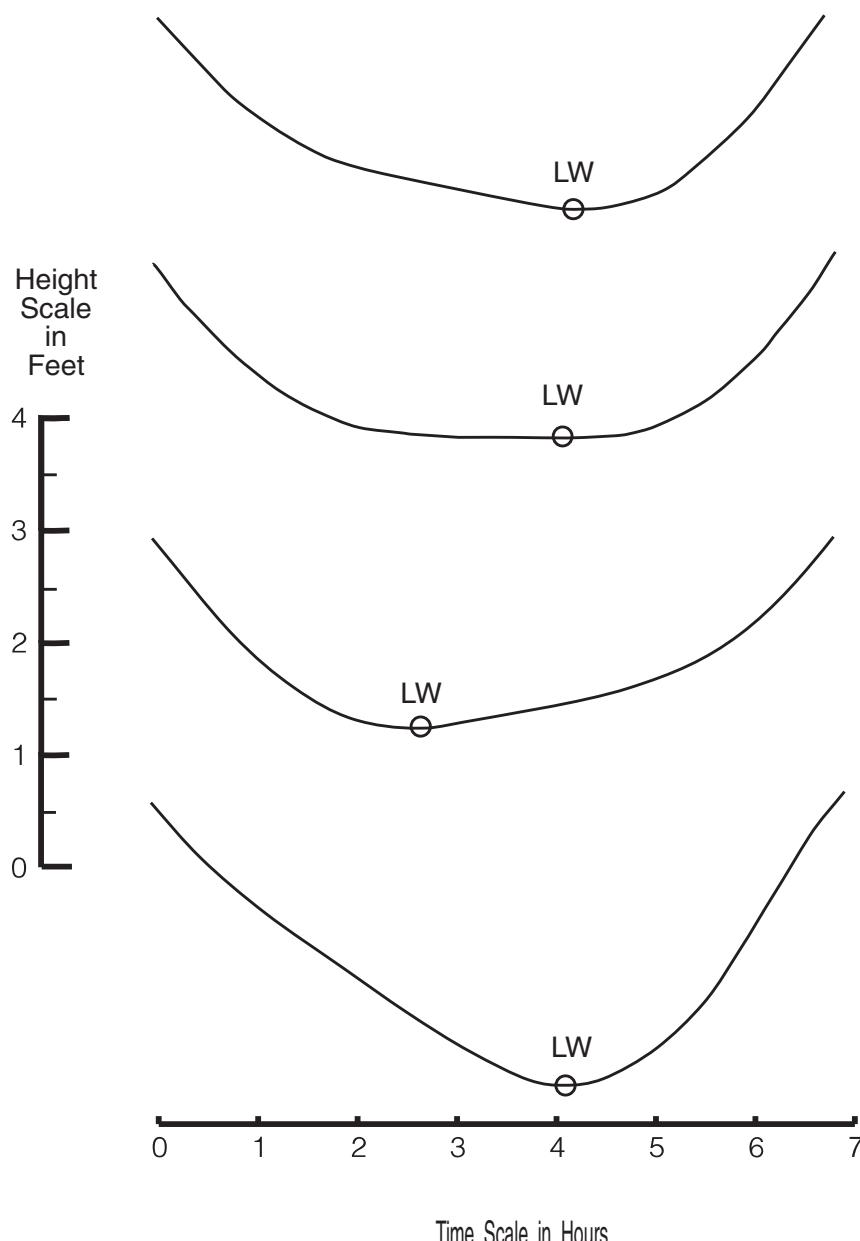


TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
CONNECTICUT, Long Island Sound Time meridian, 75° W											
1051	Silver Eel Pond, Fishers Island, N.Y. <i>Thames River</i>	41° 15.4'	72° 01.8'	-0 04	-0 04	*0.91	*1.00	2.33	2.83	1.37	
1053	NEW LONDON, State Pier	41° 21.6'	72° 05.5'								
1055	Yale boathouse	41° 25.8'	72° 05.6'	+0 14	+0 10	*1.07	*1.11	2.73	3.22	1.57	
1057	Norwich	41° 31.4'	72° 04.7'	+0 24	+0 19	*1.18	*1.21	3.03	3.57	1.75	
1059	Niantic, Niantic River <i>Connecticut River</i>	41° 19.5'	72° 11.2'	+0 52	+0 57	*0.99	*0.84	2.58	3.04	1.44	
1061	Saybrook Jetty	41° 15.8'	72° 20.6'	+1 11	+0 45	*1.36	*1.35	3.5	4.2	2.0	
1063	Saybrook Point	41° 17.0'	72° 21.0'	+1 11	+0 53	*1.24	*1.25	3.2	3.8	1.8	
1065	Lyme, highway bridge	41° 19.3'	72° 21.0'	+1 36	+1 09	*1.26	*0.95	3.31	3.91	1.83	
1067	Essex <7>	41° 20.9'	72° 23.1'	+1 39	+1 38	*1.16	*1.15	3.0	3.6	1.7	
1069	Hadlyme <7>	41° 25.2'	72° 25.7'	+2 19	+2 23	*1.05	*1.05	2.7	3.2	1.5	
1071	Tylerville <7>	41° 27.1'	72° 27.9'	+2 38	+2 51	*1.02	*1.02	2.71	3.20	1.46	
1073	Haddam <7>	41° 28.9'	72° 30.4'	+2 48	+3 08	*0.97	*0.95	2.5	3.0	1.4	
1075	Higginum Creek <7>	41° 30.2'	72° 33.2'	+3 08	+3 40	*0.91	*0.91	2.40	2.83	1.30	
1077	Maromuc <7>	41° 32.5'	72° 33.1'	+3 25	+4 01	*0.91	*0.91	2.41	2.84	1.31	
1079	Middletown <7>	41° 33.6'	72° 38.7'	+3 54	+4 39	*0.83	*0.83	2.17	2.56	1.19	
1081	Rocky Hill <7>	41° 39.8'	72° 37.8'	+4 30	+5 36	*0.72	*0.63	1.88	2.22	1.07	
1083	South Hartford <7>	41° 45.3'	72° 39.5'	+5 24	+6 54	*0.74	*0.58	1.94	2.29	1.07	
1085	Hartford <7>	41° 46.2'	72° 40.1'	+5 30	+6 52	*0.74	*0.75	1.9	2.3	1.1	
on New London, p.60											
1087	Westbrook, Duck Island Roads	41° 16.4'	72° 28.5'	-0 24	-0 32	*0.61	*0.60	4.1	4.7	2.2	
1089	Madison	41° 16.2'	72° 36.2'	-0 21	-0 30	*0.73	*0.72	4.9	5.6	2.6	
1091	Guilford Harbor	41° 16.3'	72° 40.0'	-0 11	-0 21	*0.77	*0.96	5.19	5.92	2.83	
1093	Sachem Head	41° 14.7'	72° 42.5'	+0 11	-0 15	*0.80	*0.80	5.4	6.2	2.9	
1095	Branford, Branford River	41° 15.7'	72° 49.1'	-0 05	-0 13	*0.87	*0.96	5.85	6.67	3.15	
1097	Lighthouse Point, New Haven Harbor	41° 15.1'	72° 54.3'	-0 04	-0 07	*0.91	*0.96	6.12	6.98	3.29	
1099	New Haven Harbor, New Haven Reach	41° 17.0'	72° 54.5'	-0 01	-0 06	*0.92	*1.00	6.15	7.11	3.32	
1101	Gulf Beach	41° 12.3'	72° 02.5'	-0 05	-0 08	*0.94	*1.04	6.29	7.17	3.40	
1103	Milford Harbor	41° 13.1'	73° 03.3'	-0 02	-0 03	*0.94	*1.04	6.32	7.20	3.41	
<i>Housatonic River</i>											
1105	Sniffens Point	41° 11.2'	73° 06.8'	+0 10	+0 09	*0.96	*1.00	6.43	7.33	3.46	
1107	Stratford, I-95 bridge	41° 12.2'	73° 06.7'	+0 23	+0 23	*0.98	*1.00	6.58	7.50	3.53	
1109	Long Hill	41° 16.5'	73° 05.3'	+0 43	+1 13	*1.02	*1.04	6.85	7.81	3.67	
1111	Shelton	41° 18.1'	73° 04.3'	+0 46	+1 19	*1.04	*0.96	7.01	7.99	3.74	
1113	BRIDGEPORT	41° 10.4'	73° 10.9'					6.74	7.80	3.61	
1115	South Norwalk	41° 05.9'	73° 24.9'	+0 09	+0 15	*1.05	*1.04	7.1	8.2	3.8	
1117	Rowayton, Fivemile River	41° 03.9'	73° 26.7'	+0 00	+0 05	*1.05	*1.08	7.09	8.08	3.80	
1119	Long Neck Point	41° 02.3'	73° 28.8'	-0 09	+0 01	*1.06	*0.96	7.17	8.17	3.82	
1121	Stamford	41° 02.3'	73° 32.8'	+0 03	+0 08	*1.07	*1.08	7.2	8.3	3.9	
1123	Cos Cob Harbor	41° 01.0'	73° 35.8'	+0 05	+0 11	*1.07	*1.08	7.2	8.3	3.9	
NEW YORK Long Island Sound, north side											
1125	Rye Beach	40° 57.7'	73° 40.3'	-0 20	-0 27	*1.00	*0.86	7.29	7.89	3.88	
1127	New Rochelle	40° 53.6'	73° 46.9'	-0 16	-0 18	*1.01	*0.93	7.29	8.46	3.90	
1129	Throgs Neck	40° 48.3'	73° 47.7'	+0 11	+0 15	*0.98	*1.11	7.0	8.2	3.8	
East River											
1131	Whitestone	40° 47.9'	73° 48.8'	+0 07	+0 09	*1.00	*1.04	7.1	8.3	3.8	
1133	College Point, Flushing Bay	40° 47.0'	73° 51.4'	+0 17	+0 16	*0.95	*1.04	6.8	7.9	3.7	
1135	Hunts Point	40° 48.0'	73° 52.4'	+0 12	+0 10	*0.97	*1.07	6.92	7.57	3.75	
1137	North Brother Island	40° 48.1'	73° 54.0'	+0 18	+0 18	*0.93	*1.11	6.6	7.8	3.6	
1139	Port Morris (Stony Point)	40° 48.1'	73° 54.4'	+0 07	+0 10	*0.87	*0.96	6.24	6.85	3.39	
on Kings Point, p.68											
1141	Hell Gate, Wards Island	40° 47.2'	73° 55.3'	+2 58	+3 45	*1.33	*1.59	6.0	7.3	3.4	
1143	Horns Hook, East 90th Street	40° 46.6'	73° 56.5'	+1 54	+1 34	*1.03	*0.90	4.68	5.18	2.53	
1145	Queensboro Bridge	40° 45.5'	73° 57.5'	+1 23	+0 57	*0.96	*1.00	4.33	5.24	2.38	
1147	East 41st Street, New York City	40° 44.8'	73° 58.1'	+1 03	+0 46	*0.95	*1.09	4.31	4.89	2.40	
1149	Hunters Point, Newtown Creek	40° 44.4'	73° 57.7'	+1 22	+0 56	*0.89	*0.90	4.1	4.9	2.2	
1151	Williamsburg Bridge	40° 42.7'	73° 58.1'	+0 45	+0 28	*0.93	*0.95	4.22	5.11	2.31	
1153	Wallabout Bay, Brooklyn Navy Yard	40° 42.4'	73° 58.5'	+0 32	+0 22	*0.94	*1.05	4.3	5.2	2.4	
1155	Brooklyn Bridge	40° 42.2'	73° 59.3'	+0 24	-0 04	*0.99	*1.00	4.53	5.13	2.48	
1157	Harlem River, Randall's Island	40° 48.0'	73° 55.7'	+1 42	+1 27	*1.02	*1.09	4.6	5.6	2.6	
on New York, p.72											
1159	Willets Point	40° 47.6'	73° 46.9'	-0 01	+0 00	*1.00	*1.04	7.15	8.21	3.88	
1161	KINGS POINT	40° 48.6'	73° 45.9'					7.16	8.46	3.86	
1163	Port Washington, Manhasset Bay	40° 49.9'	73° 42.2'	-0 12	-0 12	*1.02	*0.96	7.29	8.46	3.92	
1165	Glen Cove, Hempstead Harbor	40° 51.8'	73° 39.3'	-0 22	-0 26	*1.01	*0.82	7.27	7.87	3.87	
on Kings Point, p.68											
1167	Oyster Bay	40° 53'	73° 32'	+0 07	+0 13	*1.08	*1.08	7.3	8.4	3.9	
1169	Oyster Bay Harbor	40° 54.2'	73° 33.0'	+0 06	+0 04	*1.09	*1.04	7.37	7.99	3.94	
1171	Bayville Bridge	40° 52.4'	73° 28.2'	-0 07	+0 02	*1.07	*0.92	7.27	7.86	3.86	
1173	Cold Spring Harbor	40° 57.2'	73° 24.0'	+0 02	+0 08	*1.05	*1.04	7.1	8.2	3.9	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level				
		Latitude	Longitude	Time		Height		Mean	Spring					
				High Water	Low Water	High Water	Low Water							
	NEW YORK Long Island, Long Island Sound—cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft				
on Bridgeport, p.64														
1175	Lloyd Harbor, Huntington Bay	40° 54.6'	73° 25.9'	-0 01	+0 07	*1.04	*0.88	7.02	7.60	3.73				
1177	Northport, Northport Bay	40° 54.0'	73° 21.2'	-0 05	+0 04	*1.07	*0.92	7.25	7.84	3.86				
1179	Port Jefferson Harbor entrance	40° 58'	73° 05'	+0 02	+0 01	*0.98	*0.98	6.6	7.6	3.5				
1181	Port Jefferson	40° 57.0'	73° 04.6'	+0 04	+0 05	*0.98	*0.92	6.61	7.70	3.53				
1183	Cedar Beach	40° 57.9'	73° 02.6'	+0 07	+0 05	*0.96	*1.00	6.43	7.01	3.46				
1185	Mount Sinai Harbor	40° 57.8'	73° 02.4'	+0 04	+0 18	*0.89	*0.88	6.0	6.9	3.2				
1187	Northville	40° 58.9'	72° 38.7'	+0 05	-0 03	*0.80	*0.92	5.35	6.10	2.89				
1189	Mattituck Inlet	41° 00.9'	72° 33.7'	+0 04	-0 04	*0.77	*0.76	5.2	6.0	2.8				
1191	Hashamomuck Beach	41° 05.7'	72° 23.9'	+0 03	-0 13	*0.64	*0.64	4.2	4.8	2.3				
on New London, p.60														
1193	Plum Gut Harbor, Plum Island	41° 10.3'	72° 12.3'	+0 28	+0 16	*1.01	*1.01	2.6	3.1	1.5				
1195	Little Gull Island	41° 12.4'	72° 06.1'	+0 13	-0 22	*0.85	*0.85	2.2	2.6	1.3				
<i>Shelter Island Sound</i>														
1197	Orient	41° 08'	72° 18'	+0 37	+0 36	*0.97	*0.97	2.5	3.0	1.4				
1199	Greenport	41° 06'	72° 22'	+1 05	+0 49	*0.93	*0.95	2.4	2.9	1.4				
1201	Southold	41° 04'	72° 25'	+1 44	+1 33	*0.89	*0.89	2.3	2.7	1.3				
1203	Noyack Bay	41° 00'	72° 20'	+2 06	+1 44	*0.89	*0.89	2.3	2.7	1.3				
1205	Sag Harbor	41° 00.2'	72° 17.8'	+1 00	+0 48	*0.97	*0.97	2.5	3.0	1.4				
<i>Peconic Bays</i>														
1207	New Suffolk	41° 00'	72° 28'	+2 27	+2 11	*1.01	*1.00	2.6	3.1	1.5				
1209	South Jamesport	40° 56.1'	72° 34.9'	+2 34	+2 43	*1.07	*0.95	2.79	3.29	1.57				
1211	Threemile Harbor entrance, Gardiners Bay	41° 02.1'	72° 11.4'	+0 39	+0 19	*0.96	*1.00	2.48	2.98	1.44				
1213	Lake Montauk	41° 04.4'	71° 56.1'	-0 26	-0 22	*0.77	*0.89	2.01	2.37	1.18				
1215	Montauk Harbor entrance	41° 04.5'	71° 56.2'	-0 24	-0 16	*0.74	*0.75	1.9	2.3	1.0				
1217	MONTAUK, FORT POND BAY	41° 02.9'	71° 57.6'	Daily Predictions, p.56				2.07	2.66	1.21				
Long Island, south shore														
on Sandy Hook, p.84														
1219	Shinnecock Inlet (ocean)	40° 50.2'	72° 28.8'	-0 39	-1 04	*0.71	*0.79	3.31	3.97	1.81				
<i>Shinnecock Bay</i>														
1221	Shinnecock Bay entrance	40° 49.2'	72° 33.7'	+1 12	+1 51	*0.51	*0.37	2.41	2.89	1.27				
1223	Ponquogue Point	40° 51.0'	72° 30.2'	-0 06	+0 03	*0.60	*0.65	2.81	3.20	1.53				
1225	Shinnecock Yacht Club, Penniman Creek	40° 49.1'	72° 33.2'	+0 01	+1 45	*0.55	*0.55	2.56	2.93	1.39				
1227	Moriches Inlet	40° 45.9'	72° 45.2'	-0 57	-1 09	*0.62	*0.60	2.9	3.5	1.5				
1229	Moriches Coast Guard Station	40° 47.2'	72° 45.0'	-0 18	+0 48	*0.47	*0.60	2.16	2.51	1.20				
1231	Smith Point Bridge, Narrow Bay	40° 44.3'	72° 52.1'	+1 58	+2 34	*0.27	*0.60	1.19	1.47	0.71				
1233	Democrat Point, Fire Island Inlet	40° 38'	73° 18'	-0 39	-0 27	*0.56	*0.55	2.6	3.1	1.4				
<i>Great South Bay</i>														
1235	Fire Island Coast Guard Station	40° 37.6'	73° 15.6'	-0 16	-0 03	*0.44	*0.68	2.00	2.40	1.13				
1237	Fire Island Light	40° 38.1'	73° 13.2'	+0 46	+1 22	*0.15	*0.15	0.7	0.8	0.3				
1239	West Fire Island	40° 39.4'	73° 12.3'	+2 10	+2 18	*0.13	*0.13	0.6	0.7	0.3				
1241	Point o' Woods	40° 39.1'	73° 08.2'	+2 27	+2 35	*0.15	*0.15	0.7	0.8	0.3				
1243	Patchogue	40° 45.0'	73° 00.0'	+3 14	+3 33	*0.25	*0.53	1.11	1.33	0.66				
1245	Great River, Connetquot River	40° 43.4'	73° 09.1'	+3 19	+3 32	*0.15	*0.15	0.7	0.8	0.3				
1247	Bay Shore, Watchogue Creek Entrance	40° 43.0'	73° 14.4'	+2 15	+2 27	*0.22	*0.37	0.99	1.19	0.57				
1249	Oak Beach	40° 38.5'	73° 17.2'	+2 23	+2 58	*0.15	*0.15	0.7	0.8	0.3				
1251	Babylon	40° 41.1'	73° 18.9'	+2 11	+2 41	*0.13	*0.15	0.6	0.7	0.3				
1253	Gilgo Heading	40° 37.2'	73° 23.7'	+2 22	+2 58	*0.24	*0.25	1.1	1.3	0.5				
1255	Amityville	40° 39.3'	73° 25.1'	+2 20	+3 05	*0.26	*0.25	1.2	1.4	0.7				
1257	Biltmore Shores, South Oyster Bay	40° 40'	73° 28'	+2 04	+2 32	*0.30	*0.30	1.4	1.7	0.8				
1259	Jones Inlet (Point Lookout)	40° 35.2'	73° 34.7'	-0 20	-0 25	*0.77	*0.75	3.6	4.3	2.0				
<i>Hempstead Bay</i>														
1261	Deep Creek Meadow	40° 36.2'	73° 31.5'	+1 01	+1 11	*0.51	*0.50	2.4	2.9	1.3				
1263	Green Island	40° 37.4'	73° 30.1'	+1 21	+1 31	*0.41	*0.40	1.9	2.3	1.0				
1265	Cuba Island	40° 37.2'	73° 31.4'	+1 07	+1 22	*0.49	*0.50	2.3	2.8	1.2				
1267	Bellmore, Bellmore Creek	40° 39.8'	73° 31.2'	+1 28	+1 58	*0.43	*0.45	2.0	2.4	1.1				
1269	Neds Creek	40° 37.4'	73° 33.3'	+0 49	+0 54	*0.58	*0.60	2.7	3.3	1.4				
1271	Freeport, Baldwin Bay	40° 38.0'	73° 35.2'	+0 37	+0 55	*0.64	*0.65	3.0	3.6	1.6				
1273	Long Beach (Inside)	40° 36'	73° 39'	+0 18	+0 02	*0.84	*0.85	3.9	4.7	2.1				
1275	Woodmere, Brosewere Bay	40° 37'	73° 42'	+0 34	+0 50	*0.84	*0.85	3.9	4.7	2.1				
1277	East Rockaway Inlet	40° 35.7'	73° 44.6'	-0 07	-0 14	*0.88	*0.90	4.1	5.0	2.2				
<i>Jamaica Bay</i>														
1279	Plumb Beach Channel	40° 35.1'	73° 55.5'	+0 02	-0 03	*1.05	*1.05	4.9	5.9	2.6				
1281	Barren Island, Rockaway Inlet	40° 34.7'	73° 53.3'	-0 01	-0 04	*1.07	*1.05	5.0	6.0	2.7				
1283	Beach Channel (bridge)	40° 35'	73° 49'	+0 37	+0 24	*1.09	*1.10	5.1	6.2	2.7				
1285	Motts Basin	40° 37.0'	73° 45.5'	+0 39	+0 48	*1.16	*1.15	5.4	6.5	2.9				
1287	Norton Point, Head of Bay	40° 38.1'	73° 44.8'	+0 38	+0 45	*1.16	*1.16	5.4	6.5	2.9				
1289	J.F.K. International Airport	40° 37.4'	73° 47.0'	+0 25	+0 45	*1.14	*1.15	5.3	6.4	2.8				
1291	North Channel Bridge, Grassy Bay	40° 39'	73° 50'	+0 43	+0 47	*1.12	*1.10	5.2	6.3	2.8				
1293	Canarsie	40° 37.8'	73° 53.1'	+0 27	+0 08	*1.12	*1.10	5.2	6.3	2.8				
1295	Mill Basin	40° 37'	73° 55'	+0 28	+0 04	*1.12	*1.10	5.2	6.3	2.8				
NEW YORK and NEW JERSEY New York Harbor														
1297	Coney Island	40° 34'	73° 59'	-0 04	-0 17	*1.01	*1.00	4.7	5.7	2.5				
1299	Norton Point, Gravesend Bay	40° 35.4'	73° 59.9'	-0 01	+0 03	*1.02	*1.15	4.7	5.7	2.6				
1301	Fort Wadsworth, The Narrows	40° 36.4'	74° 03.3'	+0 06	+0 06	*0.98	*1.05	4.8	5.4	2.5				
1303	Fort Hamilton, The Narrows	40° 36.5'	74° 02.1'	+0 02	+0 07	*1.01	*1.00	4.7	5.7	2.5				

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	NEW YORK and NEW JERSEY New York Harbor—cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
				on New York, p.72							
1305	St. George, Staten Island	40° 38.6'	74° 04.4'	-0 17	-0 15	*0.99	*0.99	4.5	5.4	2.4	
1307	Gowanus Bay	40° 39.9'	74° 00.8'	-0 18	-0 12	*1.03	*0.95	4.7	5.7	2.6	
1309	NEW YORK (The Battery)	40° 42.0'	74° 00.9'			Daily Predictions		4.53	5.50	2.47	
	Hudson River <8>										
1311	Weehawken, Union City, N.J.	40° 45.9'	74° 01.1'	+0 13	+0 15	*0.96	*0.96	4.37	5.29	2.41	
1313	Edgewater, N.J.	40° 48.8'	73° 58.7'	+0 31	+0 28	*0.93	*0.93	4.24	5.13	2.33	
1315	Spuyten Duyvil Creek ent., N.Y.	40° 52.7'	73° 55.5'	+0 52	+0 48	*0.84	*0.84	3.85	4.66	2.20	
1317	Riverdale, N.Y.	40° 54.2'	73° 54.9'	+0 48	+0 49	*0.85	*0.85	3.86	4.67	2.13	
1319	Alpine, N.J.	40° 56.7'	73° 55.1'	+1 05	+1 02	*0.83	*0.90	3.75	4.54	2.06	
1321	Tarrytown	41° 04.7'	73° 52.2'	+1 49	+1 57	*0.70	*0.70	3.2	3.7	1.8	
1323	Haverstraw	41° 13.1'	73° 57.8'	+2 15	+2 42	*0.72	*0.81	3.23	3.91	1.78	
1325	Peekskill	41° 17'	73° 56'	+2 28	+3 03	*0.64	*0.64	2.9	3.4	1.8	
1327	Newburgh	41° 30.0'	74° 00.4'	+3 46	+4 03	*0.62	*0.64	2.8	3.2	1.5	
1329	New Hamburg	41° 35'	73° 57'	+4 04	+4 28	*0.64	*0.64	2.9	3.3	1.6	
1331	Poughkeepsie	41° 42'	73° 57'	+4 34	+4 46	*0.68	*0.68	3.1	3.5	1.7	
1333	Hyde Park	41° 47'	73° 57'	+5 00	+5 12	*0.70	*0.68	3.2	3.6	1.8	
1335	Kingston	41° 55'	73° 59'	+5 20	+5 34	*0.81	*0.82	3.7	4.2	2.0	
1337	Tivoli	42° 04'	73° 56'	+5 50	+6 04	*0.86	*0.86	3.9	4.4	1.9	
1339	Hudson	42° 15'	73° 48'	+6 58	+7 12	*0.88	*0.86	4.0	4.4	2.2	
				on Albany, p.80							
1341	Castleton	42° 32'	73° 46'	-0 17	-0 29	-0.2	+0.1	4.3	4.7	2.2	
1343	ALBANY	42° 39.0'	73° 44.8'	+0 08	Daily predictions			4.6	5.0	2.5	
1345	Troy	42° 44'	73° 42'	+0 10	*1.00		*1.00	4.7	5.1	2.3	
	The Kills and Newark Bay			on New York, p.72							
	Kill Van Kull										
1347	Constable Hook	40° 39.3'	74° 05.2'	-0 18	-0 08	*1.02	*1.02	4.63	5.60	2.54	
1349	BAYONNE BRIDGE, STATEN ISLAND	40° 38.4'	74° 08.8'	+0 02	+0 13	*1.11	*0.95	4.98	5.52	2.70	
1351	Port Elizabeth	40° 40.4'	74° 08.4'	+0 03	+0 21	*1.12	*1.12	5.05	6.11	2.73	
1353	Port Newark Terminal	40° 41'	74° 08'	+0 00	+0 22	*1.15	*1.04	5.1	6.1	2.7	
	Passaic River										
1355	Point No Point	40° 43.9'	74° 07.0'	+0 00	+0 22	*1.15	*1.04	5.21	6.30	2.83	
1357	Belleview	40° 47.2'	74° 08.8'	+0 09	+0 49	*1.23	*1.19	5.60	6.78	3.08	
1359	East Rutherford	40° 50.8'	74° 07.2'	+0 09	+1 06	*1.29	*1.29	5.87	7.10	3.20	
1361	Garfield	40° 52.1'	74° 06.7'	+0 08	---	---	---	---	---	---	
	Hackensack River										
1363	Kearny Point	40° 43.7'	74° 06.2'	+0 11	+0 22	*1.15	*1.14	5.21	6.30	2.85	
1365	Amtrak RR. swing bridge	40° 45.1'	74° 05.8'	+0 33	+0 39	*1.16	*1.10	5.27	6.38	2.87	
1367	Fish Creek, Berry's Creek	40° 47.6'	74° 05.5'	+1 02	+1 00	*1.16	*1.00	5.31	6.43	2.86	
1369	Carlstadt, Garretts Reach	40° 48.4'	74° 03.6'	+0 59	+0 45	*1.26	*1.29	5.71	6.29	3.12	
1371	North Secaucus, Garretts Reach	40° 48.4'	74° 02.6'	+0 57	+0 57	*1.23	*1.23	5.61	6.79	3.06	
1373	Mill Creek, 0.8 n.mi. above entrance	40° 47.9'	74° 03.0'	+1 34	---	---	---	---	---	---	
1375	Cromakill Creek, N.J. Turnpike	40° 48.2'	74° 02.0'	+1 00	---	---	---	---	---	---	
1377	Ridgefield Park	40° 51.0'	74° 01.8'	+1 00	+1 00	*1.26	*1.26	5.73	6.93	---	
1379	Hackensack	40° 52.8'	74° 02.4'	+1 06	+1 00	*1.33	*1.38	6.01	7.27	3.29	
1381	New Millford	40° 56.1'	74° 01.8'	+1 17	+2 49	*1.02	*1.02	4.76	5.76	2.44	
	Arthur Kill			on Sandy Hook, p.84							
1383	Port Ivory, Howland Hook, N.Y.	40° 38.7'	74° 10.8'	+0 27	+0 39	*1.09	*1.09	5.10	6.12	2.78	
1385	Rahway River, RR. Bridge	40° 35.9'	74° 13.9'	+0 17	+0 30	*1.14	*1.16	5.36	6.49	2.91	
1387	Chelsea	40° 36'	74° 12'	+0 23	+0 37	*1.07	*1.05	5.0	6.0	2.7	
1389	Carteret	40° 35.2'	74° 12.6'	+0 22	+0 33	*1.09	*1.09	5.1	6.2	2.8	
1391	Rossville, N.Y.	40° 33.3'	74° 13.4'	+0 20	+0 29	*1.12	*1.12	5.22	5.84	2.89	
1393	Woodbridge Creek, 0.8 n.mi. above entrance	40° 32.7'	74° 15.9'	+0 09	+0 21	*1.10	*1.00	5.20	6.29	2.79	
	Lower New York Bay, Raritan Bay, etc.										
1395	Great Kills Harbor	40° 32.6'	74° 08.4'	+0 06	+0 21	*1.01	*1.00	4.7	5.7	2.6	
1397	Princes Bay	40° 30.7'	74° 12.0'	+0 00	+0 06	*1.05	*1.05	4.9	5.9	2.6	
	Raritan River										
1399	South Amboy	40° 29.5'	74° 16.9'	-0 04	+0 08	*1.09	*1.09	5.09	6.11	2.77	
1401	Keasbey	40° 30.5'	74° 18.7'	+0 06	+0 18	*1.10	*1.00	5.21	6.25	2.85	
1403	Sayreville	40° 28.7'	74° 21.4'	+0 11	+0 25	*1.14	*1.21	5.43	6.57	2.95	
1405	Old Bridge, South River	40° 25.0'	74° 21.8'	+0 48	+0 59	*1.18	*1.16	5.58	6.75	3.01	
1407	New Brunswick	40° 29.3'	74° 26.1'	+0 32	+0 48	*1.21	*1.16	5.71	6.91	3.08	
1409	Cheesquake Creek, Garden State Parkway	40° 27.2'	74° 16.4'	+0 12	+0 13	*1.09	*1.05	5.12	6.20	2.77	
1411	Keyport	40° 26.4'	74° 11.9'	-0 04	+0 06	*1.08	*1.10	5.05	6.06	2.74	
1413	Matawan Creek, Route 35 bridge	40° 26.0'	74° 13.1'	-0 01	+0 07	*1.08	*1.08	5.06	6.12	2.77	
1415	Waackaack Creek	40° 26.9'	74° 08.6'	-0 06	+0 21	*0.99	*0.99	4.62	5.54	2.47	
	NEW JERSEY Sandy Hook Bay										
1417	Pews Creek	40° 26.5'	74° 06.3'	-0 08	---	---	---	---	---	---	
1419	Compton Creek	40° 25.9'	74° 05.1'	+0 13	---	---	---	---	---	---	
1421	Atlantic Highlands	40° 25.1'	74° 02.1'	-0 10	-0 10	*1.01	*1.01	4.71	5.65	2.55	
1423	SANDY HOOK (Fort Hancock)	40° 28.0'	74° 00.6'		Daily predictions			4.70	5.71	2.54	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	NEW JERSEY Sandy Hook Bay—cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Sandy Hook, p.84											
1425	Shrewsbury River Highlands, Route 36 bridge	40° 23.8'	73° 58.9'	+0 17	+0 14	*.90	*.90	4.19	5.03	2.27	
1427	Oceanic Bridge, Navesink River	40° 22.6'	74° 00.9'	+1 13	+1 45	*.72	*.63	3.41	4.13	1.82	
1429	Red Bank, Navesink River	40° 21.3'	74° 03.9'	+1 17	+1 57	*.74	*.63	3.51	4.25	1.87	
1431	Sea Bright	40° 21.9'	73° 58.5'	+1 15	+1 07	*.68	*.68	3.15	3.78	1.74	
1433	Gooseneck Point, bridge	40° 19.6'	74° 01.0'	+2 18	+2 41	*.55	*.55	2.57	3.08	1.44	
1435	Long Branch Reach	40° 19.5'	73° 59.8'	+2 18	+2 41	*.56	*.63	2.60	3.15	1.42	
Outer Coast											
1437	Long Branch (fishing pier)	40° 18.2'	73° 58.6'	-0 26	-0 36	*.94	*1.00	4.40	5.28	2.39	
1439	Shark River Island, fixed RR. bridge	40° 11.2'	74° 01.6'	-0 13	-0 08	*.93	*.93	4.32	5.18	2.32	
1441	Shark River Hills	40° 11.6'	74° 02.3'	-0 13	-0 09	*.94	*.94	4.40	5.28	2.38	
1443	New Bedford	40° 10.7'	74° 02.8'	-0 13	-0 07	*.95	*.95	4.41	5.29	2.40	
1445	Belmar, Atlantic Ocean	40° 11.1'	74° 00.5'	-0 35	-0 45	*.95	*.95	4.43	5.32	2.38	
1447	Manasquan Inlet, USCG Station	40° 06.1'	74° 02.1'	-0 12	-0 24	*.86	*.95	4.02	4.82	2.19	
Manasquan River											
1449	Brielle, Route 35 bridge	40° 06.3'	74° 03.3'	-0 06	-0 20	*.83	*.83	3.86	4.63	2.10	
1451	Riviera Beach	40° 05.8'	74° 05.2'	+0 08	+0 38	*.73	*.73	3.39	4.07	1.83	
Metedeconk River											
1453	Beaverdam Creek entrance	40° 03.7'	74° 03.7'	+2 41	+2 40	*.07	*.37	0.30	0.36	0.22	
1455	Beaverdam Creek, inside	40° 03.7'	74° 04.4'	+2 49	+2 47	*.06	*.06	0.29	0.35	0.25	
1457	Forge Pond	40° 03.9'	74° 08.1'	+2 17	+2 07	*.07	*.07	0.31	0.37	0.23	
1459	Tall Pines Camp	40° 03.5'	74° 07.0'	+2 23	+2 24	*.06	*.06	0.30	0.36	0.23	
1461	Seaside Heights, ocean	39° 56.5'	74° 04.1'	-0 30	-0 32	*.92	*.92	4.29	5.15	2.33	
Barnegat Bay											
1463	Mantoloking	40° 02.2'	74° 03.2'	+4 28	+4 39	*.07	*.07	0.33	0.40	0.25	
1465	Kettle Creek, Green Island	40° 00.8'	74° 06.8'	+4 23	+4 41	*.08	*.08	0.38	0.46	0.28	
1467	Ocean Beach	39° 59.3'	74° 04.1'	+4 17	+4 36	*.08	*.08	0.37	0.44	0.27	
1469	Silver Bay, Silver Bay Marina	39° 59.8'	74° 08.9'	+4 26	+4 39	*.08	*.08	0.37	0.44	0.27	
1471	Goose Creek entrance	39° 57.8'	74° 06.9'	+4 06	+4 29	*.08	*.08	0.35	0.42	0.25	
1473	Coates Point	39° 56.9'	74° 06.9'	+4 00	+4 21	*.08	*.08	0.37	0.44	0.25	
1475	Toms River (town), Toms River	39° 57.0'	74° 11.9'	+4 02	+4 29	*.09	*.09	0.42	0.50	0.28	
1477	Seaside Park	39° 55.3'	74° 05.0'	+3 40	+4 05	*.08	*.08	0.38	0.46	0.25	
1479	Barneget Pier	39° 55.1'	74° 06.6'	+3 35	+3 55	*.08	*.08	0.36	0.43	0.23	
1481	Sloop Creek	39° 54.3'	74° 08.0'	+3 38	+4 01	*.08	*.08	0.35	0.42	0.22	
1483	Cedar Creek	39° 52.2'	74° 09.3'	+3 23	+3 45	*.08	*.08	0.35	0.42	0.23	
1485	Island Beach	39° 51.1'	74° 05.4'	+3 04	+3 28	*.08	*.08	0.35	0.42	0.24	
1487	Stouts Creek	39° 50.7'	74° 09.1'	+3 16	+3 33	*.06	*.06	0.30	0.36	0.20	
1489	Forked River	39° 49.5'	74° 10.4'	+3 08	+3 20	*.07	*.07	0.32	0.38	0.24	
1491	Oyster Creek	39° 48.5'	74° 11.3'	+3 30	+3 36	*.06	*.06	0.29	0.35	0.20	
1493	Island Beach, Sedge Islands	39° 47.3'	74° 05.9'	+3 00	+3 56	*.07	*.07	0.34	0.41	0.24	
1495	Waretown	39° 47.5'	74° 10.9'	+2 43	+3 00	*.07	*.07	0.34	0.41	0.24	
1497	Barnegat Inlet, USCG Station	39° 45.7'	74° 06.7'	-0 12	+0 02	*.47	*.63	2.16	2.59	1.20	
1499	High Bar	39° 45.4'	74° 07.7'	+1 04	+1 55	*.12	*.12	0.54	0.65	0.39	
1501	Double Creek	39° 44.7'	74° 12.1'	+3 03	+3 33	*.07	*.07	0.31	0.37	0.19	
1503	Loveladies Harbor	39° 43.5'	74° 08.2'	+3 02	+3 39	*.10	*.10	0.46	0.55	0.30	
Manahawkin Bay											
1505	Flat Creek	39° 42.4'	74° 11.5'	+3 33	+4 35	*.18	*.18	0.84	1.01	0.49	
1507	North Beach	39° 40.5'	74° 09.6'	+3 02	+4 07	*.22	*.22	1.02	1.22	0.58	
1509	Manahawkin Creek	39° 40.0'	74° 12.9'	+2 50	+3 51	*.27	*.27	1.25	1.50	0.69	
1511	Manahawkin Drawbridge	39° 39.2'	74° 11.1'	+2 47	+3 39	*.27	*.27	1.26	1.51	0.70	
Little Egg Harbor											
1513	Mill Creek, 1 n.mi. above entrance	39° 39.9'	74° 13.9'	+2 32	+3 33	*.35	*.35	1.61	1.93	0.87	
1515	Cedar Run	39° 39.2'	74° 15.4'	+2 10	+2 56	*.40	*.40	1.86	2.23	1.01	
1517	Dinner Point Creek, upper end	39° 39.4'	74° 16.2'	+2 41	+3 17	*.40	*.40	1.88	2.26	1.03	
1519	Beach Haven Crest	39° 36.8'	74° 12.6'	+2 13	+2 59	*.38	*.32	1.81	2.19	0.96	
1521	Westcunk Creek entrance	39° 36.8'	74° 15.8'	+2 00	+2 40	*.42	*.47	1.97	2.38	1.07	
1523	West Creek, Westcunk Creek	39° 37.9'	74° 17.8'	+2 10	+2 40	*.44	*.47	2.08	2.52	1.13	
1525	Parker Run, upper end	39° 37.0'	74° 18.6'	+2 05	+2 39	*.45	*.47	2.09	2.53	1.13	
1527	Tuckerton Creek entrance	39° 34.6'	74° 19.9'	+1 32	+1 59	*.45	*.45	2.11	2.53	1.15	
1529	Tuckerton, Tuckerton Creek	39° 36.1'	74° 20.5'	+1 45	+2 15	*.45	*.47	2.11	2.55	1.14	
1531	Beach Haven Coast Guard Station	39° 32.9'	74° 15.4'	+1 18	+1 23	*.46	*.58	2.15	2.60	1.19	
Great Bay											
1533	Shooting Thorofare, Little Egg Inlet	39° 30.5'	74° 19.6'	+0 16	+0 18	*.73	*.73	3.39	4.07	1.83	
1535	Little Sheepshhead Creek	39° 31.1'	74° 19.2'	+0 35	+0 44	*.66	*.68	3.10	3.75	1.68	
1537	Seven Island, Newmans Thorofare	39° 31.0'	74° 20.2'	+0 32	+0 28	*.73	*.73	3.4	4.1	1.8	
1539	Graveling Point	39° 32.4'	74° 23.2'	+0 44	+1 14	*.68	*.68	3.18	3.82	1.72	
Mullica River											
1541	Nacote Creek, U.S. Highway 9 bridge	39° 32.1'	74° 27.8'	+1 34	+1 55	*.66	*.68	3.09	3.74	1.68	
1543	Cramers Boatyard	39° 32.9'	74° 27.7'	+1 27	+2 01	*.63	*.79	2.94	3.53	1.74	
1545	New Gretna, Bass River	39° 35.5'	74° 26.5'	+1 52	+2 06	*.66	*.74	3.10	3.75	1.69	
1547	Wading River (town), Wading River	39° 37.1'	74° 29.8'	+2 48	+2 44	*.64	*.79	2.98	3.61	1.64	
1549	Green Bank	39° 36.7'	74° 35.4'	+2 59	+3 16	*.66	*.66	3.07	3.68	1.70	
1551	Sweetwater, Mullica River Marina	39° 37.5'	74° 38.5'	+3 23	+4 21	*.56	*.56	2.42	3.14	1.42	
on Atlantic City, p.88											
1553	Main Marsh Thorofare	39° 28.7'	74° 23.0'	+1 10	+1 52	*.80	*.76	3.21	3.92	1.74	
1555	Brigantine Channel @ Hoffman Thorofare	39° 26.1'	74° 21.8'	+0 59	+0 58	*.90	*.88	3.63	4.43	1.97	
1557	Reed Bay, Turtle Cove	39° 27.2'	74° 25.6'	+1 07	--	--	--	--	--	--	
1559	Absecon, Absecon Creek, U.S. Hwy. 30 bridge	39° 25.4'	74° 30.0'	+1 28	+1 37	*.96	*.94	3.87	4.72	2.09	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level
				Time		Height				
		Latitude	Longitude	High Water	Low Water	High Water	Low Water	Mean	Spring	
	NEW JERSEY Outer Coast—cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft
		on Atlantic City, p.88								
1561	Absecon Channel, State Route 87 bridge	39° 23.1'	74° 25.5'	+0 38	+0 26	*0.96	*1.13	3.90	4.68	2.13
1563	ATLANTIC CITY, OCEAN	39° 21.3'	74° 25.1'	39° 20.1'	74° 28.6'	-0 02	-0 02	4.02	4.90	2.18
1565	Ventnor City, ocean pier	39° 20.1'	74° 28.6'	-0 02	-0 02	*1.00	*1.00	4.04	4.92	2.19
1567	Longport (inside), Great Egg Harbor Inlet	39° 18.5'	74° 32.0'	+0 26	+0 32	*0.94	*0.88	3.78	4.61	2.04
1569	Dock Thorofare, Risley Channel	39° 21.1'	74° 32.4'	+0 55	+1 00	*0.98	*0.94	3.92	4.78	2.12
1571	Pleasantville, Lakes Bay, Great Egg Harbor Inlet	39° 22.9'	74° 31.1'	+1 00	+1 37	*0.98	*0.82	3.96	4.83	2.12
	Great Egg Harbor Bay									
1573	Beesleys Point	39° 17.3'	74° 37.7'	+0 55	+1 32	*0.87	*1.00	3.55	4.26	1.93
1575	Steelmanville, Patcong Ck., 2.5 nm above ent.	39° 20.1'	74° 35.8'	+1 28	+1 50	*0.92	*0.94	3.70	4.51	2.01
1577	Tuckahoe, Tuckahoe River	39° 17.7'	74° 44.9'	+2 12	+2 40	*0.86	*1.25	3.47	4.16	1.93
1579	Cedar Swamp Creek, Tuckahoe River	39° 14.8'	74° 43.1'	+3 14	+3 03	*0.78	*1.53	2.99	3.65	1.75
1581	River Bend Marina, Great Egg Harbor River	39° 22.1'	74° 43.0'	+2 12	+2 25	*0.87	*1.00	3.47	4.23	1.90
1583	Mays Landing, Great Egg Harbor River	39° 26.9'	74° 43.7'	+2 50	+3 10	*1.01	*1.12	4.06	4.95	2.22
	Corson Inlet									
1585	Strathmere, Strathmere Bay	39° 12.0'	74° 39.4'	+0 31	+0 38	*0.95	*1.00	3.81	4.65	2.07
1587	Middle Thorofare, Ocean Drive bridge	39° 12.9'	74° 38.9'	+0 31	+0 30	*0.95	*0.94	3.80	4.64	2.06
1589	Ludlam Bay, west side	39° 10.6'	74° 42.6'	+0 56	+1 12	*0.98	*0.94	3.94	4.81	2.13
	Townsend's Inlet									
1591	Ocean Drive bridge	39° 07.3'	74° 43.0'	+0 34	+0 34	*0.95	*1.06	3.88	4.66	2.11
1593	Townsend Sound	39° 08.8'	74° 45.0'	+1 08	+1 39	*0.90	*0.59	3.69	4.50	1.95
1595	Stites Sound	39° 07.2'	74° 45.3'	+0 49	+1 04	*0.97	*1.00	3.98	4.78	2.15
1597	Ingram Thorofare	39° 06.6'	74° 44.4'	+0 44	+0 50	*0.96	*1.00	3.93	4.72	2.12
1599	Long Reach, Ingram Thorofare	39° 06.1'	74° 45.3'	+1 06	+1 11	*0.98	*1.06	4.00	4.80	2.17
	Hereford Inlet									
1601	Great Sound, west side	39° 06.1'	74° 47.3'	+0 56	---	---	---	---	---	---
1603	Stone Harbor, Great Channel	39° 03.4'	74° 45.9'	+1 01	+1 12	*1.08	*1.00	4.02	4.82	2.17
1605	Jenkins Sound	39° 03.9'	74° 48.5'	+0 52	---	---	---	---	---	---
1607	Nummy Island, Grassy Sound Channel	39° 01.7'	74° 48.1'	+0 32	+0 45	*1.00	*1.00	4.09	4.91	2.21
1609	West Wildwood, Grassy Sound	39° 00.3'	74° 49.6'	+0 57	+1 11	*1.04	*1.00	4.27	5.12	2.30
1611	Old Turtle Thorofare, RR. bridge	39° 01.1'	74° 50.5'	+0 56	+1 10	*1.06	*1.00	4.33	5.20	2.33
1613	Wildwood Crest, ocean pier	38° 58.5'	74° 49.4'	+0 03	+0 03	*1.07	*1.06	4.31	5.26	2.34
	Cape May Inlet									
1615	Swain Channel, Taylor Sound	38° 58.8'	74° 51.8'	+0 55	+0 40	*1.09	*1.06	4.46	5.35	2.40
1617	Wildwood Crest, Sunset Lake	38° 58.7'	74° 50.2'	+0 52	+0 47	*1.10	*1.06	4.50	5.40	2.42
1619	Cape May Harbor	38° 56.9'	74° 53.5'	+0 33	+0 19	*1.10	*1.06	4.49	5.39	2.42
1621	Cape Island Creek, Cape May	38° 56.8'	74° 54.8'	+0 40	+0 20	*1.11	*1.19	4.51	5.41	2.44
1623	Cape May, Atlantic Ocean	38° 55.8'	74° 56.1'	+0 34	+0 21	*1.12	*1.06	4.59	5.51	2.46
	Delaware Bay, Eastern Shore							on Breakwater Harbor, p.92		
1625	Brandywine Shoal Light	38° 59.2'	75° 06.8'	+0 12	+0 17	*1.19	*1.06	4.89	5.77	2.61
1627	Cape May Point, Sunset Beach	38° 56.8'	74° 58.3'	-0 05	-0 08	*1.16	*1.16	4.80	5.66	2.56
1629	Cape May, ferry terminal	38° 58.1'	74° 57.5'	-0 06	-0 05	*1.18	*1.00	4.85	5.73	2.58
1631	North Highlands Beach	39° 01.1'	74° 57.2'	+0 04	+0 14	*1.26	*1.26	5.24	6.18	2.78
1633	Dias Creek, Route 47 bridge	39° 05.0'	74° 53.2'	+1 09	+3 18	*0.46	*0.46	1.89	2.23	1.04
1635	Bidwell Creek entrance	39° 07.7'	74° 53.5'	+0 15	+0 46	*1.39	*1.19	5.67	6.69	3.03
1637	Bidwell Creek, Route 47 bridge	39° 07.1'	74° 52.1'	+0 36	+0 48	*1.36	*1.36	5.66	6.68	3.01
1639	Dennis Creek, 2.5 n.mi. above entrance	39° 10.7'	74° 51.1'	+0 55	+1 17	*1.26	*1.26	5.23	6.17	2.88
1641	Sluice Creek, Route 47 bridge, Dennis Creek	39° 09.7'	74° 49.9'	+1 49	+1 36	*1.22	*1.22	5.05	5.96	2.82
1643	Dennis Creek, Route 47 bridge	39° 11.0'	74° 49.3'	+2 01	+1 30	*1.20	*1.20	4.96	5.85	2.79
1645	East Creek, Route 47 bridge	39° 12.5'	74° 54.1'	+1 46	+2 24	*0.94	*0.94	3.92	4.63	2.20
1647	West Creek, 0.7 n.mi. above entrance	39° 11.3'	74° 54.9'	+0 20	+1 31	*1.15	*1.15	4.76	5.33	2.55
1649	West Creek, Route 47 bridge	39° 13.0'	74° 55.5'	+2 20	+3 17	*0.58	*0.58	2.40	2.83	1.51
1651	Riggins Ditch, 0.5 n.mi. above entrance	39° 12.0'	74° 58.2'	+0 29	+1 29	*1.24	*1.24	5.14	6.07	2.79
1653	Riggins Ditch, Heislerville	39° 13.1'	74° 58.8'	+1 36	+1 40	*1.12	*1.12	4.65	5.49	2.55
1655	East Point, Maurice River Cove	39° 12.0'	75° 01.2'	+0 40	+1 08	*1.39	*1.39	5.75	6.78	3.08
	Maurice River									
1657	Bivalve	39° 13.8'	75° 02.2'	+0 39	+1 14	*1.35	*1.35	5.60	6.61	3.00
1659	Mauricetown	39° 17.1'	74° 59.5'	+2 17	+2 30	*1.05	*1.05	4.36	5.14	2.42
1661	Port Elizabeth, Manumuskin River	39° 18.8'	74° 59.1'	+2 52	+2 58	*1.05	*1.05	4.34	5.12	2.42
1663	Menantico Creek entrance	39° 20.6'	75° 00.5'	+3 06	+3 09	*1.10	*1.10	4.58	5.40	2.52
1665	Millville	39° 23.5'	75° 02.5'	+3 33	+3 36	*1.21	*1.21	5.01	5.91	2.75
1667	Dividing Creek entrance	39° 13.0'	75° 06.4'	+0 29	+1 05	*1.35	*1.35	5.62	6.63	2.99
1669	Weir Creek bridge, Dividing Creek	39° 15.0'	75° 07.7'	+1 38	+2 33	*0.71	*0.71	2.96	3.49	1.69
1671	Dividing Creek (town), Dividing Creek	39° 16.0'	75° 05.7'	+3 07	---	---	---	---	---	---
								on Reedy Point, p.96		
1673	Fishing Creek entrance	39° 12.9'	75° 09.6'	-1 51	-2 10	*1.02	*1.02	5.63	6.14	3.00
1675	Fortescue	39° 14.2'	75° 10.4'	-1 51	---	---	---	---	---	---
1677	Hollywood Beach, The Glades	39° 16.5'	75° 08.5'	+1 45	+1 13	*0.21	*0.21	1.16	1.26	0.71
1679	Money Island, Nantuxent Creek entrance	39° 17.1'	75° 14.3'	-1 43	-1 58	*1.10	*1.10	6.07	6.62	3.21
1681	Newport Landing, Nantuxent Creek	39° 17.5'	75° 11.9'	-0 03	-0 28	*0.74	*0.74	4.06	4.43	2.38
1683	Cedar Creek entrance, Nantuxent Cove	39° 17.9'	75° 14.8'	-1 37	-1 51	*1.08	*1.08	5.96	6.50	3.17
1685	Cedarville, Cedar Creek, Nantuxent Cove	39° 19.8'	75° 12.7'	-0 37	---	---	---	---	---	---
1687	Back Creek entrance, Nantuxent Cove	39° 18.3'	75° 16.7'	-1 29	-1 34	*1.07	*1.07	5.91	6.44	3.11
1689	Husted Landing, Ogden Creek, Back Creek	39° 21.1'	75° 15.1'	-0 47	---	---	---	---	---	---
1691	Greenwich Pier, Cohansay River	39° 23.0'	75° 21.0'	-0 42	-0 54	*0.99	*0.99	5.47	5.96	2.94
1693	Tindalls Wharf, Cohansay River	39° 22.7'	75° 14.1'	+1 01	-0 02	*1.09	*1.09	5.98	6.52	3.20

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
	DELAWARE Time meridian, 75° W			on Breakwater Harbor, p.92							
	Delaware Bay, Western Shore										
1695	LEWES (BREAKWATER HARBOR)	38° 46.9'	75° 07.2'					4.08	4.94	2.19	
1697	Mispillion River entrance	38° 56.9'	75° 18.9'	+0 22	+0 50	*1.13	*1.00	4.63	5.46	2.48	
1699	Murderkill River entrance	39° 03.5'	75° 23.8'	+0 39	+1 11	*1.25	*0.94	5.12	6.04	2.71	
1701	Mahon River entrance	39° 11.1'	75° 24.0'	+0 58	+1 29	*1.30	*1.13	5.33	6.29	2.84	
1703	Leipsic, Leipsic River	39° 14.6'	75° 31.1'	+3 35	+3 49	*0.85	*0.63	3.50	4.13	1.80	
	DELAWARE and NEW JERSEY Delaware River			on Reedy Point, p.96							
1705	Stathems Neck, Stow Creek, N.J.	39° 24.4'	75° 24.3'	-0 22	-0 37	*0.88	*0.88	4.85	5.29	2.65	
1707	Woodland Beach, Del.	39° 20.2'	75° 28.3'	-1 07	-1 10	*1.11	*1.11	5.90	6.80	3.00	
1709	Raccoon Ditch, Newport Meadows, Stow Creek, N.J.	39° 25.3'	75° 22.9'	+1 08	+0 33	*0.76	*0.76	4.17	4.55	2.30	
1711	Canton, Stow Creek, N.J.	39° 27.7'	75° 24.2'	+1 36	+0 45	*0.80	*0.80	4.42	4.82	2.49	
	Mad Horse Creek										
1713	1 n.mi. above entrance, N.J.	39° 25.9'	75° 26.8'	-0 20	-0 47	*1.07	*1.07	5.86	6.39	3.12	
1715	Pine Island, Malapartis Creek, N.J.	39° 25.3'	75° 25.7'	+0 21	-0 18	*0.92	*0.92	5.08	5.54	2.76	
1717	Silver Lake Fork, N.J.	39° 27.2'	75° 27.4'	+0 04	---	---	---	---	---	---	
1719	Hope Creek, 0.6 n.mi. above entrance, N.J.	39° 27.5'	75° 29.7'	-0 25	-0 36	*1.05	*1.05	5.78	6.30	3.07	
1721	Hope Creek, upper end, N.J.	39° 29.1'	75° 29.6'	+0 49	---	---	---	---	---	---	
1723	Taylors Bridge, Blackbird Creek, Del.	39° 24.0'	75° 36.0'	+1 53	+0 57	*0.54	*0.56	2.90	3.30	1.50	
1725	Artificial Island, Salem Nuclear Plant, N.J.	39° 27.7'	75° 31.9'	-0 35	-0 33	*1.08	*1.08	5.93	6.46	3.16	
	Alloway Creek, New Jersey										
1727	0.8 n.mi. above entrance	39° 29.8'	75° 31.0'	+0 21	-0 10	*0.99	*0.99	5.44	5.93	3.18	
1729	Abbots Meadow	39° 30.7'	75° 29.6'	+0 44	+0 12	*0.94	*0.94	5.15	5.61	2.76	
1731	2.5 n.mi. above entrance	39° 30.3'	75° 29.0'	+0 51	+0 15	*0.90	*0.90	4.95	5.40	2.67	
1733	Coopers Creek bridge	39° 30.8'	75° 26.8'	+1 51	+1 00	*0.78	*0.78	4.30	4.69	2.37	
1735	Quinton	39° 32.9'	75° 24.9'	+2 24	+1 30	*0.69	*0.69	3.79	4.13	2.17	
1737	Alloway	39° 33.9'	75° 21.8'	+3 37	---	---	---	---	---	---	
1739	Mill Creek, Elsinboro, N.J.	39° 32.1'	75° 30.7'	-0 04	---	---	---	---	---	---	
	Salem River, New Jersey										
1741	Sinnickson Landing	39° 34.2'	75° 29.9'	+0 04	+0 19	*0.97	*0.97	5.32	5.80	2.83	
1743	Salem	39° 34.6'	75° 28.6'	+0 49	+0 41	*0.76	*0.76	4.19	4.57	2.29	
1745	Kates Creek Meadow	39° 37.5'	75° 27.2'	+1 54	---	---	---	---	---	---	
1747	Winslow Farms	39° 37.7'	75° 28.9'	+2 09	---	---	---	---	---	---	
1749	Beaver Dam	39° 39.0'	75° 29.2'	+2 32	---	---	---	---	---	---	
1751	REEDY POINT	39° 33.5'	75° 34.4'				Daily predictions	5.34	5.81	2.85	
	Chesapeake and Delaware Canal										
1753	St. Georges, Delaware	39° 33.3'	75° 38.9'	-0 16	-0 17	*0.83	*1.00	4.41	4.81	2.39	
1755	Summit Bridge, Delaware	39° 32.0'	75° 44.0'	-0 28	-0 52	*0.65	*0.56	3.50	3.90	1.80	
1757	Chesapeake City, Maryland	39° 31.6'	75° 48.6'	-0 45	-1 12	*0.56	*1.28	2.86	3.14	1.66	
1759	Delaware City Branch Channel bridge	39° 34.2'	75° 35.4'	+0 00	+0 05	*1.02	*0.89	5.45	5.94	2.88	
1761	Delaware City	39° 34.9'	75° 35.3'	+0 11	+0 14	*1.02	*1.00	5.44	5.93	2.90	
1763	Pea Patch Island, Bulkhead Shoal Channel, Del.	39° 35.1'	75° 34.4'	+0 03	+0 00	*1.05	*1.00	5.62	6.13	2.99	
1765	Mill Creek, Penns Neck, N.J.	39° 36.6'	75° 31.2'	+0 08	---	---	---	---	---	---	
1767	New Castle, Delaware	39° 39.4'	75° 33.7'	+0 29	+0 40	*0.98	*1.00	5.21	5.68	2.78	
1769	Salem Canal entrance, N.J.	39° 41.0'	75° 30.6'	+0 36	+0 52	*1.00	*1.00	5.52	6.02	2.94	
	Christina River, Delaware										
1771	Wilmington Marine Terminal	39° 43.1'	75° 31.2'	+0 50	+1 06	*0.99	*1.11	5.27	5.74	2.83	
1773	Millside, RR. bridge	39° 43.5'	75° 33.6'	+1 08	+1 19	*0.99	*1.06	5.30	5.78	2.84	
1775	Edgemoor, Del.	39° 45.0'	75° 29.6'	+0 52	+1 11	*1.02	*1.17	5.52	6.02	2.97	
1777	Pedricktown, Oldmans Creek, N.J.	39° 45.7'	75° 24.2'	+2 11	+2 07	*0.75	*0.75	4.13	4.50	2.32	
1779	Auburn, Oldmans Creek, N.J.	39° 42.9'	75° 21.6'	+4 12	+3 30	*0.55	*0.55	2.74	2.99	1.65	
	NEW JERSEY and PENNSYLVANIA Delaware River—cont.			on Philadelphia, p.100							
1781	Marcus Hook, Pa.	39° 48.7'	75° 24.7'	-1 23	-1 07	*0.92	*0.95	5.53	5.86	2.96	
1783	Bridgeport, Raccoon Creek, N.J.	39° 48.4'	75° 21.3'	-1 11	-0 50	*0.91	*1.00	5.42	5.66	2.91	
1785	Swedesboro, Raccoon Creek, N.J.	39° 45.1'	75° 18.4'	+0 40	---	---	---	---	---	---	
	Derby Creek, Pennsylvania										
1787	Wanamaker Bridge	39° 52.6'	75° 18.3'	-0 46	-0 34	*0.95	*0.95	5.71	6.05	3.05	
1789	Norwood City	39° 52.8'	75° 17.4'	-0 42	-0 35	*0.97	*1.00	5.79	6.13	3.09	
1791	Tinicum National Wildlife Refuge	39° 52.7'	75° 16.6'	-0 22	-0 08	*0.91	*0.90	5.47	5.80	2.91	
1793	Tinicum National Wildlife Refuge	39° 53.2'	75° 15.9'	-0 24	+0 27	*0.74	*0.74	4.51	4.78	2.33	
1795	Tinicum Nat. Wildlife Refuge, Visitor Center	39° 53.5'	75° 15.5'	-0 10	---	---	---	---	---	---	
1797	Billingsport, N.J.	39° 51.0'	75° 15.0'	-0 35	-0 28	*0.93	*0.95	5.59	5.93	2.99	
1799	Paulsboro, Mantua Creek, N.J.	39° 50.1'	75° 14.3'	-0 24	-0 19	*0.94	*0.90	5.64	5.88	3.01	
1801	Mantua, Mantua Creek, N.J.	39° 47.8'	75° 10.6'	+1 28	+0 56	*0.71	*0.71	4.19	4.37	2.31	
1803	Woodbury Creek, N.J.	39° 51.6'	75° 11.2'	-0 13	-0 14	*0.96	*0.95	5.75	6.10	3.07	
	Schuylkill River, Pennsylvania										
1805	Penrose Avenue Bridge	39° 53.9'	75° 12.7'	-0 22	-0 11	*0.96	*0.85	5.79	6.14	3.07	
1807	Market Street Bridge	39° 57.3'	75° 10.8'	-0 20	+0 00	*0.99	*0.80	5.94	6.30	3.13	
1809	Westville, Rt. 47 bridge, Big Timber Creek, N.J.	39° 52.5'	75° 07.4'	+0 02	+0 03	*0.97	*1.00	5.80	6.15	3.10	
1811	Sunset Beach, Big Timber Creek, N.J.	39° 48.9'	75° 05.3'	+1 32	---	---	---	---	---	---	
1813	Philadelphia, Municipal Pier 11, Pa.	39° 57.2'	75° 08.3'	+0 02	+0 05	*1.04	*0.95	6.24	6.61	3.32	
1815	PHILADELPHIA, US Coast Guard Station, Pa.	39° 56.0'	75° 08.5'				Daily predictions	5.99	6.32	3.30	
1817	Pavonia, Cooper River, RR. bridge, N.J.	39° 56.8'	75° 06.3'	+0 14	+0 23	*1.04	*1.00	6.24	6.61	3.32	
1819	Bridesburg, Philadelphia, Pa.	39° 59.0'	75° 04.5'	+0 17	+0 22	*1.06	*1.00	6.38	6.76	3.39	
1821	Palmyra, Pennsauken Creek, Route 73 bridge, N.J.	39° 59.6'	75° 01.7'	+0 51	+1 03	*0.89	*0.89	5.25	5.48	2.86	
1823	Cinnaminson, Pennsauken Ck., Rt. 130 bridge, N.J.	39° 59.1'	75° 00.9'	+1 37	---	---	---	---	---	---	
1825	Tacony–Palmyra Bridge	40° 00.7'	75° 02.6'	+0 24	+0 25	*1.10	*0.95	6.60	7.00	3.49	
1827	Pompeston Creek, N.J.	40° 00.8'	75° 00.5'	+0 21	+0 43	*1.05	*1.05	6.39	6.68	3.30	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	NEW JERSEY and PENNSYLVANIA Delaware River—cont. Time meridian, 75° W	North	West	h	m	ft	ft	ft	ft	ft	
	on Philadelphia, p.100										
1829	Rancocas Creek, New Jersey Bridgeboro	40° 01.7'	74° 55.9'	+1	15	+1 18	*1.06	*1.00	6.35	6.73	3.38
1831	North Branch	39° 59.9'	74° 49.1'	+2	58	+3 29	*0.48	*0.60	2.86	3.03	1.55
1833	Hainesport, South Branch	39° 58.7'	74° 49.4'	+2	58	+3 05	*0.62	*0.62	3.63	3.85	2.05
1835	Cornwells Heights, Pa.	40° 04.1'	74° 56.3'	+0	46	+0 58	*1.17	*1.00	7.02	7.44	3.71
1837	Burlington, N.J.	40° 04.8'	74° 52.5'	+0	53	+1 07	*1.20	*1.00	7.24	7.63	3.83
1839	Assicunk Creek, Route 130 bridge, N.J.	40° 04.4'	74° 50.9'	+1	04	+1 31	*1.12	*0.85	6.75	7.16	3.54
1841	Edgely, Pa.	40° 07.7'	74° 49.4'	+1	08	+1 28	*1.27	*1.15	7.64	8.10	4.05
1843	Fieldsboro, N.J.	40° 08.2'	74° 44.2'	+1	07	+1 39	*1.29	*1.10	7.78	8.25	4.11
1845	Newbold, Pa.	40° 08.2'	74° 45.1'	+1	10	+1 31	*1.30	*1.00	7.86	8.33	4.13
1847	Blacks Creek, Route 130 bridge, N.J.	40° 08.3'	74° 42.7'	+1	13	---	---	---	---	---	---
1849	Sylvan Glen, Crosswicks Ck., Rt. 206 bridge, N.J.	40° 10.9'	74° 42.3'	+2	03	---	---	---	---	---	---
1851	Crosswicks Creek, Route 130 bridge, N.J.	40° 10.4'	74° 40.8'	+3	07	---	---	---	---	---	---
1853	Trenton, N.J.	40° 11.3'	74° 45.3'	+1	13	+1 54	*1.35	*1.00	8.18	8.47	4.29
	on Ocean City, p.104										
1855	Rehoboth Beach	38° 43.2'	75° 04.6'	+0	15	+0 08	*1.13	*1.33	3.9	4.7	2.1
1857	Indian River Inlet (Coast Guard Station)	38° 36.6'	75° 04.2'	+1	14	+0 45	*0.76	*1.00	2.51	2.94	1.41
	MARYLAND, outer coast										
1859	OCEAN CITY (FISHING PIER)	38° 19.6'	75° 05.0'						3.36	4.00	1.84
1861	Ocean City Inlet	38° 19.7'	75° 05.5'	+0	28	+0 14	*0.65	*1.00	2.13	2.62	1.23
1863	Ocean City (Isle of Wight Bay)	38° 19.9'	75° 05.4'	+0	25	+0 23	*0.67	*0.94	2.20	2.61	1.25
1865	Keydash, Isle of Wight Bay	38° 20.5'	75° 05.1'	-0	57	+0 54	*0.47	*0.81	1.53	1.82	0.89
	MARYLAND and VIRGINIA Chincoteague Bay										
1867	Assateague Beach, Toms Cove	37° 52.0'	75° 22.0'	+0	35	+0 48	*1.08	*1.25	3.60	4.28	2.00
1869	Harbor of Refuge	37° 54.2'	75° 24.4'	+0	31	+0 35	*0.73	*0.88	2.43	2.89	1.35
1871	Chincoteague Channel (south end)	37° 54.4'	75° 24.3'	+0	39	+0 47	*0.64	*0.69	2.16	2.57	1.19
1873	Wishart Point, Bogues Bay	37° 52.9'	75° 29.5'	+0	52	+1 13	*0.77	*0.63	2.60	3.09	1.40
1875	Chincoteague Island, USCG Station	37° 55.9'	75° 23.0'	+0	56	+1 11	*0.48	*0.56	1.59	1.89	0.89
1877	Chincoteague Island, Lewis Creek	37° 56.3'	75° 22.4'	+1	17	+1 38	*0.40	*0.63	1.32	1.57	0.76
1879	Chincoteague Island, Oyster Bay	37° 56.5'	75° 20.8'	+1	44	+2 05	*0.46	*0.56	1.54	1.83	0.86
1881	Chincoteague Island, Blake Cove	37° 57.1'	75° 21.3'	+1	51	+2 32	*0.28	*0.56	0.89	1.06	0.53
1883	Jesters Island	37° 58.9'	75° 18.1'	+2	32	+3 24	*0.24	*0.24	0.76	0.90	0.48
1885	Franklin City	38° 00.4'	75° 23.0'	+2	20	+3 00	*0.22	*0.63	0.66	0.79	0.43
1887	Public Landing	38° 08.9'	75° 17.1'	+4	41	+5 21	*0.18	*0.18	0.53	0.63	0.36
1889	South Point, Sinepuxent Neck	38° 12.9'	75° 11.5'	+5	16	+5 02	*0.16	*0.16	0.46	0.54	0.33
	VIRGINIA, outer coast										
1891	Wallop's Island	37° 50.5'	75° 28.7'	+0	04	-0 04	*1.06	*0.31	3.67	4.37	1.89
1893	Gargathy Neck	37° 46.6'	75° 33.7'	+1	31	+1 27	*0.88	*0.63	3.01	3.58	1.60
1895	Metompkin Inlet	37° 40.3'	75° 35.7'	+1	01	+0 44	*1.08	*1.25	3.60	4.28	2.00
1897	Folly Creek, Metompkin Inlet	37° 41.8'	75° 38.1'	+1	24	+1 12	*0.97	*0.63	3.30	3.93	1.80
1899	Wachapreague, Wachapreague Channel	37° 36.4'	75° 41.2'	+1	10	+0 56	*1.19	*1.06	4.02	4.85	2.18
1901	Revel Creek, Revel Island	37° 29.8'	75° 41.0'	+0	35	+0 27	*1.19	*1.00	4.04	4.81	2.18
1903	Great Machipongo Inlet (inside)	37° 23.6'	75° 42.8'	+1	05	+0 56	*1.16	*1.25	3.86	4.59	2.10
1905	Upshur Neck, south end	37° 28.0'	75° 48.0'	+1	09	+1 14	*1.31	*1.25	4.40	5.24	2.40
1907	Sand Shoal Inlet (Coast Guard Station)	37° 18.1'	75° 46.7'	+0	32	+0 17	*1.18	*1.00	4.00	4.76	2.16
1909	Oyster Harbor	37° 17.3'	75° 55.5'	+1	00	+0 36	*1.34	*1.13	4.52	5.38	2.40
1911	Smith Island (Coast Guard Station)	37° 07.4'	75° 54.7'	+0	52	+1 29	*1.05	*1.25	3.50	4.17	1.90
	Chesapeake Bay, Eastern Shore										
1913	Fishermans Island	37° 05.8'	75° 58.9'	+0	02	+0 11	*1.19	*1.25	3.02	3.62	1.71
1915	Kiptopeke Beach	37° 10.0'	75° 59.3'	+0	23	+0 32	*1.01	*0.92	2.60	3.09	1.41
1917	Old Plantation Light	37° 14'	76° 03'	+0	33	+0 52	*0.92	*0.83	2.4	2.9	1.3
1919	Cape Charles Harbor	37° 15.8'	76° 09.9'	+0	45	+1 03	*0.90	*0.92	2.3	2.8	1.3
1921	Gaskins Point, Ocoahnock Creek	37° 33.3'	75° 55.2'	+2	35	+3 13	*0.66	*0.83	1.70	2.00	0.94
1923	Harborton, Pungoteague Creek	37° 40.0'	75° 50.0'	+3	11	+3 33	*0.70	*0.83	1.76	2.11	0.98
1925	Onancock, Onancock Creek	37° 42.7'	75° 45.4'	+3	55	+4 19	*0.71	*0.83	1.80	2.16	1.00
1927	Chesconessex Creek, Schooner Bay	37° 45.8'	75° 46.4'	+3	41	+3 59	*0.78	*1.25	1.94	2.33	1.12
1929	Watts Island	37° 47.9'	75° 53.8'	+4	02	+4 12	*0.64	*0.83	1.60	1.92	0.90
1931	Tangier Island	37° 49.7'	75° 59.6'	+3	58	+4 16	*0.60	*0.75	1.41	1.69	0.80
1933	Muddy Creek Entrance	37° 51.3'	75° 40.5'	+4	14	+4 51	*0.86	*0.83	2.20	2.64	1.20
1935	Guard Shore	37° 51.0'	75° 42.0'	+4	06	+4 47	*0.90	*0.83	2.30	2.76	1.27
	MARYLAND Chesapeake Bay, Eastern Shore										
1937	Saxis, Starling Creek, Pocomoke Sound	37° 55.3'	75° 43.7'	+3	52	+4 36	*0.89	*1.17	2.24	2.69	1.26
1939	Ape Hole Creek, Pocomoke Sound	37° 57.7'	75° 49.3'	+4	27	+4 58	*0.90	*0.83	2.30	2.80	1.20
	Pocomoke River										
1941	Shelton Town	37° 58.8'	75° 38.3'	+4	32	+5 16	*0.94	*1.00	2.40	2.90	1.30
1943	Snow Hill, city park	38° 10.7'	75° 23.8'	+7	26	+7 36	*0.70	*1.33	1.62	1.96	0.98
1945	Crisfield, Little Annemessex River	37° 58.6'	75° 51.8'	+4	34	+4 51	*0.75	*1.00	1.86	2.23	1.05
1947	Colburn Creek, Big Annemessex River	38° 02.9'	75° 48.2'	+4	59	+5 30	*0.78	*1.17	1.94	2.33	1.11
1949	Long Point, Big Annemessex River	38° 03.4'	75° 48.2'	+5	19	+5 47	*0.82	*0.83	2.10	2.50	1.10

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	MARYLAND Chesapeake Bay, Eastern Shore—cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Ches. Bay Bridge Tunnel, p.116											
1951	Teague Creek, Manokin River	38° 06.5'	75° 50.3'	+5 38	+6 05	*0.82	*0.83	2.10	2.50	1.10	
1953	Ewell, Smith Island	37° 59.7'	76° 01.9'	+4 56	+5 19	*0.61	*1.00	1.53	1.84	0.88	
1955	Holland Island Bar Light	38° 04.1'	76° 05.8'	+5 16	+5 30	*0.56	*0.58	1.40	1.70	0.80	
1957	Chance	38° 10.2'	75° 56.8'	+5 29	+5 57	*0.78	*1.17	1.94	2.33	1.11	
1959	Sharkfin Shoal Light	38° 12.1'	75° 59.2'	+5 46	+6 06	*0.86	*0.92	2.20	2.64	1.20	
1961	Great Shoals Light, Monie Bay	38° 13.0'	75° 53.0'	+6 00	+6 22	*0.90	*0.92	2.30	2.80	1.30	
	Wicomico River										
1963	Whitehaven	38° 16.0'	75° 47.0'	+6 26	+6 46	*0.94	*1.00	2.40	2.90	1.30	
1965	Salisbury	38° 22.0'	75° 36.0'	+7 21	+7 24	*1.20	*1.25	3.00	3.60	1.70	
	Nanticoke River										
1967	Roaring Point	38° 15.7'	75° 55.2'	+6 00	+6 35	*0.90	*0.92	2.30	2.76	1.30	
1969	Vienna	38° 29.0'	75° 49.1'	+8 25	+8 32	*0.79	*1.33	1.94	2.33	1.13	
1971	Sharptown	38° 32.5'	75° 43.4'	+9 19	+9 28	*0.97	*1.00	2.50	3.00	1.40	
1973	McCreedy's Creek, Fishing Bay	38° 18.0'	76° 00.4'	+5 49	+6 22	*0.82	*1.17	2.05	2.46	1.16	
1975	Hooper Strait Light	38° 13.6'	76° 04.6'	+5 26	+5 51	*0.61	*1.17	1.48	1.77	0.88	
1977	Bishops Head, Hooper Strait	38° 13.2'	76° 02.3'	+5 32	+6 04	*0.70	*1.08	1.73	2.08	0.99	
on Baltimore, p.108											
1979	Middle Hooper Island	38° 17.8'	76° 12.3'	-4 40	-4 39	*1.32	*1.50	1.51	1.71	1.09	
1981	Barren Island	38° 20.5'	76° 15.9'	-4 45	-4 56	*1.01	*0.68	1.22	1.38	0.77	
	Little Choptank River										
1983	Smithville Road Bridge, Beaverdam Creek	38° 25.7'	76° 14.2'	-2 26	-2 49	*1.01	*0.82	1.19	1.34	0.78	
1985	Taylors Island, Slaughter Creek	38° 28.0'	76° 17.7'	-3 15	-3 00	*1.10	*1.18	1.30	1.47	0.88	
1987	Woolford, Church Creek	38° 30.4'	76° 10.4'	-3 11	-2 55	*1.25	*1.41	1.40	1.58	1.00	
1989	Cherry Island, Beckwiths Creek	38° 33.7'	76° 12.5'	-3 07	-2 57	*1.18	*1.27	1.34	1.51	0.90	
	Choptank River										
1991	Cambridge	38° 34.4'	76° 04.1'	-2 42	-2 28	*1.23	*0.95	1.62	1.83	1.02	
1993	Dover Bridge	38° 45.4'	75° 59.9'	-0 18	-0 41	*1.54	*1.68	1.70	1.92	1.24	
1995	Hillsboro, Tuckahoe Creek	38° 55.0'	75° 56.7'	+1 21	+1 18	*1.83	*0.86	2.30	2.60	1.34	
	Tred Avon River										
1997	Oxford	38° 42.0'	76° 10.4'	-2 50	-2 45	*1.25	*1.41	1.40	1.58	1.00	
1999	Easton Point	38° 46.1'	76° 05.9'	-2 45	-2 35	*1.47	*1.59	1.60	1.81	1.20	
2001	Deep Neck Point, Broad Creek	38° 43.9'	76° 16.1'	-2 57	-2 47	*1.25	*1.41	1.40	1.58	1.00	
2003	St. Michaels, San Domingo Creek	38° 46.5'	76° 14.0'	-2 55	-2 52	*1.25	*1.41	1.40	1.58	1.00	
2005	Avalon, Dogwood Harbor	38° 42.5'	76° 19.8'	-2 54	-2 48	*1.18	*1.36	1.30	1.47	0.90	
2007	Tilghman Island, Ferry Cove, Eastern Bay	38° 45.9'	76° 19.7'	-2 33	-2 42	*0.98	*1.00	1.10	1.24	0.78	
2009	Claiborne, Eastern Bay	38° 50.2'	76° 16.8'	-2 26	-2 28	*0.96	*1.09	1.10	1.24	0.70	
2011	St. Michaels, Miles River	38° 47.2'	76° 13.3'	-2 12	-2 02	*1.22	*1.18	1.40	1.58	0.96	
2013	Kent Island Narrows	38° 58.0'	76° 14.6'	-1 30	-1 23	*1.10	*1.18	1.20	1.36	0.90	
2015	Matapeake, Kent Island	38° 57.4'	76° 21.3'	-1 30	-1 49	*0.90	*0.95	1.02	1.15	0.72	
2017	Kent Point Marina	38° 50.2'	76° 22.4'	-2 21	-2 29	*0.97	*0.95	1.11	1.25	0.76	
	Chester River										
2019	Love Point	39° 01.9'	76° 18.1'	-0 25	-0 41	*1.03	*0.95	1.19	1.34	0.84	
2021	Queenstown	38° 59.8'	76° 09.5'	+0 05	-0 08	*1.18	*1.27	1.30	1.47	0.90	
2023	Centreville Landing, Corsica River	39° 03.2'	76° 04.5'	+0 20	+0 14	*1.47	*1.89	1.60	1.81	1.20	
2025	Cliffs Point	39° 06.4'	76° 08.5'	+0 12	-0 02	*1.32	*1.50	1.50	1.70	1.00	
2027	Cliffs Wharf	39° 06.7'	76° 08.3'	+0 09	-0 08	*1.33	*1.27	1.53	1.73	1.05	
2029	Chestertown	39° 12.4'	76° 03.8'	+1 03	+0 36	*1.62	*1.77	1.80	2.03	1.31	
2031	Crumpton	39° 14.7'	75° 55.5'	+1 10	+1 04	*1.82	*0.91	2.28	2.58	1.34	
2033	Deep Landing, Swan Creek	39° 08.7'	76° 15.6'	+0 02	-0 04	*0.96	*1.09	1.13	1.28	0.70	
2035	Tolchester Beach	39° 12.8'	76° 14.7'	+0 18	+0 11	*1.04	*0.95	1.21	1.35	0.81	
2037	Worton Creek entrance	39° 17.8'	76° 10.3'	+1 22	+1 19	*1.18	*1.27	1.30	1.47	0.90	
2039	Sassafras River, Betterton	39° 22.3'	76° 03.8'	+2 35	+2 15	*1.34	*1.00	1.60	1.81	1.02	
	Elk River										
2041	Town Point Wharf	39° 30.2'	75° 55.0'	+3 18	+2 59	*1.74	*0.86	2.17	2.45	1.28	
	C & D Canal (see Delaware River)	---	---	---	---	---	---	---	---	---	
2043	Chesapeake City, Maryland (see C & D Canal)	39° 34.5'	75° 50.6'	+3 13	+3 00	*2.06	*2.27	2.30	2.60	1.60	
2045	Old Frenchtown Wharf	39° 34.4'	75° 58.2'	+3 52	+4 03	*1.69	*1.86	1.90	2.15	1.30	
Chesapeake Bay, western shore											
	Susquehanna River										
2047	Havre de Grace	39° 32.2'	76° 05.4'	+3 13	+3 27	*1.55	*0.95	1.90	2.15	1.16	
2049	Port Deposit	39° 36.0'	76° 06.8'	+3 24	+3 49	*1.51	*1.14	1.81	2.04	1.16	
2051	Pond Point, Bush River	39° 23.3'	76° 15.3'	+1 52	+1 31	*1.06	*0.86	1.25	1.41	0.81	
	Patapsco River										
2053	North Point	39° 11.8'	76° 26.8'	+0 12	+0 04	*0.93	*1.09	1.03	1.16	0.75	
2055	Stony Creek	39° 09.8'	76° 31.6'	+0 03	-0 05	*0.95	*0.91	1.09	1.23	0.75	
2057	Hawkins Point	39° 12.5'	76° 32.0'	+0 00	+0 06	*1.03	*0.95	1.19	1.34	0.80	
2059	BALTIMORE, Fort McHenry	39° 16.0'	76° 34.7'	---	---	Daily predictions	---	1.14	1.25	0.79	
2061	Fort McHenry Marsh	39° 15.7'	76° 35.1'	-0 01	-0 01	*1.00	*1.00	1.14	1.29	0.78	
2063	Mountain Point, Magothy River	39° 03.7'	76° 26.0'	-0 04	-0 04	*0.74	*0.77	0.80	0.90	0.60	
2065	Cornfield Creek, Magothy River	39° 06.0'	76° 26.7'	-0 29	-0 38	*0.89	*0.95	0.99	1.12	0.71	
	Severn River										
2067	Brewer Point	39° 01.6'	76° 32.0'	-0 45	-0 54	*0.74	*0.91	0.80	0.90	0.60	
2069	Annapolis (US Naval Academy)	38° 59.0'	76° 28.8'	-1 30	-1 44	*0.88	*1.00	0.97	1.12	0.71	
2071	Thomas Point Shoal Light	38° 54.0'	76° 26.0'	-1 56	-2 11	*0.81	*0.91	0.90	1.02	0.60	
2073	Edgewater, South River	38° 57.0'	76° 33.0'	-1 51	-2 07	*0.81	*0.91	0.90	1.02	0.60	
2075	Gingerville Creek, South River	38° 57.5'	76° 33.3'	-2 01	-2 06	*0.92	*1.00	1.03	1.16	0.74	
2077	Rhode River (County Wharf)	38° 53.2'	76° 32.4'	-2 07	-2 17	*0.88	*1.00	0.98	1.10	0.70	
2079	Galesville, West River	38° 50.0'	76° 32.0'	-1 39	-1 34	*0.81	*0.91	0.90	1.01	0.60	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
	MARYLAND Chesapeake Bay, western shore—cont. Time meridian, 75° W			on Baltimore, p.108							
2081	Rose Haven	38° 43.5'	76° 32.5'	-2	37	-2 44	*0.81	*0.91	0.90	1.01	0.60
2083	Chesapeake Beach	38° 41.0'	76° 32.0'	-2	47	-3 05	*0.88	*1.00	1.00	1.13	0.70
2085	Long Beach	38° 27.9'	76° 28.4'	-3	47	-4 04	*0.87	*0.77	1.01	1.14	0.67
2087	Cove Point	38° 23.5'	76° 23.9'	-4	10	-4 25	*0.83	*0.83	1.04	1.18	0.61
	Patuxent River			on Washington, p.112							
2089	Solomons Island	38° 19.0'	76° 27.1'	-4	38	-4 46	*0.98	*0.73	1.17	1.34	0.74
2091	Broomes Island	38° 24.9'	76° 32.7'	-4	13	-4 19	*1.18	*1.36	1.30	1.47	0.94
2093	Benedict	38° 30.8'	76° 40.2'	-3	54	-3 54	*1.47	*1.82	1.60	1.81	0.81
2095	Lower Marlboro	38° 39.3'	76° 41.0'	-2	46	-2 54	*1.47	*0.77	1.82	2.06	1.09
2097	Point Lookout	38° 02.4'	76° 1.4'	-5	28	-5 37	*1.02	*0.77	1.22	1.38	0.78
	MD., VA. and DISTRICT OF COLUMBIA Potomac River			on Washington, p.112							
2099	Cornfield Harbor, Md.	38° 03.7'	76° 21.5'	-6	16	-7 35	*0.48	*0.53	1.30	1.43	0.76
2101	Lewisetta, Va.	37° 59.7'	76° 27.9'	-6	19	-7 31	*0.46	*0.80	1.25	1.42	0.74
2103	Travis Point, Coan River, Va.	37° 59.8'	76° 28.0'	-6	00	-7 05	*0.44	*0.67	1.20	1.32	0.70
2105	Kinsale, Yeocomico River, Va.	38° 01.9'	76° 34.6'	-5	46	-6 53	*0.44	*0.67	1.20	1.32	0.70
2107	Piney Point, Md.	38° 08.0'	76° 32.0'	-5	54	-7 16	*0.51	*0.60	1.40	1.54	0.80
2109	Ragged Point, Coles Neck, Va.	38° 08.5'	76° 36.8'	-5	35	-7 03	*0.54	*0.67	1.50	1.65	0.85
2111	Mount Holly, Nomini Creek, Va.	38° 05.9'	76° 44.1'	-4	51	-6 14	*0.54	*0.67	1.50	1.65	0.80
2113	Colton Point, Md.	38° 13.2'	76° 45.0'	-5	18	-6 43	*0.65	*0.73	1.80	1.98	1.03
2115	Mills Point (south of), Wicomico Riv., Md.	38° 19.6'	76° 50.0'	-5	05	-6 05	*0.65	*0.73	1.80	1.98	1.00
2117	Colonial Beach, Va.	38° 15.1'	76° 57.6'	-5	08	-6 13	*0.61	*0.93	1.63	1.79	0.96
2119	Dahlgren, Upper Machodoc Creek, Va.	38° 19.2'	77° 02.2'	-4	42	-5 33	*0.58	*0.67	1.64	1.80	0.92
2121	Lower Cedar Point, Md.	38° 20.5'	76° 58.6'	-4	48	-5 56	*0.54	*0.60	1.50	1.65	0.80
2123	Mathias Point, Va.	38° 23.9'	77° 03.2'	-4	00	-4 56	*0.44	*0.67	1.20	1.32	0.70
2125	Goose Creek, Port Tobacco River, Md.	38° 27.2'	77° 03.3'	-4	08	-5 07	*0.54	*0.60	1.46	1.61	0.82
2127	Riverside, Md.	38° 23.2'	77° 08.7'	-3	23	-4 24	*0.48	*0.53	1.28	1.41	0.78
2129	Aquia Creek, Va.	38° 25.1'	77° 21.2'	-1	28	-2 32	*0.48	*0.67	1.26	1.39	0.71
2131	Clifton Beach, Smith Point, Md.	38° 24.8'	77° 16.0'	-1	42	-2 46	*0.41	*0.67	1.10	1.21	0.60
2133	Liverpool Point, Md.	38° 27.6'	77° 16.2'	-0	39	-1 58	*0.44	*0.67	1.20	1.32	0.70
2135	Quantico, Va.	38° 31.2'	77° 17.2'	-0	52	-2 04	*0.51	*0.67	1.40	1.54	0.80
2137	Indian Head, Md.	38° 36.1'	77° 11.1'	-0	14	-1 33	*0.65	*0.73	1.80	1.98	1.03
2139	Marshall Hall, Md.	38° 41.2'	77° 06.1'	+0	10	-0 55	*0.82	*0.93	2.30	2.53	1.27
2141	Alexandria, Va.	38° 48.3'	77° 02.3'	+0	18	-0 11	*0.96	*1.33	2.62	2.88	1.51
2143	Bellevue, D.C.	38° 49.6'	77° 01.6'	+0	34	-0 11	*1.02	*1.33	2.80	3.08	1.60
2145	WASHINGTON, Washington Channel, D.C.	38° 52.3'	77° 01.2'				Daily predictions		2.77	3.07	1.55
	Anacostia River			on Ches. Bay Bridge Tunnel, p.116							
2147	Washington Naval Yard	38° 52.3'	76° 59.7'	+0	18	-0 06	*1.01	*1.20	2.80	3.08	1.57
2149	Kingman Lake	38° 53.7'	76° 58.1'	+0	22	+0 04	*1.03	*1.20	2.84	3.12	1.60
2151	Kenilworth Aquatic Garden	38° 54.6'	76° 57.3'	+0	29	+0 10	*1.05	*1.07	2.92	3.21	1.62
2153	Bladensburg, Md.	38° 56.0'	76° 56.3'	+0	31	+0 25	*1.06	*1.13	2.95	3.25	1.64
	VIRGINIA Chesapeake Bay, western shore—cont.			on Ches. Bay Bridge Tunnel, p.116							
2155	Sunnybank, Little Wicomico River	37° 53.2'	76° 16.0'	+6	41	+6 45	*0.30	*0.30	0.80	0.96	0.40
2157	Great Wicomico River Light	37° 48.3'	76° 16.1'	+3	58	+4 11	*0.41	*0.41	1.10	1.32	0.50
2159	Fleeton Point	37° 48.8'	76° 16.5'	+3	58	+4 14	*0.41	*0.41	1.10	1.32	0.59
2161	Glebe Point, Great Wicomico River	37° 50.8'	76° 22.1'	+4	15	+4 37	*0.49	*0.83	1.20	1.44	0.70
2163	Windmill Point Light	37° 35.8'	76° 14.2'	+2	48	+3 12	*0.41	*0.41	1.10	1.32	0.50
	Rappahannock River			on Hampton Roads, p.120							
2165	Windmill Point	37° 36.9'	76° 17.4'	+1	55	+2 14	*0.49	*0.83	1.16	1.40	0.68
2167	Mill Creek (Grey Point)	37° 35.0'	76° 25.1'	+2	28	+2 42	*0.55	*0.83	1.30	1.57	0.69
2169	Millenbeck, Corrotoman River	37° 40.1'	76° 29.2'	+2	37	+3 05	*0.55	*0.83	1.30	1.57	0.70
2171	Urbanna	37° 39.0'	76° 34.5'	+2	50	+3 09	*0.59	*0.83	1.40	1.69	0.79
2173	Bayport	37° 45.3'	76° 40.4'	+3	22	+3 51	*0.67	*0.83	1.60	1.94	0.90
2175	Wares Wharf	37° 52.4'	76° 47.0'	+4	04	+4 34	*0.75	*0.83	1.88	2.27	0.98
2177	Tappahannock	37° 55.8'	76° 51.4'	+4	40	+5 18	*0.71	*0.83	1.74	2.11	0.95
				on Washington, p.112							
2179	Saunders Wharf	38° 05.4'	77° 02.0'	-3	53	-4 41	*0.54	*0.66	1.50	1.65	0.85
2181	Port Royal	38° 10.4'	77° 11.4'	-2	19	-3 02	*0.68	*0.67	1.90	2.09	1.10
2183	Park Turn	38° 12.8'	77° 14.6'	-1	35	-2 30	*0.73	*0.20	2.13	2.34	1.09
2185	Hopyard Landing	38° 14.6'	77° 13.6'	-1	07	-1 57	*0.75	*0.67	2.10	2.31	1.19
2187	Massaponax Sand & Gravel	38° 15.3'	77° 24.6'	-0	39	-0 41	*0.88	*1.33	2.50	2.75	1.39
	Piankatank River			on Hampton Roads, p.120							
2189	Jackson Creek, Deltaville	37° 32.9'	76° 19.9'	+1	36	+2 04	*0.51	*0.83	1.20	1.45	0.70
2191	Dixie	37° 30.5'	76° 25.0'	+1	34	+2 14	*0.55	*0.83	1.30	1.57	0.72
2193	Wolf Trap Light	37° 23.4'	76° 11.4'	-0	02	+0 32	*0.67	*0.83	1.60	1.94	0.90
	Mobjack Bay			on Hampton Roads, p.120							
2195	Mobjack, East River	37° 22.4'	76° 20.8'	-0	17	+0 02	*0.98	*0.83	2.40	2.90	1.30
2197	Belleview	37° 24.7'	76° 26.3'	-0	06	+0 00	*1.02	*0.83	2.48	3.00	1.36
2199	Browns Bay	37° 18.1'	76° 24.2'	-0	11	-0 03	*0.98	*1.58	2.32	2.81	1.35

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	h	m	ft	ft	ft	
	VIRGINIA York River Time meridian, 75° W			on Hampton Roads, p.120							
2201	Tue Marshes Light	37° 14.1'	76° 23.1'	+0 03	+0 03	*0.90	*0.83	2.17	2.63	1.19	
2203	Yorktown, Goodwin Neck	37° 13.4'	76° 26.4'	+0 18	+0 15	*0.90	*0.83	2.20	2.66	1.23	
2205	Yorktown, USCG Training Center	37° 13.6'	76° 28.7'	+0 10	+0 15	*0.95	*1.08	2.29	2.77	1.28	
2207	Gloucester Point	37° 14.8'	76° 30.0'	+0 10	+0 11	*0.98	*1.00	2.38	2.93	1.30	
2209	Cheatham Annex	37° 17.5'	76° 35.2'	+0 48	+0 40	*1.02	*0.83	2.50	3.03	1.34	
2211	Roane Point	37° 26.9'	76° 42.4'	+1 47	+1 50	*1.14	*0.83	2.81	3.40	1.54	
2213	West Point	37° 32.1'	76° 47.6'	+2 12	+2 38	*1.14	*0.83	2.80	3.39	1.50	
2215	Wakema (Fraziers Ferry), Mattaponi River	37° 39.0'	76° 54.0'	+3 34	+3 57	*1.41	*1.67	3.42	4.14	1.90	
	Pamunkey River										
2217	Lester Manor	37° 35.0'	76° 59.4'	+4 45	+5 00	*1.05	*0.83	2.80	3.39	1.50	
2219	Northbury	37° 37.5'	77° 07.3'	+6 03	+6 18	*1.37	*1.67	3.30	4.01	1.80	
	Chesapeake Bay, western shore—cont.										
2221	Messick Point, Back River	37° 06.5'	76° 19.1'	-0 07	+0 02	*0.97	*0.97	2.30	2.78	1.33	
	Hampton Roads										
2223	Old Point Comfort	37° 00.2'	76° 18.9'	+0 01	+0 09	*1.02	*0.83	2.52	3.05	1.38	
2225	HAMPTON ROADS (Sewells Point)	36° 56.8'	76° 19.8'			Daily predictions		2.43	2.95	1.34	
	Elizabeth River										
2227	Craney Island Light	36° 53.5'	76° 20.3'	+0 18	+0 04	*1.06	*0.83	2.60	3.15	1.40	
2229	Norfolk	36° 51.1'	76° 17.9'	+0 23	+0 20	*1.14	*0.83	2.82	3.41	1.50	
2231	Portsmouth, Naval Shipyard	36° 49.3'	76° 17.6'	+0 08	+0 10	*1.13	*1.17	2.76	3.26	1.52	
2233	Money Point	36° 46.7'	76° 18.1'	+0 15	+0 12	*1.18	*1.17	2.86	3.46	1.57	
2235	Deep Creek Entrance	36° 45.3'	76° 17.6'	+0 22	+0 18	*1.21	*1.25	2.92	3.53	1.61	
	Nansemond River										
2237	Pig Point	36° 55.0'	76° 26.1'	+0 42	+0 40	*1.05	*0.83	2.80	3.39	1.50	
2239	Town Point	36° 53.0'	76° 30.5'	+0 37	+0 44	*1.22	*0.83	3.00	3.63	1.60	
2241	Holidays Point (Kings Highway bridge)	36° 50.3'	76° 33.0'	+0 56	+1 03	*1.25	*1.67	3.00	3.63	1.63	
	James River										
2243	Newport News	36° 58.4'	76° 26.0'	+0 29	+0 28	*1.08	*0.83	2.60	3.15	1.40	
2245	Huntington Park	37° 00.8'	76° 27.5'	+0 38	+0 39	*1.07	*0.92	2.62	3.17	1.42	
2247	Menchville	37° 04.9'	76° 31.5'	+1 03	+1 19	*1.06	*0.83	2.60	3.15	1.40	
2249	Smithfield, Pagan River	36° 59.1'	76° 37.8'	+1 34	+1 38	*1.14	*0.83	2.78	3.36	1.50	
2251	Burwell Bay	37° 03.4'	76° 40.1'	+1 17	+1 39	*1.00	*1.17	2.42	2.93	1.35	
2253	Mulberry Point, Fort Eustis	37° 08.2'	76° 38.0'	+2 05	+2 26	*0.98	*0.83	2.40	2.90	1.30	
2255	Kingsmill	37° 13.2'	76° 39.8'	+2 05	+2 26	*0.94	*1.33	2.26	2.73	1.29	
2257	Scotland	37° 11.1'	76° 47.0'	+2 44	+3 13	*0.78	*1.08	1.84	2.22	1.06	
2259	Jamestown Island, Church Point	37° 12.4'	76° 46.7'	+3 03	+3 36	*0.82	*0.83	2.00	2.42	1.10	
	Chickahominy River										
2261	Ferry Point (bridge)	37° 15.8'	76° 52.7'	+4 01	+4 26	*0.78	*0.83	1.90	2.30	1.04	
2263	Wright Island Landing	37° 20.7'	76° 52.5'	+4 44	+5 03	*0.90	*0.83	2.20	2.66	1.20	
2265	Claremont	37° 13.9'	76° 56.9'	+3 51	+4 25	*0.76	*1.17	1.79	2.11	1.06	
2267	Sturgeon Point	37° 18.4'	77° 00.4'	+4 37	+5 09	*0.86	*0.83	2.10	2.54	1.10	
2269	Wilcox Wharf, Charles City	37° 19.0'	77° 05.9'	+5 30	+5 50	*0.90	*0.83	2.15	2.60	1.09	
2271	Jordan Point	37° 18.8'	77° 13.4'	+6 16	+6 39	*1.02	*0.83	2.50	3.02	1.40	
	on Washington, p.112										
2273	City Point, Hopewell	37° 18.8'	77° 16.2'	-4 30	-5 24	*0.86	*1.00	2.40	2.64	1.35	
2275	Puddledock, Appomattox River	37° 16.0'	77° 22.3'	-3 49	-4 32	*1.00	*1.07	2.80	3.08	1.55	
2277	Hasall	37° 22.4'	77° 14.6'	-4 10	-4 53	*0.99	*1.33	2.70	2.97	1.60	
2279	Chester	37° 23.0'	77° 22.7'	-3 39	-3 59	*1.02	*0.67	2.90	3.19	1.60	
2281	Meadowville	37° 22.7'	77° 19.4'	-3 46	-4 17	*1.05	*1.33	2.90	3.19	1.60	
2283	Richmond (river locks)	37° 31.5'	77° 25.2'	-3 16	-3 26	*1.16	*1.33	3.20	3.52	1.80	
	Chesapeake Bay, southern shore										
2285	Little Creek, NAB	36° 54.7'	76° 10.5'	+0 08	+0 09	*1.01	*1.17	2.57	3.08	1.42	
2287	CHESAPEAKE BAY BRIDGE TUNNEL	36° 58.0'	76° 06.8'			Daily predictions		2.55	3.07	1.40	
2289	Lynnhaven Inlet, Virginia Pilots Dock	36° 54.4'	76° 05.4'	+0 40	+0 38	*0.88	*1.08	2.22	2.66	1.24	
	Lynnhaven Bay										
2291	Bayville	36° 53.6'	76° 06.3'	+1 52	+2 48	*0.67	*0.83	1.70	2.04	1.00	
2293	Buchanan Creek entrance	36° 51.7'	76° 06.9'	+2 02	+2 56	*0.75	*0.83	1.90	2.28	1.00	
2295	Brown Cove	36° 52.5'	76° 03.7'	+2 05	+2 43	*0.65	*0.83	1.64	1.96	0.92	
2297	Broad Bay Canal	36° 54.1'	76° 03.7'	+2 05	+2 00	*0.56	*0.92	1.38	1.66	0.80	
2299	Long Creek	36° 54.2'	76° 04.2'	+1 15	+1 15	*0.68	*1.08	1.68	2.02	0.97	
	VIRGINIA, outer coast										
2301	Cape Henry	36° 55.8'	76° 00.4'	+0 31	+0 36	*0.96	*0.93	3.12	3.71	1.68	
2303	Virginia Beach	36° 50.6'	75° 58.3'	+0 15	+0 16	*1.07	*1.07	3.34	3.97	1.85	
2305	Rudee Inlet entrance	36° 49.9'	75° 58.1'	+0 02	+0 02	*1.01	*0.86	3.28	3.90	1.77	
2307	Rudee Inlet, interior channel	36° 49.9'	75° 58.4'	+0 17	+0 16	*1.02	*1.00	3.28	3.92	1.79	
2309	Rudee Heights, Lake Wesley	36° 49.5'	75° 58.5'	+0 18	+0 16	*1.03	*1.00	3.32	3.95	1.81	
2311	Lake Rudee, south end	36° 49.5'	75° 58.9'	+0 20	+0 19	*1.05	*1.07	3.39	4.03	1.85	
2313	Sandbridge	36° 41.5'	75° 55.2'	+0 07	+0 07	*1.04	*1.04	3.35	3.99	1.85	

Endnotes can be found at the end of table 2.

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No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h m	h m	ft	ft	ft	ft	ft	
NORTH CAROLINA, outer coast Time meridian, 75° W											
2315	DUCK PIER	36° 11.0'	75° 44.8'			Daily predictions		3.22	3.96	1.75	
2317	Albemarle and Pamlico Sounds <9>	— —	— —	— —	— —	— —	— —	— —	— —	— —	
2319	Kitty Hawk (ocean)	36° 06.1'	75° 42.6'	-0 01	+0 02	*1.01	*1.43	3.19	3.80	1.80	
2321	Jennettes Pier, Nags Head (ocean)	35° 54.6'	75° 35.5'	-0 05	+0 01	*1.04	*1.43	3.26	3.88	1.80	
on Duck Pier, p.124											
2323	Roanoke Sound Channel	35° 48'	75° 35'	+1 37	+1 17	*0.47	*0.14	0.5	0.6	0.3	
2325	OREGON INLET MARINA	35° 47.7'	75° 32.9'			Daily predictions		0.89	1.08	0.58	
2327	Oregon Inlet	35° 46'	75° 31'	-0 03	-0 27	*1.98	*0.71	2.0	2.4	1.1	
2329	Oregon Inlet (USCG Station)	35° 46.1'	75° 31.6'	-0 22	-0 51	*2.00	*0.69	1.97	2.30	1.07	
2331	Oregon Inlet Bridge	35° 46.4'	75° 32.3'	-0 17	-0 55	*1.89	*0.64	1.9	2.3	1.1	
2333	Oregon Inlet Channel	35° 46.5'	75° 33.5'	-0 09	-0 34	*1.23	*0.43	1.2	1.4	0.7	
2335	Old House Channel	35° 46.5'	75° 34.9'	+0 34	+0 28	*0.66	*0.21	0.7	0.8	0.4	
2337	Davis Slough	35° 44.9'	75° 33.2'	+0 09	-0 01	*0.85	*0.29	0.9	1.1	0.5	
2339	Rodanthe, Pamlico Sound	35° 35.7'	75° 28.3'	+2 03	+1 36	*0.79	*0.69	0.72	0.84	0.45	
on Oregon Inlet, p.128											
2341	Cape Hatteras	35° 14'	75° 31'	+0 01	+0 01	*1.00	*1.08	3.6	4.3	2.0	
2343	CAPE HATTERAS FISHING PIER	35° 13.4'	75° 38.1'			Daily predictions		2.99	3.60	1.61	
2345	Hatteras, Pamlico Sound	35° 12.3'	75° 42.2'	+1 16	+1 25	*0.17	*1.08	0.41	0.49	0.33	
2347	Hatteras Inlet	35° 12'	75° 44'	+0 08	+0 13	*0.66	*0.83	2.0	2.4	1.1	
2349	Ocracoke Inlet	35° 04'	76° 01'	+0 09	+0 11	*0.63	*0.83	1.9	2.3	1.0	
2351	Ocracoke, Ocracoke Island	35° 06.9'	75° 59.3'	+0 15	+0 47	*0.34	*0.50	0.99	1.19	0.56	
2353	Cape Lookout Bight	34° 36.8'	76° 32.3'	-0 17	-0 12	*1.35	*1.33	4.05	4.86	2.19	
2355	Cape Lookout (ocean)	34° 36.5'	76° 31.7'	-0 22	-0 22	*1.15	*1.25	3.44	4.13	1.87	
2357	Shell Point, Harkers Island	34° 41'	76° 32'	+1 52	+2 34	*0.54	*0.83	1.6	1.8	0.9	
2359	Harkers Island Bridge	34° 43'	76° 35'	+2 08	+2 31	*0.52	*0.67	1.6	1.7	0.9	
2361	Channel Marker Lt. 59	34° 42'	76° 37'	+1 25	+1 27	*0.66	*0.83	2.0	2.3	1.1	
2363	Lenoxville Point	34° 42.5'	76° 37.2'	+1 18	+1 11	*0.80	*1.00	2.37	2.84	1.31	
2365	North River Bridge	34° 47'	76° 37'	+2 25	+3 08	*0.59	*0.67	1.8	2.0	1.0	
2367	Beaufort Inlet Channel Range	34° 42'	76° 40'	+0 07	+0 11	*1.07	*1.67	3.2	3.8	1.6	
2369	Beaufort, Taylor Creek	34° 42.7'	76° 38.7'	+0 52	+0 48	*0.95	*1.17	2.82	3.38	1.55	
2371	Beaufort, Duke Marine Lab	34° 43.2'	76° 40.2'	+0 39	+0 36	*1.05	*1.17	3.11	3.58	1.70	
2373	Gallant Channel	34° 44'	76° 40.3'	+0 49	+0 44	*1.01	*1.25	3.0	3.5	1.7	
2375	Newport River (Yacht Club)	34° 46.1'	76° 40.3'	+1 03	+1 13	*1.03	*1.00	3.08	3.70	1.66	
2377	Core Creek Bridge	34° 50'	76° 42'	+1 26	+1 46	*0.68	*0.83	2.1	2.3	1.1	
2379	Fort Macon, USCG Station	34° 42'	76° 41'	+0 17	+0 18	*1.03	*1.25	3.1	3.7	1.7	
2381	Morehead City	34° 43'	76° 42'	+0 26	+0 27	*1.04	*1.25	3.1	3.7	1.7	
2383	Morehead City Harbor	34° 43.2'	76° 43.7'	+0 35	+0 37	*1.04	*1.17	3.08	3.70	1.68	
2385	Atlantic Beach	34° 41.6'	76° 42.7'	-0 02	+0 01	*1.23	*1.25	3.65	4.38	1.98	
2387	Triple S Marina, Bogue Sd.	34° 41.7'	76° 42.7'	+0 35	+0 28	*0.93	*1.17	2.8	3.3	1.5	
2389	Atlantic Beach Bridge	34° 43'	76° 44'	+0 48	+0 02	*0.79	*0.83	2.4	2.8	1.2	
2391	N.C. State Fisheries	34° 43'	76° 45'	+1 05	+1 32	*0.66	*0.83	2.0	2.3	1.1	
2393	Coral Bay, Atlantic Beach	34° 42'	76° 46'	+1 47	+2 14	*0.53	*0.83	1.6	1.8	0.9	
2395	Spooner Creek	34° 44'	76° 48'	+2 20	+2 44	*0.41	*0.50	1.2	1.4	0.7	
2397	Bogue Inlet	34° 39'	77° 06'	+0 13	+0 15	*0.73	*0.83	2.2	2.6	1.2	
2399	New River Inlet	34° 32'	77° 20'	+0 16	+0 17	*0.98	*0.83	3.0	3.6	1.6	
2401	Ocean City Beach (fishing pier)	34° 27.1'	77° 29.7'	+0 03	-0 01	*1.40	*1.33	4.20	5.04	2.25	
2403	New Topsail Inlet	34° 22'	77° 38'	+0 20	+0 00	*0.98	*0.83	3.0	3.5	1.6	
2405	Wrightsville Beach	34° 12.8'	77° 47.2'	+0 18	+0 23	*1.27	*1.25	3.80	4.56	2.05	
2407	Wilmington Beach	34° 01.9'	77° 53.6'	+0 18	+0 10	*1.40	*1.25	4.21	5.05	2.26	
2409	Cape Fear	33° 51'	77° 58'	+0 04	+0 07	*1.47	*1.33	4.5	5.1	2.3	
on Wilmington, p.136											
2411	Cape Fear River	33° 52.8'	78° 00.1'	-2 06	-2 43	*1.05	*1.13	4.49	4.89	2.41	
2413	Bald Head	33° 54'	78° 01'	-2 02	-2 45	*1.03	*1.25	4.2	4.8	2.3	
2415	Southport	33° 54.9'	78° 01.1'	-1 49	-2 22	*0.99	*1.00	4.24	4.62	2.28	
2417	Zekes Island	33° 57.0'	77° 57.1'	-1 12	-1 43	*0.96	*1.07	4.09	4.46	2.20	
2419	Federal Point	33° 57.7'	77° 56.4'	-1 17	-1 52	*0.94	*0.93	4.04	4.40	2.16	
2421	Sunny Point Army Base, Wharf no.1	33° 59.4'	77° 57.4'	-1 03	-1 45	*0.95	*0.93	4.06	4.43	2.17	
2423	Reaves Point	34° 00.2'	77° 57.3'	-0 54	-1 18	*0.96	*1.07	4.09	4.46	2.21	
2425	Sunny Point Army Base, Wharf no.3	34° 01.4'	77° 58.8'	-0 57	-1 15	*0.97	*1.07	4.15	4.52	2.24	
2427	Orton Point	34° 03.4'	77° 56.4'	-0 36	-0 58	*0.98	*1.00	4.17	4.55	2.24	
2429	WILMINGTON	34° 13.6'	77° 57.2'			Daily predictions		4.28	4.70	2.29	
2431	Castle Hayne, Northeast River	34° 21'	77° 56'	+2 44	+2 54	*0.42	*0.42	1.7	1.9	0.9	
2433	Bannermans Branch, Northeast River	34° 35'	77° 46'	+5 58	+6 08	*0.32	*0.31	1.3	1.4	0.6	
on Myrtle Beach, p.140											
2435	Oak Island	33° 54.1'	78° 04.9'	-0 05	-0 05	*0.94	*0.84	4.72	5.57	2.53	
2437	Lockwoods Folly Inlet	33° 55'	78° 14'	+0 04	+0 15	*0.84	*1.00	4.2	4.8	2.3	
2439	Shallotte Inlet (Bowen Point)	33° 55'	78° 22'	+0 43	+0 55	*0.91	*1.00	4.6	5.4	2.5	
2441	Tubbs Inlet	33° 53'	78° 29'	+0 14	+0 15	*0.89	*1.00	4.5	5.1	2.4	
2443	Sunset Beach Pier	33° 51.9'	78° 30.4'	+0 02	-0 03	*0.97	*1.11	4.82	5.78	2.62	
2445	Sunset Beach Bridge	33° 52.9'	78° 30.6'	+0 34	+0 56	*0.94	*0.84	4.72	5.57	2.52	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	h	m	ft	ft	ft	
	SOUTH CAROLINA, outer coast Time meridian, 75° W			on Myrtle Beach, p.140							
2447	Dunn Sound, Little River Inlet	33° 51.5'	78° 34.2'	+0 15	+0 41	*0.91	*0.80	4.64	5.52	2.48	
2449	Dunn Sound, north end	33° 51.6'	78° 34.8'	+0 25	+0 40	*0.93	*0.84	4.67	5.51	2.50	
2451	Dunn Sound, west end	33° 51.1'	78° 35.3'	+0 29	+0 36	*0.96	*1.00	4.85	5.58	2.63	
2453	Little River Neck, north end	33° 52.2'	78° 34.4'	+0 32	+0 46	*0.92	*0.84	4.63	5.56	2.47	
2455	Cherry Grove (inside)	33° 50.1'	78° 38.0'	+0 40	+0 44	*0.92	*0.74	4.67	5.51	2.47	
2457	Hog Inlet Pier	33° 50.2'	78° 36.4'	-0 06	-0 07	*0.99	*0.90	5.0	5.7	2.7	
2459	MYRTLE BEACH, SPRINGMAID PIER	33° 39.3'	78° 55.1'			<i>Daily predictions</i>		5.02	6.00	2.70	
2461	Garden City Pier (ocean)	33° 34.5'	78° 59.8'	+0 00	+0 00	*1.00	*1.00	5.07	5.88	2.74	
	Murrells Inlet										
2463	Garden City Bridge, Main Creek	33° 34.7'	79° 00.2'	+1 19	+2 09	*0.84	*0.68	4.26	5.03	2.25	
2465	Divine's Dock	33° 32.5'	79° 01.7'	+0 40	+1 18	*0.84	*0.84	4.22	5.06	2.27	
2467	Smith's Dock	33° 32.7'	79° 02.7'	+1 01	+1 36	*0.86	*0.95	4.29	5.06	2.32	
2469	Captain Alex's Marina, Parsonage Creek	33° 33.1'	79° 02.2'	+0 57	+1 28	*0.85	*0.68	4.30	5.16	2.28	
2471	Oaks Creek, 0.5 mi. above entrance	33° 31.8'	79° 02.6'	+0 38	+1 03	*0.85	*0.95	4.27	5.12	2.32	
2473	Allston Creek	33° 31.9'	79° 03.2'	+0 52	+1 32	*0.84	*0.95	4.24	4.92	2.31	
2475	Oaks Creek, upper end	33° 30.7'	79° 04.1'	+1 10	+1 43	*0.87	*1.05	4.35	5.22	2.37	
2477	Litchfield Beach bridge	33° 28.3'	79° 06.1'	+1 10	+3 02	*0.58	*0.75	2.89	3.35	1.59	
2479	Midway Inlet North, Pawleys Island	33° 26.9'	79° 06.7'	+0 16	+0 42	*0.87	*1.00	4.40	5.10	2.40	
2481	Bennet's Dock, Pawleys Island Creek	33° 26.1'	79° 07.6'	+0 55	+1 35	*0.78	*1.21	3.84	4.61	2.15	
2483	Pawleys Island Pier (ocean)	33° 25.9'	79° 07.0'	+0 06	+0 06	*0.98	*0.95	4.92	5.81	2.65	
2485	Ward's Dock, Pawleys Inlet	33° 24.7'	79° 08.1'	+0 35	+2 07	*0.67	*0.95	3.32	3.98	1.84	
2487	Oyster Landing, Crab Haul Creek, North Inlet	33° 21.1'	79° 11.2'	+1 08	+0 52	*0.92	*1.00	4.58	5.50	2.48	
2489	Clambank Creek, Goat Island, North Inlet	33° 20.0'	79° 11.6'	+1 01	+0 36	*0.94	*1.00	4.69	5.53	2.54	
	Intercoastal Waterway Little River Inlet to Winyah Bay			on Charleston, p.144							
2491	Little River (town)	33° 52.2'	78° 36.5'	+0 13	+0 39	*0.84	*0.79	4.41	5.07	2.35	
2493	Nixon Crossroads	33° 51.3'	78° 38.9'	+0 27	+0 51	*0.78	*0.68	4.10	4.55	2.18	
2495	Myrtle Beach Airport	33° 49.2'	78° 43.1'	+1 09	+1 47	*0.56	*0.84	2.88	3.34	1.60	
2497	North Myrtle Beach	33° 46.0'	78° 48.9'	+2 15	+3 12	*0.36	*0.84	1.78	2.10	1.25	
2499	Myrtle Beach, Combination Bridge	33° 42.8'	78° 55.3'	+2 56	+4 18	*0.35	*0.89	1.71	2.02	1.03	
2501	Socastee Bridge	33° 41.2'	79° 00.3'	+3 27	+4 41	*0.41	*0.74	2.08	2.45	1.18	
	Winyah Bay										
2503	Winyah Bay Entrance (South Jetty)	33° 11'	79° 09'	-0 21	-0 24	*0.87	*0.89	4.6	5.4	2.5	
2505	Georgetown Lighthouse	33° 13.4'	79° 11.1'	+0 26	+0 25	*0.75	*1.05	3.89	4.51	2.15	
2507	South Island Plantation (C.G. Station)	33° 14.1'	79° 12.2'	+0 35	+0 36	*0.74	*0.84	3.81	4.38	2.07	
2509	South Island Ferry, Intracoastal Waterway	33° 15.1'	79° 16.1'	+0 54	+1 25	*0.71	*0.74	3.69	4.24	1.99	
2511	Frazier Point	33° 19'	79° 17'	+1 26	+2 07	*0.66	*0.68	3.5	4.1	1.8	
	Sampit River										
2513	Georgetown	33° 21.7'	79° 16.8'	+1 25	+2 09	*0.71	*0.79	3.72	4.32	2.01	
2515	Jacobs Wharf	33° 21.8'	79° 21.3'	+2 15	+2 22	*0.73	*0.74	3.84	4.45	2.06	
2517	Cumberland	33° 22.2'	79° 26.0'	+2 42	+2 29	*0.77	*0.74	4.02	4.74	2.15	
	Great Pee Dee River										
2519	Windor Plantation, Black River	33° 24.9'	79° 15.0'	+2 00	+2 45	*0.66	*0.74	3.45	3.97	1.86	
2521	Black River (south of Dunbar)	33° 30.7'	79° 20.5'	+3 29	+4 09	*0.47	*0.89	2.42	2.81	1.38	
2523	Winea Plantation, Black River	33° 32.1'	79° 23.3'	+4 23	+4 39	*0.47	*0.84	2.37	2.73	1.34	
2525	Mt. Pleasant Plantation, Black River	33° 29.7'	79° 27.7'	+5 38	+6 04	*0.37	*1.05	1.82	2.11	1.11	
2527	Rhems, Black Mingo Creek, Black River	33° 36.2'	79° 25.6'	+6 00	+6 13	*0.36	*1.05	1.75	2.03	1.08	
2529	Weymouth Plantation	33° 27.3'	79° 12.3'	+2 16	+3 02	*0.68	*0.89	3.56	4.13	1.95	
2531	Carr Creek, 1 mile above entrance	33° 27.9'	79° 12.2'	+1 23	+3 13	*0.69	*0.84	3.62	4.20	1.97	
2533	South of Sam Worth Game Management Area	33° 28.1'	79° 11.3'	+2 21	+3 06	*0.69	*0.68	3.66	4.25	1.96	
2535	Arundel Plantation	33° 29.0'	79° 10.7'	+2 38	+3 39	*0.53	*0.79	2.75	3.19	1.53	
2537	Holly Grove Plantation	33° 33.1'	79° 10.6'	+3 20	+4 12	*0.50	*0.68	2.59	3.00	1.43	
2539	Lower Topsaw Landing	33° 36.5'	79° 09.1'	+4 48	+5 20	*0.20	*0.53	0.96	1.13	0.58	
2541	Yauhannah Bridge	33° 39.6'	79° 09.3'	+4 33	+5 24	*0.33	*0.68	1.66	1.91	0.96	
	Waccamaw River										
2543	Entrance	33° 22.0'	79° 15.3'	+1 19	+2 11	*0.69	*0.58	3.60	4.14	1.91	
2545	Hagley Landing	33° 26.1'	79° 10.9'	+1 58	+2 53	*0.67	*0.79	3.47	3.99	1.88	
2547	Thoroughfare Creek entrance	33° 30.4'	79° 08.8'	+2 32	+3 15	*0.64	*0.89	3.34	3.94	1.84	
2549	Wachesaw Landing	33° 33.6'	79° 05.1'	+3 11	+4 00	*0.53	*0.84	2.74	3.18	1.53	
2551	Bull Creek entrance	33° 35.8'	79° 05.9'	+3 36	+4 22	*0.48	*0.79	2.46	2.85	1.38	
2553	Little Bull Creek entrance, Bull Creek	33° 36.1'	79° 07.1'	+3 59	+4 43	*0.46	*0.84	2.35	2.73	1.33	
2555	Bucksport	33° 38.8'	79° 05.7'	+4 23	+4 53	*0.43	*0.89	2.16	2.48	1.25	
2557	Enterprise Landing	33° 40'	79° 04'	+5 01	+5 35	*0.38	*0.37	2.0	2.4	1.1	
2559	Keysfield	33° 44.7'	79° 03.9'	+6 09	+6 20	*0.28	*0.89	1.37	1.59	0.85	
2561	Pitch Landing	33° 48.0'	79° 03.3'	+7 25	+7 30	*0.20	*0.74	0.94	1.09	0.61	
2563	Conway, RR. bridge	33° 50.1'	79° 02.5'	+7 19	+7 28	*0.25	*0.74	1.24	1.44	0.76	
2565	Grahamville	33° 49.8'	78° 57.2'	+8 17	+8 32	*0.20	*0.58	0.97	1.13	0.60	
2567	North Santee River Inlet	33° 08'	79° 15'	-0 09	+0 04	*0.85	*0.84	4.5	5.3	2.3	
2569	Cedar Island, North Santee Bay	33° 08.4'	79° 14.7'	-0 03	+0 17	*0.80	*0.95	4.19	4.86	2.28	
2571	Minini Creek ent., ICWW, North Santee Bay	33° 11.7'	79° 16.5'	+0 16	+1 00	*0.77	*0.95	3.98	4.70	2.18	
2573	North Santee Bridge	33° 12.6'	79° 23.1'	+1 09	+1 54	*0.72	*0.74	3.8	4.2	2.0	
2575	Cedar Island Point, South Santee River	33° 07.2'	79° 16.2'	-0 16	+0 08	*0.78	*0.79	4.1	4.8	2.1	
2577	Brown Island, South Santee River	33° 09'	79° 20'	+0 27	+1 31	*0.78	*0.79	4.1	4.8	2.1	
2579	U.S. Highway 17 bridge, South Santee River	33° 11.1'	79° 24.4'	+0 43	+1 43	*0.78	*0.95	4.07	4.68	2.20	
2581	Pleasant Hill Landing, Santee River	33° 14.7'	79° 31.3'	+2 28	+3 47	*0.45	*0.74	2.30	2.71	1.29	
2583	Jamestown Bridge, Santee River	33° 18.3'	79° 40.7'	+4 15	+6 30	*0.22	*0.37	1.12	1.29	0.63	
2585	Cape Romain	33° 01'	79° 21'	-0 22	-0 17	*0.89	*0.89	4.7	5.5	2.5	
2587	Cape Romain, 46 miles east of	33° 06'	78° 26'	-1 05	-1 13	*0.78	*0.79	4.1	4.8	2.1	
2589	Casino Creek, ICWW	33° 06.5'	79° 23.6'	+0 40	+0 53	*0.87	*0.79	4.55	5.37	2.42	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	SOUTH CAROLINA Winyah Bay—cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
				on Charleston, p.144							
Bulls Bay											
2591	Five Fathom Creek entrance	33° 00'	79° 30'	-0 06	-0 07	*0.93	*0.95	4.9	5.8	2.6	
2593	McClellanville, Jeremy Creek	33° 04.7'	79° 27.6'	+0 31	+0 24	*0.93	*0.89	4.86	5.59	2.60	
2595	Harbor River entrance	33° 02.0'	79° 32.1'	+0 03	+0 36	*0.93	*0.95	4.9	5.8	2.6	
2597	Buck Hall, Awendaw Creek	33° 02.4'	79° 33.6'	+0 22	+0 37	*0.95	*1.00	4.97	5.77	2.67	
2599	Jack Creek entrance	32° 56'	79° 35'	-0 14	-0 15	*0.95	*0.95	5.0	5.9	2.7	
2601	Wharf Creek entrance	32° 55'	79° 37'	+0 12	-0 08	*0.97	*0.95	5.1	6.0	2.7	
2603	Moores Landing, ICWW, Sewee Bay	32° 56.2'	79° 39.3'	+0 11	+0 08	*0.96	*1.00	5.04	5.85	2.71	
2605	Price Creek, North Capers Island	32° 52.9'	79° 39.5'	-0 01	-0 21	*0.92	*0.89	4.80	5.52	2.57	
2607	Old Capers Landing, Santee Pass, Capers Island	32° 52.2'	79° 41.2'	+0 21	-0 09	*0.94	*0.84	4.93	5.67	2.62	
2609	North Dewees Island, Capers Inlet	32° 51.0'	79° 42.2'	-0 02	-0 11	*0.91	*0.95	4.76	5.62	2.56	
2611	Capers Creek, South Capers Island	32° 51.4'	79° 42.4'	+0 04	-0 15	*0.94	*0.95	4.89	5.62	2.63	
2613	South Dewees Island, Dewees Inlet	32° 50.0'	79° 43.6'	-0 01	-0 17	*0.94	*0.89	4.93	5.67	2.63	
2615	Hamlin Sound	32° 49.6'	79° 47.2'	+0 13	-0 13	*0.99	*1.00	5.19	5.97	2.78	
2617	Isle of Palms Pier	32° 47.0'	79° 47.1'	-0 25	-0 28	*0.95	*0.89	4.94	5.68	2.65	
2619	Hamlin Creek, Isle of Palms	32° 47.2'	79° 47.5'	+0 06	-0 12	*0.97	*1.00	5.04	5.80	2.71	
2621	Breach Inlet, Isle of Palms	32° 46.6'	79° 48.7'	-0 05	-0 14	*0.95	*1.05	4.94	5.68	2.66	
2623	Sullivans Island (outer coast)	32° 46'	79° 50'	-0 08	-0 12	*0.99	*1.00	5.2	6.1	2.8	
2625	Ben Sawyer Bridge, ICWW	32° 46.4'	79° 50.5'	+0 06	-0 12	*0.97	*1.00	5.05	5.81	2.71	
	Charleston Harbor										
2627	Fort Sumter	32° 45.2'	79° 52.6'	+0 02	-0 01	*0.97	*0.95	5.09	5.90	2.72	
2629	The Cove, Fort Moultrie	32° 45.8'	79° 51.4'	-0 01	-0 10	*0.97	*0.95	5.08	5.84	2.72	
2631	Fort Johnson	32° 45.1'	79° 53.9'	-0 05	-0 02	*0.97	*1.00	5.09	5.90	2.74	
2633	Shem Creek	32° 47.6'	79° 52.9'	-0 02	-0 03	*0.99	*1.00	5.20	6.03	2.79	
2635	CHARLESTON (Customhouse Wharf)	32° 46.9'	79° 55.5'			Daily predictions		5.22	6.15	2.80	
2637	Shipyard Creek, 0.8 mile above entrance.	32° 50'	79° 57'	+0 34	+0 20	*1.01	*1.00	5.3	6.1	2.8	
	Cooper River										
2639	Clouter Creek, south entrance	32° 51.6'	79° 56.3'	+0 25	+0 19	*1.02	*1.00	5.35	6.31	2.87	
2641	Goose Creek entrance	32° 54.6'	79° 57.1'	+0 42	+0 33	*1.04	*1.00	5.41	6.22	2.90	
2643	Yeaman's Hall, Goose Creek	32° 55.5'	79° 59.2'	+0 06	+1 31	*1.00	*1.37	5.14	6.07	2.84	
2645	Hanahan, Turkey Creek, Goose Creek	32° 55.1'	80° 00.7'	+2 51	+2 13	*0.90	*0.79	4.70	5.55	2.50	
2647	Clouter Creek, north entrance	32° 54.4'	79° 56.1'	+0 45	+0 33	*1.04	*1.00	5.43	6.41	2.91	
2649	Snow Point, 0.4 mi. North of	32° 56.9'	79° 55.9'	+0 59	+0 45	*1.02	*1.05	5.31	6.10	2.86	
2651	General Dynamics Pier	33° 00.5'	79° 55.4'	+1 40	+1 24	*0.84	*1.11	4.35	5.03	2.39	
2653	Dupont, Dean Hall	33° 03.5'	79° 56.2'	+2 21	+2 07	*0.68	*1.58	3.43	3.98	2.01	
2655	Bonneau Ferry, East Branch	33° 04.3'	79° 53.0'	+3 14	+2 49	*0.63	*1.79	3.11	3.61	1.90	
2657	Blessing Plantation, East Branch	33° 03.3'	79° 52.8'	+3 24	+3 20	*0.56	*1.32	2.79	3.29	1.64	
2659	Richmond Plantation, East Branch	33° 04.6'	79° 51.3'	+3 43	+3 43	*0.54	*1.37	2.67	3.07	1.59	
2661	Quinby Creek bridge, East Branch	33° 05.7'	79° 48.5'	+4 37	+4 12	*0.56	*1.42	2.75	3.25	1.65	
2663	Huger Landing, East Branch	33° 07.8'	79° 48.7'	+4 46	--	--	--	--	--	--	
2665	Old Rice Mill, West Branch	33° 04.7'	79° 55.5'	+2 56	+2 51	*0.53	*1.63	2.60	3.02	1.61	
2667	Back River Reservoir, West Branch	32° 59.7'	79° 56.2'	+5 44	+5 57	*0.17	*0.79	0.78	0.90	0.54	
2669	Pimlico, West Branch	33° 05.7'	79° 57.2'	+3 19	+3 53	*0.34	*0.89	1.69	1.94	1.01	
	Wando River										
2671	Hobcaw Point	32° 49.3'	79° 54.0'	+0 19	+0 13	*1.03	*0.95	5.39	6.20	2.88	
2673	Parker Island, Horlbeck Creek	32° 53.1'	79° 50.7'	+0 43	+0 27	*1.09	*1.11	5.70	6.73	3.06	
2675	Nowell Creek	32° 54.0'	79° 54.0'	+0 47	+0 23	*1.13	*1.05	5.91	6.80	3.16	
2677	Cainhoey	32° 55.6'	79° 49.8'	+0 49	+0 31	*1.15	*1.00	6.02	6.92	3.20	
2679	Big Paradise Island	32° 54.9'	79° 44.8'	+1 24	+0 52	*1.24	*1.11	6.48	7.45	3.45	
2681	Woodville	32° 55.2'	79° 44.0'	+2 07	+1 22	*1.19	*1.19	6.3	7.3	3.4	
	Ashley River										
2683	James Island Creek, 1 mi. above ent.	32° 44.7'	79° 56.9'	+0 17	+0 07	*1.02	*1.05	5.36	6.22	2.88	
2685	Wappoo Creek, highway bridge	32° 46.0'	79° 58.4'	+0 22	+0 22	*0.99	*0.99	5.2	6.0	2.8	
2687	South Ashley Bridge	32° 47.0'	79° 57.4'	+0 04	+0 07	*1.01	*1.05	5.34	6.19	2.87	
2689	Duck Island	32° 49.8'	79° 58.0'	+0 23	+0 17	*1.06	*1.06	5.6	6.5	3.0	
2691	Cosgrove Bridge	32° 50.1'	79° 59.2'	+0 25	+0 17	*1.07	*1.05	5.57	6.57	2.99	
2693	I-526 bridge	32° 50.2'	80° 01.3'	+0 30	+0 29	*1.08	*1.11	5.68	6.53	3.05	
2695	Drayton, Bee's Ferry	32° 50.9'	80° 03.1'	+0 41	+0 39	*1.09	*1.05	5.69	6.54	3.05	
2697	Magnolia Gardens	32° 52.6'	80° 04.9'	+1 02	+0 54	*1.10	*1.05	5.79	6.72	3.10	
2699	Greggs Landing, Matceba Gardens	32° 55.7'	80° 09.3'	+2 06	+1 42	*1.15	*1.16	6.06	7.03	3.25	
2701	Bacon Bridge	32° 57.5'	80° 12.2'	+2 45	+3 41	*0.39	*0.16	2.10	2.48	1.08	
	SOUTH CAROLINA, outer coast—cont.										
2703	Secessionville, Secessionville Creek	32° 42.4'	79° 56.2'	+0 22	--	--	--	--	--	--	
2705	Folly Island (outer coast)	32° 39'	79° 56'	-0 08	-0 14	*0.98	*1.00	5.2	6.1	2.8	
2707	Folly River Bridge, Flooy Island	32° 39.7'	79° 56.7'	+0 21	-0 03	*1.01	*0.95	5.27	6.06	2.22	
2709	Folly Creek, Hwy. 171 bridge	32° 40.5'	79° 57.1'	+0 25	-0 06	*1.04	*1.00	5.41	6.22	2.89	
2711	Folly River, north, Folly Island	32° 40.2'	79° 55.0'	+0 24	-0 05	*1.03	*0.95	5.38	6.19	2.87	
	Stono River										
2713	Snake Island	32° 38.4'	80° 00.9'	+0 01	-0 12	*1.01	*1.00	5.27	6.06	2.83	
2715	Abappoola Creek entrance	32° 40.6'	80° 00.4'	+0 17	+0 02	*1.01	*0.95	5.36	6.22	2.86	
2717	Elliott Cut entrance	32° 45.8'	80° 00.1'	+0 48	+0 52	*0.99	*1.16	5.14	5.91	2.79	
2719	Pennys Creek, west entrance	32° 46.1'	80° 04.2'	+1 23	+1 20	*1.03	*1.32	5.32	6.12	2.91	
2721	Sandblasters, Pennys Creek	32° 46.2'	80° 03.8'	+1 30	+1 18	*1.02	*1.02	5.26	6.21	2.91	
2723	Limehouse Bridge	32° 47.2'	80° 06.3'	+1 43	+1 34	*1.08	*1.08	5.58	6.58	3.04	
2725	Church Flats	32° 44.8'	80° 09.9'	+1 51	+1 14	*1.22	*1.16	6.37	7.33	3.41	
2727	Kiawah River Bridge	32° 36.2'	80° 07.9'	+0 14	+0 06	*1.07	*0.89	5.60	6.44	2.97	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
	SOUTH CAROLINA, outer coast—cont. Time meridian, 75° W			on Charleston, p.144							
2729	North Edisto River Ocelia Creek, 2 mi. above entrance	32° 33.7'	80° 14.3'	+0 32	+0 09	*1.08	*1.08	5.7	6.6	3.0	
2731	Rockville, Bohicket Creek	32° 35.9'	80° 11.7'	+0 19	+0 07	*1.09	*1.11	5.76	6.68	3.09	
2733	Ho-Non-Wah Boy Scout Camp, Bohicket Creek	32° 37.5'	80° 10.0'	+0 49	+0 30	*1.13	*1.11	5.93	6.82	3.17	
2735	Oak Branch, Bohicket Creek	32° 41.0'	80° 05.8'	+1 39	+0 57	*1.26	*1.16	6.66	7.73	3.55	
2737	Point of Pines	32° 35.1'	80° 13.7'	+0 15	+0 11	*1.08	*1.05	5.66	6.51	3.04	
2739	Leadenwah Creek, 3 mi. above entrance	32° 38.2'	80° 12.1'	+0 54	+0 23	*1.15	*1.11	5.99	6.89	3.21	
2741	Steamboat Landing, Steamboat Creek	32° 36.2'	80° 17.2'	+0 45	+0 25	*1.15	*1.11	6.02	6.92	3.22	
2743	Windsor Plantation, Russel Creek	32° 35.9'	80° 20.7'	+1 16	+0 35	*1.21	*1.11	6.40	7.42	3.41	
2745	Dawho Bridge, Dawho River	32° 38.2'	80° 20.5'	+0 56	+0 47	*1.18	*1.11	6.17	7.10	3.29	
2747	Park Island, Tom Point Creek	32° 39.9'	80° 19.0'	+1 19	+0 34	*1.21	*1.21	6.40	7.42	3.43	
2749	Toogoodoo Creek, 2 mi. above entrance	32° 40.1'	80° 17.6'	+1 06	+0 38	*1.21	*1.05	6.36	7.31	3.38	
2751	Lower Toogoodoo Creek, 2 mi. above entrance	32° 42.2'	80° 16.7'	+1 26	+0 47	*1.29	*1.26	6.73	7.94	3.61	
	Wadmalaw River			on Savannah River Ent., p.148							
2753	Bluff Point	32° 38.8'	80° 15.4'	+0 58	+0 31	*1.17	*1.11	6.13	7.05	3.28	
2755	Yonges Island	32° 41.7'	80° 13.4'	+1 22	+0 45	*1.24	*1.16	6.50	7.48	3.47	
2757	Johns Island, Church Creek	32° 42.7'	80° 09.4'	+1 43	+1 00	*1.30	*1.16	6.85	7.88	3.64	
2759	Church Creek bridge	32° 42.9'	80° 05.5'	+1 58	+0 58	*1.30	*1.00	6.93	8.04	3.66	
	Edisto Beach, Edisto Island	32° 30.1'	80° 17.8'	-0 21	-0 29	*0.84	*0.95	5.75	6.61	3.08	
	South Edisto River			on Savannah River Ent., p.148							
2761	Edisto Marina, Big Bay Creek entrance	32° 29.6'	80° 20.4'	-0 06	-0 13	*0.86	*0.91	5.96	6.85	3.18	
2763	Carters Dock, Big Bay Creek	32° 29.6'	80° 19.6'	+0 08	-0 07	*0.87	*0.91	5.97	6.87	3.18	
2765	Scott Creek, 0.5 mi. above ent., Big Bay Creek	32° 30.1'	80° 19.1'	+0 29	---	---	---	---	---	---	
2767	Peters Point, St. Pierre Creek	32° 32.4'	80° 20.4'	+0 22	+0 09	*0.88	*0.95	6.09	7.00	3.25	
2769	Fenwick Island	32° 33.6'	80° 25.1'	+0 15	+0 25	*0.90	*1.09	6.19	7.12	3.32	
2771	Pine Landing	32° 36.2'	80° 23.3'	+0 29	+0 45	*0.92	*0.95	6.29	7.30	3.36	
2773	Dawho River	32° 39.4'	80° 23.5'	+1 07	+1 31	*0.89	*0.95	6.15	7.07	3.29	
2775	Willtown Bluff, Edisto River	32° 40.9'	80° 25.0'	+1 34	+2 03	*0.83	*1.00	5.69	6.54	3.06	
2777	Hope Creek, Edisto River	32° 42.0'	80° 25.6'	+1 46	+2 13	*0.82	*1.05	5.62	6.46	3.04	
2779	Penny Creek, south of, Edisto River	32° 42.9'	80° 26.2'	+2 10	+2 43	*0.73	*1.18	4.97	5.72	2.75	
2781	Jacksonboro Camp	32° 45.2'	80° 27.0'	+2 46	+3 34	*0.59	*0.86	4.04	4.65	2.21	
2783	Canaday Landing, south of, Edisto River	32° 48.8'	80° 24.4'	+4 20	+5 34	*0.13	*0.32	0.84	0.97	0.49	
2785	Hart Bluff, Edisto River <24>	32° 55.6'	80° 23.9'	---	---	---	---	---	---	---	
	St. Helena Sound			on Savannah River Ent., p.148							
2787	Otter Island	32° 28.6'	80° 25.2'	+0 04	+0 07	*0.87	*0.95	6.01	6.91	3.21	
2791	Johnson Creek Bridge, Hunting Island	32° 23.5'	80° 26.3'	+0 03	+0 03	*0.85	*0.86	5.88	6.76	3.13	
2793	Harbor River Bridge	32° 24.2'	80° 27.2'	+0 03	-0 06	*0.88	*0.95	6.09	7.00	3.25	
	Ashepoo River			on Savannah River Ent., p.148							
2795	Seabrook	32° 31.4'	80° 24.4'	+0 11	+0 18	*0.90	*0.91	6.2	7.3	3.3	
2797	Ashepoo–Coosaw Cutoff, ICWW	32° 31.5'	80° 27.1'	+0 15	+0 23	*0.90	*0.91	6.20	7.19	3.30	
2799	Musselboro Island, Mosquito Creek	32° 34.7'	80° 26.9'	+1 21	+0 57	*0.90	*0.91	6.22	7.15	3.31	
2801	Hutchinson Island	32° 33.1'	80° 28.9'	+0 31	+0 44	*0.87	*0.91	6.01	6.97	3.20	
2803	Bluff Islands	32° 34.7'	80° 29.6'	+0 46	+1 04	*0.84	*0.91	5.79	6.72	3.10	
2805	Brickyard Ferry, swing bridge	32° 36.8'	80° 28.9'	+1 27	+1 34	*0.71	*0.86	4.82	5.59	2.60	
2807	Airy Hall Plantation	32° 37.9'	80° 28.3'	+1 57	+1 59	*0.60	*1.00	4.16	4.71	2.25	
2809	Ashepoo	32° 44.6'	80° 33.4'	+4 18	+4 00	*0.34	*1.05	2.18	2.53	1.32	
	Morgan River			on Savannah River Ent., p.148							
2811	Village Creek Entrance	32° 26.7'	80° 30.2'	+0 17	+0 07	*0.93	*1.00	6.35	7.37	3.40	
2813	Village Creek Cemetery	32° 25.0'	80° 31.2'	+0 36	+0 15	*0.94	*0.95	6.45	7.48	3.43	
2815	Edding Point, Edding Creek	32° 26.8'	80° 32.0'	+0 31	+0 14	*0.93	*0.95	6.41	7.37	3.42	
2817	Jenkins Creek, 1 mi. above entrance	32° 26.4'	80° 33.2'	+0 41	+0 17	*0.98	*0.95	6.80	7.82	3.61	
2819	Jenkins Creek, Polawana Island	32° 25.2'	80° 34.6'	+0 55	+0 27	*1.01	*1.05	6.91	8.02	3.69	
2821	Lucy Point Creek entrance	32° 27.1'	80° 36.6'	+0 53	+0 33	*0.90	*0.88	6.32	7.33	3.21	
	Combahee River			on Savannah River Ent., p.148							
2823	Bowles Island, New Chehaw River	32° 33.9'	80° 31.0'	+1 02	+0 42	*0.96	*1.00	6.59	7.64	3.51	
2825	Wiggins, Chehaw River	32° 36.1'	80° 32.5'	+1 45	+1 20	*0.88	*1.18	6.03	6.93	3.28	
2827	Fields Point	32° 34.0'	80° 33.7'	+0 42	+0 52	*0.91	*0.91	6.2	7.3	3.3	
2829	Railroad Bridge	32° 35.4'	80° 37.8'	+1 37	---	---	---	---	---	---	
2831	U.S. 17 Bridge	32° 39.1'	80° 41.0'	+3 00	+2 29	*0.71	*1.14	4.83	5.55	2.66	
2833	Bluff Plantation	32° 41.0'	80° 44.3'	+4 17	+3 51	*0.50	*1.59	3.12	3.59	1.95	
2835	Cuckolds Creek	32° 42.8'	80° 41.7'	+4 45	+4 12	*0.51	*1.73	3.26	3.81	2.01	
	Coosaw River			on Savannah River Ent., p.148							
2837	Summerhouse Point, Bull River	32° 31.6'	80° 34.4'	+0 55	+0 37	*0.96	*0.95	6.58	7.63	3.50	
2839	Briars Creek ent., Wimbee Creek, Bull River	32° 34.7'	80° 40.2'	+2 06	+1 24	*0.93	*0.95	6.39	7.35	3.41	
2841	Sams Point, Lucy Point Creek	32° 29.0'	80° 35.9'	+0 55	+0 45	*0.97	*0.91	6.71	7.78	3.55	
2843	Brickyard Point, Brickyard Creek	32° 29.6'	80° 41.1'	+1 27	+1 19	*1.08	*0.95	7.45	8.64	3.94	
2845	Whale Branch entrance	32° 31.5'	80° 40.5'	+1 27	+1 20	*1.06	*0.95	7.32	8.49	3.87	
2847	Lobeco, Whale Branch	32° 34.4'	80° 44.7'	+1 40	+1 28	*1.11	*0.95	7.75	8.91	4.08	
2849	Sheldon, Huspa Creek, Whale Branch	32° 35.0'	80° 47.0'	+2 11	+1 52	*1.16	*0.77	8.07	9.28	4.21	
2851	Fripps Inlet, Hunting Island Bridge	32° 20.4'	80° 27.9'	-0 10	-0 22	*0.88	*0.91	6.10	7.02	3.25	
	Port Royal Sound			on Savannah River Ent., p.148							
2853	Capers Island, Trenchards Inlet	32° 16.4'	80° 35.1'	-0 01	-0 18	*0.93	*0.95	6.37	7.39	3.39	
2855	Club Bridge Creek ent., Trenchards Inlet	32° 20.1'	80° 32.5'	+0 15	-0 24	*0.99	*1.00	6.78	7.86	3.61	
2857	Port Royal Plantation, Hilton Head Island	32° 13.2'	80° 40.1'	+0 01	-0 11	*0.88	*1.00	6.10	7.02	3.27	
2859	The Folly, Hilton Head Island	32° 11.4'	80° 42.1'	+0 03	---	---	---	---	---	---	
2861	Station Creek, west end	32° 16.8'	80° 38.3'	+0 16	+0 13	*0.96	*0.91	6.62	7.68	3.51	
2863	Station Creek, County Landing	32° 19.5'	80° 36.1'	+0 27	-0 16	*0.99	*1.00	6.84	7.87	3.64	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
SOUTH CAROLINA Port Royal Sound—cont. Time meridian, 75° W											
Beaufort River											
2865	Fort Fremont	32° 18.4'	80° 38.7'	+0 19	+0 17	*0.95	*0.64	6.63	7.69	3.45	
2867	Parris Island, Marine Corps Recruit Depot	32° 21.0'	80° 40.1'	+0 37	+0 26	*1.02	*0.91	7.02	8.14	3.71	
2869	Distant Island, Cowen Creek	32° 22.7'	80° 38.0'	+0 43	+0 27	*1.06	*1.05	7.29	8.46	3.87	
2871	Distant Island Creek, upper end, Cowen Creek	32° 24.1'	80° 39.2'	+1 00	+1 08	*0.98	*0.36	6.92	7.96	3.54	
2873	Capers Creek, Cowen Creek, St. Helena Island	32° 22.3'	80° 36.3'	+0 58	+0 34	*1.08	*0.95	7.44	8.63	3.93	
2875	Cowen Creek, Rt. 21 bridge	32° 23.9'	80° 37.0'	+0 55	+0 58	*1.00	*0.55	6.97	8.09	3.61	
2877	Battery Creek, 4 mi. above entrance	32° 24.8'	80° 42.0'	+1 14	+0 37	*1.10	*0.91	7.64	8.79	4.02	
2879	Beaufort	32° 25.8'	80° 40.5'	+1 09	+0 51	*1.07	*0.95	7.39	8.17	3.90	
2881	Marine Corps Air Station, Brickyard Creek	32° 27.9'	80° 41.5'	+1 27	+1 11	*1.10	*0.95	7.62	8.84	4.02	
2883	Albergoottie Creek, Rt. 21 bridge	32° 27.0'	80° 43.9'	+1 48	+2 02	*0.98	*0.45	6.83	7.92	3.52	
2885	Skull Creek, north entrance, Hilton Head Island	32° 16.0'	80° 42.2'	+0 15	+0 16	*0.99	*0.91	6.83	7.85	3.62	
2887	Skull Creek, south entrance, Hilton Head Island	32° 13.4'	80° 46.3'	+0 34	+0 23	*1.05	*1.05	7.28	8.37	3.87	
2889	Pinckney Island, Mackay Creek, Chechessee River	32° 15.6'	80° 46.0'	+0 36	+0 25	*1.04	*0.91	7.21	8.36	3.80	
2891	Colleton River Entrance	32° 19.3'	80° 47.5'	+0 49	+0 37	*1.05	*1.05	7.2	8.4	3.8	
2893	Callawassie Creek, Colleton River	32° 19.0'	80° 50.5'	+1 15	+0 53	*1.13	*1.14	7.8	9.1	4.1	
2895	Callawassie Island, south, Colleton River	32° 18.8'	80° 51.6'	+1 09	+0 40	*1.19	*1.11	7.7	9.0	4.1	
2897	Callawassie Island Bridge, Colleton River	32° 20.5'	80° 51.4'	+1 12	+0 49	*1.13	*1.14	7.8	9.1	4.2	
2899	Baileys Landing, Okatee River, Colleton River	32° 20.8'	80° 53.4'	+1 25	+0 57	*1.17	*1.05	8.09	9.30	4.28	
2901	Chechessee Bluff, Chechessee River	32° 22.4'	80° 50.2'	+1 06	+0 48	*1.10	*1.00	7.62	8.84	4.03	
<i>Broad River</i>											
2903	Hwy. 170 bridge	32° 23.2'	80° 46.6'	+0 51	+0 45	*1.06	*0.91	7.35	8.45	3.88	
2905	Broughton Point, Hazzard Creek	32° 24.6'	80° 53.1'	+1 34	+1 30	*1.10	*0.82	7.61	8.83	3.99	
2907	Euhaw Creek, 2.5 mi. above entrance	32° 26.1'	80° 51.1'	+1 33	+1 09	*1.14	*0.91	7.92	9.19	4.16	
2909	Salvesburg Landing, West Branch Boyds Creek	32° 28.5'	80° 51.0'	+1 29	---	---	---	---	---	---	
2911	Pilot Island, West Branch Boyds Creek	32° 30.3'	80° 51.8'	+1 50	+1 24	*1.15	*0.91	7.98	9.26	4.19	
2913	Corning Landing, Whale Branch	32° 30.0'	80° 47.1'	+1 37	+1 25	*1.15	*0.77	8.00	9.28	4.17	
2915	RR. Bridge, Hall Island	32° 31.3'	80° 50.3'	+1 39	+1 24	*1.17	*1.05	8.08	9.37	4.27	
2917	Pocotaligo River, 4 mi. above entrance	32° 35.7'	80° 49.9'	+2 21	+1 48	---	---	---	---	---	
2919	North Dawson Landing, Coosawhatchie River	32° 33.7'	80° 54.6'	+2 34	+2 10	*1.12	*1.14	7.71	8.94	4.10	
2921	Tulifiny River, I-95 bridge	32° 36.1'	80° 54.2'	+3 24	+3 31	*0.73	*0.73	5.01	5.81	2.66	
<i>Calibogue Sound</i>											
2923	Braddock Point, Hilton Head Island	32° 06.8'	80° 49.8'	+0 05	-0 02	*0.98	*1.00	6.74	7.82	3.59	
2925	Calibogue Cay, Broad Creek, Hilton Head Island	32° 09.2'	80° 47.7'	+0 20	+0 09	*1.04	*1.00	7.13	8.27	3.79	
2927	Broad Creek, Hilton Head Island	32° 11.1'	80° 45.2'	+0 33	+0 17	*1.08	*1.05	7.48	8.60	3.97	
2929	Haig Point, Daufuskie Island, Cooper River	32° 08.8'	80° 50.2'	+0 20	+0 10	*1.02	*1.00	7.05	8.18	3.74	
2931	Bull Creek, Bull Island South, Cooper River	32° 09.9'	80° 51.4'	+0 28	+0 12	*1.05	*1.05	7.23	8.39	3.84	
2933	Pine Island, Ramshorn Creek, Cooper River	32° 07.3'	80° 53.9'	+0 34	+0 28	*1.03	*0.91	7.17	8.25	3.78	
2935	Savage I., Savage Creek, Bull Creek	32° 11.1'	80° 51.6'	+0 46	+0 19	*1.10	*1.00	7.56	8.77	4.00	
<i>May River</i>											
2937	Moreland Cemetery	32° 10.5'	80° 53.5'	+0 49	+0 23	*1.11	*0.77	7.73	8.97	4.04	
2939	Bull Island North	32° 12.0'	80° 48.9'	+0 40	+0 25	*1.09	*1.05	7.52	8.72	3.99	
2941	Bluffton	32° 13.8'	80° 51.7'	+1 00	+0 37	*1.16	*1.05	8.01	9.29	4.23	
2943	Rose Dew Creek	32° 13.2'	80° 55.2'	+1 19	---	---	---	---	---	---	
<i>New River</i>											
2945	Bloody Point, Daufuskie Island	32° 04.9'	80° 52.7'	+0 01	+0 19	*0.98	*0.91	6.77	7.79	3.59	
2947	Hargray Pier, Daufuskie Island	32° 05.9'	80° 53.9'	+0 19	+0 27	*1.01	*1.05	6.96	8.07	3.71	
2949	Daufuskie Landing, Daufuskie Island	32° 06.2'	80° 53.7'	+0 30	+0 33	*1.01	*0.95	7.02	8.07	3.72	
2951	Doughboy Island	32° 08.3'	80° 55.9'	+1 04	+1 06	*1.01	*1.05	6.96	8.07	3.71	
2953	Good Hope Landing, south of	32° 10.6'	80° 58.0'	+2 19	+2 06	*0.85	*1.55	5.71	6.62	3.20	
2955	Cook Landing Cemetery	32° 11.7'	81° 00.0'	+3 09	+3 00	*0.69	*1.41	4.58	5.31	2.60	
2957	Rt. 170 bridge	32° 14.2'	81° 00.7'	+4 12	+3 53	*0.51	*0.51	3.33	3.83	2.01	
2959	Fields Cut, Wright River	32° 05.2'	80° 56.0'	+0 16	+0 29	*1.02	*1.05	6.98	8.10	3.72	
2961	Turnbridge Landing, Salt Water Creek	32° 07.7'	81° 00.7'	+1 41	+0 59	*1.06	*1.09	7.27	8.43	3.87	
<i>GEORGIA</i>											
<i>Savannah River</i>											
2963	Tybee Light	32° 02'	80° 51'	-0 10	-0 12	*0.99	*0.99	6.8	8.0	3.6	
2965	SAVANNAH RIVER ENTRANCE, FORT PULASKI	32° 02.0'	80° 54.1'	+0 29	+0 42	*1.09	*1.09	6.92	8.03	3.67	
2967	Fort Jackson	32° 04.9'	81° 02.2'	+0 29	+0 42	*1.09	*1.09	7.50	8.70	4.04	
2969	SAVANNAH	32° 05'	81° 05'					7.9	8.8	4.2	
2971	Port Wentworth	32° 08.6'	81° 08.5'	+0 44	+0 41	*1.17	*0.95	8.14	9.12	4.28	
2973	Little Back River, Hwy. 17, Back River, S.C.	32° 09.9'	81° 07.8'	+1 28	+1 41	*1.10	*1.14	7.63	8.55	4.06	
2975	S.C.L. RR. bridge	32° 14'	81° 09'	+1 51	+3 08	*0.90	*0.91	6.2	7.2	3.3	
2977	Purrysburg Landing, S.C.	32° 18.2'	81° 07.3'	+2 14	+3 38	*0.44	*0.41	3.03	3.48	1.60	
<i>Tybee Creek and Wassaw Sound</i>											
2979	Tybee Creek entrance	31° 59'	80° 51'	-0 09	+0 05	*0.99	*1.00	6.8	8.0	3.6	
2981	Beach Hammock	31° 57'	80° 56'	-0 01	-0 07	*1.00	*1.00	6.9	8.1	3.7	
2983	Romerly Marsh Creek	31° 56'	81° 00'	+0 08	-0 03	*1.03	*1.03	7.1	8.3	3.7	
<i>Wilmington River</i>											
2985	Savannah Sheraton Resort Hotel	32° 00'	81° 00'	+0 14	+0 06	*1.13	*1.14	7.8	9.1	4.2	
2987	Thunderbolt	32° 02'	81° 03'	+0 32	+0 12	*1.15	*1.14	7.9	9.2	4.2	
2989	North entrance	32° 04'	81° 00'	+0 40	+0 44	*1.10	*1.09	7.6	8.9	4.0	
2991	Isle of Hope, Skidaway River	31° 59'	81° 03'	+0 50	+0 28	*1.13	*1.13	7.8	9.1	4.1	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
on Savannah River Ent., p.148											
GEORGIA											
Ossabaw Sound											
Time meridian, 75° W											
2993	Egg Islands	31° 50'	81° 05'	+0 04	+0 10	*1.04	*1.04	7.2	8.4	3.8	
2995	Vernon View, Burnside River	31° 56'	81° 06'	+0 40	+0 31	*1.09	*1.09	7.5	8.8	4.0	
2997	Coffee Bluff, Forest River	31° 56'	81° 09'	+1 05	+0 42	*1.09	*1.09	7.5	8.8	3.9	
2999	Fort McAllister, Ogeechee River	31° 53'	81° 13'	+0 48	+1 16	*1.00	*1.00	6.9	8.1	3.6	
3001	Highway bridge, Ogeechee River	31° 59'	81° 17'	+3 19	+4 25	*0.15	*0.14	1.0	1.2	0.5	
3003	Florida Passage, Ogeechee River	31° 51'	81° 09'	+0 34	+0 46	*1.05	*0.91	7.3	8.5	3.8	
3005	Florida Passage, Bear River	31° 49'	81° 10'	+0 46	+0 49	*1.09	*0.95	7.6	8.8	4.0	
3007	Cane Patch Creek entrance	31° 49'	81° 09'	+0 55	+0 43	*1.05	*1.05	7.2	8.4	3.8	
3009	Bradley Point, Bradley River	31° 49'	81° 03'	+0 04	+0 13	*1.02	*0.95	7.0	8.2	3.7	
St. Catherines and Sapelo Sounds											
3011	Walburg Creek entrance	31° 42'	81° 09'	+0 16	+0 21	*1.03	*1.00	7.1	8.3	3.8	
3013	Kilkenny Club, Kilkenny Creek	31° 47'	81° 12'	+0 48	+0 37	*1.09	*0.91	7.5	8.8	4.0	
3015	Bear River, (Range 'A' Light)	31° 48'	81° 10'	+0 43	+0 39	*1.09	*0.95	7.6	8.8	4.0	
3017	Bear River Entrance	31° 43'	81° 08'	+0 10	+0 17	*1.03	*1.09	7.0	8.2	3.8	
3019	Sunbury, Medway River	31° 46'	81° 17'	+0 53	+0 52	*1.05	*0.73	7.3	8.6	3.8	
3021	Belfast, Belfast River	31° 49'	81° 18'	+1 23	+1 10	*1.13	*1.14	7.8	9.1	4.2	
3023	North Newport River (Daymark 119)	31° 41'	81° 12'	+0 35	+0 31	*1.05	*1.00	7.2	8.4	3.8	
3025	North Newport River	31° 40'	81° 16'	+0 56	+0 36	*1.10	*1.09	7.6	8.9	4.0	
3027	South Newport Cut, N. Newport River	31° 40'	81° 16'	+1 01	+0 54	*1.08	*1.04	7.5	8.7	4.0	
3029	Halfmoon, Timmons River	31° 41.7'	81° 16.3'	+1 21	+1 09	*1.06	*1.05	7.35	8.45	3.90	
3031	Eagle Neck, South Newport River	31° 39'	81° 18'	+1 16	+1 06	*1.09	*1.00	7.5	8.8	4.0	
3033	Thomas Landing, S. Newport River	31° 39'	81° 15'	+0 57	+0 46	*1.06	*0.95	7.4	8.6	3.9	
3035	South Newport River (Daymark 135)	31° 34'	81° 11'	+0 27	+0 20	*1.03	*1.05	7.1	8.3	3.8	
3037	Dallas Bluff, Jullenton River	31° 35'	81° 19'	+0 48	+1 04	*1.10	*1.09	7.6	8.9	4.0	
3039	Harris Neck, Barbour Island River	31° 37'	81° 16'	+0 54	+0 32	*1.08	*1.00	7.5	8.8	4.0	
3041	Barbour Island, Barbour Island River	31° 35'	81° 14'	+0 36	+0 24	*1.06	*1.00	7.3	8.5	3.9	
3043	Blackbeard Island	31° 32'	81° 12'	+0 18	+0 22	*1.00	*1.00	6.9	8.1	3.6	
3045	Dog Hammock, Sapelo River	31° 32'	81° 16'	+0 33	+0 22	*1.04	*0.91	7.2	8.4	3.8	
3047	Bellville Point, Sapelo River	31° 32'	81° 22'	+1 12	+1 02	*1.08	*0.86	7.5	8.8	3.9	
3049	Pine Harbor, Sapelo River	31° 33'	81° 22'	+1 03	+1 04	*1.05	*1.05	7.2	8.4	3.8	
3051	Eagle Creek, Mud River	31° 31'	81° 17'	+0 21	+0 19	*1.05	*1.05	7.2	8.4	3.8	
3053	Creighton Narrows Entrance, Crescent River	31° 29'	81° 20'	+0 49	+0 37	*1.08	*1.09	7.4	8.6	4.0	
3055	Mud River, at Old Teakettle Creek	31° 29'	81° 19'	+0 45	+0 46	*1.08	*1.09	7.4	8.7	3.9	
Doboy and Altamaha Sounds											
3057	Old Tea Kettle Creek (Daymark 173)	31° 26'	81° 18'	+0 39	+0 39	*0.96	*0.82	6.7	7.8	3.5	
3059	Blackbeard Creek, Blackbeard Island	31° 29'	81° 13'	+0 19	+0 47	*0.94	*0.95	6.5	7.6	3.5	
3061	Old Tower, Sapelo Island	31° 23.4'	81° 17.3'	+0 15	+0 14	*0.99	*0.95	6.82	7.84	3.62	
3063	Hudson Creek entrance	31° 27'	81° 21'	+0 37	+0 31	*1.05	*1.05	7.2	8.4	3.8	
3065	Threemile Cut entrance, Darien River	31° 21'	81° 23'	+0 44	+0 55	*1.03	*1.05	7.1	8.3	3.7	
3067	Darien, Darien River	31° 22'	81° 26'	+1 08	+1 15	*1.06	*1.05	7.3	8.5	3.9	
3069	Rockdedundy River (Daymark 185)	31° 22'	81° 20'	+0 29	+0 41	*1.00	*1.01	6.9	8.0	3.7	
3071	Wolf Island, south end	31° 20'	81° 19'	+0 25	+0 45	*0.97	*1.09	6.7	7.8	3.6	
3073	Champney Island, South Altamaha River	31° 20'	81° 28'	+1 10	+2 33	*0.76	*0.77	5.2	6.1	2.8	
3075	Hampton River entrance	31° 13'	81° 19'	+0 16	+0 04	*0.96	*0.95	6.6	7.8	3.5	
3077	Jones Creek entrance, Hampton River	31° 18'	81° 20'	+1 03	+0 13	*1.05	*1.05	7.2	8.5	3.8	
St. Simons Sound											
3079	St. Simons Sound Bar	31° 06'	81° 19'	-0 01	-0 02	*0.95	*0.95	6.5	7.6	3.4	
3081	St. Simons Light	31° 07.9'	81° 23.8'	+0 14	+0 16	*0.95	*0.91	6.60	7.72	3.50	
3083	Frederick River Bridge	31° 10'	81° 25'	+0 43	+0 45	*1.00	*1.09	6.9	8.0	3.7	
3085	Frederica River	31° 13'	81° 24'	+0 48	+0 56	*1.05	*1.05	7.2	8.4	3.8	
3087	Mackay River (Daymark 239)	31° 13'	81° 26'	+0 58	+0 56	*1.03	*1.09	7.1	8.3	3.8	
3089	Mackay River (ICWW), Buttermilk Sound	31° 17.1'	81° 23.1'	+0 58	+1 23	*1.00	*1.09	6.87	7.90	3.68	
3091	Brunswick, East River	31° 09'	81° 30'	+0 59	+0 51	*1.05	*1.09	7.2	8.4	3.8	
Turtle River											
3093	Crispen Island	31° 13'	81° 33'	+1 33	+0 55	*1.15	*1.05	7.9	9.3	4.2	
3095	Allied Chemical Corp. docks	31° 11'	81° 31'	+1 03	+0 42	*1.10	*1.09	7.6	8.9	4.0	
3097	Dillard Creek	31° 12'	81° 34'	+1 32	+1 02	*1.16	*1.18	8.0	9.4	4.3	
3099	Buffalo River entrance	31° 13'	81° 35'	+1 37	+0 58	*1.16	*1.18	8.0	9.4	4.3	
3101	Highway bridge, South Brunswick River	31° 09'	81° 34'	+1 07	+0 49	*1.10	*1.09	7.6	8.9	4.0	
St. Andrew Sound											
3103	Jekyll Island Marina, Jekyll Creek	31° 03.4'	81° 25.4'	+0 03	+0 36	*1.13	*1.16	6.83	7.85	3.63	
3105	Jointer Island, Jointer Creek	31° 06'	81° 30'	+0 11	+0 31	*1.18	*1.18	7.2	8.4	3.8	
3107	Little Satilla River	31° 04'	81° 30'	-0 04	+0 31	*1.12	*1.12	6.8	7.9	3.6	
3109	2.5 miles above mouth	31° 06'	81° 34'	+0 24	+1 02	*1.20	*1.20	7.3	8.5	3.8	
3111	8 miles above mouth	31° 10'	81° 37'	+1 09	+1 31	*1.23	*1.23	7.5	8.7	3.9	
3113	Below Spring Bluff	31° 01'	81° 32'	+0 06	+0 31	*1.15	*1.15	7.0	8.1	3.7	
Satilla River											
3115	Todd Creek entrance	30° 58'	81° 31'	-0 08	+0 41	*1.10	*1.10	6.7	7.8	3.5	
3117	Bailey Cut, 0.8 mile west of	30° 59'	81° 36'	+0 06	+1 02	*1.13	*1.13	6.9	8.0	3.6	
3119	Ceylon	30° 58'	81° 39'	+0 34	+1 35	*1.09	*1.09	6.6	7.7	3.5	
3121	Burnt Fort	30° 57'	81° 54'	+3 55	+5 05	*0.53	*0.53	3.2	3.7	1.7	
3123	Cumberland Wharf, Cumberland River	30° 55.8'	81° 26.8'	+0 00	+0 26	*1.12	*1.12	6.8	7.9	3.6	
3125	Floyd Creek, 2.8 miles above entrance	30° 56'	81° 30'	+0 08	+0 21	*1.17	*1.17	7.1	8.2	3.7	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	GEORGIA and FLORIDA Time meridian, 75° W	North	West	h	m	ft	ft	ft	ft	ft	
	Cumberland Sound			on Fernandina Beach, p.156							
3127	St. Marys Entrance, North Jetty	30° 43'	81° 26'	-0 36	-0 03	*0.96	*0.96	5.8	6.7	3.1	
3129	Kings Bay, Navy Base	30° 48.1'	81° 30.9'	+0 12	+0 10	*1.09	*1.05	6.43	7.39	3.42	
3131	Beach Creek ent., Cumberland Island	30° 43.6'	81° 28.6'	+0 00	-0 04	*0.98	*0.95	5.92	6.81	3.14	
3133	Seacamp Dock, Cumberland Island	30° 45.8'	81° 28.3'	+0 12	+0 16	*1.04	*1.05	6.23	7.16	3.31	
3135	Crooked River, Cumberland Dividings	30° 50.6'	81° 29.2'	+0 44	+0 56	*1.12	*1.12	6.8	7.9	3.6	
3137	Harriets Bluff, Crooked River	30° 52.2'	81° 35.1'	+1 29	+1 56	*1.05	*1.05	6.4	7.4	3.4	
	St. Marys River										
3139	St. Marys	30° 43.2'	81° 32.9'	+0 38	+0 45	*0.98	*1.05	5.86	6.74	3.13	
3141	Crandall	30° 43.3'	81° 37.3'	+1 06	+1 25	*0.81	*1.00	4.84	5.57	2.61	
3143	U.S. Highway 17	30° 44.5'	81° 41.3'	+2 30	---	---	---	---	---	---	
3145	Little St. Marys River	30° 43.9'	81° 43.0'	+2 49	+2 36	*0.71	*0.79	4.27	4.91	2.29	
3147	Kings Ferry	30° 47.2'	81° 50.4'	+4 05	+4 09	*0.49	*1.16	2.83	3.25	1.63	
3149	Chester, Bells River	30° 41.0'	81° 32.0'	+0 27	+0 19	*1.04	*1.11	6.27	7.21	3.34	
3151	Roses Bluff, Bells River	30° 42.2'	81° 34.6'	+0 35	+0 35	*1.03	*0.95	6.18	7.11	3.28	
3153	Lofton, Lanceford Creek	30° 38.6'	81° 31.4'	+0 18	-0 01	*1.05	*1.05	6.33	7.28	3.36	
3155	FERNANDINA BEACH, Amelia River	30° 40.5'	81° 27.9'	Daily Predictions				6.02	7.07	3.20	
3157	Kingsley Creek, RR. bridge	30° 37.9'	81° 28.6'	+0 27	+0 25	*0.99	*1.00	5.97	6.87	3.18	
	FLORIDA										
	Nassau Sound and Fort George River										
3159	Amelia City, South Amelia River	30° 35.2'	81° 27.8'	+0 21	+0 42	*0.89	*0.89	5.39	6.20	2.86	
	Nassau River entrance	30° 31.1'	81° 27.2'	-0 18	+0 41	*0.86	*1.00	5.16	5.93	2.77	
3163	Nassauville	30° 34.1'	81° 30.9'	+0 24	+1 09	*0.80	*1.00	4.75	5.46	2.56	
3165	Tiger Point, Pumpkin Hill Creek	30° 30.1'	81° 29.7'	+1 22	+1 46	*0.82	*0.95	4.89	5.62	2.63	
3167	Edwards Creek, 1 mi. above entrance	30° 30.1'	81° 32.5'	+1 24	+1 51	*0.77	*0.85	4.62	5.36	2.48	
3169	Cuno, Lofton Creek	30° 34.6'	81° 34.3'	+2 14	+2 48	*0.60	*1.05	3.55	4.12	1.98	
3171	Mink Creek entrance	30° 32.2'	81° 34.9'	+1 13	+2 05	*0.72	*1.05	4.26	4.90	2.33	
3173	Halfmoon Island, highway bridge	30° 34.6'	81° 36.5'	+2 00	+2 39	*0.70	*1.05	4.16	4.78	2.28	
3175	Boggy Creek, 2 mi. above entrance	30° 35.3'	81° 39.8'	+3 29	+3 50	*0.49	*0.89	2.90	3.34	1.62	
3177	Sawpit Creek entrance, bridge	30° 30.8'	81° 27.4'	-0 14	+0 21	*0.84	*1.00	5.05	5.81	2.71	
3179	Sawpit Creek, 1 mi. above entrance	30° 30.2'	81° 28.3'	+0 05	+0 31	*0.84	*0.74	5.08	5.84	2.68	
3181	Simpson Creek, A1A highway bridge	30° 27.9'	81° 25.9'	+0 04	+0 17	*0.84	*0.63	5.08	5.84	2.66	
3183	Little Talbot Island, ocean	30° 25.8'	81° 24.3'	-0 36	-0 13	*0.91	*1.00	5.45	6.27	2.91	
3185	Fort George Island, Fort George River	30° 26.4'	81° 26.3'	+0 10	+0 33	*0.79	*0.74	4.78	5.50	2.53	
	FLORIDA, St. Johns River			on Mayport, p.160							
3187	Mayport Naval Station, Degausing Structure	30° 23.8'	81° 23.7'	-0 21	-0 04	*1.07	*1.13	4.87	5.36	2.61	
3189	Mayport Naval Station, Water Treatment Dock	30° 24.0'	81° 24.8'	-0 12	-0 06	*1.03	*1.00	4.72	5.17	2.51	
3191	MAYPORT (BAR PILOT DOCK)	30° 23.8'	81° 25.8'	Daily Predictions				4.57	5.32	2.44	
3193	Pablo Creek entrance	30° 22.6'	81° 26.9'	+0 29	+0 33	*0.85	*0.73	3.89	4.24	2.05	
3195	Pablo Creek, ICWW bridge	30° 19.4'	81° 26.3'	+1 14	+1 20	*0.84	*1.00	3.82	4.16	2.06	
3197	Sisters Creek	30° 25.0'	81° 27.2'	+0 32	+0 50	*0.95	*0.93	4.34	4.70	2.31	
3199	Clapboard Creek, Pelotes Island	30° 24.4'	81° 30.6'	+0 32	+0 56	*0.79	*0.80	3.64	3.94	1.94	
3201	Fulton	30° 23.4'	81° 30.4'	+0 24	+0 40	*0.80	*0.73	3.66	3.97	1.94	
3203	Blount Island Bridge	30° 24.8'	81° 32.7'	+0 42	+1 05	*0.77	*0.73	3.51	3.80	1.87	
3205	Dame Point	30° 23.2'	81° 33.5'	+0 42	+1 12	*0.70	*0.67	3.19	3.44	1.70	
3207	Mill Cove	30° 22.2'	81° 33.5'	+0 51	---	---	---	---	---	---	
3209	Cedar Heights, Broward River	30° 26.2'	81° 38.5'	+1 08	+1 53	*0.65	*0.53	2.99	3.47	1.58	
3211	Jacksonville, Navy Fuel Depot	30° 24.0'	81° 37.6'	+1 14	+1 48	*0.56	*0.53	2.60	2.81	1.37	
	Trout River										
3213	Moncrief Creek entrance	30° 23.5'	81° 39.7'	+1 11	+1 53	*0.55	*0.53	2.51	2.91	1.34	
3215	Lake Forest, Ribault River	30° 23.9'	81° 41.9'	+1 13	+2 10	*0.58	*0.60	2.64	2.82	1.41	
3217	Sherwood Forest	30° 25.2'	81° 43.7'	+1 42	+2 13	*0.58	*0.67	2.65	2.88	1.43	
3219	Phoenix Park	30° 23.0'	81° 38.2'	+1 02	+1 47	*0.56	*0.60	2.54	2.75	1.36	
3221	Jacksonville, Long Branch	30° 21.6'	81° 37.2'	+1 15	+1 54	*0.55	*0.73	2.49	2.89	1.35	
3223	Little Pottsburg Creek	30° 18.6'	81° 36.6'	+1 31	+2 09	*0.44	*0.53	2.02	2.34	1.09	
3225	Jacksonville, Main Street Bridge	30° 19.2'	81° 39.5'	+1 39	+2 09	*0.40	*0.73	1.79	1.95	1.00	
3227	Ortega River entrance	30° 16.7'	81° 42.3'	+2 09	+2 47	*0.25	*0.47	1.11	1.26	0.63	
3229	Piney Point	30° 13.7'	81° 39.8'	+2 39	+3 36	*0.20	*0.40	0.87	1.01	0.49	
3231	I-295 bridge (west end)	30° 11.5'	81° 41.5'	+2 56	+3 43	*0.21	*0.60	0.91	1.06	0.55	
3233	Orange Park Landing, Orange Park	30° 10.1'	81° 41.7'	+3 24	+4 44	*0.17	*0.53	0.74	0.87	0.45	
3235	Peoria Point, Doctors Lake	30° 07.2'	81° 45.5'	+3 36	+4 56	*0.18	*0.33	0.80	0.93	0.45	
3237	Julington Creek	30° 08.1'	81° 37.8'	+3 58	+5 13	*0.16	*0.47	0.71	0.83	0.43	
3239	Black Creek, S.C.L. RR. bridge	30° 04.8'	81° 45.7'	+4 46	+5 52	*0.18	*0.33	0.82	0.92	0.46	
3241	Green Cove Springs	29° 59.4'	81° 39.8'	+4 57	+5 55	*0.17	*0.27	0.78	0.90	0.43	
3243	Tocoi	29° 51.5'	81° 33.2'	+6 02	+7 03	*0.21	*0.27	0.95	1.10	0.51	
3245	Palmetto Bluff	29° 45.8'	81° 33.7'	+6 35	+7 36	*0.23	*0.47	1.04	1.18	0.59	
3247	Palatka	29° 38.6'	81° 37.9'	+7 11	+8 38	*0.25	*0.53	1.09	1.22	0.63	
3249	Sutherlands Still, Dunns Creek	29° 34.3'	81° 36.4'	+7 35	+9 05	*0.18	*0.20	0.84	0.97	0.45	
3251	Buffalo Bluff	29° 35.7'	81° 40.9'	+7 27	+8 58	*0.21	*0.40	0.93	1.03	0.52	
3253	Welaka	29° 28.6'	81° 40.5'	+7 16	+8 07	*0.10	*0.27	0.43	0.50	0.25	
3255	Georgetown <24>	29° 23.1'	81° 38.2'	---	---	---	---	---	---	---	
	FLORIDA, East Coast			on Fernandina Beach, p.156							
3257	Atlantic Beach	30° 20.1'	81° 23.7'	-0 41	-0 23	*0.86	*0.86	5.2	6.0	2.8	
3259	Jacksonville Beach	30° 17.0'	81° 23.2'	-0 50	-0 27	*0.84	*0.84	5.07	5.83	2.70	
3261	Oak Landing, ICWW	30° 15.2'	81° 25.8'	+2 15	+2 03	*0.68	*0.80	4.07	4.72	2.20	
3263	Palm Valley, ICWW	30° 08.0'	81° 23.2'	+2 00	+1 49	*0.79	*0.75	4.79	5.56	2.55	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	FLORIDA, East Coast—cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
		on Fernandina Beach, p.156									
3265	Vilano Beach, Tolomato River	29° 55.0'	81° 18.0'	-0 20	-0 05	*0.74	*0.90	4.48	5.20	2.42	
3267	St. Augustine, city dock	29° 53.5'	81° 18.6'	-0 20	+0 01	*0.75	*0.89	4.48	5.15	2.41	
3269	St. Augustine Beach	29° 51.4'	81° 15.8'	-0 51	-0 32	*0.77	*0.84	4.61	5.48	2.47	
3271	Matanzas River, ICWW	State Road 312	29° 52.0'	81° 18.4'	-0 03	+0 15	*0.72	*1.00	4.31	5.04	2.34
3273	Crescent Beach	29° 46.1'	81° 15.5'	+0 39	+1 14	*0.69	*0.95	4.09	4.79	2.23	
3275	Fort Matanzas	29° 42.9'	81° 14.3'	+0 03	+0 49	*0.65	*0.95	3.86	4.44	2.11	
3277	Bing Landing	29° 36.9'	81° 12.3'	+2 15	+2 52	*0.26	*0.68	1.46	1.71	0.86	
3279	Smith Creek, Flagler Beach	29° 28.7'	81° 08.2'	+4 33	+5 00	*0.15	*0.30	0.86	1.00	0.49	
3281	Ormond Beach, Halifax River	29° 17.1'	81° 03.2'	+3 17	+4 31	*0.11	*0.45	0.60	0.70	0.39	
3283	Daytona Beach Shores, Sunglow Pier	29° 08.8'	80° 57.8'	-0 56	-0 42	*0.65	*0.84	3.90	4.49	2.11	
		on Miami Harbor Entrance, p.168									
3285	Ponce de Leon Inlet	29° 03.8'	80° 54.9'	-0 11	+0 19	*1.17	*0.92	2.76	3.37	1.48	
3287	Ponce Inlet, Halifax River	29° 04.9'	80° 56.2'	+0 05	+0 33	*1.18	*1.00	2.75	3.36	1.52	
3289	Cape Canaveral	28° 26'	80° 34'	-1 06	-0 44	*1.50	*1.42	3.5	4.1	2.0	
3291	Oak Hill, Mosquito Lagoon <21>	28° 52'	80° 50'	---	---	---	---	---	---	---	
3293	PORT CANAVERAL (TRIDENT PIER)	28° 24.9'	80° 35.6'	Daily predictions, p.164				3.47	4.13	1.89	
3295	Cocoa Beach	28° 22.1'	80° 36.0'	-1 01	-0 38	*1.47	*1.14	3.46	4.22	1.89	
3297	Patrick Air Force Base	28° 14.7'	80° 36.0'	-1 04	-0 38	*1.50	*1.43	3.50	4.20	1.95	
		Banana River									
3299	Kennedy Pkwy., Banana Creek, Merritt I. <22>	28° 35.4'	80° 39.5'	---	---	---	---	---	---	---	
3301	VAB Turning Basin, Merritt Island <22>	28° 35.1'	80° 38.6'	---	---	---	---	---	---	---	
3303	Orsino Causeway <22>	28° 30.8'	80° 36.7'	---	---	---	---	---	---	---	
3305	Port Canaveral locks <22>	28° 24.5'	80° 38.3'	---	---	---	---	---	---	---	
3307	Sykes Creek <22>	28° 24.3'	80° 41.8'	---	---	---	---	---	---	---	
3309	Carter's Cut, Merritt Island <22>	28° 09.5'	80° 36.7'	---	---	---	---	---	---	---	
		Indian River									
3311	Titusville <22>	28° 37.2'	80° 48.0'	---	---	---	---	---	---	---	
3313	Williams Point <22>	28° 27.4'	80° 45.6'	---	---	---	---	---	---	---	
3315	Pineda <22>	28° 12.7'	80° 39.8'	---	---	---	---	---	---	---	
3317	Canova Beach	28° 08.3'	80° 34.7'	-0 53	-0 26	*1.49	*1.50	3.45	4.14	1.93	
		Indian River – cont.									
3319	Eau Gallie <22>	28° 08.0'	80° 37.5'	---	---	---	---	---	---	---	
3321	Melbourne <22>	28° 06.0'	80° 36.7'	---	---	---	---	---	---	---	
3323	Palm Bay <22>	28° 02.5'	80° 34.9'	---	---	---	---	---	---	---	
3325	Micco	27° 52.4'	80° 29.8'	+1 14	+2 19	*0.14	*0.57	0.26	0.31	0.21	
3327	Sebastian Inlet bridge	27° 51.6'	80° 26.9'	-0 48	-0 24	*0.93	*1.00	2.16	2.64	1.22	
		Indian River – cont.									
3329	Sebastian	27° 48.7'	80° 27.8'	+1 32	+2 36	*0.15	*0.50	0.30	0.36	0.22	
3331	Wabasso	27° 45.3'	80° 25.6'	+2 20	+3 24	*0.17	*0.42	0.37	0.44	0.25	
3333	Vero Beach	27° 38.0'	80° 22.5'	+2 56	+3 41	*0.37	*0.79	0.80	0.96	0.51	
3335	Oslo	27° 35.6'	80° 21.4'	+3 00	+3 59	*0.34	*0.50	0.77	0.92	0.46	
3337	St. Lucie	27° 28.7'	80° 20.0'	+0 41	+1 46	*0.48	*1.00	1.05	1.26	0.66	
3339	Vero Beach (ocean)	27° 40.2'	80° 21.6'	-0 55	-0 35	*1.45	*1.36	3.39	4.03	1.88	
3341	Fort Pierce Inlet, south jetty	27° 28.2'	80° 17.3'	-0 31	-0 18	*1.14	*1.50	2.61	3.13	1.52	
3343	Fort Pierce Inlet	27° 28.1'	80° 17.8'	-0 14	-0 01	*0.82	*1.28	1.85	2.22	1.11	
		Indian River – cont.									
3345	Fort Pierce	27° 27.4'	80° 19.4'	+0 49	+1 01	*0.56	*1.14	1.22	1.46	0.77	
3347	Ankona	27° 21.3'	80° 16.5'	+2 16	+3 03	*0.52	*0.85	1.10	1.32	0.67	
3349	Eden, Nettles Island	27° 17.2'	80° 13.6'	+2 35	+3 31	*0.45	*0.92	0.98	1.18	0.62	
3351	Jensen Beach	27° 14.1'	80° 12.6'	+2 17	+3 04	*0.48	*0.92	1.05	1.26	0.65	
		St. Lucie River									
3353	North Fork	27° 14.6'	80° 18.8'	+2 28	+3 28	*0.46	*0.92	0.99	1.19	0.63	
3355	Stuart	27° 12.0'	80° 15.5'	+2 13	+3 30	*0.40	*0.86	0.88	1.06	0.56	
3357	South Fork	27° 09.9'	80° 15.3'	+2 35	+3 32	*0.43	*0.92	0.93	1.12	0.59	
3359	Seawall Point	27° 10.5'	80° 11.3'	+1 13	+2 10	*0.43	*0.93	0.93	1.11	0.59	
3361	Port Salerno, Manatee Pocket	27° 09.1'	80° 11.7'	+0 51	+1 46	*0.42	*0.92	0.90	1.08	0.58	
3363	Seminole Shores	27° 11.0'	80° 09.5'	-0 59	-0 35	*1.29	*1.28	3.00	3.60	1.68	
3365	Great Pocket	27° 09.1'	80° 10.3'	+0 55	+1 42	*0.50	*1.00	1.08	1.30	0.68	
3367	Peck Lake, ICWW	27° 06.8'	80° 08.7'	+1 13	+2 10	*0.58	*1.00	1.28	1.54	0.78	
3369	Gomez, South Jupiter Narrows	27° 05.7'	80° 08.2'	+1 33	+2 37	*0.60	*1.07	1.32	1.58	0.81	
3371	Hobe Sound bridge	27° 03.8'	80° 07.4'	+1 28	+2 25	*0.68	*1.00	1.53	1.84	0.90	
3373	Hobe Sound, Jupiter Island	27° 02.2'	80° 06.4'	+1 16	+2 12	*0.75	*1.00	1.72	2.06	1.00	
3375	Conch Bar, Jupiter Sound	26° 59.3'	80° 05.6'	+0 56	+1 34	*0.74	*1.07	1.68	2.02	0.99	
3377	Jupiter Sound, south end	26° 57.1'	80° 04.7'	+0 22	+0 45	*0.88	*1.36	1.98	2.38	1.18	
3379	Jupiter Inlet, south jetty	26° 56.6'	80° 04.4'	-0 10	-0 09	*1.08	*1.42	2.46	2.95	1.43	
3381	Jupiter Inlet, U.S. Highway 1 Bridge	26° 56.9'	80° 05.1'	+0 28	+1 05	*0.86	*1.14	1.96	2.35	1.14	
		Loxahatchee River									
3383	A1A highway bridge	26° 56.8'	80° 05.4'	+0 34	+0 54	*0.87	*1.14	2.00	2.40	1.16	
3385	Tequesta	26° 57.0'	80° 06.1'	+0 59	+1 58	*0.80	*1.14	1.83	2.20	1.08	
3387	Tequesta, North Fork entrance	26° 57.1'	80° 06.1'	+0 51	+1 42	*0.78	*0.92	1.80	2.16	1.03	
3389	Tequesta, North Fork	26° 57.6'	80° 06.3'	+1 14	+2 13	*0.75	*1.00	1.72	2.06	1.00	
3391	North Fork, 2 miles above entrance	26° 58.6'	80° 06.9'	+1 04	+1 55	*0.86	*1.14	1.95	2.34	1.14	
3393	3 miles above A1A highway bridge	26° 58.2'	80° 07.5'	+0 56	+1 49	*0.86	*1.14	1.98	2.38	1.15	
3395	Boy Scout Dock	26° 59.2'	80° 08.5'	+1 01	+1 57	*0.92	*1.36	2.09	2.51	1.23	
3397	Southwest Fork, 0.5 mile above entrance	26° 56.6'	80° 07.2'	+0 41	+1 35	*0.89	*1.42	2.00	2.40	1.20	
3399	Southwest Fork (spillway)	26° 56.1'	80° 08.6'	+0 52	+1 45	*0.86	*1.28	1.94	2.33	1.15	
3401	Jupiter, Lake Worth Creek, ICWW	26° 56.1'	80° 05.1'	+0 34	+1 12	*0.91	*1.28	2.06	2.47	1.21	
3403	Lake Worth Creek, Day Beacon 19, ICWW	26° 54.7'	80° 04.8'	+0 29	+1 08	*0.92	*1.21	2.10	2.52	1.22	
3405	Donald Ross Bridge, ICWW	26° 52.9'	80° 04.2'	+0 20	+0 50	*1.00	*1.21	2.31	2.77	1.32	
3407	PGA Boulevard Bridge, ICWW	26° 50.6'	80° 04.0'	-0 02	+0 31	*1.16	*1.36	2.68	3.22	1.53	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
	FLORIDA, East Coast—cont. Time meridian, 75° W			on Miami Harbor Entrance, p.168							
3409	Lake Worth North Palm Beach	26° 49.6'	80° 03.3'	-0 17	+0 15	*1.22	*1.29	2.81	3.34	1.59	
3411	Port of Palm Beach	26° 46.2'	80° 03.1'	-0 21	+0 04	*1.18	*1.36	2.72	3.26	1.55	
3413	Palm Beach	26° 44.0'	80° 02.5'	-0 11	+0 16	*1.17	*1.29	2.69	3.20	1.54	
3415	Palm Beach, Highway 704 bridge	26° 42.3'	80° 02.7'	+0 18	+0 40	*1.10	*1.07	2.57	3.06	1.44	
3417	West Palm Beach Canal	26° 38.7'	80° 02.7'	+0 48	+1 35	*1.07	*1.14	2.46	2.92	1.40	
3419	Rt. 802 bridge	26° 36.8'	80° 02.8'	+0 42	+1 26	*1.18	*1.07	2.75	3.27	1.52	
3421	Boynton Beach	26° 32.9'	80° 03.2'	+1 05	+2 07	*1.06	*1.07	2.47	2.94	1.38	
3423	Lake Worth Pier (ocean)	26° 36.7'	80° 02.0'	-0 45	-0 19	*1.16	*1.00	2.73	3.25	1.50	
3425	Ocean Ridge, ICWW	26° 31.6'	80° 03.2'	+1 16	+2 10	*1.10	*1.21	2.54	3.05	1.44	
3427	Delray Beach, ICWW	26° 28.4'	80° 03.7'	+1 24	+2 07	*1.07	*1.14	2.47	2.94	1.40	
3429	South Delray Beach, ICWW	26° 26.8'	80° 03.9'	+1 21	+1 58	*1.06	*1.21	2.43	2.89	1.39	
3431	Yamato, ICWW	26° 24.2'	80° 04.2'	+1 22	+1 57	*1.02	*1.14	2.35	2.80	1.34	
3433	Lake Wyman, ICWW	26° 22.2'	80° 04.2'	+1 17	+1 49	*0.96	*1.14	2.21	2.63	1.26	
3435	Boca Raton, Lake Boca Raton	26° 20.6'	80° 04.6'	+0 23	+1 07	*0.97	*1.14	2.23	2.68	1.27	
3437	Deerfield Beach, Hillsboro River	26° 18.8'	80° 04.9'	+0 28	+1 03	*1.02	*1.07	2.36	2.83	1.33	
3439	Hillsboro Beach, ICWW	26° 16.5'	80° 04.8'	+0 02	+0 34	*1.06	*1.07	2.47	2.96	1.39	
3441	Hillsboro Inlet, Coast Guard Light Station	26° 15.5'	80° 04.9'	-0 16	+0 03	*1.08	*1.14	2.49	2.96	1.41	
3443	Hillsboro Inlet Marina	26° 15.6'	80° 05.1'	-0 06	+0 24	*1.06	*1.14	2.45	2.94	1.38	
3445	Hillsboro Inlet (ocean)	26° 15.4'	80° 04.8'	-0 23	+0 00	*1.12	*1.21	2.60	3.12	1.47	
3447	Lauderdale-by-the-Sea, Anglin Fishing Pier	26° 11.3'	80° 05.6'	-0 34	-0 13	*1.14	*1.28	2.64	3.17	1.50	
	Fort Lauderdale										
3449	Bahia Mar Yacht Club	26° 06.8'	80° 06.5'	-0 05	+0 33	*1.05	*1.21	2.42	2.90	1.38	
3451	Andrews Avenue bridge, New River	26° 07.1'	80° 08.7'	+0 15	+0 51	*0.92	*1.07	2.13	2.56	1.22	
3453	Mayan Lake	26° 06.0'	80° 06.5'	+0 20	+1 02	*0.91	*1.00	2.11	2.53	1.19	
3455	Port Everglades, Turning Basin	26° 05.5'	80° 07.4'	-0 29	-0 09	*1.09	*1.14	2.53	3.01	1.43	
3457	South Port Everglades, ICWW	26° 04.9'	80° 07.0'	-0 23	-0 03	*1.10	*1.42	2.52	3.02	1.46	
3459	Whiskey Creek, north end	26° 04.8'	80° 06.7'	-0 23	-0 06	*1.10	*1.28	2.52	3.02	1.44	
3461	Port Lauderdale, Dania cut-off Canal	26° 03.6'	80° 07.8'	+0 01	+0 11	*1.00	*1.21	2.30	2.76	1.32	
3463	Whiskey Creek, south entrance, ICWW	26° 03.3'	80° 06.8'	+0 04	+0 31	*0.96	*1.14	2.21	2.63	1.27	
3465	Hollywood Beach, West Lake, north end	26° 02.6'	80° 07.6'	+1 08	+1 42	*0.85	*1.07	1.94	2.33	1.12	
3467	Hollywood Beach, West Lake, south end	26° 02.0'	80° 07.4'	+1 02	+1 45	*0.88	*1.14	2.02	2.42	1.17	
3469	Hollywood Beach	26° 02.4'	80° 06.9'	+0 37	+1 41	*0.91	*1.14	2.08	2.50	1.20	
3471	Golden Beach, ICWW	25° 58.0'	80° 07.4'	+1 13	+1 57	*0.91	*1.07	2.10	2.52	1.20	
3473	Dumfoundling Bay	25° 56.5'	80° 07.5'	+1 17	+2 07	*0.88	*1.00	2.02	2.40	1.15	
3475	Sunny Isles, Biscayne Creek	25° 55.7'	80° 07.8'	+2 00	+2 24	*0.77	*0.71	1.8	2.2	1.0	
3477	Biscayne Creek, ICWW	25° 52.8'	80° 09.8'	+0 47	+1 39	*0.93	*1.00	2.15	2.56	1.21	
3479	North Miami Beach, Newport Fishing Pier	25° 55.8'	80° 07.2'	-0 22	+0 00	*1.08	*1.21	2.49	2.96	1.41	
3481	Haulover Pier, N. Miami Beach	25° 54.2'	80° 07.2'	-0 29	-0 06	*1.06	*1.00	2.48	2.95	1.37	
3483	Bakers Haulover Inlet (inside)	25° 54.2'	80° 07.5'	+0 57	+1 37	*0.87	*0.92	2.01	2.20	1.13	
3485	Indian Creek Golf Club, ICWW	25° 52.5'	80° 08.6'	+1 13	+1 46	*0.92	*0.92	2.13	2.56	1.20	
3487	Miami Harbor Entrance	25° 46.1'	80° 07.9'	-0 22	-0 02	*1.07	*1.14	2.46	2.93	1.39	
3489	GOVERNMENT CUT, MIAMI HARBOR ENTRANCE	25° 45.8'	80° 07.8'			Daily predictions		2.32	2.83	1.32	
	Biscayne Bay										
3491	San Marino Island	25° 47.6'	80° 09.8'	+0 37	+0 58	*0.92	*1.00	2.14	2.57	1.21	
3493	Miami, Miami Marina	25° 46.7'	80° 11.1'	+0 20	+0 49	*0.94	*0.92	2.18	2.59	1.22	
3495	Dodge Island, Fishermans Channel	25° 46.2'	80° 10.1'	+0 34	+1 10	*0.91	*1.00	2.10	2.52	1.19	
3497	Dinner Key Marina	25° 43.6'	80° 14.2'	+0 54	+1 48	*0.84	*0.92	1.94	2.33	1.10	
	Florida Keys										
3499	Bear Cut, Virginia Key	25° 43.9'	80° 09.7'	+0 28	+0 51	*0.88	*0.86	2.05	2.44	1.15	
3501	Key Biscayne Yacht Club, Biscayne Bay	25° 41.9'	80° 10.2'	+0 44	+1 31	*0.86	*0.92	2.00	2.40	1.13	
3503	Coral Shoal, Biscayne Channel	25° 39.1'	80° 09.4'	+0 11	+0 37	*0.88	*0.92	2.05	2.46	1.15	
3505	Cutler, Biscayne Bay	25° 36.9'	80° 18.3'	+1 01	+1 58	*0.84	*0.92	1.94	2.31	1.10	
3507	Soldier Key	25° 35'	80° 10'	+0 30	+1 16	*0.81	*0.71	1.9	2.3	1.0	
3509	Ragged Keys, Biscayne Bay	25° 32.0'	80° 10.3'	+0 43	+1 18	*0.73	*1.00	1.65	1.96	0.96	
3511	Boca Chita Key, Biscayne Bay	25° 31.4'	80° 10.6'	+1 01	+1 39	*0.70	*1.14	1.57	1.88	0.94	
3513	Sands Key, northwest point, Biscayne Bay	25° 30.3'	80° 11.3'	+1 25	+2 26	*0.63	*0.64	1.46	1.64	0.82	
3515	Coon Point, Elliott Key, Biscayne Bay	25° 28.7'	80° 11.4'	+1 55	+2 56	*0.63	*0.71	1.44	1.63	0.82	
3517	Elliott Key Harbor, Elliott Key, Biscayne Bay	25° 27.2'	80° 11.8'	+1 56	+3 00	*0.64	*0.64	1.48	1.67	0.83	
3519	Turkey Point, Biscayne Bay	25° 26.2'	80° 19.7'	+2 11	+3 21	*0.70	*0.79	1.61	1.92	0.92	
3521	Billys Point, south of, Elliott Key, Biscayne Bay	25° 24.9'	80° 12.6'	+2 08	+3 20	*0.63	*0.64	1.46	1.65	0.82	
3523	Sea Grape Point, Elliott Key	25° 28.6'	80° 10.8'	-0 25	-0 05	*1.03	*1.03	2.30	2.74	1.39	
3525	Christmas Point, Elliott Key	25° 23.5'	80° 13.8'	+0 13	+0 37	*0.80	*1.07	1.82	2.13	1.06	
3527	Adams Key, south end, Biscayne Bay	25° 23.8'	80° 14.0'	+1 01	+1 08	*0.67	*1.00	1.52	1.75	0.90	
3529	Totten Key, west side, Biscayne Bay	25° 22.7'	80° 15.4'	+2 19	+3 21	*0.54	*0.57	1.26	1.41	0.71	
3531	East Arsenicker, Card Sound	25° 22.4'	80° 17.5'	+2 26	+3 09	*0.40	*0.64	0.91	1.04	0.54	
3533	Card Sound, western side	25° 20.7'	80° 19.9'	+2 51	+3 40	*0.30	*0.43	0.68	0.77	0.40	
3535	Pumpkin Key, south end, Card Sound	25° 19.5'	80° 17.6'	+2 35	+2 52	*0.30	*0.78	0.63	0.71	0.43	
3537	Wednesday Point, Key Largo, Card Sound	25° 18.6'	80° 17.9'	+2 38	+3 30	*0.34	*0.57	0.77	0.88	0.46	
3539	Cormorant Point, Key Largo, Card Sound	25° 17.4'	80° 20.3'	+2 45	+3 01	*0.32	*0.50	0.73	0.82	0.43	
3541	Little Card Sound bridge	25° 17.3'	80° 22.2'	+3 30	+4 03	*0.24	*0.43	0.53	0.63	0.33	
3543	Ocean Reef Harbor, Key Largo	25° 18.6'	80° 16.8'	-0 08	+0 17	*1.02	*1.50	2.30	2.74	1.36	
3545	Main Key, Barnes Sound	25° 14.4'	80° 24.0'	+5 04	+6 16	*0.19	*0.36	0.41	0.46	0.26	
3547	Manatee Creek, Manatee Bay, Barnes Sound	25° 14.1'	80° 25.8'	+5 14	+6 20	*0.18	*0.36	0.39	0.44	0.25	
3549	Manatee Creek, Hwy. 1 bridge, Long Sound <26>	25° 14.1'	80° 26.1'	---	---	---	---	---	---	---	
3551	Carysfort Reef	25° 13.3'	80° 12.7'	+0 19	+0 39	*1.03	*1.36	2.34	2.60	1.36	
3553	Jewfish Creek entrance, Blackwater Sound <26>	25° 11.0'	80° 23.2'	---	---	---	---	---	---	---	
3555	Deep Six Marina, Blackwater Sound <26>	25° 08.4'	80° 24.2'	---	---	---	---	---	---	---	
3557	Garden Cove, Key Largo	25° 10.3'	80° 22.0'	-0 01	+0 25	*0.94	*1.14	2.16	2.53	1.24	
3559	Largo Sound, Key Largo	25° 08.4'	80° 23.7'	+2 13	+3 03	*0.35	*0.50	0.80	0.96	0.47	
3561	Key Largo, South Sound, Key Largo	25° 06.8'	80° 25.0'	+0 23	+1 49	*0.66	*0.64	1.55	1.86	0.85	
3563	Point Charles, Key Largo	25° 04.9'	80° 27.0'	+0 25	+1 53	*0.77	*0.64	1.80	2.14	0.99	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	FLORIDA Florida Keys—cont. Time meridian, 75° W	North	West	h	m	ft	ft	ft	ft	ft	
on Miami Harbor Entrance, p.168											
3565	Rock Harbor, Key Largo	25° 04.9'	80° 26.8'	+0 22	+0 36	*0.94	*1.21	2.14	2.57	1.24	
3567	Sunset Cove, Key Largo, Buttonwood Sound <26>	25° 05.7'	80° 26.6'	---	---	---	---	---	---	---	
3569	Hammer Point, Key Largo, Florida Bay <26>	25° 02.1'	80° 30.3'	---	---	---	---	---	---	---	
3571	Tavernier, Key Largo, Florida Bay <26>	25° 00.9'	80° 30.9'	---	---	---	---	---	---	---	
3573	Tavernier Harbor, Hawk Channel	25° 00.3'	80° 31.0'	+0 07	+0 26	*0.90	*1.36	2.04	2.43	1.21	
3575	Tavernier Creek, Hwy. 1 bridge, Hawk Channel	25° 00.2'	80° 31.8'	+0 25	+0 52	*0.60	*1.07	1.32	1.58	0.81	
3577	Plantation Key, northern end, Florida Bay <26>	25° 00.1'	80° 32.6'	---	---	---	---	---	---	---	
3579	Crane Keys, north side, Florida Bay	25° 00.3'	80° 37.1'	+2 52	+4 35	*0.17	*0.21	0.39	0.46	0.22	
3581	East Key, southern end, Florida Bay	24° 59.8'	80° 36.6'	+2 43	+4 06	*0.22	*0.14	0.52	0.62	0.28	
3583	Plantation Key, Hawk Channel	24° 58.4'	80° 33.0'	+0 05	+0 12	*0.96	*1.21	2.20	2.64	1.27	
3585	Yacht Harbor, Copewins Anchorage, Plantation Key	24° 57.9'	80° 34.1'	+2 45	+4 00	*0.23	*0.29	0.53	0.64	0.31	
3587	Snake Creek, Hwy. 1 bridge, Windley Key	24° 57.1'	80° 35.3'	+0 49	+0 56	*0.46	*0.50	1.07	1.28	0.61	
3589	Snake Creek, USCG Station, Plantation Key	24° 57.2'	80° 35.2'	+1 08	+1 56	*0.36	*0.50	0.82	0.98	0.48	
3591	Whale Harbor, Windley Key, Hawk Channel	24° 56.4'	80° 36.5'	+0 07	+0 51	*0.65	*0.36	1.56	1.87	0.83	
3593	Whale Harbor Channel, Hwy. 1 bridge, Windley Key	24° 56.3'	80° 36.6'	+0 16	+1 00	*0.59	*0.71	1.36	1.63	0.78	
3595	Upper Matecumbe Key, Hawk Channel	24° 54.9'	80° 37.9'	+0 34	+0 49	*0.87	*1.21	1.98	2.38	1.16	
3597	Alligator Reef, Hawk Channel	24° 51.0'	80° 37.1'	+0 08	+0 24	*0.86	*1.36	1.93	2.37	1.15	
on Key West, p.176											
3599	Flamingo, Florida Bay	25° 08.5'	80° 55.4'	+5 28	+7 20	*1.47	*1.08	2.02	2.52	1.27	
3601	Upper Matecumbe Key, west end, Hawk Channel	24° 53.8'	80° 39.5'	-1 00	+0 14	*0.98	*0.33	1.44	1.80	0.80	
3603	Indian Key, Hawk Channel	24° 52.6'	80° 40.6'	-0 58	-0 35	*1.30	*0.71	1.84	2.30	1.09	
3605	Shell Key Channel, Florida Bay	24° 54.8'	80° 39.6'	-0 20	+0 45	*0.78	*0.78	1.02	1.28	0.58	
3607	Lignumvitae Key, NE side, Florida Bay	24° 54.2'	80° 41.7'	+0 09	+1 31	*0.52	*0.52	0.68	0.85	0.37	
3609	Lignumvitae Key, west side, Florida Bay	24° 54.0'	80° 42.3'	+0 32	+1 54	*0.47	*0.47	0.62	0.74	0.35	
3611	Little Basin, Upper Matecumbe Key, Florida Bay	24° 54.9'	80° 38.4'	+0 08	+1 15	*0.61	*0.61	0.80	1.00	0.40	
3613	Shell Key, northwest side, Lignumvitae Basin	24° 55.4'	80° 40.3'	+0 31	+1 57	*0.46	*0.46	0.60	0.75	0.33	
3615	Islamorada, Upper Matecumbe Key, Florida Bay	24° 55.5'	80° 37.9'	+0 39	+2 07	*0.37	*0.37	0.49	0.57	0.30	
3617	Indian Key Anchorage, Lower Matecumbe Key	24° 52.1'	80° 42.2'	-1 25	-0 54	*1.38	*0.88	1.89	2.34	1.16	
3619	Matecumbe Bight, Lower Matecumbe Key, Fla. Bay	24° 51.9'	80° 43.0'	-0 18	+0 33	*0.55	*0.38	0.75	0.93	0.47	
3621	Matecumbe Harbor, Lower Matecumbe Key, Fla. Bay	24° 51.1'	80° 44.4'	-0 25	+0 23	*0.59	*0.33	0.83	1.04	0.50	
3623	Channel Two, east, Lower Matecumbe Key, Fla. Bay	24° 50.7'	80° 44.9'	-0 49	-0 42	*0.85	*0.54	1.18	1.48	0.72	
3625	Channel Two, west side, Hawk Channel	24° 50.5'	80° 45.2'	-1 06	-0 54	*1.12	*0.75	1.55	1.94	0.96	
3627	Channel Five, east side, Hawk Channel	24° 50.2'	80° 46.0'	-0 54	-0 42	*0.90	*0.58	1.25	1.56	0.77	
3629	Channel Five, west side, Hawk Channel	24° 50.4'	80° 46.8'	-0 58	-0 41	*1.00	*0.67	1.39	1.74	0.85	
3631	Jewfish Hole, Long Key, Florida Bay	24° 50.3'	80° 47.9'	-0 11	+1 32	*0.42	*0.38	0.56	0.70	0.37	
3633	Long Key Bight, Long Key	24° 49.7'	80° 48.5'	-0 59	-0 43	*1.03	*0.62	1.44	1.80	0.87	
3635	Long Key Lake, Long Key	24° 49.2'	80° 49.0'	+0 33	+0 57	*0.62	*0.46	0.85	1.06	0.53	
3637	Long Key, western end	24° 48.1'	80° 51.0'	-1 01	-0 54	*0.82	*0.33	1.19	1.49	0.67	
3639	Conch Key, eastern end	24° 47.5'	80° 53.0'	-1 09	-0 45	*0.85	*0.54	1.18	1.48	0.72	
3641	Toms Harbor Cut	24° 47.0'	80° 54.4'	-1 19	-0 30	*0.37	*0.38	0.48	0.60	0.33	
3643	Toms Harbor, Duck Key <26>	24° 46.4'	80° 54.9'	---	---	---	---	---	---	---	
3645	Duck Key, Hawk Channel	24° 45.9'	80° 54.8'	-1 11	-0 40	*0.97	*0.55	1.34	1.66	0.80	
3647	Toms Harbor Channel, Hwy. 1 bridge	24° 46.6'	80° 55.4'	+5 07	+4 49	*0.38	*0.38	0.50	0.62	0.45	
3649	Grassy Key, north side, Florida Bay	24° 46.3'	80° 56.4'	+5 40	+6 48	*0.73	*1.04	0.86	1.07	0.68	
3651	Grassy Key, south side, Hawk Channel	24° 45.3'	80° 57.5'	-0 52	-0 26	*1.22	*0.71	1.72	2.15	1.03	
3653	Fat Deer Key, Florida Bay	24° 44.0'	81° 01.1'	+5 09	+6 26	*0.87	*0.87	1.14	1.42	0.82	
3655	Vaca Key—Fat Deer Key bridge	24° 43.8'	81° 01.8'	-1 11	-0 36	*0.95	*0.71	1.31	1.64	0.83	
3657	Key Colony Beach	24° 43.1'	81° 01.0'	-1 17	-0 53	*1.22	*0.83	1.66	2.06	1.03	
3659	VACA KEY, USCG STATION, FLORIDA BAY	24° 42.7'	81° 06.3'	Daily predictions, p.172							
3661	Boot Key Harbor bridge, Boot Key	24° 42.2'	81° 06.3'	-1 03	-0 37	*1.13	*0.75	1.57	1.96	0.96	
3663	Sombrero Key, Hawk Channel	24° 37.6'	81° 06.7'	-1 03	-0 39	*1.18	*0.79	1.64	2.02	1.01	
3665	Knight Key Channel, Knight Key, Florida Bay	24° 42.4'	81° 07.5'	-0 02	-0 18	*0.54	*0.50	0.72	0.90	0.48	
3667	Pigeon Key, south side, Hawk Channel	24° 42.2'	81° 09.3'	-0 55	-0 26	*0.81	*0.50	1.14	1.42	0.69	
3669	Pigeon Key, north side, Florida Bay	24° 42.3'	81° 09.4'	-0 10	+0 45	*0.46	*0.46	0.60	0.75	0.44	
3671	Molasses Key Channel, Molasses Keys	24° 41.0'	81° 11.5'	-0 56	-0 16	*0.79	*0.50	1.10	1.38	0.67	
3673	Money Key	24° 41.0'	81° 12.9'	+0 03	+1 17	*0.58	*0.58	0.76	0.95	0.54	
3675	Little Duck Key, east end, Hawk Channel	24° 40.9'	81° 13.7'	-0 49	+0 05	*0.67	*0.67	0.88	1.10	0.60	
3677	East Bahia Honda Key, south end, Florida Bay	24° 46.5'	81° 13.6'	+4 04	+2 49	*0.69	*0.69	0.90	1.12	0.77	
3679	Cocoanut Key, Florida Bay	24° 44.7'	81° 14.2'	+3 52	+2 50	*0.55	*0.55	0.72	0.90	0.66	
3681	West Bahia Honda Key	24° 46.8'	81° 16.3'	+3 59	+4 01	*0.97	*1.00	1.27	1.59	0.88	
3683	Horseshoe Keys, south end	24° 46.0'	81° 17.0'	+3 54	+3 09	*0.86	*1.00	1.09	1.36	0.79	
3685	Johnson Keys, south end	24° 44.6'	81° 18.0'	+3 36	+2 33	*0.72	*0.96	0.88	1.10	0.67	
3687	Johnson Keys, north end	24° 46.0'	81° 19.4'	+3 35	+4 22	*1.31	*1.38	1.70	2.12	1.18	
3689	Missouri Key—Little Duck Key Channel	24° 40.8'	81° 14.1'	-0 52	+0 36	*0.70	*0.46	0.98	1.22	0.60	
3691	Missouri Key—Ohio Key Channel, west side	24° 40.4'	81° 14.6'	-0 47	-0 22	*0.77	*0.50	1.08	1.35	0.66	
3693	Ohio Key—Bahia Honda Key Channel, west side	24° 40.2'	81° 15.1'	-0 57	-0 14	*0.81	*0.62	1.10	1.38	0.70	
3695	Bahia Honda Key, Bahia Honda Channel	24° 39.3'	81° 16.9'	-0 46	-0 28	*0.86	*0.63	1.16	1.44	0.73	
3697	Big Pine Key, Spanish Harbor	24° 38.9'	81° 19.8'	-0 44	-0 03	*0.75	*0.42	1.07	1.34	0.64	
3699	Big Pine Key, Doctors Arm, Bogie Channel	24° 41.4'	81° 21.4'	+0 41	+1 47	*0.63	*0.71	0.80	1.00	0.57	
3701	Big Pine Key, Bogie Channel Bridge	24° 41.9'	81° 20.9'	+2 10	+2 11	*0.65	*0.83	0.80	1.00	0.60	
3703	No Name Key, east side, Bahia Honda Channel	24° 41.9'	81° 19.1'	+1 35	+1 33	*0.58	*0.83	0.70	0.88	0.55	
3705	Little Pine Key, south end	24° 42.8'	81° 18.2'	+1 07	+1 07	*0.56	*0.79	0.68	0.85	0.53	
3707	Porpoise Key, Big Spanish Channel	24° 43.1'	81° 21.1'	+3 23	+2 29	*0.72	*1.00	0.88	1.10	0.68	
3709	Water Key, west end, Big Spanish Channel	24° 44.4'	81° 20.5'	+3 23	+2 37	*0.81	*1.04	1.00	1.25	0.75	
3711	Mayo Key, Big Spanish Channel	24° 44.0'	81° 21.7'	+3 35	+3 01	*0.92	*1.08	1.17	1.46	0.85	
3713	Little Pine Key, north end	24° 45.0'	81° 19.7'	+3 38	+3 28	*1.05	*1.21	1.33	1.66	0.96	
3715	Big Pine Key, northeast shore	24° 43.7'	81° 23.2'	+3 19	+2 30	*0.86	*1.08	1.08	1.35	0.80	
3717	Crawl Key, Big Spanish Channel	24° 45.4'	81° 21.5'	+3 34	+4 13	*1.33	*1.33	1.74	2.18	1.19	
3719	Big Pine Key, north end	24° 44.7'	81° 23.7'	+4 24	+5 56	*0.96	*0.83	1.29	1.61	0.85	
3721	Annette Key, north end, Big Spanish Channel	24° 45.5'	81° 23.4'	+3 30	+4 33	*1.44	*1.29	1.92	2.40	1.27	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
FLORIDA Florida Keys—cont. Time meridian, 75° W											
on Key West, p.176											
3723	Little Spanish Key, Spanish Banks	24° 46.5'	81° 22.2'	+3 25	+4 30	*1.74	*1.62	2.30	2.88	1.54	
3725	Big Spanish Key	24° 47.3'	81° 24.7'	+3 19	+4 29	*1.97	*1.50	2.69	3.36	1.71	
3727	Munson Island, Newfound Harbor Channel	24° 37.4'	81° 24.2'	-0 40	-0 12	*0.98	*0.67	1.36	1.70	0.84	
3729	Ramrod Key, Newfound Harbor	24° 39.0'	81° 24.2'	-0 41	+0 05	*0.90	*0.50	1.28	1.60	0.76	
3731	Middle Torch Key, Torch Ramrod Channel	24° 39.7'	81° 24.1'	-0 16	+1 29	*0.69	*0.38	0.98	1.22	0.58	
3733	Little Torch Key, Torch Channel	24° 39.9'	81° 23.7'	+0 11	+1 45	*0.57	*0.33	0.80	1.00	0.48	
3735	Big Pine Key, Newfound Harbor Channel	24° 39.1'	81° 22.5'	-0 09	+0 44	*0.82	*0.46	1.16	1.45	0.69	
3737	Big Pine Key, Coupon Bight	24° 39.1'	81° 21.0'	-0 20	+0 49	*0.87	*0.50	1.19	1.48	0.72	
3739	Little Torch Key, Pine Channel Bridge, south side	24° 39.9'	81° 23.3'	-0 15	+0 57	*0.68	*0.33	0.97	1.21	0.56	
3741	Big Pine Key, Pine Channel Bridge, south side	24° 40.1'	81° 22.3'	-0 13	+1 03	*0.67	*0.33	0.96	1.20	0.56	
3743	Big Pine Key, Pine Channel Bridge, north side	24° 40.2'	81° 22.1'	+0 03	+1 43	*0.57	*0.33	0.79	0.98	0.47	
3745	Big Pine Key, west side, Pine Channel	24° 41.4'	81° 23.0'	+2 21	+1 52	*0.52	*0.42	0.71	0.89	0.45	
3747	Howe Key, south end, Harbor Channel	24° 43.5'	81° 24.4'	+4 43	+4 49	*0.72	*0.62	0.96	1.20	0.63	
3749	Big Torch Key, Harbor Channel	24° 44.3'	81° 26.6'	+3 47	+5 51	*1.58	*1.29	2.14	2.68	1.38	
3751	Water Keys, south end, Harbor Channel	24° 44.8'	81° 27.0'	+3 42	+5 41	*1.52	*1.00	2.11	2.64	1.29	
3753	Howe Key, northwest end	24° 45.5'	81° 25.7'	+3 29	+5 22	*1.68	*1.33	2.28	2.85	1.46	
3755	Summerland Key, Niles Channel South	24° 39.1'	81° 26.1'	-0 36	+0 11	*0.85	*0.71	1.14	1.42	0.74	
3757	Summerland Key, Niles Channel Bridge	24° 39.6'	81° 26.2'	-0 10	+0 56	*0.67	*0.58	0.90	1.12	0.59	
3759	Ramrod Key, Niles Channel Bridge	24° 39.6'	81° 25.4'	-0 13	+1 12	*0.67	*0.46	0.93	1.16	0.58	
3761	Big Torch Key, Niles Channel	24° 42.3'	81° 26.0'	+3 15	+2 05	*0.61	*0.71	0.77	0.96	0.56	
3763	Knockemdown Key, north end	24° 42.9'	81° 28.7'	+3 30	+4 54	*1.35	*1.21	1.80	2.25	1.19	
3765	Raccoon Key, east side	24° 44.5'	81° 29.0'	+3 20	+5 09	*1.50	*1.21	2.04	2.55	1.31	
3767	Content Keys, Content Passage	24° 47.4'	81° 29.0'	+2 46	+3 49	*2.13	*1.83	2.79	3.46	1.84	
3769	Key Lois, southeast end	24° 36.4'	81° 28.2'	-1 15	-0 45	*1.06	*0.75	1.46	1.82	0.91	
3771	Sugarloaf Key, east side, Tarpon Creek	24° 37.7'	81° 30.6'	-0 41	+0 15	*0.89	*0.58	1.24	1.55	0.76	
3773	Gopher Key, Cudjoe Bay	24° 38.5'	81° 29.1'	-0 46	+0 17	*0.90	*0.71	1.22	1.52	0.78	
3775	Sugarloaf Key, Pirates Cove	24° 39.2'	81° 30.9'	-0 48	+1 41	*0.59	*0.75	0.74	0.92	0.55	
3777	Cudjoe Key, Cudjoe Bay	24° 39.6'	81° 29.5'	-0 38	+0 41	*0.87	*0.71	1.18	1.48	0.76	
3779	Summerland Key, southwest side, Kemp Channel	24° 39.0'	81° 26.8'	-0 26	+0 50	*0.81	*0.54	1.12	1.40	0.69	
3781	Cudjoe Key, Kemp Channel Bridge	24° 39.7'	81° 28.1'	---	---	*0.59	*0.50	0.79	0.99	0.52	
3783	Cudjoe Key, northeast side, Kemp Channel	24° 41.2'	81° 29.0'	+3 45	---	---	---	---	---	---	
3785	Cudjoe Key, north end, Kemp Channel	24° 42.0'	81° 30.3'	+3 33	+4 40	*1.61	*1.46	2.10	2.60	1.41	
3787	Sugarloaf Key, northeast side, Bow Channel	24° 40.3'	81° 32.0'	+3 47	+3 24	*1.01	*0.71	1.40	1.75	0.87	
3789	Cudjoe Key, Pirates Cove	24° 39.7'	81° 30.9'	+3 50	+2 54	*0.77	*0.79	0.98	1.21	0.68	
3791	Sugarloaf Key, north end, Bow Channel	24° 41.6'	81° 33.3'	+3 37	+5 20	*1.29	*0.75	1.82	2.28	1.09	
3793	Pumpkin Key, Bow Channel	24° 43.0'	81° 33.7'	+3 17	+4 39	*1.56	*1.17	2.14	2.68	1.35	
3795	Sawyer Key, outside, Cudjoe Channel	24° 45.5'	81° 33.7'	+2 45	+5 24	*1.57	*0.50	2.32	2.90	1.28	
3797	Sawyer Key, inside, Cudjoe Channel	24° 45.5'	81° 33.7'	+2 37	+5 19	*1.43	*0.50	2.10	2.62	1.17	
3799	Johnston Key, southwest end, Turkey Basin	24° 42.6'	81° 35.6'	+3 26	+5 38	*1.10	*0.50	1.59	1.99	0.92	
<i>Upper Sugarloaf Sound</i>											
3801	Perky	24° 38.9'	81° 34.2'	+5 37	+8 25	*0.28	*0.08	0.42	0.52	0.23	
3803	Park Channel Bridge	24° 39.3'	81° 32.4'	+5 47	+8 33	*0.26	*0.29	0.34	0.42	0.24	
3805	North Harris Channel	24° 39.0'	81° 33.2'	+5 32	+8 04	*0.25	*0.25	0.33	0.41	0.22	
3807	Sugarloaf Shores East <26>	24° 38.6'	81° 33.6'	---	---	---	---	---	---	---	
3809	Tarpon Creek	24° 37.8'	81° 31.0'	-0 29	+0 17	*0.35	*0.38	0.46	0.58	0.32	
<i>Lower Sugarloaf Sound <27></i>											
3811	Sugarloaf Shores <27>	24° 38.0'	81° 33.1'	---	---	---	---	---	---	---	
3813	Sugarloaf Beach <27>	24° 36.4'	81° 34.0'	---	---	---	---	---	---	---	
3815	Sugarloaf Shores North <27>	24° 38.4'	81° 34.2'	---	---	---	---	---	---	---	
3817	Saddlebunch Keys, south end <27>	24° 36.1'	81° 34.9'	---	---	---	---	---	---	---	
3819	Lower Sugarloaf Channel Bridge <27>	24° 38.0'	81° 35.2'	---	---	---	---	---	---	---	
3821	Saddlebunch Keys, Channel No. 2 <27>	24° 37.6'	81° 35.9'	---	---	---	---	---	---	---	
3823	Saddlebunch Keys <27>	24° 37.1'	81° 36.1'	---	---	---	---	---	---	---	
3825	Snipe Keys, southeast end, Inner Narrows	24° 39.5'	81° 36.5'	+3 25	+5 39	*1.28	*0.83	1.79	2.24	1.10	
3827	Snipe Keys, Middle Narrows	24° 40.0'	81° 37.8'	+3 44	+5 54	*1.02	*0.67	1.42	1.78	0.87	
3829	Snipe Keys, Snipe Point	24° 41.5'	81° 40.4'	+2 15	+3 33	*1.69	*1.29	2.31	2.89	1.47	
3831	Waltz Key, Waltz Key Basin	24° 38.8'	81° 39.2'	+3 53	+5 33	*1.03	*0.96	1.36	1.70	0.91	
3833	Duck Key Point, Duck Key, Waltz Key Basin	24° 37.4'	81° 41.1'	+3 27	+4 57	*1.19	*0.96	1.61	2.01	1.03	
3835	O'Hara Key, north end, Waltz Key Basin	24° 37.0'	81° 38.7'	+3 53	+5 39	*1.03	*0.83	1.40	1.75	0.90	
3837	Saddlebunch Keys, Channel No. 5	24° 36.7'	81° 37.5'	+4 32	+6 58	*0.66	*1.12	0.76	0.95	0.65	
3839	Saddlebunch Keys, Channel No. 4	24° 36.9'	81° 37.0'	+4 35	+5 36	*0.54	*0.29	0.76	0.95	0.45	
3841	Saddlebunch Keys, Channel No. 3	24° 37.4'	81° 36.2'	+1 44	-0 10	*0.43	*0.21	0.62	0.78	0.36	
3843	Bird Key, Similar Sound	24° 35.3'	81° 38.3'	-0 21	+1 03	*0.59	*0.42	0.82	1.02	0.51	
3845	Shark Key, southeast end, Similar Sound	24° 36.2'	81° 38.7'	+0 18	+1 51	*0.52	*0.46	0.70	0.88	0.46	
3847	Saddlebunch Keys, Similar Sound	24° 36.0'	81° 37.3'	+0 39	+2 41	*0.37	*0.21	0.52	0.65	0.31	
3849	Geiger Key, inside <26>	24° 35.0'	81° 39.3'	---	---	---	---	---	---	---	
3851	Big Coppit Key, northeast side, Waltz Key Basin	24° 36.1'	81° 39.3'	+4 21	+6 54	*0.84	*0.33	1.22	1.52	0.69	
3853	Rockland Key, Rockland Channel Bridge	24° 35.5'	81° 40.1'	+5 02	+6 06	*0.76	*0.88	0.97	1.21	0.69	
3855	Boca Chica Key, Long Point	24° 36.2'	81° 41.9'	+3 54	+5 22	*0.94	*0.71	1.28	1.60	0.81	
3857	Channel Key, west side	24° 36.2'	81° 43.5'	+3 09	+3 07	*0.70	*0.71	0.91	1.14	0.62	
3859	Boca Chica Marina	24° 34.5'	81° 42.5'	+0 20	+1 11	*0.66	*0.71	0.83	1.03	0.58	
3861	Boca Chica Key, Southwest end	24° 33.8'	81° 42.8'	-0 14	+0 16	*0.66	*0.63	0.87	1.08	0.58	
3863	Boca Chica Channel Bridge	24° 34.6'	81° 43.2'	+1 23	+1 29	*0.57	*0.67	0.72	0.90	0.52	
3865	Key Haven – Stock Island Channel	24° 34.8'	81° 44.3'	+2 25	+2 57	*0.73	*0.79	0.94	1.18	0.66	
3867	Cow Key Channel	24° 34.2'	81° 45.0'	+1 55	+2 05	*0.65	*0.71	0.82	1.01	0.58	
3869	Sigsbee Park, Garrison Bight Channel	24° 35.1'	81° 46.5'	+1 59	+2 06	*0.81	*0.88	1.04	1.30	0.73	
3871	Fleming Key, north end	24° 35.5'	81° 47.7'	+1 38	+1 54	*0.79	*0.79	1.01	1.25	0.69	
3873	Key West, south side, White Street Pier	24° 32.7'	81° 47.0'	-0 53	-0 31	*1.07	*0.92	1.41	1.75	0.92	
3875	KEY WEST	24° 33.2'	81° 48.5'	---	---	Daily predictions	---	1.28	1.65	0.88	
3877	Sand Key Lighthouse, Sand Key Channel	24° 27.2'	81° 52.6'	-0 43	-0 32	*0.95	*0.88	1.23	1.53	0.83	
3879	Garden Key, Dry Tortugas	24° 37.6'	82° 52.3'	+0 29	+0 33	*0.94	*1.33	1.14	1.42	0.89	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Diurnal		
				High Water	Low Water	High Water	Low Water				
		North	West	h	m	ft	ft	ft	ft	ft	
FLORIDA Gulf Coast Time meridian, 75° W											
3881	Cape Sable, East Cape	25° 07'	81° 05'	+1	33	+1 50	*1.30	*0.98	2.9	3.8	2.0
3883	Shark River entrance	25° 21'	81° 08'	+0	57	+1 45	*1.43	*0.98	3.6	4.5	2.4
3885	Whitewater Bay	25° 19'	81° 02'	+3	53	+4 38	*0.26	*0.33	0.5	0.8	0.4
3887	Lostmans River entrance	25° 33'	81° 13'	+1	09	+1 59	*1.33	*0.98	3.0	3.9	2.1
3889	Onion Key, Lostmans River	25° 37'	81° 08'	+3	09	+4 53	*0.26	*0.16	0.6	0.9	0.4
3891	Chatham River entrance	25° 41'	81° 10'	+0	59	+1 53	*1.43	*0.66	3.3	4.2	2.1
3893	Chokoloskee	25° 48.8'	81° 21.8'	+2	15	+3 14	*1.11	*0.62	2.53	3.18	1.63
3895	Everglades City, Barron River	25° 51.5'	81° 23.2'	+2	25	+3 26	*0.99	*0.57	2.26	2.84	1.47
3897	Indian Key	25° 48'	81° 28'	+0	55	+1 19	*1.48	*0.98	3.4	4.3	2.3
3899	Round Key	25° 50'	81° 32'	+0	54	+1 12	*1.48	*0.98	3.4	4.3	2.3
3901	Pumpkin Bay	25° 55'	81° 33'	+2	39	+3 07	*0.89	*0.49	2.1	2.7	1.3
3903	Marco Island, Caxambas Pass	25° 54.5'	81° 43.7'	+0	25	+0 18	*1.07	*0.98	2.22	3.05	1.70
3905	Coon Key	25° 54'	81° 38'	+1	15	+1 31	*1.19	*0.98	2.6	3.5	1.9
3907	Cape Romano	25° 51'	81° 41'	+0	43	+1 04	*1.19	*0.98	2.6	3.5	1.9
3909	Marco, Big Marco River	25° 58.3'	81° 43.7'	+1	00	+0 46	*0.98	*0.85	2.04	2.78	1.53
3911	Naples, Naples Bay, north end	26° 08.2'	81° 47.3'	+0	43	+0 56	*0.97	*0.90	2.06	2.85	1.58
3913	NAPLES (outer coast)	26° 07.8'	81° 48.4'	Daily Predictions				2.01			
3915	Wiggins Pass, Cocohatchee River	26° 17.4'	81° 49.1'	+0	44	+0 59	*0.77	*0.73	1.59	2.26	1.23
3917	Cochathee River, U.S. 41 bridge	26° 16.9'	81° 48.1'	+1	10	+1 28	*0.74	*0.65	1.54	2.18	1.17
on Naples, p. 180											
on St. Petersburg, p. 184											
Estero Bay											
3919	Little Hickory Island	26° 21'	81° 51'	-0	58	-1 05	*1.09	*1.09	--	2.5	1.3
3921	Coconut Point	26° 24'	81° 50'	-0	47	-0 40	*1.17	*1.17	--	2.7	1.3
3923	Carlos Point	26° 24'	81° 53'	-1	08	-1 28	*1.17	*1.17	--	2.7	1.4
3925	Estero River	26° 25.8'	81° 51.4'	-0	45	-0 10	*1.09	*1.11	1.74	2.45	1.29
3927	Matanzas Pass (fixed bridge) Estero Island	26° 27'	81° 57'	-1	10	-1 34	*1.22	*1.22	--	2.8	1.4
3929	Point Ybel, San Carlos Bay entrance	26° 27'	82° 01'	-1	50	-1 12	*1.21	*1.21	--	2.6	1.4
3931	Punta Rassa, San Carlos Bay	26° 29'	82° 01'	-1	01	-1 19	*1.04	*1.04	--	2.4	1.2
Caloosahatchee River											
3933	Iona Shores	26° 31'	81° 58'	+1	08	+1 40	*0.43	*0.43	--	1.0	0.5
3935	Cape Coral Bridge	26° 34'	81° 56'	+1	15	+2 02	*0.43	*0.43	--	1.0	0.5
3937	Fort Myers	26° 38.8'	81° 52.3'	+1	56	+2 23	*0.56	*0.39	0.95	1.32	0.63
3939	St. James City, Pine Island	26° 30'	82° 05'	-0	30	-0 44	*1.04	*1.04	--	2.4	1.2
3941	Galt Island, Pine Island Sound	26° 31'	82° 06'	-0	25	+0 16	*0.91	*0.91	--	2.1	1.1
3943	Captiva Island (outside)	26° 29'	82° 11'	-2	20	-2 28	*1.13	*1.13	--	2.6	1.3
3945	Captiva Island, Pine Island Sound	26° 31'	82° 11'	-0	46	-0 20	*0.91	*0.91	--	2.1	1.1
3947	Redfish Pass, Captiva Island (north end)	26° 33'	82° 12'	-0	55	-1 14	*0.91	*0.91	--	2.1	1.0
3949	Tropical Homesites Landing, Pine Island	26° 33'	82° 05'	-0	08	+0 22	*0.87	*0.87	--	2.0	1.0
3951	Matlacha Pass (bascule bridge)	26° 38'	82° 04'	+0	43	+1 28	*0.83	*0.83	--	1.9	1.0
3953	Pineland, Pine Island	26° 40'	82° 09'	-0	19	+0 26	*0.83	*0.83	--	1.9	0.9
3955	Port Boca Grande, Charlotte Harbor	26° 43'	82° 15'	-1	12	-1 56	*0.74	*0.74	--	1.7	0.9
3957	Punta Gorda, Charlotte Harbor	26° 56'	82° 04'	+1	06	+1 27	*0.83	*0.83	--	1.9	1.0
3959	Shell Point, Peace River, Charlotte Harbor	26° 59'	82° 00'	+1	52	+2 30	*0.91	*0.91	--	2.1	1.1
3961	El Jobean, Myakka River	26° 58'	82° 13'	+1	38	+1 56	*0.83	*0.83	--	1.9	1.0
3963	Placida, Gasparilla Sound	26° 50'	82° 16'	-1	27	-0 59	*0.70	*0.70	--	1.6	0.8
3965	Englewood, Lemon Bay	26° 56.0'	82° 21.2'	-0	17	-0 17	*0.66	*0.82	1.00	1.57	0.81
3967	Venice Inlet (inside)	27° 07'	82° 28'	-2	02	-1 38	*0.91	*0.91	--	2.1	1.1
3969	Sarasota, Sarasota Bay	27° 20'	82° 33'	-1	38	-0 58	*0.91	*0.91	--	2.1	1.1
3971	Cortez, Sarasota Bay	27° 28'	82° 41'	-2	00	-1 25	*0.96	*0.96	--	2.2	1.1
Tampa Bay											
3973	Egmont Key, Egmont Channel	27° 36.1'	82° 45.6'	-2	15	-3 20	*0.96	*1.00	--	2.16	1.14
3975	Anna Maria Key, Bradenton Beach	27° 29.8'	82° 42.8'	-2	53	-2 46	*1.02	*1.02	--	2.28	1.14
3977	Anna Maria Key, city pier	27° 32.0'	82° 43.8'	-2	10	-2 19	*0.99	*0.99	--	2.22	1.11
3979	Bradenton, Manatee River	27° 30'	82° 34'	-1	24	-0 55	*0.97	*0.95	--	2.3	1.2
3981	Redfish Point, Manatee River	27° 32'	82° 29'	-0	30	+0 14	*0.92	*1.00	--	2.2	1.1
3983	Mullet Key Channel (Skyway)	27° 36.9'	82° 43.6'	-2	03	-2 01	*0.92	*0.92	1.48	2.08	1.09
3985	Port Manatee	27° 38.2'	82° 33.8'	-1	00	-0 48	*0.97	*0.95	1.56	2.19	1.14
3987	Shell Point	27° 43'	82° 29'	+0	08	+0 17	*0.91	*0.91	--	2.3	1.2
3989	Point Pinellas	27° 42'	82° 38'	-0	22	-0 29	*0.86	*0.86	--	2.0	1.0
3991	ST. PETERSBURG	27° 46.4'	82° 37.3'	Daily predictions				1.59			
3993	Ballast Point	27° 53.4'	82° 28.8'	+0	20	+0 22	*1.22	*1.13	--	2.0	1.4
3995	Pendola Point, Hillsborough Bay	27° 53.9'	82° 25.6'	+0	21	+0 05	*1.14	*1.18	1.81	2.61	1.36
3997	Davis Island, Hillsborough Bay	27° 54.5'	82° 27.1'	+0	03	+0 32	*1.16	*1.24	1.82	2.63	1.38
3999	McKay Bay entrance	27° 54.8'	82° 25.5'	+0	02	+0 28	*1.19	*1.26	1.89	2.69	1.42
4001	Old Port Tampa	27° 51.5'	82° 33.2'	+0	25	+0 39	*1.10	*1.18	1.73	2.48	1.31
4003	Gandy Bridge, Old Tampa Bay	27° 53.6'	82° 32.3'	+0	59	+0 57	*1.12	*1.24	1.75	2.55	1.35
4005	Bay Aristocrat Village, Old Tampa Bay	27° 56.5'	82° 43.2'	+1	01	+1 32	*1.24	*1.37	1.95	2.81	1.49
4007	Safety Harbor, Old Tampa Bay	27° 59.3'	82° 41.1'	+1	32	+1 34	*1.23	*1.39	1.91	2.79	1.48
4009	Mobbly Bayou	28° 01.3'	82° 39.3'	+2	38	+2 54	*0.71	*0.45	1.24	1.77	0.79
4011	Boca Ciega Bay Pass-a-Grille Beach	27° 41'	82° 44'	-1	34	-1 30	*0.87	*0.87	--	2.1	1.0
4013	Gulfport	27° 44'	82° 42'	-1	32	-1 05	*0.96	*0.96	--	2.3	1.2
4015	Long Key, 0.5mi N. of Corey Causeway	27° 44.7'	82° 44.8'	-1	18	-0 44	*0.92	*1.00	--	2.2	1.1
4017	Johns Pass	27° 47'	82° 47'	-2	14	-2 04	*0.97	*1.02	--	2.3	1.2
4019	Madeira Beach Causeway	27° 48.5'	82° 47.7'	-1	32	-1 45	*1.08	*1.18	--	2.42	1.29

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Diurnal		
				High Water	Low Water	High Water	Low Water				
		North	West	h m	h m	ft	ft	ft	ft	ft	
	FLORIDA Gulf Coast—cont. Time meridian, 75° W										
4021	Indian Rocks Beach (inside)	27° 52'	82° 51'	-0 57	-0 53	*0.65	*0.63	1.8	2.6	1.3	
4023	Clearwater	27° 57'	82° 48'	-1 48	-1 35	*0.65	*0.63	1.8	2.6	1.3	
4025	Clearwater Beach	27° 58.7'	82° 49.9'	-2 07	-2 19	*0.69	*0.84	1.87	2.74	1.46	
4027	Dunedin, St. Joseph Sound	28° 01'	82° 48'	-1 50	-1 45	*0.70	*0.79	1.9	2.8	1.4	
4029	Anclope Key, southern end	28° 09.9'	82° 50.6'	-1 53	-1 50	*0.81	*0.65	2.35	3.04	1.59	
4031	Anclope, Anclope River	28° 10.3'	82° 47.1'	-1 28	-1 24	*0.78	*0.87	2.16	3.07	1.63	
4033	Tarpon Springs, Anclope River	28° 09.6'	82° 46.1'	-1 16	-1 03	*0.77	*0.83	2.10	3.00	1.57	
4035	North Anclope Key	28° 12.6'	82° 50.4'	-1 55	-1 38	*0.80	*0.86	2.20	3.11	1.64	
4037	Gulf Harbors	28° 14.6'	82° 45.8'	-1 15	-0 52	*0.84	*0.90	2.30	3.26	1.72	
4039	Hwy. 19 bridge, Pithlachascotee River	28° 16.1'	82° 43.6'	-1 16	-0 40	*0.85	*0.84	2.36	3.27	1.71	
4041	New Port Richey, Pithlachascotee River	28° 14.9'	82° 43.4'	-0 58	-0 11	*0.88	*0.87	2.44	3.40	1.77	
4043	Hudson, Hudson Creek	28° 21.7'	82° 42.6'	-1 12	-1 02	*0.91	*0.89	2.53	3.48	1.82	
4045	Aripeka, Hammock Creek	28° 26.0'	82° 40.1'	-0 37	+0 23	*0.81	*0.63	2.37	3.15	1.58	
4047	Hernando Beach, Rocky Creek, Little Pine I. Bay	28° 29.2'	82° 39.7'	-0 20	+0 58	*0.83	*0.83	2.16	—	—	
4049	Bayport	28° 32.0'	82° 39.0'	-0 03	+0 36	*0.84	*0.78	2.36	3.28	1.67	
4051	Johns Island, Chassahowitzka Bay	28° 41.5'	82° 38.3'	+1 09	+2 14	*0.62	*0.49	1.81	2.53	1.22	
4053	Chassahowitzka, Chassahowitzka River	28° 42.9'	82° 34.6'	+3 59	+5 45	*0.14	*0.16	0.39	0.60	0.30	
4055	Mason Creek, Homosassa Bay	28° 45.7'	82° 38.3'	+3 09	+4 44	*0.32	*0.25	0.96	1.35	0.64	
4057	Tuckers Island, Homosassa River	28° 46.3'	82° 41.7'	+1 26	+2 23	*0.47	*0.33	1.38	1.92	0.90	
4059	Halls River bridge, Homosassa River	28° 48.0'	82° 36.2'	+4 30	+5 41	*0.16	*0.13	0.45	0.72	0.30	
4061	Ozello, St. Martins River	28° 49.5'	82° 39.5'	+4 25	+5 21	*0.17	*0.14	0.49	0.74	0.33	
4063	Mangrove Pt., Crystal Bay	28° 52.2'	82° 43.4'	+0 22	+0 41	*0.95	*0.76	2.82	3.65	1.89	
4065	Ozello north, Crystal Bay	28° 51.8'	82° 40.0'	+1 25	+3 17	*0.50	*0.25	1.53	2.03	0.93	
4067	Dixie Bay, Salt River, Crystal Bay	28° 52.9'	82° 38.1'	+2 00	+3 06	*0.55	*0.33	1.66	2.15	1.04	
	<i>Crystal River</i>										
4069	Florida Power	28° 57.6'	82° 43.5'	-0 03	+0 30	*1.04	*0.89	3.00	3.90	2.06	
4071	Shell Island, north end	28° 55.4'	82° 41.5'	+0 36	+1 30	*0.79	*0.59	2.32	3.01	1.53	
4073	Twin Rivers Marina	28° 54.3'	82° 38.3'	+1 46	+2 30	*0.64	*0.49	1.90	2.53	1.26	
4075	Kings Bay	28° 53.9'	82° 35.9'	+2 20	+3 07	*0.59	*0.41	1.76	2.31	1.14	
4077	Withlacoochee River entrance	29° 00'	82° 46'	+0 07	+0 55	*0.91	*0.95	2.5	3.5	1.8	
4079	CEDAR KEY	29° 08.1'	83° 01.9'	<i>Daily predictions</i>				2.83	3.80	2.05	
4081	Suwannee River entrance	29° 17'	83° 09'	+0 06	+0 18	*0.88	*0.95	2.4	3.4	1.8	
4083	Suwannee, Salt Creek	29° 19.7'	83° 09.1'	-0 07	+0 24	*0.91	*0.83	2.65	3.47	1.84	
4085	Pepperfish Keys	29° 30'	83° 22'	+0 12	+0 24	*0.88	*0.95	2.4	3.4	1.8	
4087	Steinhatchee River ent., Deadman Bay	29° 40.3'	83° 23.4'	+0 02	+0 00	*1.03	*1.08	2.87	3.83	2.12	
	<i>on St. Marks River Ent., p.192</i>										
4089	Fishermans Rest	29° 44'	83° 32'	-0 14	-0 02	*0.93	*0.86	2.4	3.4	1.8	
4091	Spring Warrior Creek	29° 55'	83° 41'	-0 09	+0 03	*0.92	*0.91	2.4	3.4	1.8	
4093	Rock Islands	29° 58'	83° 50'	-0 03	+0 04	*0.93	*0.91	2.4	3.3	1.8	
	<i>Apalachee Bay</i>										
4095	Mandalay, Aucilla River	30° 07.6'	83° 58.5'	+0 25	+0 57	*0.69	*0.55	1.92	2.47	1.30	
4097	ST. MARKS RIVER ENTRANCE	30° 04.7'	84° 10.7'	<i>Daily predictions</i>				2.63	3.49	1.94	
4099	St. Marks, St. Marks River	30° 09'	84° 12'	+0 36	+1 04	*0.93	*0.91	2.4	3.3	1.8	
4101	Shell Point, Walker Creek	30° 03.6'	84° 17.4'	-0 03	-0 03	*1.02	*1.08	2.65	3.56	2.00	
4103	Bald Point, Ochlockonee Bay	29° 56.9'	84° 20.5'	+0 33	+0 19	*0.85	*0.70	2.28	3.07	1.60	
4105	Panacea, Dickerson Bay	30° 01.7'	84° 23.2'	+0 16	+0 20	*1.01	*0.82	2.73	3.66	1.90	
4107	Alligator Point, St. James Island	29° 54.2'	84° 24.8'	-0 08	+0 11	*0.75	*0.73	1.95	2.82	1.45	
4109	Turkey Point, St. James Island	29° 54.9'	84° 30.7'	-0 16	-0 21	*0.78	*0.98	1.92	2.74	1.57	
	<i>on Apalachicola, p.196</i>										
4111	St. George Sound	29° 47'	84° 40'	-1 53	-2 38	*1.73	*1.40	—	2.6	1.3	
4113	Dog Island, west end	29° 51'	84° 40'	-1 25	-2 13	*1.60	*1.60	—	2.6	1.3	
4115	Carrabelle, Carrabelle River	29° 41.2'	84° 47.2'	-2 02	-2 48	*1.13	*1.00	—	1.9	1.1	
4117	St. George Island, Rattlesnake Cove	29° 41.5'	84° 47.5'	-1 00	-1 35	*1.33	*1.20	—	2.2	1.3	
4119	St. George Island, 12th St. W (Bayside)	29° 39'	84° 54'	-0 55	-1 08	*1.26	*1.26	—	2.2	1.1	
4121	St. George Island, Sikes Cut	29° 36.8'	84° 57.5'	-0 58	-1 22	*1.00	*1.00	—	1.6	1.0	
	<i>on Apalachicola Bay</i>										
4123	Cat Point	29° 43'	84° 53'	-0 40	-1 17	*1.07	*0.60	—	2.2	1.1	
4125	APALACHICOLA	29° 43.6'	84° 58.9'	<i>Daily predictions</i>				1.11	1.61	0.96	
4127	Apalachicola River (A&N RR bridge)	29° 45.8'	85° 02.0'	+0 28	+0 35	*0.85	*0.83	0.97	1.39	0.81	
4129	Lower Anchorage	29° 36'	85° 03'	-0 17	-0 35	*0.93	*1.00	—	1.5	0.8	
4131	West Pass	29° 38'	85° 06'	-0 27	-0 27	*0.87	*1.00	—	1.4	0.7	
	<i>on Pensacola, p.200</i>										
4133	Port Saint Joe, St. Joseph Bay †	29° 48.9'	85° 18.8'	-1 06	-1 45	*1.11	*1.11	1.15	1.65	0.78	
	Time meridian, 90° W										
	<i>St. Andrew Bay</i>										
4135	Channel entrance †	30° 07.5'	85° 43.8'	-1 39	-1 50	*1.02	*1.02	1.20	1.29	0.67	
4137	Panama City †	30° 09.1'	85° 40.0'	-0 57	-1 11	*1.05	*1.66	1.25	1.34	0.7	
4139	Panama City Beach (outside) †	30° 12.8'	85° 52.7'	-2 17	-2 44	*1.05	*1.05	1.22	1.37	0.68	
4141	Parker †	30° 08'	85° 37'	-0 05	+0 22	*1.20	*1.20	—	1.5	0.7	
4143	Laird Bayou, East Bay †	30° 07.3'	85° 32.7'	-0 28	-1 05	*1.13	*1.13	1.28	1.47	0.75	
4145	Farmdale, East Bay †	30° 01.0'	85° 28.2'	-0 16	-0 59	*1.17	*1.17	1.31	1.56	0.78	
4147	Allanton, East Bay †	30° 01.8'	85° 27.9'	-0 16	-1 01	*1.15	*1.15	1.30	1.53	0.76	
4149	Wetappo Creek, East Bay †	30° 02'	85° 24'	+1 01	+1 40	*1.10	*1.10	—	1.4	0.7	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Diurnal		
				High Water	Low Water	High Water	Low Water				
		North	West	h m	h m	ft	ft	ft	ft	ft	
FLORIDA Gulf Coast—cont. Time meridian, 90° W											
<i>St. Andrew Bay—cont.</i>											
4151	Alligator Bayou †	30° 10.2'	85° 45.3'	-0 47	-1 10	*1.07	*1.07	1.25	1.37	0.68	
4153	Lynn Haven, North Bay †	30° 15.3'	85° 38.9'	-0 31	-1 01	*1.10	*1.10	1.25	1.47	0.73	
4155	West Bay Creek, West Bay †	30° 17.6'	85° 51.5'	-0 10	-0 47	*1.13	*1.13	1.30	1.46	0.74	
<i>Choctawhatchee Bay <11></i>											
4157	East Pass (Destin)	30° 23.7'	86° 30.8'	-0 33	-0 34	*0.49	*0.33	0.59	0.61	0.31	
4159	Shalimar, Garnier Bayou †	30° 26.1'	86° 35.2'	+3 33	+3 03	*0.32	*0.32	0.36	0.41	0.21	
4161	Harris, The Narrows†	30° 24'	86° 44'	+1 37	+2 51	*1.10	*1.10	—	1.4	0.7	
4163	Navarre Beach	30° 22.6'	86° 51.9'	-2 07	-2 26	*1.07	*1.67	1.26	1.38	0.69	
4165	Fishing Bend, Santa Rosa Sound †	30° 20'	87° 08'	+0 41	+0 51	*1.10	*1.10	—	1.4	0.7	
<i>Pensacola Bay</i>											
4167	Entrance †	30° 20'	87° 19'	-1 23	-0 34	*0.80	*0.80	—	1.1	0.5	
4169	Warrington, 2 miles south of †	30° 21'	87° 16'	-0 27	-0 30	*1.00	*1.00	—	1.3	0.6	
4171	PENSACOLA †	30° 24.2'	87° 13.8'	<i>Daily predictions</i>				1.20	1.26	0.63	
4173	Lora Point, Escambia Bay †	30° 31'	87° 10'	+0 36	+1 03	*1.20	*1.20	—	1.5	0.7	
4175	East Bay †	30° 27'	86° 55'	+0 44	+1 17	*1.20	*1.20	—	1.6	0.8	
4177	Bay Point, Blackwater River †	30° 34'	87° 00'	+1 23	+1 27	*1.20	*1.20	—	1.6	0.8	
4179	Milton, Blackwater River †	30° 37'	87° 02'	+1 40	+1 47	*1.20	*1.20	—	1.6	0.8	
<i>Pedido Bay</i>											
4181	Blue Angels Park †	30° 23.2'	87° 25.7'	+2 36	+4 00	*0.58	*0.58	0.71	0.73	0.35	
4183	Nix Point †	30° 23.6'	87° 25.5'	+2 29	+3 37	*0.57	*0.33	0.69	0.71	0.35	
4185	Millview †	30° 25.1'	87° 21.4'	+2 33	+4 33	*0.67	*0.67	0.82	0.85	0.41	
4187	Alabama Point, Perdido Pass, Alabama	30° 16.70'	87° 33.3'	-1 26	-1 24	*0.67	*0.67	0.78	0.86	0.42	
<i>ALABAMA</i>											
<i>on Mobile, p.208</i>											
4189	Mobile Point (Fort Morgan) †	30° 14'	88° 01'	-1 46	-1 32	*0.80	*0.80	—	1.2	0.6	
4191	DAUPHIN ISLAND †	30° 15.0'	88° 04.5'	<i>Daily predictions, p.204</i>				1.18	1.20	0.60	
4193	Gulf Shores, ICWW †	30° 16.8'	87° 41.1'	-0 41	-0 16	*0.75	*0.90	1.03	1.15	0.60	
4195	Bon Secour, Bon Secour River †	30° 18'	87° 44'	-1 13	-1 17	*1.07	*1.07	—	1.6	0.8	
4197	Fowl River, Mobile Bay Entrance †	30° 26'	88° 07'	-0 19	-0 09	*1.00	*1.00	—	1.5	0.8	
4199	Great Point Clear, Mobile Bay †	30° 29'	87° 56'	-1 03	-0 57	*0.93	*0.93	—	1.4	0.7	
4201	Coast Guard Station, Mobile Bay †	30° 38.9'	88° 03.5'	-0 38	-0 38	*1.03	*0.90	1.45	1.63	0.82	
4203	MOBILE, Mobile River (State Dock) †	30° 42.3'	88° 02.4'	<i>Daily predictions</i>				—	1.5	0.8	
4205	Lower Hall Landing, Tensaw River †	30° 49'	87° 55'	+2 16	+3 05	*0.87	*0.87	—	1.3	0.6	
<i>on South Pass, p.212</i>											
4207	Bayou La Batre, Mississippi Sound †	30° 22'	88° 16'	+1 52	+1 14	*1.23	*1.23	—	1.5	0.8	
<i>MISSISSIPPI</i>											
4209	Point of Pines, Bayou Cumbest †	30° 23.2'	88° 26.4'	+1 49	+1 09	*1.25	*1.25	1.37	1.62	0.81	
4211	Hollingsworth Point, Davis Bayou †	30° 23.2'	88° 46.4'	+2 24	+1 52	*1.42	*1.42	1.59	1.80	0.91	
4213	Ship Island, Mississippi Sound †	30° 12.8'	88° 58.3'	+1 52	+1 22	*1.30	*1.30	1.44	1.68	0.84	
4215	Horn Island, Mississippi Sound †	30° 14.3'	88° 40.0'	+0 34	+0 59	*1.25	*1.25	1.38	1.60	0.81	
4217	Port of Pascagoula, Dock E †	30° 20.8'	88° 30.3'	+1 16	+0 51	*1.22	*1.22	1.37	1.55	0.78	
4219	Pascagoula, Mississippi Sound †	30° 20.4'	88° 32.0'	+1 20	+0 48	*1.21	*1.21	1.37	1.53	0.86	
4221	Gulfport Harbor, Mississippi Sound †	30° 21.6'	89° 04.9'	+2 09	+1 09	*1.29	*1.29	1.38	1.64	0.86	
4223	Biloxi (Cader Point), Biloxi Bay †	30° 23.4'	88° 51.4'	+2 04	+1 30	*1.38	*1.38	1.55	1.76	0.88	
4225	Turkey Creek, Bernard Bayou †	30° 25.6'	89° 03.2'	+3 23	+2 27	*1.54	*1.54	1.65	2.00	1.02	
4227	Cat Island †	30° 13.9'	89° 07.0'	+2 13	+2 00	*1.23	*1.23	1.39	1.57	0.78	
4229	Pass Christian Yacht Club, Mississippi Sound †	30° 18.6'	89° 14.7'	+2 36	+2 04	*1.37	*1.37	1.53	1.73	0.87	
4231	Wolf River, Henderson Avenue bridge	30° 21.5'	89° 16.4'	+3 18	+2 51	*1.36	*1.36	1.47	1.80	0.90	
4233	St. Louis Bay entrance †	30° 19.5'	89° 19.5'	+3 17	+2 57	*1.36	*1.36	1.52	1.73	0.87	
4235	Waveland †	30° 16.9'	89° 22.0'	+3 09	+2 49	*1.28	*1.28	1.44	1.60	0.81	
4237	Pearl River †	30° 14.4'	89° 36.9'	+5 51	+5 31	*0.99	*0.99	1.15	1.23	0.62	
<i>LOUISIANA</i>											
4239	Bayou BonFouca, Route 433 †	30° 16.3'	89° 47.6'	+11 12	+11 31	*0.43	*0.43	0.53	0.53	0.26	
4241	Tchefuncta River, Lake Pontchartrain	30° 22.7'	90° 09.6'	+11 36	+12 21	*0.48	*0.48	0.57	0.57	0.28	
4243	New Canal USCG station, Lake Pontchartrain	30° 01.6'	90° 06.8'	+11 47	+12 09	*0.43	*0.43	0.51	0.52	0.26	
4245	Chef Menteur, Chef Menteur Pass †	30° 03.9'	89° 48.0'	+6 25	+6 27	*0.88	*0.88	0.97	1.06	0.56	
4247	Michoud Substation, ICWW †	30° 00.4'	89° 56.2'	+6 37	+6 22	*1.09	*1.09	1.23	1.39	0.70	
4249	Shell Beach, Lake Borgne †	29° 52.0'	89° 40.3'	+5 34	+5 13	*1.17	*1.17	1.35	1.45	0.73	
4251	Grand Pass †	30° 07.6'	89° 13.3'	+3 01	+2 36	*1.18	*1.18	1.14	1.47	0.73	
4253	Chandeleur Light †	30° 03'	88° 52'	+1 50	+1 54	*0.98	*0.98	—	1.2	0.6	
4255	Comfort Island †	29° 49.4'	89° 16.2'	+2 47	+2 14	*1.28	*1.28	1.45	1.57	0.80	
4257	Bay Gardene †	29° 35.9'	89° 37.1'	+4 04	+4 04	*1.16	*1.16	1.34	1.44	0.75	
4259	Breton Islands †	29° 29.6'	89° 10.4'	+2 07	+2 08	*1.14	*1.14	1.37	1.37	0.69	
4261	Jack Bay †	29° 22.0'	89° 20.7'	+3 12	+2 48	*1.00	*1.00	—	1.2	0.6	
4263	Grand Bay †	29° 23.1'	89° 22.8'	+2 54	+2 56	*1.08	*1.08	1.25	1.34	0.67	
4265	Lonesome Bayou (Thomasin) †	29° 14'	89° 03'	+0 34	-0 29	*0.90	*0.90	—	1.1	0.5	
<i>Mississippi River</i>											
4267	North Pass, Pass a Loutre †	29° 12.3'	89° 02.2'	+0 42	+0 43	*0.91	*0.91	1.08	1.10	0.55	
4269	Southeast Pass †	29° 07.0'	89° 02.7'	+0 37	-0 28	*0.98	*0.98	—	1.2	0.6	
4271	SOUTH PASS †	28° 59.4'	89° 04.4'	<i>Daily predictions</i>				1.18	1.22	0.61	
4273	Port Eads, South Pass †	29° 00.9'	89° 09.6'	+0 56	-0 17	*0.90	*0.90	—	1.1	0.5	
4275	Southwest Pass †	28° 55.9'	89° 25.7'	+0 35	-0 13	*1.07	*1.07	—	1.3	0.6	
4277	Joseph Bayou †	29° 03.5'	89° 16.3'	+0 37	-0 17	*1.15	*1.15	—	1.4	0.7	
4279	New Orleans <12> †	29° 55'	90° 04'	—	—	—	—	—	—	—	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Diurnal		
				High Water	Low Water	High Water	Low Water				
	LOUISIANA—cont. Time meridian, 90° W	North	West	h	m	ft	ft	ft	ft	ft	
		on Grand Isle, p.216									
4281	Paris Road Bridge (ICWW) †	30° 00'	89° 56'	+5	53	*1.04	*1.04	—	1.1	0.6	
4283	Empire Jetty †	29° 15.0'	89° 36.5'	-1	03	-1.45	*1.23	—	1.3	0.7	
4285	Bastian Island †	29° 17.2'	89° 39.8'	+0	41	+0.12	*1.13	—	1.2	0.6	
4287	Quatre Bayous Pass †	29° 18.6'	89° 51.2'	+2	18	+0.17	*1.23	—	1.3	0.6	
4289	Barataria Pass †	29° 16'	89° 57'	+1	00	-0.10	*1.13	—	1.2	0.6	
	Barataria Bay										
4291	EAST POINT, GRAND ISLE	29° 15.8'	89° 57.4'			Daily predictions		1.04	1.06	0.53	
4293	Bayou Rigaud, Grand Isle †	29° 16'	89° 58'	+1	32	+0.46	*0.94	—	1.0	0.5	
4295	Independence Island †	29° 18.6'	89° 56.3'	+2	29	+1.59	*0.85	—	0.9	0.4	
4297	Manilla †	29° 25.6'	89° 58.6'	+2	32	+3.13	*0.94	—	1.0	0.5	
4299	Caminada Pass (bridge) †	29° 12.6'	90° 02.4'	+0	20	+0.12	*0.94	0.99	0.99	0.50	
4301	Port Fourchon, Belle Pass †	29° 06.8'	90° 11.9'	+4	09	+3.45	*1.16	1.21	1.23	0.62	
4303	Timbalier Island, Timbalier Bay †	29° 05'	90° 32'	+0	19	+0.23	*1.13	—	1.2	0.6	
4305	Pelican Islands, Timbalier Bay †	29° 07.7'	90° 25.4'	+2	26	+2.26	*1.13	—	1.2	0.6	
4307	Wine Island, Terrebonne Bay †	29° 04.7'	90° 37.1'	+1	08	+1.02	*1.23	—	1.3	0.6	
4309	Cocodrie, Terrebonne Bay †	29° 14.7'	90° 39.7'	+1	22	+1.33	*0.98	1.01	1.05	0.53	
4311	Caillou Boca †	29° 03.8'	90° 48.4'	+0	40	+0.48	*1.32	—	1.4	0.7	
4313	Raccoon Point, Caillou Bay †	29° 03.5'	90° 57.7'	-0	03	-0.20	*1.60	—	1.7	0.8	
4315	Ship Shoal Light †	28° 55'	91° 04'	-1	54	-1.50	*1.51	—	1.6	0.8	
	Atchafalaya Bay					on Galveston, p.220					
4317	Eugene Island †	29° 22'	91° 23'	-0	25	-2.03	*1.40	—	1.9	1.0	
4319	Point Au Fer †	29° 20'	91° 21'	-0	21	-2.26	*1.40	—	2.0	1.0	
4321	Shell Island †	29° 28'	91° 18'	+0	54	-0.39	*1.07	—	1.5	0.7	
4323	Point Chevreuil †	29° 31'	91° 33'	+1	02	-0.54	*1.07	—	1.5	0.8	
4325	Rabbit Island, 5 miles south of †	29° 25'	91° 36'	-0	13	-2.00	*1.40	—	2.0	1.0	
4327	South Point, Marsh Island †	29° 29'	91° 46'	-0	19	-1.57	*1.30	—	1.8	0.9	
4329	Lighthouse Point †	29° 31'	92° 03'	-1	16	-2.17	*1.40	—	2.0	1.0	
4331	Cote Blanche Island, West Cote Blanche Bay †	29° 44'	91° 43'	+2	19	+2.16	*1.00	—	1.4	0.7	
4333	Southwest Pass, Vermilion Bay †	29° 35'	92° 02'	-0	32	-0.33	*1.14	—	1.6	0.8	
4335	Weeks Bay, Vermilion Bay †	29° 48'	91° 50'	+1	44	+2.32	*1.07	—	1.5	0.7	
4337	Mermantau River entrance †	29° 45'	93° 06'	-1	54	-0.59	*1.79	—	2.5	1.2	
4339	Calcasieu Pass, Lighthouse wharf †	29° 47'	93° 21'	-2	14	-1.24	*1.43	—	2.0	1.0	
	TEXAS										
4341	Sabine Bank Lighthouse †	29° 28'	93° 43'	-1	46	-1.31	*2.00	—	2.8	1.4	
4343	Sabine Pass (jetty) †	29° 39'	93° 50'	-1	26	-1.31	*1.79	—	2.5	1.2	
4345	Sabine Pass †	29° 43.8'	93° 52.2'	-1	18	-0.38	*1.14	1.09	1.60	0.96	
4347	Mesquite Point, Sabine Pass †	29° 46'	93° 54'	-0	04	-0.25	*0.93	—	1.3	0.6	
4349	Galveston Bay entrance, south jetty †	29° 20'	94° 42'	-0	39	-1.05	*1.43	—	2.0	1.0	
4351	GALVESTON, Galveston Channel †	29° 18.6'	94° 47.6'			Daily predictions		1.02	1.41	0.81	
	Galveston Bay										
4353	Port Bolivar †	29° 21.9'	94° 46.8'	+0	57	+0.09	*1.00	*0.63	1.13	1.40	0.85
4355	Texas City, Turning Basin †	29° 23'	94° 53'	+0	33	+0.41	*1.00	*1.00	—	1.4	0.7
4357	Eagle Point <20> †	29° 28.8'	94° 55.1'	+5	34	+2.38	*0.80	*0.80	1.01	1.09	0.60
4359	Clear Lake <20> †	29° 33.8'	95° 04.0'	+6	57	+5.19	*0.83	*0.83	1.05	1.16	0.63
4361	Morgans Point, Barbours Cut <20> †	29° 40.9'	94° 59.1'	+5	11	+4.17	*0.95	*0.40	1.14	1.31	0.72
4363	Lynchburg Landing, San Jacinto River <20> †	29° 45.9'	95° 04.7'	+4	55	+4.51	*1.05	*0.57	1.21	1.48	0.78
4365	Manchester, Houston Ship Channel <20> †	29° 43.1'	95° 15.1'	+4	55	+5.05	*1.15	*0.83	1.27	1.64	0.90
4367	Round Point, Trinity Bay <20> †	29° 44'	94° 42'	+10	39	+5.15	*0.71	*0.71	—	1.0	0.5
4369	Point Barrow, Trinity Bay †	29° 44'	94° 50'	+5	48	+4.43	*0.79	*0.79	—	1.1	0.5
4371	Gilchrist, East Bay †	29° 31'	94° 29'	+3	16	+4.18	*0.86	*0.86	—	1.2	0.6
4373	Jamaica Beach, West Bay †	29° 12'	94° 59'	+2	38	+3.31	*0.71	*0.71	—	1.0	0.5
4375	Alligator Point, West Bay †	29° 10'	95° 08'	+2	39	+2.33	*0.64	*0.64	—	0.9	0.4
4377	Christmas Bay †	29° 02.5'	95° 10.5'	+4	47	+2.37	*0.58	*0.23	0.71	0.82	0.42
4379	Galveston Pleasure Pier †	29° 17.1'	94° 47.3'	-1	33	-1.03	*1.40	*1.30	1.46	2.04	1.12
4381	San Luis Pass †	29° 05'	95° 07'	-0	09	-0.09	*0.86	*0.86	—	1.2	0.6
4383	Freeport Harbor †	28° 56.9'	95° 18.5'	-1	17	-1.08	*1.23	*0.90	1.35	1.76	0.95
4385	PORT O'CONNOR, MATAGORDA BAY †	28° 27'	96° 24'			Daily predictions, p.224		—	0.5	0.2	
4387	Port Lavaca, Matagorda Bay †	28° 37'	96° 37'	—	—	—	—	—	0.7	0.3	
4389	Rockport, Aransas Bay †	28° 01.3'	97° 02.8'	—	—	—	—	—	0.36	0.36	0.18
4391	Port Aransas (H. Caldwell Pier) †	27° 49.6'	97° 03.0'	-0	46	-1.26	*1.15	*0.77	1.30	1.64	0.88
4393	Corpus Christi †	27° 34.8'	97° 13.0'	-1	09	-1.30	*1.17	*0.73	1.31	1.63	0.93
4395	Riviera Beach, Baffin Bay †	27° 17'	97° 40'	—	—	—	—	—	—	0.3	0.1
	MEXICO <13> Gulf of Mexico					on Padre Island, p.228					
4397	PADRE ISLAND (south end) †	26° 04.1'	97° 09.4'			Daily predictions		1.25	1.47	0.87	
4399	Queen Isabella Causeway (east end) †	26° 04.7'	97° 10.2'	+0	24	+0.21	*0.87	*0.75	1.11	1.28	0.68
4401	Queen Isabella Causeway (west end) †	26° 04.3'	97° 11.5'	+0	52	+0.30	*0.81	*0.63	1.05	1.19	0.62
4403	Port Isabel †	26° 03.6'	97° 12.9'	+0	10	+0.26	*0.92	*1.00	1.15	1.37	0.74
4405	South Bay entrance †	26° 03.1'	97° 10.9'	+0	14	+0.21	*0.91	*0.94	1.14	1.35	0.72
						on Tampico Harbor, p.232					
4407	Matamoros †	25° 53'	97° 31'	+0	55	+0.40	*1.00	*1.00	—	1.4	0.7
4409	TAMPICO HARBOR (Madero) †	22° 13'	97° 51'			Daily predictions		—	1.4	0.7	
4411	Tuxpan †	21° 00'	97° 20'	+0	02	+0.04	*1.21	*1.21	—	1.7	0.8
4413	Veracruz †	19° 12'	96° 08'	-0	19	-0.12	*1.21	*1.21	—	1.7	0.8

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Diurnal		
				High Water	Low Water	High Water	Low Water				
	MEXICO <13> Gulf of Mexico—cont. Time meridian, 90° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Tampico Harbor, p.232											
4415	Alvarado †	18° 46'	95° 46'	+0 51	+0 27	*0.93	*0.93	—	1.3	0.6	
4417	Coatzacoalcos †	18° 09'	94° 25'	-0 40	+0 05	*1.07	*1.07	—	1.5	0.7	
4419	Frontera †	18° 32'	92° 39'	-0 18	-0 27	*1.14	*1.14	—	1.6	0.8	
4421	Progreso †	21° 18'	89° 40'	+1 19	+0 23	*1.29	*1.29	—	1.8	0.9	
on Key West, p.176											
4423	Belize City	17° 30'	88° 11'	+0 14	+0 47	*0.46	*0.46	0.6	0.7	0.4	
4425	Punta Gorda	16° 06'	88° 49'	-0 27	+0 30	*0.46	*0.46	0.6	0.8	0.4	
GUATEMALA <13>											
4427	Rio Dulce entrance	15° 50'	88° 49'	-1 25	-1 35	*0.92	*0.92	1.2	1.5	0.7	
HONDURAS <13>											
4429	Puerto Cortes	15° 50'	87° 57'	-0 43	-0 02	*0.38	*0.38	0.5	0.6	0.2	
4431	Port Royal, Isla de Roatan	16° 24'	86° 20'	-2 41	-2 35	*0.92	*0.92	1.2	1.4	0.6	
4433	Puerto Castilla	16° 00'	86° 02'	-0 48	-0 13	*0.46	*0.46	0.6	0.8	0.4	
4435	Isla de Guanaja	16° 29'	85° 54'	-1 26	-1 42	*0.72	*0.72	1.0	1.3	0.6	
4437	Harbor Bay, Great Swan Island	17° 24'	83° 56'	-1 18	-0 33	*0.51	*0.51	0.7	0.9	0.4	
NICARAGUA <13>											
4439	Cabo Gracias a Dios	15° 00'	83° 10'	+0 23	-0 32	*0.57	*0.57	1.2	1.6	0.8	
4441	Puerto Cabezas	14° 01'	83° 23'	+3 05	+3 11	*0.56	*0.56	1.4	1.9	0.9	
4443	Cayos de Perlas	12° 25'	83° 25'	+4 53	+4 33	*0.46	*0.46	0.9	1.3	0.6	
4445	Isla del Maiz Grande	12° 10'	83° 03'	+4 38	+4 13	*0.46	*0.46	0.9	1.3	0.3	
4447	Bluefields Lagoon entrance	12° 00'	83° 42'	+3 54	+3 27	*0.28	*0.28	0.7	1.0	0.4	
4449	San Juan del Norte (Greytown)	10° 55'	83° 42'	+4 03	+4 03	*0.28	*0.28	0.7	1.1	0.5	
COSTA RICA <13>											
4451	Limon	10° 00'	83° 02'	-0 32	-0 29	*1.00	*1.00	0.7	1.2	0.5	
PANAMA <13>											
	Time meridian, 75° W										
4453	Bocas del Toro, Almirante Bay	9° 21'	82° 15'	+0 21	+0 24	*1.14	*1.14	0.8	1.2	0.6	
4455	CRISTOBAL (COLON)	9° 21'	79° 55'	Daily Predictions				0.7	1.1	0.4	
4457	Bahia de Caledonia	8° 54'	77° 41'	+0 12	+0 00	*1.00	*1.00	0.7	1.1	0.4	
BERMUDA ISLANDS											
	Time meridian, 60° W										
4459	Ireland Island	32° 19'	64° 50'	+0 11	+0 13	*1.07	*1.23	2.6	3.1	1.6	
4461	Ferry Reach (Biological Station)	32° 22.2'	64° 41.7'	-0 04	+0 03	*0.93	*1.00	2.4	2.9	1.3	
4463	ESSO PIER, ST. GEORGES ISLAND	32° 22.4'	64° 42.2'	Daily Predictions				2.5	3.0	1.3	
BAHAMAS											
	Time meridian, 75° W										
4465	Guinchos Cay	22° 45'	78° 07'	+0 06	+0 16	*0.79	*1.11	2.1	2.6	1.2	
4467	Elbow Cay, Cay Sal Bank	23° 57'	80° 28'	+1 18	+1 28	*0.79	*1.11	2.1	2.6	1.2	
4469	Fresh Creek, Andros Island	24° 44'	77° 48'	+0 05	-0 08	*0.97	*1.11	2.4	2.9	1.3	
4471	North Cat Cay	25° 33'	79° 17'	+0 22	+0 32	*0.86	*1.11	2.3	2.8	1.3	
4473	North Bimini	25° 44'	79° 18'	+0 05	+0 22	*0.90	*1.11	2.4	2.9	1.3	
4475	Memory Rock	26° 57'	79° 07'	+0 16	+0 26	*0.86	*1.11	2.3	2.7	1.3	
4477	SETTLEMENT POINT, GRAND BAHAMAS ISLAND	26° 42.6'	78° 59.8'	Daily Predictions				2.7	3.1	1.4	
4479	Pelican Harbor	26° 23'	76° 58'	+0 18	+0 28	*0.97	*1.11	2.6	3.1	1.4	
4481	Nassau, New Providence Island	25° 05'	77° 21'	-0 08	-0 03	*0.98	*1.44	2.6	3.1	1.9	
4483	Eleuthera Island, west coast	25° 15'	76° 19'	+2 09	+2 33	*0.94	*1.11	2.4	2.9	1.3	
4485	Eleuthera Island, east coast	24° 56'	76° 09'	+0 11	+0 23	*0.82	*1.11	2.2	2.6	1.2	
4487	The Bight, Cat Island	24° 19'	75° 26'	-0 37	-0 27	*0.97	*1.11	2.6	3.1	1.4	
4489	San Salvador	24° 03'	74° 33'	-0 08	-0 06	*0.86	*1.11	2.3	2.8	1.3	
4491	Clarence Harbor, Long Island	23° 06'	74° 59'	+0 41	+0 51	*0.97	*1.11	2.6	3.1	1.4	
4493	Nurse Channel	22° 31'	75° 51'	+0 00	+0 10	*0.79	*1.11	2.1	2.6	1.1	
4495	Datum Bay, Acklin Island	22° 10'	74° 18'	-0 21	-0 11	*0.75	*1.11	2.0	2.6	1.1	
4497	Mathew Town, Great Inagua Island	20° 57'	73° 41'	+0 08	+0 28	*0.79	*1.11	2.1	2.6	1.2	
4499	Abraham Bay, Mayaguana Island	22° 22'	73° 00'	+0 02	-0 10	*0.79	*1.11	2.0	2.5	1.1	
4501	Hawks Nest Anchorage, Turks Islands	21° 26'	71° 07'	-0 27	-0 17	*0.79	*1.11	2.1	2.6	1.1	
CUBA											
4503	La Isabela	22° 56'	80° 00'	+0 20	+0 16	*0.64	*0.64	1.6	2.0	0.9	
4505	Bahia de Nuevitas entrance	21° 38'	77° 07'	-0 05	-0 46	*0.52	*0.52	1.3	1.5	0.7	
4507	Nuevitas, Bahia de Nuevitas	21° 35'	77° 15'	+1 32	+1 33	*0.56	*0.56	1.4	1.6	0.7	
4509	Puerto Padre	21° 14'	76° 33'	-0 05	-0 10	*0.84	*0.84	2.1	2.4	1.1	
4511	Puerto de Gibara	21° 07'	76° 07'	-1 06	-1 03	*0.76	*0.76	1.9	2.2	1.0	
4513	Bahia de Nipe entrance	20° 47'	75° 34'	-0 55	-1 01	*0.81	*0.81	2.0	2.3	1.1	
4515	Antilla, Bahia de Nipe	20° 50'	75° 44'	-0 37	-0 44	*0.89	*0.89	2.2	2.5	1.2	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	CUBA-cont. Time meridian, 75° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Hampton Roads, p.120											
4517	Bahia de Levisa entrance	20° 45'	75° 28'	-1 03	-1 07	*0.77	*0.77	1.9	2.2	1.0	
4519	Sagua de Tanamo, Bahia de	20° 43'	75° 19'	-1 00	-1 08	*0.76	*0.76	1.9	2.2	1.0	
4521	Baracoa	20° 21'	74° 30'	-1 14	-1 18	*0.68	*0.68	1.7	2.0	0.9	
4523	Punta Maisi	20° 15'	74° 08'	-1 16	-1 20	*0.88	*0.88	2.2	2.8	1.2	
on San Juan, p.252											
4525	Guantanamo Bay	19° 54'	75° 09'	-0 17	-0 23	*0.89	*0.89	--	1.4	0.7	
4527	Puerto de Santiago de Cuba	19° 59'	75° 52'	+0 30	+0 17	*0.89	*0.89	--	1.4	0.7	
4529	Puerto de Pilon	19° 54'	77° 19'	+0 11	+0 13	*0.72	*0.72	--	1.2	0.6	
4531	Manzanillo, Golfo de Guacanayabo	20° 21'	77° 07'	+1 41	+1 38	+1.39	+1.39	--	2.2	1.1	
4533	Casilda	21° 45'	79° 59'	+1 04	+0 52	*0.65	*0.65	--	1.0	0.5	
on Key West, p.176											
4535	Bahia de Cienfuegos	Punta Pasacaballos	22° 04'	80° 27'	+0 49	+0 58	*0.80	*0.80	--	1.3	0.6
4537	Cienfuegos	22° 08'	80° 27'	+0 51	+0 58	*0.81	*0.81	--	1.3	0.6	
4539	Carapachibey, Isla de Pinos	21° 27'	82° 55'	+0 43	+0 52	*0.54	*0.54	--	0.9	0.4	
4541	La Coloma	22° 14'	83° 34'	+2 04	+2 23	*0.54	*0.54	--	0.9	0.4	
4543	Cabo San Antonio	21° 52'	84° 58'	-0 50	-0 07	*0.92	*0.92	1.2	1.5	0.8	
on Galveston, p.220											
4545	Bahia Honda	22° 58'	83° 13'	-1 04	-0 23	*0.76	*0.76	1.0	1.4	0.7	
4547	Havana	23° 09'	82° 20'	-0 48	-0 40	*0.76	*0.76	1.0	1.2	0.6	
4549	Matanzas	23° 04'	81° 32'	-0 59	-0 59	*0.92	*0.92	1.2	1.5	0.8	
4551	Cardenas	23° 04'	81° 12'	-0 11	+0 34	*1.08	*1.08	1.4	1.8	1.0	
on Galveston, p.220											
4553	JAMAICA	Port Morant	17° 53'	76° 20'	-7 45	-7 45	*0.57	*0.57	--	0.8	0.4
4555	Port Royal †	17° 56'	76° 51'	-7 07	-8 14	*0.50	*0.50	--	0.7	0.3	
4557	Galleon Harbour	17° 54'	77° 04'	---	---	---	---	--	0.8	0.4	
4559	South Negril Point †	18° 18'	78° 24'	-2 47	-2 47	*1.21	*1.21	--	1.7	0.8	
4561	Montego Bay	18° 28'	77° 55'	-6 44	-6 40	*0.71	*0.71	--	1.0	0.5	
4563	St. Ann's Bay	18° 25'	77° 14'	-7 17	-7 17	*0.57	*0.57	--	0.8	0.4	
4565	Grand Cayman †	19° 20'	81° 20'	-8 01	-8 01	*0.93	*0.93	--	1.3	0.6	
on San Juan, p.252											
4567	HAITI and DOMINICAN REPUBLIC	Port-au-Prince	18° 33'	72° 21'	-0 35	-0 38	*0.99	*0.99	--	1.6	0.8
4569	Massacre, Riviere du entrance	19° 43'	71° 46'	-1 04	-1 07	*1.44	*1.44	--	2.3	1.2	
4571	Puerto Plata	19° 49'	70° 42'	-1 12	-1 20	*1.44	*1.44	--	2.3	1.2	
4573	Santa Barbara de Samana	19° 12'	69° 20'	-0 54	-0 53	*1.25	*1.25	--	2.0	1.0	
4575	Sanchez	19° 13'	69° 36'	-0 40	-0 43	*2.05	*2.05	--	3.3	1.6	
on Galveston, p.220											
4577	PUERTO RICO	Saona, Isla †	18° 10'	68° 40'	---	---	---	---	--	0.6	0.3
4579	Time meridian, 60° W	La Romana †	18° 25'	68° 57'	---	---	---	---	--	0.6	—
4581	Santo Domingo †	18° 27'	69° 53'	-6 28	-11 01	*0.57	*0.57	--	0.8	0.4	
4583	Barahona †	18° 12'	71° 05'	---	---	---	---	--	0.7	0.3	
4585	Jacmel †	18° 13'	72° 34'	-10 00	-10 00	*1.43	*1.43	--	2.0	1.0	
on Magueyes, p.248											
4587	MAGUEYES ISLAND †	17° 58.3'	67° 02.8'	Daily predictions				0.65	0.67	0.34	
4589	Guanica †	17° 58'	66° 55'	-1 22	+0 18	*1.00	*1.00	--	0.7	0.3	
4591	Playa de Ponce †	17° 58'	66° 37'	-0 39	-0 13	*1.14	*1.14	--	0.8	0.4	
4593	Playa Cortada †	17° 59'	66° 27'	+0 16	-0 37	*1.14	*1.14	--	0.8	0.4	
4595	Arroyo †	17° 58'	66° 04'	+0 52	+0 13	*1.14	*1.14	--	0.8	0.4	
4597	Puerto Maunabo †	18° 00'	65° 53'	-0 56	+1 13	*1.00	*1.00	--	0.7	0.4	
4599	Culebrita, Isla †	18° 19'	65° 14'	-2 34	+2 40	*1.57	*1.57	--	1.1	0.6	
4601	Puerto Ferro, Isla de Vieques †	18° 06'	65° 26'	-2 26	+3 01	*1.14	*1.14	--	0.8	0.4	
on San Juan, p.252											
4603	Punta Mulas, Isla de Vieques	18° 09'	65° 26'	-0 14	-0 17	*0.72	*0.72	--	1.2	0.6	
4605	Roosevelt Roads	18° 14'	65° 37'	+0 02	+0 20	*0.63	*0.63	--	1.0	0.5	
4607	Ensenada Honda, Culebra Island	18° 18'	65° 17'	-0 34	-0 15	*0.63	*0.63	--	1.0	0.5	
4609	Playa de Fajardo	18° 20'	65° 38'	-0 10	-0 13	*0.99	*0.99	--	1.6	0.8	
4611	SAN JUAN	18° 27.5'	66° 07.0'	Daily predictions				1.10	1.58	0.76	
4613	Mayaguez	18° 13.2'	67° 09.6'	-0 09	-0 11	*0.93	*0.76	1.06	1.40	0.69	
4615	Puerto Real	18° 05'	67° 11'	-0 33	-0 26	*0.72	*0.72	--	1.2	0.6	
on Charlotte Amalie, p.256											
4617	LESSER ANTILLES & VIRGIN ISLANDS	St. Thomas Island	18° 22'	64° 55'	-0 06	-0 17	*1.59	*1.59	1.0	1.4	0.7
4619	Magens Bay, St. Thomas Island †	18° 20.1'	64° 55.2'	Daily predictions				0.70	0.79	0.40	
4621	CHARLOTTE AMALIE, ST. THOMAS ISLAND †	18° 19.1'	64° 51.1'	-0 46	+0 44	*1.28	*1.28	0.82	1.09	0.54	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Diurnal		
				High Water	Low Water	High Water	Low Water				
	LESSER ANTILLES & VIRGIN ISLANDS—cont. Time meridian, 60° W	North	West	h m	h m	ft	ft	ft	ft	ft	
on Lime Tree Bay, p.260											
4623	<i>St. Croix Island</i> Christiansted, St. Croix Island †	17° 45'	64° 42'	-2 43	+1 06	*1.07	*1.00	—	0.8	0.4	
4625	LIME TREE BAY, ST.CROIX ISLAND †	17° 41.8'	64° 45.2'		Daily predictions			0.69	0.71	0.36	
4627	St. Barthelemy †	17° 54'	62° 51'	-3 26	-1 11	*1.87	*1.00	—	1.4	0.7	
4629	Pointe-a-Pitre, Guadeloupe	16° 14'	61° 32'	-4 28	-0 33	*3.24	*1.80	—	1.0	0.5	
on Key West, p.176											
4631	Roseau, Dominica	15° 18'	61° 24'	-6 29	-6 05	*0.65	*0.65	0.7	1.2	0.6	
4633	Fort-de-France, Martinique	14° 35'	61° 03'	-6 55	-6 18	*0.38	*0.38	0.5	—	0.5	
4635	Castries, St. Lucia	14° 01'	61° 00'	-7 09	-7 05	*0.62	*0.62	0.8	1.2	0.6	
4637	Vieux Fort Bay, St. Lucia	13° 44'	60° 58'	-6 02	-5 38	*0.69	*0.69	0.9	—	0.7	
4639	Kingstown, St. Vincent <15>	13° 10'	61° 13'	-7 09	-6 38	*1.53	*1.53	2.0	2.7	1.4	
4641	Bridgetown, Barbados	13° 06'	59° 38'	-6 28	-5 47	*1.30	*1.30	1.7	2.1	1.0	
4643	Grenada	12° 04'	61° 45'	-7 26	-6 51	*0.92	*0.92	1.2	1.5	0.8	
4645	Scarborough, Tobago	11° 11'	60° 44'	-6 40	-6 22	*1.60	*1.60	2.1	2.7	1.4	
on Cristobal, p.236											
4647	Schottegat, Curacao †	12° 07'	68° 56'	+0 25	+1 09	*0.82	*0.82	—	0.9	0.5	
4649	St. Nicolaas Bay, Aruba †	12° 26'	69° 54'	—	—	—	—	—	0.8	0.4	
COLOMBIA <13> Time meridian, 75° W											
4651	Isla de Providencia	13° 20'	81° 23'	+7 53	+7 53	*0.28	*0.28	0.7	1.1	0.4	
on Hampton Roads, p.120											
4653	Turbo	8° 10'	76° 45'	-0 49	-0 30	*1.43	*1.43	1.0	1.4	0.6	
4655	Covenas	9° 20'	75° 40'	-1 06	-0 46	*1.14	*1.14	0.8	1.2	0.5	
4657	Cartagena, Bahia de Cartagena	10° 24'	75° 33'	-1 16	-0 48	*1.00	*1.00	0.7	1.1	0.4	
4659	Puerto Colombia	11° 00'	74° 58'	-0 52	-1 08	*1.29	*1.29	0.9	1.3	0.5	
4661	Santa Marta	11° 18'	74° 12'	-1 19	-1 08	*1.00	*1.00	0.7	1.1	0.4	
4663	Riohacha	11° 33'	72° 55'	-1 54	-1 09	*1.00	*1.00	0.7	1.1	0.4	
VENEZUELA Time meridian, 60° 30' W											
4665	ISLA ZAPARA, Lake Maracaibo	11° 00'	71° 35'		Daily predictions			2.8	3.0	2.7	
4667	Bahia de Tablazos, Lake Maracaibo	10° 53'	71° 35'	+0 30	+0 11	*0.61	*0.31	2.1	2.3	1.5	
4669	Punta de Palmas	10° 48'	71° 37'	+0 35	+0 16	*0.49	*0.31	1.6	1.8	1.2	
on Amuay, p.268											
4671	AMUAY	11° 45'	70° 13'		Daily predictions			—	1.2	0.6	
4673	La Guaira †	10° 36'	66° 56'	-2 29	-1 59	+0.8	+1.0	—	1.0	1.5	
4675	Carenero †	10° 32'	66° 07'	-1 51	-1 59	+0.8	+1.0	—	1.0	1.5	
4677	Cumana †	10° 28'	64° 11'	-2 37	-1 02	-0.1	0.0	—	1.1	0.5	
4679	Porlamar, Isla de Margarita †	10° 57'	63° 51'	-1 19	-0 59	+0.6	0.0	—	1.8	0.9	
4681	Carupano †	10° 40'	63° 15'	-1 17	-0 42	+0.2	0.0	—	1.4	0.7	
on Punta Gorda, p.272											
4683	<i>Gulf of Paria</i>							2.2	2.7	1.4	
4685	Macuro	10° 39'	61° 56'	-1 15	-2 05	*0.38	*0.38	3.3	4.2	2.0	
4687	Puerto de Hierro	10° 37'	62° 05'	-0 46	-1 19	*0.59	*0.59	4.6	5.7	2.8	
4689	Barra de Maturin, channel entrance	10° 18'	62° 31'	-0 22	-0 45	-1.0	+0.2	5.8	7.1	3.2	
4691	PUNTA GORDA, Rio San Juan	10° 10'	62° 38'		Daily predictions			4.3	5.4	2.6	
4693	Boca Pedernales entrance	10° 01'	62° 12'	-0 03	-0 34	-1.3	+0.2	5.0	6.7	3.8	
	Rio Orinoco entrance, Isla Ramon Isidro	8° 39'	60° 35'	+0 07	-0 12	+0.2	+1.0				
TRINIDAD Time meridian, 60° W											
4695	Stauples Bay	10° 41'	61° 39'	-0 37	-1 32	(*0.33+1.7)	1.9	2.5	2.8		
4697	Carenage Bay	10° 41'	61° 36'	-0 28	-1 10	(*0.34+1.6)	2.0	2.6	2.7		
4699	Port of Spain	10° 39'	61° 31'	-0 14	-0 42	(*0.31+1.4)	1.8	2.3	2.4		
4701	Bonasse pier	10° 05'	61° 52'	-0 13	-0 45	-1.0	+1.4	3.4	4.4	3.4	
4703	Erin Bay	10° 04'	61° 39'	-0 20	-1 11	-0.3	+1.2	4.3	5.6	3.6	
4705	Guayaguayare Bay	10° 09'	61° 01'	-1 02	-1 39	(*0.53+1.3)	3.1	3.8	3.0		
4707	Nariva River	10° 24'	61° 02'	-0 36	-1 46	(*0.41+1.3)	2.4	3.1	2.5		
GUYANA Time meridian, 56° 15' W											
4709	Parika, Essequibo River	6° 52'	58° 25'	+0 07	+0 31	+1.6	+1.0	6.6	8.3	5.6	
4711	Georgetown	6° 48'	58° 10'	-0 13	-0 29	+0.9	+1.1	5.8	8.0	5.3	
SURINAM Time meridian, 45° W											
4713	Nickerie River	5° 57'	56° 59'	+0 09	+0 21	+1.1	0.0	7.1	9.2	4.9	
4715	SURINAME RIVIER ENTRANCE	6° 00'	55° 14'		Daily predictions			6.0	7.6	4.3	
4717	Paramaribo, Suriname Rivier	5° 49'	55° 09'	+1 09	+1 42	0.0	0.0	6.0	7.3	4.3	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
		North	West	h m	h m	ft	ft	ft	ft	ft	
on Suriname Rivier, p.276											
4719	Rio Maroni entrance	5° 45'	53° 58'	+0 18	+0 24	+0.7	+1.2	5.5	7.2	5.2	
4721	Iles du Salut	5° 17'	52° 35'	-0 07	-0 07	+1.7	+2.2	5.5	7.2	6.2	
4723	Cayenne	4° 56'	52° 20'	+0 15	+0 15	+2.4	+1.8	6.6	7.8	6.4	
BRAZIL <16> Time meridian, 45° W											
4725	Cape Cassipore	3° 49'	51° 01'	+1 24	+1 19	+1.5	+0.3	7.2	9.5	5.2	
4727	Rio Cunani entrance	2° 50'	50° 53'	+2 10	+2 24	(*2.42-0.2)		14.5	19.0	10.1	
		South West									
4729	Illa de Maraca anchorage	2° 09'	50° 30'	+1 40	+1 52	(*2.42-0.2)		14.5	19.0	10.1	
4731	Illa do Brigue, Amazon River	0° 55'	50° 05'	+7 09	+7 40	+8.3	+1.1	13.2	15.7	9.0	
4733	Ponta Pedreira, Amazon River	0° 11'	50° 43'	+6 31	+6 43	*2.08	*2.23	12.3	16.2	9.0	
4735	Macapa, Amazon River	0° 03'	51° 11'	+10 57	+12 13	+2.8	+0.4	8.4	9.5	5.9	
4737	Canal de Braganca, Rio Para entrance	0° 23'	47° 55'	+6 09	+6 09	+1.8	-0.1	7.9	10.4	5.1	
4739	Salinopolis	0° 39'	47° 23'	+2 38	+2 52	*1.99	*1.54	12.5	15.9	8.3	
4741	Belem (Para)	1° 27'	48° 30'	+6 34	+7 37	+2.9	+0.7	8.2	10.1	6.1	
4743	Ilhas de Sao Joao	1° 17'	44° 55'	+1 31	+1 31	*1.70	*1.31	10.7	14.1	7.0	
4745	Sao Luiz	2° 32'	44° 18'	+2 28	+2 25	(*2.35-0.7)		14.1	17.1	9.3	
4747	Santana, Recifes de	2° 16'	43° 36'	+0 46	+0 45	*1.58	*1.15	10.0	13.1	6.5	
4749	Tutoia, Baia da	2° 46'	42° 14'	+0 11	+0 10	+2.4	+0.4	8.0	10.0	5.7	
4751	Luis Correia	2° 53'	41° 40'	+0 01	+0 13	+1.8	+0.4	7.4	9.4	5.4	
4753	Camocim	2° 53'	40° 52'	+1 07	+1 06	+2.0	+0.4	7.6	9.7	5.5	
4755	Rio Ceara (bar)	3° 41'	38° 37'	-0 13	-0 21	+0.2	-0.1	6.3	8.3	4.3	
4757	Fortaleza	3° 43'	38° 29'	-0 08	-0 12	+0.2	-0.3	6.5	8.5	4.2	
Time meridian, 30° W											
4759	Fernando de Noronha	3° 50'	32° 25'	+1 32	+1 33	-1.2	-0.5	4.5	6.0	2.9	
4761	Rocas, Atol das	3° 51'	33° 49'	+1 43	+1 44	+2.3	0.0	7.5	10.0	4.9	
Time meridian, 45° W											
4763	Macau, Rio Acu	5° 06'	36° 41'	+1 29	+1 58	+0.6	-0.1	5.9	7.6	4.1	
4765	Natal	5° 47'	35° 12'	+0 28	+0 30	+0.1	-0.2	5.5	7.3	3.7	
4767	Cabedelo	6° 58'	34° 50'	+0 36	+0 37	+0.1	-0.2	5.5	7.2	3.7	
4769	Tambau	7° 06'	34° 50'	-0 04	-0 03	+0.7	-0.1	6.0	7.6	4.1	
4771	RECIFE	8° 03'	34° 52'	Daily predictions				5.3	7.1	3.8	
4773	Maceio	9° 40'	35° 43'	+0 10	+0 14	-0.3	-0.2	5.1	6.8	3.6	
4775	Rio Sao Francisco (bar)	10° 31'	36° 24'	+0 06	+0 14	-0.7	0.0	4.5	6.0	3.5	
4777	Aracaju	10° 56'	37° 03'	+0 33	+0 48	-0.8	-0.3	4.7	6.1	3.3	
4779	Salvador	12° 58'	38° 31'	-0 02	-0 08	+0.6	+0.4	5.5	7.4	4.3	
4781	Ponta da Areia	12° 47'	38° 30'	+0 10	+0 06	+0.6	-0.1	5.9	7.6	4.0	
4783	Morro de Sao Paulo	13° 21'	38° 54'	-0 11	-0 13	-0.6	0.0	4.6	6.0	3.5	
4785	Camamu	13° 54'	38° 58'	-0 08	-0 04	-0.2	+0.1	4.9	6.5	3.8	
4787	Ilheus	14° 48'	39° 02'	-0 33	-0 32	-0.9	-0.3	4.6	5.8	3.2	
4789	Canavieiras	15° 40'	38° 56'	+0 16	+0 22	-1.0	-0.2	4.5	5.8	3.1	
4791	Santa Cruz Cabralia	16° 17'	39° 02'	-0 35	-0 35	-1.2	-0.5	4.5	6.0	2.9	
4793	Cumuruxatiba	17° 06'	39° 11'	-0 23	-0 09	+0.4	+0.3	5.3	7.2	4.2	
4795	Caravelas	17° 43'	39° 09'	-0 50	-0 49	-0.8	-0.5	4.9	6.4	3.1	
4797	Abrolhos Anchorage	17° 58'	38° 42'	-0 01	+0 04	+0.6	+0.1	5.7	7.6	4.2	
4799	Vitoria	20° 19'	40° 19'	-0 34	-0 35	*0.66	*0.75	3.3	4.6	2.6	
4801	Guarapari	20° 40'	40° 30'	+0 12	+0 17	*0.62	*0.75	3.1	4.2	2.5	
on Rio de Janeiro, p.284											
4803	Sao Joao da Barra	21° 38'	41° 03'	+0 34	-0 42	-0.1	-0.2	2.6	3.6	2.1	
4805	Macae (Imbitiba Bay)	22° 23'	41° 46'	-0 23	-1 08	0.0	-0.2	2.7	3.6	2.1	
4807	Armacao dos Buzios	22° 45'	41° 53'	-0 01	-0 55	-0.1	-0.1	2.5	3.4	2.1	
4809	Cabo Frio	23° 00'	42° 03'	-0 03	-0 05	*0.91	*0.90	2.3	3.2	2.0	
4811	RIO DE JANEIRO	22° 54'	43° 10'	Daily predictions				2.5	3.5	2.2	
4813	Itacurussa	22° 56'	43° 55'	+0 50	-0 26	0.0	-0.1	2.6	3.3	2.2	
4815	Angra dos Reis	23° 01'	44° 19'	-0 35	-0 40	*0.86	*0.86	2.1	3.0	1.9	
4817	Parati	23° 14'	44° 43'	-0 09	-1 25	-0.1	0.0	2.4	3.4	2.2	
4819	Sao Sebastiao	23° 49'	45° 24'	-0 28	-1 24	*0.94	*1.00	2.3	3.3	2.2	
4821	SANTOS	23° 57'	46° 19'	Daily predictions, p.288				2.6	3.8	2.4	
4823	Cananeia	25° 01'	47° 56'	+1 09	-1 09	+0.4	+0.2	2.7	4.1	2.6	
4825	Paranagua	25° 31'	48° 27'	+1 51	-1 32	+1.8	+0.2	4.1	6.0	3.2	
4827	Sao Francisco do Sul	26° 15'	48° 38'	+0 38	--	+0.8	-0.1	3.4	4.8	2.6	
4829	Itajai	26° 54'	48° 39'	-0 08	-0 16	(*0.76+0.4)		1.9	2.8	2.1	
4831	Porto Belo	27° 09'	48° 33'	-0 38	-0 28	*0.74	*0.74	1.8	2.5	1.7	
4833	Florianopolis	27° 36'	48° 34'	-0 14	+0 15	*0.69	*0.70	1.7	2.4	1.6	
4835	Imbituba	28° 14'	48° 39'	-0 17	-1 10	*0.54	*0.50	1.4	2.0	1.2	
4837	Laguna	28° 30'	48° 47'	+1 10	-1 31	(*0.32+0.4)		0.8	1.2	1.1	
4839	Barra do Rio Grande <18> †	32° 10'	52° 05'	--	--	--	--	--	0.8	0.3	
URUGUAY											
4841	Montevideo	34° 55'	56° 13'	-5 10	-7 11	(*0.52+1.6)		1.1	1.4	3.0	
4843	Colonia, Rio de la Plata	34° 28'	57° 51'	+0 17	-0 33	(*0.52+1.2)		1.1	1.3	2.6	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	ARGENTINA Time meridian, 45° W	South	West	h m	h m	ft	ft	ft	ft	ft	
on Buenos Aires, p.292											
4845	Rio de la Plata										
4845	BUENOS AIRES	34° 34'	58° 23'					Daily predictions	2.1	2.5	
4847	La Plata	34° 50'	57° 53'	-1 50	-2 04	+0.2	+0.6	1.7	2.0	3.0	
4849	Banco Chico	34° 50'	57° 30'	-3 00	-3 24	+0.8	+0.8	2.1	2.5	3.4	
4851	Banco Cuirassier	35° 06'	57° 08'	-5 25	-5 39	+0.8	+0.8	2.1	2.5	3.4	
4853	Punta Piedras	35° 26'	57° 07'	-7 10	-7 23	+2.2	+1.1	3.2	3.8	4.2	
4855	Punta Norte del Cabo San Antonio <17>	36° 18'	56° 47'	-8 50	-9 26	+1.2	+0.3	3.0	3.7	3.3	
4857	Mar del Plata <17>	38° 03'	57° 33'	-0 02	+0 14	+0.7	+0.2	2.6	3.0	3.0	
4859	Quequen <17>	38° 35'	58° 42'	-0 18	-0 22	+1.5	-0.3	3.9	4.2	3.2	
on Puerto Ingeniero White, p.296											
4861	Faro Recalada	39° 00'	61° 16'	-0 48	-0 28	-4.9	-1.3	6.5	7.1	5.3	
4863	Monte Hermoso	38° 59'	61° 41'	-0 46	-0 40	-3.4	-1.2	7.9	9.1	6.2	
on Comodoro Rivadavia, p.300											
4891	Golfo San Matias										
4891	Caleta de los Loros	41° 02'	64° 06'	+7 14	+7 08	*1.45	*1.39	20.3	24.0	14.8	
4893	Puerto San Antonio	40° 48'	64° 52'	+7 30	+7 23	(*1.57-1.6)		21.9	25.6	14.6	
on Golfo San Jose											
4895	San Roman	42° 15'	64° 14'	+7 15	+7 18	(*1.42-1.1)		19.8	23.4	13.5	
4897	Pueyrredon (Fondeadero)	42° 24'	64° 09'	+7 46	+7 40	(*1.52-2.2)		21.2	24.6	13.5	
4899	La Argentina (Fondeadero)	42° 23'	64° 34'	+7 04	+6 58	*1.31	*1.36	18.0	23.3	13.5	
4901	Punta Norte	42° 05'	63° 46'	+6 50	+6 44	-0.8	-1.4	14.5	17.0	9.5	
4903	Caleta Valdes	42° 31'	63° 36'	+5 04	+4 58	-5.2	-1.9	10.6	12.4	6.7	
4905	Punta Delgada	42° 46'	63° 38'	+4 08	+4 02	-5.8	-2.0	10.1	11.7	6.4	
on Golfo Nuevo											
4907	Punta Ninfas (Fondeadero)	42° 57'	64° 25'	+2 48	+3 31	-2.3	-1.0	12.6	15.4	8.6	
4909	Puerto Piramides	42° 35'	64° 17'	+2 56	+3 33	-2.7	-1.3	12.5	15.0	8.3	
4911	Puerto Madryn	42° 46'	65° 02'	+3 08	+3 42	-0.8	-0.1	13.2	16.0	9.8	
4913	Bahia Engano	43° 20'	65° 04'	+2 06	+2 00	-2.7	-1.3	12.5	15.2	8.2	
4915	Isla Escondida	43° 43'	65° 17'	+2 10	+2 05	-3.3	-0.3	10.9	13.1	8.5	
4917	Bahia Janssen	44° 02'	65° 14'	+1 48	+2 03	-4.1	-1.9	11.7	13.9	7.3	
4919	Cabo Raso	44° 20'	65° 14'	+1 41	+1 26	-4.8	-1.6	10.7	12.4	7.0	
4921	Bahia Cruz	44° 27'	65° 19'	+2 13	+2 07	-6.1	-2.1	9.9	11.5	6.2	
4923	Santa Elena, Puerto	44° 31'	65° 22'	+1 45	+1 40	-3.1	-0.4	11.2	13.6	8.5	
4925	Bahia Camarones	44° 54'	65° 36'	+1 10	+1 14	-2.3	+0.1	11.5	13.7	9.2	
on Golfo San Jorge											
4927	Caleta Leones	45° 03'	65° 37'	+1 11	+1 05	-0.7	-0.2	13.4	14.7	9.8	
4929	Bahia Gil (Caleta Horno)	45° 02'	65° 41'	+0 42	+0 36	-1.7	+0.3	11.9	14.1	9.6	
4931	Puerto Melo	45° 01'	65° 50'	+0 27	+0 24	-1.5	+0.1	12.3	14.6	9.6	
4933	Isla Tova	45° 06'	65° 59'	+0 27	+0 24	-1.5	+0.1	12.3	14.6	9.6	
4935	Bahia Bustamante	45° 07'	66° 32'	+0 28	+0 23	-0.8	+0.7	12.4	14.7	10.2	
4937	COMODORO RIVADAVIA	45° 52'	67° 29'					Daily predictions	14.0	16.3	10.3
4939	Cabo Blanco	47° 12'	65° 45'	-1 15	-1 20	-2.3	-0.3	11.9	13.2	9.0	
4941	Puerto Deseado	47° 45'	65° 55'	-2 52	-2 44	-0.6	+1.0	12.4	14.5	10.5	
4943	Bahia Oso Marino	47° 56'	65° 48'	-3 35	-3 40	-1.2	+1.2	11.5	14.1	10.3	
4945	Bahia de los Nodales	48° 01'	65° 57'	-3 01	-3 06	-1.2	+0.1	12.6	15.3	9.7	
4947	Bahia Laura	48° 23'	66° 29'	-5 28	-5 28	+6.7	-1.9	22.5	25.4	12.7	
4949	Bahia San Julian (Punta Pena)	49° 15'	67° 40'	-4 58	-5 04	(*1.40-1.4)		19.5	23.6	13.0	
on Punta Loyola, p.304											
4951	Santa Cruz (Punta Quilla)	50° 07'	68° 25'	+0 43	+0 44	+0.2	+0.1	26.0	32.4	20.4	
4953	Ria Coig	50° 57'	69° 10'	-0 05	-0 04	0.0	-0.7	26.6	32.2	19.9	
4955	PUNTA LOYOLA	51° 36'	69° 01'					Daily predictions	25.9	32.4	20.3
4957	Rio Gallegos (Reducción Beacon)	51° 37'	69° 13'	+0 21	+0 30	+4.2	+1.1	29.0	36.2	22.9	
4959	Cabo Virgenes	52° 21'	68° 22'	-0 36	-0 55	-2.1	0.0	23.8	29.8	19.2	
on Tierra del Fuego <19>											
4961	Bahia San Sebastian	53° 10'	68° 30'	-7 50	-7 55	*1.69	*1.91	22.8	28.6	17.7	
4963	Rio Grande (Muelle)	53° 48'	67° 41'	-7 50	-7 55	*1.15	*1.18	15.8	19.2	11.8	
4965	Cabo San Pablo	54° 17'	66° 42'	-8 48	-8 53	*1.17	*1.27	16.0	19.3	12.2	
on Puerto Ingeniero White, p.296											
4967	Bahia Thetis	54° 38'	65° 15'	+1 00	+1 07	-2.0	-0.6	8.7	10.6	7.2	

Endnotes can be found at the end of table 2.

TABLE 2 – TIDAL DIFFERENCES AND OTHER CONSTANTS

No.	PLACE	POSITION		DIFFERENCES				RANGES		Mean Tide Level	
		Latitude	Longitude	Time		Height		Mean	Spring		
				High Water	Low Water	High Water	Low Water				
	SOUTH ATLANTIC OCEAN ISLANDS Time meridian, 60° W	South	West	h m	h m	ft	ft	ft	ft	ft	
				on Pictou, p.8							
4969	<i>Falkland Islands</i> Port Louis (Berkeley Sound)	51° 33'	58° 09'	+7 50	+7 47	-0.9	-1.0	3.3	4.2	3.0	
4971	Stanley Harbor	51° 42'	57° 51'	+7 51	+7 48	-1.0	-1.0	3.2	4.2	2.9	
4973	<i>South Georgia</i> Royal Bay (Moltke Harbor)	54° 31'	36° 01'	+9 58	+10 19	*0.36	*0.13	1.7	2.3	1.2	
4975	Leith Harbor	54° 08'	36° 41'	+9 15	+9 35	*0.64	*0.65	2.0	2.7	2.5	
	Time meridian, local										
4977	<i>South Orkneys</i> Scotia Bay, Laurie Island	60° 44'	44° 39'	+8 21	+8 32	-0.3	-0.6	3.5	5.0	3.5	
4979	<i>South Shetlands</i> Port Foster, Deception Island	62° 58'	60° 34'	+8 26	+8 38	0.0	-0.1	3.3	4.3	3.9	
	Time meridian, 45° W										
4981	Admiralty Bay	62° 03'	58° 24'	+9 49	+10 05	-0.5	-0.4	3.1	4.4	3.5	

Endnotes can be found at the end of table 2.

ENDNOTES

* RATIO. If the ratio is accompanied by a correction factor multiply the heights of the high and low waters at the reference station by the ratio and then apply the correction factor. See note and example on pages 309 and 310.

- † The tide at this location is chiefly diurnal. SEE CAUTION NOTE ON PAGE 309.
- <1> Neap low water falls lower than spring low water.
- <2> Wharves are dry at low water.
- <3> There is a bore in the Petitcodiac River. It arrives at Moncton about 1h 38m before high water at St. John: its height is about 3 to 3 1/2 feet on average spring tides, but it sometimes exceeds 5 feet on highest tides. On small tides it is not much more than a large ripple.
- <4> The Reversing Falls at St. John—The most turbulence in the gorge occurs on days when the tides are largest. On largest tides the outward fall is between 15 and 16 1/2 feet and is accompanied by a greater turbulence than the inward fall which is between 11 and 12 1/2 feet. The outward fall is at its greatest between 2 hours before and 1 hour after low water at St John: the inward fall is greater just before the time of high water.
- <5> For Eastern Standard, time subtract one hour from the predictions obtained using these differences.
- <6> Low water time difference is +2h 47m. SEE CAUTION NOTE ON PAGE 321.
- <7> Tidal information applies only during low river stages.
- <8> Values for the Hudson River above the George Washington Bridge are based upon averages for the six months May to October, when the freshwater discharge is at a minimum.
- <9> In Albemarle and Pamlico Sounds, except near the inlets, the periodic tide has a mean range of less than 0.5 foot.
- <11> In Choctawhatchee and Perdido Bays the periodic tide has a mean range of less than 0.5 foot.
- <12> At New Orleans the diurnal range of the tide during low river stages averages 0.8 foot. There is no periodic tide at high river stages.
- <13> For places on the Pacific coast, see "Tide Tables, West Coast of North and South America."
- <14> Inside, in the various bays, except near the inlets, the periodic tide has a mean range of less than 0.5 foot.
- <15> Spring range is given instead of diurnal range.
- <16> A "Pororoca", a bore, reported to vary from 5 to 15 feet at spring tides, occurs in the Araguari, Guama and Guajara Rivers.
- <17> Predictions will be approximate.
- <18> Diurnal range is given instead of spring range.
- <19> For places in Magellan Strait, on the south coast of Tierra del Fuego and on the Pacific coast, see "Tide Tables, West Coast of North and South America."
- <20> The time differences should be applied only to the higher high and the lower low water times of the reference station.
- <21> From Oak Hill southward in Mosquito Lagoon the periodic tide is negligible.
- <22> In Indian River north of Palm Bay, in Banana River and in Banana Creek, the periodic tides are negligible.
- <24> The periodic tide is negligible, at this location and above.
- <25> Data is for low river levels. At high levels the tidal range is reduced.
- <26> The periodic range of the tide is negligible at this location.
- <27> The periodic range of the tide is negligible inside Sugarloaf Sound.
- <29> "The times listed for this reference station are the Greenwich Intervals for high water and low water respectively. Please see the discussion at the beginning of Table 2 under the heading "Time differences".

TABLE 3. —HEIGHT OF TIDE AT ANY TIME

EXPLANATION OF TABLE

Although the footnote of table 3 may contain sufficient explanation for finding the height of tide at any time, two examples are given here to illustrate its use.

Example 1.—Find the height of the tide at 0755 at New York (The Battery), N.Y., on a day when the predicted tides from table 1 are given as:

Low Water		High Water	
Time h.m.	Height ft	Time h.m.	Height ft
0522	0.1	1114	4.2
1741	0.6	2310	4.1

An inspection of the above example shows that the desired time falls between the two morning tides

The duration of rise is $11^{\text{h}}\ 14^{\text{m}} - 5^{\text{h}}\ 22^{\text{m}} = 5^{\text{h}}\ 52^{\text{m}}$.

The time after low water for which the height is required is $7^{\text{h}}\ 55^{\text{m}} - 5^{\text{h}}\ 22^{\text{m}} = 2^{\text{h}}\ 33^{\text{m}}$.

The range of tide is $4.2 - 0.1 = 4.1$ feet.

The duration of rise or fall in table 3 is given in heavy-faced type for each 20 minutes from $4^{\text{h}}\ 10^{\text{m}}$ to $10^{\text{h}}\ 40^{\text{m}}$. The nearest tabular value to $5^{\text{h}}\ 52^{\text{m}}$, the above duration of rise, is $6^{\text{h}}\ 00^{\text{m}}$; and on the horizontal line of $6^{\text{h}}\ 00^{\text{m}}$, the nearest tabular time to $2^{\text{h}}\ 33^{\text{m}}$ after low water for which the height is required is $2^{\text{h}}\ 36^{\text{m}}$. Following down the column in which this $2^{\text{h}}\ 36^{\text{m}}$ is found to its intersection with the line of the range 4.0 feet (the nearest tabular value to the above range of 4.1 feet), the correction is found to be 1.6 feet, which being reckoned from low water, must be added, making $0.1 + 1.6 = 1.7$ feet or 52 centimeters which is the required height above mean lower low water, the datum for New York.

Example 2.—Find the height of the tide at 0300 at Somewhere, U.S.A. on a day when the predicted tides are given as:

High Water		Low Water	
Time h.m.	Height ft	Time h.m.	Height ft
0012	11.3	0638	-2.0
1251	11.0	1853	-0.8

The duration of fall is $6^{\text{h}}\ 38^{\text{m}} - 00^{\text{h}}\ 12^{\text{m}} = 6^{\text{h}}\ 26^{\text{m}}$.

The time after high water for which the height is required is $3^{\text{h}}\ 00^{\text{m}} - 00^{\text{h}}\ 12^{\text{m}} = 2^{\text{h}}\ 48^{\text{m}}$.

The range of tide is $11.3 - (-2.0) = 13.3$ feet.

Entering table 3 at the duration of fall of $6^{\text{h}}\ 20^{\text{m}}$, which is the nearest value to $6^{\text{h}}\ 26^{\text{m}}$, the nearest value on the horizontal line to $2^{\text{h}}\ 48^{\text{m}}$ is $2^{\text{h}}\ 45^{\text{m}}$ after high water. Follow down this column to its intersection with a range of 13.5 feet which is the nearest tabular value to 13.3 feet, one obtains 5.3 which, being calculated from high water, must be subtracted from it. The approximate height at $03^{\text{h}}\ 00^{\text{m}}$ is, therefore, $11.3 - 5.3 = 6.0$ feet or 183 centimeters.

When the duration of rise or fall is greater than $10^{\text{h}}\ 40^{\text{m}}$, enter the table with one-half the given duration and with one-half the time from the nearest high or low water; but if the duration of rise or fall is less than 4 hours, enter the table with double the given duration and with double the time from the nearest high or low water.

TABLE 3.—HEIGHT OF TIDE AT ANY TIME.

Similarly, when the range of tide is greater than 20 feet, enter the table with one-half the given range. The tabular correction should then be doubled before applying it to the given high or low water height. If the range of tide is greater than 40 feet, take one-third of the range and multiply the tabular correction by 3.

If the height at any time is desired for a place listed in table 2 predictions of the high and low waters for the day in question should be obtained by the use of the difference given for the place in that table. Having obtained these predictions, the height for any intermediate time is obtained in the same manner as illustrated in the foregoing example.

GRAPHIC METHOD

If the height of the tide is required for a number of times on a certain day the full tide curve for the day may be obtained by the *one-quarter, one-tenth rule*. The procedure is as follows:

1. On cross-section paper plot the high and low water points in the order of their occurrence for the day, measuring time horizontally and height vertically. These are the basic points for the curve.
2. Draw light straight lines connecting the points representing successive high and low waters.
3. Divide each of these straight lines into four equal parts. The halfway point of each line gives another point for the curve.
4. At the quarter point adjacent to high water draw a vertical line above the point and at the quarter point adjacent to low water draw a vertical line below the point, making the length of these lines equal to one-tenth of the range between the high and low waters used. The points marking the ends of these vertical lines give two additional intermediate points for the curve.
5. Draw a smooth curve through the points of high and low waters and the intermediate points, making the curve well rounded near high and low waters. This curve will approximate the actual tide curve and heights for any time of the day may be readily scaled from it.

Caution.—Both methods presented are based on the assumption that the rise and fall conform to simple cosine curves. Therefore, the heights obtained will be approximate. The roughness of approximation will vary as the tide curve differs from a cosine curve.

An example of the use of the graphical method is illustrated below. Using the same predicted tides as in example 2, the approximate height at 3^h 00^m could be determined as shown below.

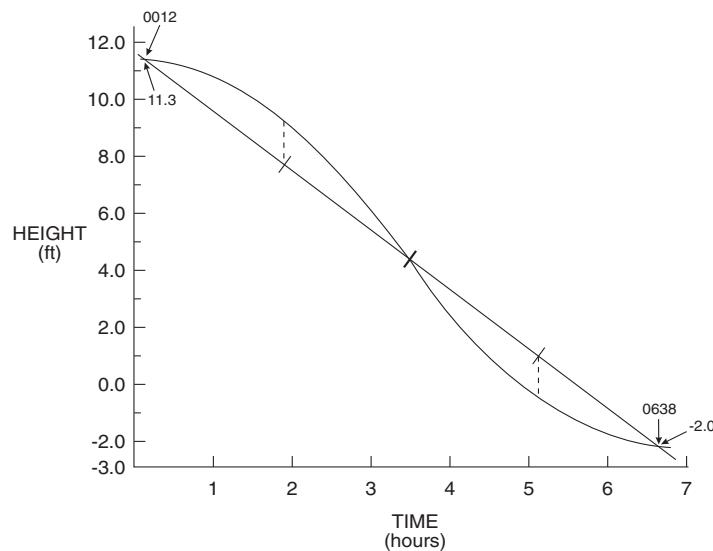


TABLE 3.—HEIGHT OF TIDE AT ANY TIME

		Time from the nearest high water or low water																
Duration of rise or fall, see footnote	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.	h. m.
4 10	0 08	0 16	0 24	0 32	0 40	0 48	0 56	1 04	1 12	1 20	1 28	1 36	1 44	1 52	2 00	2 10	2 20	2 30
4 20	0 09	0 17	0 26	0 35	0 43	0 52	1 01	1 09	1 18	1 27	1 35	1 44	1 53	2 01	2 10	2 20	2 30	
4 40	0 09	0 19	0 28	0 37	0 47	0 56	1 05	1 15	1 24	1 33	1 43	1 52	2 01	2 11	2 20	2 30		
5 00	0 10	0 20	0 30	0 40	0 50	1 00	1 10	1 20	1 30	1 40	1 50	2 00	2 10	2 20	2 30			
5 20	0 11	0 21	0 32	0 43	0 53	1 04	1 15	1 25	1 36	1 47	1 57	2 08	2 19	2 29	2 40			
5 40	0 11	0 23	0 34	0 45	0 57	1 08	1 19	1 31	1 42	1 53	2 05	2 16	2 27	2 39	2 50			
6 00	0 12	0 24	0 36	0 48	1 00	1 12	1 24	1 36	1 48	2 00	2 12	2 24	2 36	2 48	3 00			
6 20	0 13	0 25	0 38	0 51	1 03	1 16	1 29	1 41	1 54	2 07	2 19	2 32	2 45	2 57	3 10			
6 40	0 13	0 27	0 40	0 53	1 07	1 20	1 33	1 47	2 00	2 13	2 27	2 40	2 53	3 07	3 20			
7 00	0 14	0 28	0 42	0 56	1 10	1 24	1 38	1 52	2 06	2 20	2 34	2 48	3 02	3 16	3 30			
7 20	0 15	0 29	0 44	0 59	1 13	1 28	1 43	1 57	2 12	2 27	2 41	2 56	3 11	3 25	3 40			
7 40	0 15	0 31	0 46	1 01	1 17	1 32	1 47	2 03	2 18	2 33	2 49	3 04	3 19	3 35	3 50			
8 00	0 16	0 32	0 48	1 04	1 20	1 36	1 52	2 08	2 24	2 40	2 56	3 12	3 28	3 44	4 00			
8 20	0 17	0 33	0 50	1 07	1 23	1 40	1 57	2 13	2 30	2 47	3 03	3 20	3 37	3 53	4 10			
8 40	0 17	0 35	0 52	1 09	1 27	1 44	2 01	2 19	2 36	2 53	3 11	3 28	3 45	4 03	4 20			
9 00	0 18	0 36	0 54	1 12	1 30	1 48	2 06	2 24	2 42	3 00	3 18	3 36	3 54	4 12	4 30			
9 20	0 19	0 37	0 56	1 15	1 33	1 52	2 11	2 29	2 48	3 07	3 25	3 44	4 03	4 21	4 40			
9 40	0 19	0 39	0 58	1 17	1 37	1 56	2 15	2 35	2 54	3 13	3 33	3 52	4 11	4 31	4 50			
10 00	0 20	0 40	1 00	1 20	1 40	2 00	2 20	2 40	3 00	3 20	3 40	4 00	4 20	4 40	5 00			
10 20	0 21	0 41	1 02	1 23	1 43	2 04	2 25	2 45	3 06	3 27	3 47	4 08	4 29	4 49	5 10			
10 40	0 21	0 43	1 04	1 25	1 47	2 08	2 29	2 51	3 12	3 33	3 55	4 16	4 37	4 59	5 20			
		Correction to height																
Range of tide, see footnote	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.	Ft.
0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
1.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5
1.5	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.0
2.0	0.0	0.0	0.0	0.1	0.1	0.2	0.3	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.2
2.5	0.0	0.0	0.1	0.1	0.2	0.2	0.3	0.4	0.5	0.6	0.7	0.9	1.0	1.1	1.2	1.3	1.4	1.4
3.0	0.0	0.0	0.1	0.1	0.2	0.3	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.3	1.5	1.6	1.8	1.8
3.5	0.0	0.0	0.1	0.2	0.2	0.3	0.4	0.6	0.7	0.9	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.2
4.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.4
4.5	0.0	0.0	0.1	0.2	0.3	0.4	0.6	0.7	0.9	1.1	1.3	1.6	1.8	2.0	2.2	2.4	2.6	2.6
5.0	0.0	0.1	0.1	0.2	0.3	0.5	0.6	0.8	1.0	1.2	1.5	1.7	2.0	2.2	2.5	2.7	2.8	2.8
5.5	0.0	0.1	0.1	0.2	0.4	0.5	0.7	0.9	1.1	1.4	1.6	1.9	2.2	2.5	2.8	3.0	3.2	3.2
6.0	0.0	0.1	0.1	0.3	0.4	0.6	0.8	1.0	1.2	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.6
6.5	0.0	0.1	0.2	0.3	0.4	0.6	0.8	1.1	1.3	1.6	1.9	2.2	2.6	2.9	3.2	3.5	3.8	3.8
7.0	0.0	0.1	0.2	0.3	0.5	0.7	0.9	1.2	1.4	1.8	2.1	2.4	2.8	3.1	3.5	3.8	4.2	4.2
7.5	0.0	0.1	0.2	0.3	0.5	0.7	1.0	1.2	1.5	1.9	2.2	2.6	3.0	3.4	3.8	4.2	4.6	4.6
8.0	0.0	0.1	0.2	0.3	0.5	0.8	1.0	1.3	1.6	2.0	2.4	2.8	3.2	3.6	4.0	4.4	4.8	4.8
8.5	0.0	0.1	0.2	0.4	0.6	0.8	1.1	1.4	1.8	2.1	2.5	2.9	3.4	3.8	4.2	4.6	5.0	5.0
9.0	0.0	0.1	0.2	0.4	0.6	0.9	1.2	1.5	1.9	2.2	2.7	3.1	3.6	4.0	4.5	4.9	5.3	5.3
9.5	0.0	0.1	0.2	0.4	0.6	0.9	1.2	1.6	2.0	2.4	2.8	3.3	3.8	4.3	4.8	5.2	5.6	5.6
10.0	0.0	0.1	0.2	0.4	0.7	1.0	1.3	1.7	2.1	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.0
10.5	0.0	0.1	0.3	0.5	0.7	1.0	1.3	1.7	2.2	2.6	3.1	3.6	4.2	4.7	5.2	5.7	6.2	6.2
11.0	0.0	0.1	0.3	0.5	0.7	1.1	1.4	1.7	2.3	2.8	3.3	3.8	4.4	4.9	5.5	6.0	6.5	6.5
11.5	0.0	0.1	0.3	0.5	0.8	1.1	1.5	1.8	2.3	2.9	3.4	4.0	4.6	5.1	5.8	6.3	6.8	6.8
12.0	0.0	0.1	0.3	0.5	0.8	1.1	1.5	1.9	2.5	3.0	3.6	4.1	4.8	5.4	6.0	6.6	7.2	7.2
12.5	0.0	0.1	0.3	0.5	0.8	1.2	2.6	1.9	2.6	3.1	3.7	4.3	5.0	5.6	6.2	6.8	7.4	7.4
13.0	0.0	0.1	0.3	0.6	0.9	1.2	1.7	2.2	2.7	3.2	3.9	4.5	5.1	5.8	6.5	7.2	7.8	7.8
13.5	0.0	0.1	0.3	0.6	0.9	1.3	1.7	2.2	2.8	3.4	4.0	4.7	5.3	6.0	6.8	7.5	8.0	8.0
14.0	0.0	0.2	0.3	0.6	0.9	1.3	1.8	2.3	2.9	3.5	4.2	4.8	5.5	6.3	7.0	7.7	8.2	8.2
14.5	0.0	0.2	0.4	0.6	1.0	1.4	1.9	2.4	3.0	3.6	4.3	5.0	5.7	6.5	7.2	7.9	8.5	8.5
15.0	0.0	0.2	0.4	0.6	1.0	1.4	1.9	2.5	3.1	3.8	4.4	5.2	5.9	6.7	7.5	8.2	8.8	8.8
15.5	0.0	0.2	0.4	0.7	1.0	1.5	2.0	2.6	3.2	3.9	4.6	5.4	6.1	6.9	7.8	8.5	9.2	9.2
16.0	0.0	0.2	0.4	0.7	1.1	1.5	2.1	2.6	3.3	4.0	4.7	5.5	6.4	7.3	8.3	9.0	9.5	9.5
16.5	0.0	0.2	0.4	0.7	1.1	1.6	2.1	2.7	3.4	4.1	4.9	5.7	6.5	7.4	8.2	9.0	9.8	9.8
17.0	0.0	0.2	0.4	0.7	1.1	1.6	2.2	2.8	3.5	4.2	5.0	5.9	6.7	7.6	8.5	9.3	10.0	10.0
17.5	0.0	0.2	0.4	0.8	1.2	1.7	2.2	2.9	3.6	4.4	5.2	6.0	6.9	7.8	8.6	9.4	10.2	10.2
18.0	0.0	0.2	0.4	0.8	1.2	1.7	2.3	3.0	3.7	4.5	5.3	6.2	7.1	8.1	9.0	9.9	10.8	10.8
18.5	0.1	0.2	0.5	0.8	1.2	1.8	2.4	3.1	3.8	4.6	5.5	6.4	7.3	8.3	9.2	10.1	11.0	11.0
19.0	0.1	0.2	0.5	0.8	1.3	1.8	2.4	3.1	3.9	4.8	5.6	6.6	7.5	8.5	9.4	10.3	11.2	11.2
19.5	0.1	0.2	0.5	0.8	1.3	1.9	2.5	3.2	4.0	4.9	5.8	6.7	7.7	8.7	9.6	10.5	11.4	11.4
20.0	0.1	0.2	0.5	0.9	1.3	1.9	2.6	3.3	4.1	5.0	5.9	6.9	7.9	8.9	9.8	10.7	11.6	11.6

Obtain from the predictions the high water and low water, one of which is before and the other after the time for which the height is required. The difference between the times of occurrence of these tides is the duration of rise or fall, and the difference between their heights is the range of tide for the above table. Find the difference between the nearest high or low water and the time for which the height is required.

Enter the table with the duration of rise or fall, printed in heavy-faced type, which most nearly agrees with the actual value, and on that horizontal line find the time from the nearest high or low water which agrees most nearly with the corresponding actual difference. The correction sought is in the column directly below, on the line with the range of tide.

When the nearest tide is high water, subtract the correction.

When the nearest tide is high water, subtract the correction.

TABLE 4.—LOCAL MEAN TIME OF SUNRISE AND SUNSET

EXPLANATION OF TABLE

This table gives the local mean time of the rising and setting of the Sun's upper limb for every fifth day of the year. The times were computed for the instant when the true zenith distance of the Sun's center is $90^{\circ} 50', 34'$ having been allowed for horizontal refraction and $16'$ for semidiameter. No allowance has been made for elevation of the observer.

Because of the sensible variations which may be made in the time of rising or setting of the Sun by a difference in elevation of the observer, and by changes in the refraction, any great refinement in the interpolation of intermediate dates or latitudes in this table is unnecessary.

The value obtained from table 4 may be converted to standard time by means of table 5, which follows it.

TABLE 4.-SUNRISE AND SUNSET, 2011

Date	0°		5° N.		10° N.		15° N.		20° N.		25° N.	
	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.
Jan.	06 00	18 07	06 08	17 59	06 17	17 50	06 26	17 41	06 35	17 32	06 45	17 22
	06 02	18 09	06 10	18 01	06 19	17 53	06 27	17 44	06 36	17 35	06 46	17 25
	06 04	18 12	06 12	18 04	06 20	17 55	06 29	17 47	06 37	17 38	06 47	17 29
	06 06	18 13	06 14	18 06	06 21	17 58	06 29	17 50	06 38	17 42	06 47	17 33
	06 08	18 15	06 15	18 08	06 22	18 00	06 30	17 53	06 38	17 45	06 46	17 36
	06 09	18 16	06 16	18 09	06 23	18 02	06 30	17 55	06 37	17 48	06 45	17 40
	06 10	18 17	06 16	18 11	06 23	18 04	06 29	17 58	06 36	17 51	06 43	17 44
Feb.	06 10	18 17	06 16	18 12	06 22	18 06	06 28	18 00	06 34	17 54	06 41	17 47
	06 11	18 18	06 16	18 13	06 21	18 07	06 26	18 02	06 32	17 57	06 38	17 51
	06 11	18 18	06 15	18 13	06 20	18 09	06 25	18 04	06 29	17 59	06 35	17 54
	06 10	18 17	06 14	18 13	06 18	18 09	06 22	18 05	06 26	18 01	06 31	17 57
	06 10	18 16	06 13	18 13	06 16	18 10	06 20	18 07	06 23	18 03	06 27	18 00
Mar.	06 09	18 15	06 11	18 13	06 14	18 10	06 17	18 08	06 19	18 05	06 22	18 02
	06 08	18 14	06 10	18 13	06 12	18 11	06 13	18 09	06 15	18 07	06 18	18 05
	06 07	18 13	06 08	18 12	06 09	18 11	06 10	18 10	06 11	18 09	06 13	18 07
	06 05	18 12	06 06	18 11	06 06	18 11	06 07	18 10	06 07	18 10	06 08	18 10
	06 04	18 10	06 04	18 10	06 03	18 11	06 03	18 11	06 03	18 11	06 02	18 12
	06 02	18 09	06 01	18 10	06 00	18 11	05 59	18 12	05 58	18 13	05 57	18 14
Apr.	06 01	18 07	05 59	18 09	05 58	18 11	05 56	18 12	05 54	18 14	05 52	18 16
	05 59	18 06	05 57	18 08	05 55	18 10	05 52	18 13	05 50	18 16	05 47	18 18
	05 58	18 04	05 55	18 07	05 52	18 10	05 49	18 14	05 46	18 17	05 42	18 21
	05 57	18 03	05 53	18 07	05 49	18 11	05 46	18 14	05 42	18 18	05 37	18 23
	05 55	18 02	05 51	18 06	05 47	18 11	05 43	18 15	05 38	18 20	05 33	18 25
	05 54	18 01	05 50	18 06	05 45	18 11	05 40	18 16	05 34	18 22	05 29	18 27
May	05 54	18 01	05 48	18 06	05 43	18 12	05 37	18 17	05 31	18 23	05 25	18 30
	05 53	18 00	05 47	18 06	05 41	18 12	05 35	18 19	05 28	18 25	05 21	18 32
	05 53	18 00	05 46	18 06	05 40	18 13	05 33	18 20	05 26	18 27	05 18	18 35
	05 53	18 00	05 46	18 07	05 39	18 14	05 32	18 21	05 24	18 29	05 15	18 38
	05 53	18 00	05 46	18 08	05 38	18 15	05 30	18 23	05 22	18 31	05 13	18 40
	05 54	18 01	05 46	18 08	05 38	18 16	05 30	18 25	05 21	18 33	05 12	18 43
June	05 55	18 02	05 46	18 10	05 38	18 19	05 29	18 28	05 20	18 37	05 10	18 47
	05 56	18 03	05 47	18 12	05 39	18 20	05 29	18 29	05 20	18 39	05 10	18 49
	05 57	18 04	05 48	18 13	05 39	18 22	05 30	18 31	05 20	18 40	05 10	18 51
	05 58	18 05	05 49	18 14	05 40	18 23	05 31	18 32	05 21	18 42	05 11	18 52
	05 59	18 06	05 50	18 15	05 41	18 24	05 32	18 33	05 22	18 43	05 12	18 53
	06 00	18 07	05 51	18 16	05 43	18 25	05 33	18 34	05 24	18 43	05 13	18 54
July	06 01	18 08	05 52	18 17	05 44	18 25	05 35	18 34	05 25	18 44	05 15	18 54
	06 02	18 09	05 54	18 17	05 45	18 26	05 36	18 34	05 27	18 43	05 17	18 53
	06 02	18 10	05 54	18 17	05 46	18 26	05 38	18 34	05 29	18 43	05 19	18 52
	06 03	18 10	05 55	18 17	05 47	18 25	05 39	18 33	05 31	18 42	05 22	18 51
	06 03	18 10	05 56	18 17	05 48	18 25	05 41	18 32	05 33	18 40	05 24	18 49
	06 03	18 10	05 56	18 17	05 49	18 23	05 42	18 31	05 35	18 38	05 26	18 46
Aug.	06 03	18 10	05 56	18 16	05 50	18 22	05 43	18 29	05 36	18 36	05 29	18 43
	06 02	18 09	05 56	18 15	05 51	18 20	05 44	18 26	05 38	18 33	05 31	18 40
	06 01	18 08	05 56	18 13	05 51	18 18	05 45	18 24	05 40	18 30	05 33	18 36
	06 00	18 07	05 56	18 12	05 51	18 16	05 46	18 21	05 41	18 26	05 35	18 32
	05 59	18 06	05 55	18 10	05 51	18 14	05 47	18 18	05 42	18 22	05 38	18 27
	05 58	18 04	05 54	18 08	05 51	18 11	05 47	18 14	05 44	18 18	05 40	18 22
Sept.	05 56	18 03	05 53	18 05	05 51	18 08	05 48	18 11	05 45	18 14	05 41	18 17
	05 55	18 01	05 52	18 03	05 50	18 05	05 48	18 07	05 46	18 09	05 43	18 12
	05 53	17 59	05 51	18 01	05 50	18 02	05 48	18 03	05 47	18 05	05 45	18 07
	05 51	17 57	05 50	17 58	05 50	17 59	05 49	18 00	05 48	18 00	05 47	18 01
	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56
	05 48	17 54	05 48	17 53	05 49	17 53	05 49	17 52	05 50	17 51	05 51	17 50
Oct.	05 46	17 52	05 47	17 51	05 49	17 50	05 50	17 48	05 51	17 47	05 53	17 45
	05 44	17 51	05 46	17 49	05 48	17 47	05 50	17 45	05 53	17 42	05 55	17 40
	05 43	17 50	05 46	17 47	05 48	17 44	05 51	17 41	05 54	17 38	05 57	17 35
	05 42	17 49	05 45	17 45	05 49	17 42	05 52	17 38	05 56	17 35	05 59	17 31
	05 41	17 48	05 45	17 44	05 49	17 40	05 53	17 35	05 57	17 31	06 02	17 26
	05 40	17 47	05 45	17 43	05 50	17 38	05 54	17 33	05 59	17 28	06 05	17 23
Nov.	05 40	17 47	05 45	17 42	05 51	17 36	05 56	17 31	06 02	17 25	06 08	17 19
	05 40	17 47	05 46	17 41	05 52	17 35	05 58	17 29	06 04	17 23	06 11	17 16
	05 41	17 48	05 47	17 41	05 53	17 35	06 00	17 28	06 07	17 21	06 14	17 14
	05 41	17 48	05 48	17 42	05 55	17 35	06 02	17 27	06 10	17 20	06 18	17 12
	05 42	17 50	05 50	17 42	05 57	17 35	06 05	17 27	06 13	17 19	06 21	17 11
	05 44	17 51	05 52	17 43	05 59	17 36	06 07	17 28	06 16	17 19	06 25	17 10
Dec.	05 46	17 53	05 54	17 45	06 02	17 37	06 10	17 28	06 19	17 19	06 28	17 10
	05 48	17 55	05 56	17 47	06 04	17 38	06 13	17 30	06 22	17 20	06 32	17 11
	05 50	17 57	05 58	17 49	06 07	17 40	06 16	17 31	06 25	17 22	06 35	17 12
	05 52	18 00	06 01	17 51	06 10	17 42	06 19	17 33	06 28	17 24	06 38	17 14
	05 55	18 02	06 03	17 53	06 12	17 45	06 21	17 36	06 31	17 26	06 41	17 16
	05 57	18 05	06 06	17 56	06 15	17 47	06 24	17 38	06 33	17 29	06 43	17 19
Jan.	06 00	18 07	06 08	17 59	06 17	17 50	06 26	17 41	06 35	17 32	06 45	17 22

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

361

Date	30° N.		32° N.		34° N.		36° N.		38° N.		40° N.		
	Rise h. m.	Set h. m.											
Jan.	06 56	17 11	07 00	17 06	07 05	17 02	07 11	16 56	07 16	16 51	07 22	16 45	
	06 57	17 15	07 01	17 10	07 06	17 06	07 11	17 01	07 16	16 55	07 22	16 50	
	06 57	17 19	07 01	17 14	07 06	17 10	07 11	17 05	07 16	17 00	07 21	16 54	
	06 57	17 23	07 01	17 19	07 05	17 14	07 10	17 10	07 15	17 05	07 20	17 00	
	06 55	17 27	06 59	17 23	07 03	17 19	07 08	17 15	07 12	17 10	07 17	17 06	
	06 54	17 32	06 57	17 28	07 01	17 24	07 05	17 20	07 09	17 16	07 14	17 11	
	06 51	17 36	06 54	17 33	06 58	17 29	07 02	17 25	07 06	17 22	07 10	17 17	
Feb.	06 48	17 40	06 51	17 37	06 54	17 34	06 58	17 31	07 01	17 27	07 05	17 23	
	06 44	17 44	06 47	17 42	06 50	17 39	06 53	17 36	06 56	17 33	07 00	17 29	
	06 40	17 48	06 43	17 46	06 45	17 44	06 48	17 41	06 51	17 38	06 53	17 35	
	06 36	17 52	06 38	17 50	06 40	17 48	06 42	17 46	06 44	17 44	06 47	17 41	
	06 31	17 56	06 32	17 54	06 34	17 53	06 36	17 51	06 38	17 49	06 40	17 47	
Mar.	06 25	17 59	06 27	17 58	06 28	17 57	06 29	17 55	06 31	17 54	06 33	17 52	
	06 20	18 03	06 21	18 02	06 22	18 01	06 23	18 00	06 24	17 59	06 25	17 58	
	06 14	18 06	06 15	18 06	06 15	18 05	06 16	18 04	06 16	18 04	06 17	18 03	
	06 08	18 09	06 08	18 09	06 08	18 09	06 09	18 09	06 09	18 09	06 09	18 08	
	06 02	18 12	06 02	18 13	06 02	18 13	06 01	18 13	06 01	18 13	06 01	18 14	
	05 56	18 15	05 55	18 16	05 55	18 17	05 54	18 17	05 54	18 18	05 53	18 19	
Apr.	05 50	18 18	05 49	18 19	05 48	18 20	05 47	18 21	05 46	18 23	05 45	18 24	
	05 44	18 21	05 43	18 23	05 41	18 24	05 40	18 26	05 38	18 27	05 37	18 29	
	05 38	18 25	05 37	18 26	05 35	18 28	05 33	18 30	05 31	18 32	05 29	18 34	
	05 33	18 28	05 31	18 30	05 29	18 29	05 26	18 34	05 24	18 36	05 21	18 39	
	05 27	18 31	05 25	18 33	05 22	18 36	05 20	18 38	05 17	18 41	05 14	18 44	
	05 22	18 34	05 20	18 37	05 17	18 39	05 14	18 43	05 11	18 46	05 07	18 49	
May	05 18	18 37	05 15	18 40	05 11	18 43	05 08	18 47	05 04	18 50	05 01	18 54	
	05 13	18 40	05 10	18 44	05 06	18 47	05 03	18 51	04 59	18 55	04 55	18 59	
	05 10	18 44	05 06	18 47	05 02	18 51	04 58	18 55	04 54	19 00	04 49	19 04	
	05 06	18 47	05 02	18 51	04 58	18 55	04 54	18 59	04 49	19 04	04 44	19 09	
	05 04	18 50	04 59	18 54	04 55	18 59	04 50	19 03	04 45	19 08	04 40	19 14	
	05 01	18 53	04 57	18 57	04 52	19 02	04 47	19 07	04 42	19 12	04 37	19 18	
June	05 00	18 56	04 55	19 00	04 50	19 05	04 45	19 10	04 40	19 16	04 34	19 22	
	04 59	18 58	04 54	19 03	04 49	19 08	04 44	19 13	04 38	19 19	04 32	19 25	
	04 58	19 01	04 53	19 05	04 48	19 11	04 43	19 16	04 37	19 22	04 31	19 28	
	04 58	19 02	04 54	19 07	04 48	19 13	04 43	19 18	04 37	19 24	04 31	19 30	
	04 59	19 04	04 54	19 09	04 49	19 14	04 43	19 20	04 37	19 26	04 31	19 32	
	05 00	19 05	04 55	19 10	04 50	19 15	04 45	19 21	04 39	19 26	04 32	19 33	
July	05 04	19 05	04 59	19 10	04 54	19 15	04 49	19 20	04 43	19 26	04 37	19 32	
	05 06	19 04	05 02	19 09	04 57	19 14	04 51	19 19	04 46	19 25	04 40	19 30	
	05 09	19 03	05 04	19 07	05 00	19 12	04 55	19 17	04 49	19 22	04 43	19 28	
	05 12	19 01	05 07	19 05	05 03	19 10	04 58	19 14	04 53	19 19	04 47	19 25	
	05 15	18 58	05 10	19 02	05 06	19 06	05 02	19 11	04 57	19 16	04 52	19 21	
	05 18	18 55	05 14	18 59	05 10	19 03	05 05	19 07	05 01	19 11	04 56	19 16	
Aug.	05 21	18 51	05 17	18 55	05 13	18 59	05 09	19 02	05 05	19 07	05 01	19 11	
	05 24	18 47	05 20	18 50	05 17	18 54	05 13	18 57	05 09	19 01	05 05	19 05	
	05 27	18 43	05 24	18 45	05 21	18 48	05 17	18 52	05 14	18 55	05 10	18 59	
	05 29	18 37	05 27	18 40	05 24	18 43	05 21	18 46	05 18	18 49	05 15	18 52	
	05 32	18 32	05 30	18 34	05 28	18 37	05 25	18 39	05 23	18 42	05 20	18 44	
	05 35	18 26	05 33	18 28	05 31	18 30	05 29	18 32	05 27	18 35	05 24	18 37	
Sept.	05 38	18 21	05 36	18 22	05 35	18 24	05 33	18 25	05 31	18 27	05 29	18 29	
	05 41	18 15	05 39	18 16	05 38	18 17	05 37	18 18	05 35	18 20	05 34	18 21	
	05 43	18 08	05 42	18 09	05 42	18 10	05 41	18 11	05 40	18 12	05 39	18 13	
	05 46	18 02	05 45	18 03	05 45	18 03	05 44	18 03	05 44	18 04	05 43	18 05	
	05 49	17 56	05 49	17 56	05 48	17 56	05 48	17 56	05 48	17 56	05 48	17 56	
	05 51	17 50	05 52	17 49	05 52	17 49	05 52	17 49	05 53	17 48	05 53	17 48	
Oct.	05 54	17 44	05 55	17 43	05 56	17 42	05 56	17 41	05 57	17 41	05 58	17 40	
	05 57	17 38	05 58	17 37	05 59	17 35	06 00	17 34	06 02	17 33	06 03	17 32	
	06 00	17 32	06 02	17 31	06 03	17 29	06 05	17 27	06 06	17 26	06 08	17 24	
	06 04	17 26	06 05	17 25	06 07	17 23	06 09	17 21	06 11	17 19	06 13	17 17	
	06 07	17 21	06 09	17 19	06 11	17 17	06 14	17 15	06 16	17 12	06 18	17 10	
	06 11	17 17	06 13	17 14	06 16	17 12	06 18	17 09	06 21	17 06	06 24	17 03	
Nov.	06 14	17 13	06 17	17 10	06 20	17 07	06 23	17 04	06 26	17 00	06 30	16 57	
	06 18	17 09	06 21	17 06	06 25	17 02	06 28	16 59	06 32	16 55	06 35	16 51	
	06 22	17 06	06 26	17 02	06 29	16 59	06 33	16 55	06 37	16 51	06 41	16 47	
	06 26	17 03	06 30	16 59	06 34	16 56	06 38	16 51	06 42	16 47	06 47	16 43	
	06 30	17 01	06 34	16 57	06 39	16 53	06 43	16 49	06 48	16 44	06 53	16 39	
	06 35	17 00	06 39	16 56	06 43	16 52	06 48	16 47	06 53	16 42	06 58	16 37	
Dec.	06 39	17 00	06 43	16 55	06 48	16 51	06 53	16 46	06 58	16 41	07 03	16 35	
	06 42	17 00	06 47	16 55	06 52	16 51	06 57	16 46	07 02	16 40	07 08	16 35	
	06 46	17 01	06 51	16 56	06 56	16 51	07 01	16 46	07 06	16 41	07 12	16 35	
	06 49	17 03	06 54	16 58	06 59	16 53	07 04	16 48	07 10	16 42	07 16	16 36	
	06 52	17 05	06 57	17 00	07 02	16 55	07 07	16 50	07 13	16 44	07 19	16 38	
	06 54	17 08	06 59	17 03	07 04	16 58	07 09	16 53	07 15	16 47	07 21	16 41	
Jan.	1	06 56	17 11	07 00	17 06	07 05	17 01	07 11	16 56	07 16	16 51	07 22	16 45

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

Date	42° N.		44° N.		46° N.		48° N.		50° N.		52° N.		
	Rise h. m.	Set h. m.											
Jan.	07 28	16 39	07 35	16 32	07 42	16 25	07 50	16 17	07 59	16 08	08 08	15 59	
	07 28	16 44	07 35	16 37	07 42	16 30	07 49	16 22	07 58	16 14	08 07	16 05	
	07 27	16 49	07 33	16 42	07 40	16 36	07 47	16 28	07 56	16 20	08 04	16 12	
	07 25	16 54	07 31	16 48	07 38	16 42	07 45	16 35	07 52	16 28	08 01	16 19	
	07 22	17 00	07 28	16 55	07 34	16 49	07 41	16 42	07 48	16 35	07 55	16 27	
	07 19	17 07	07 24	17 01	07 29	16 56	07 35	16 50	07 42	16 43	07 49	16 36	
	07 14	17 13	07 19	17 08	07 24	17 03	07 30	16 58	07 36	16 52	07 42	16 45	
Feb.	07 09	17 19	07 13	17 15	07 18	17 11	07 23	17 06	07 28	17 00	07 34	16 55	
	07 03	17 26	07 07	17 22	07 11	17 18	07 15	17 14	07 20	17 09	07 25	17 04	
	06 57	17 32	07 00	17 29	07 03	17 26	07 07	17 22	07 11	17 18	07 16	17 13	
	06 50	17 39	06 52	17 36	06 55	17 33	06 59	17 30	07 02	17 26	07 06	17 23	
	06 42	17 45	06 44	17 42	06 47	17 40	06 49	17 38	06 52	17 35	06 55	17 32	
Mar.	06 34	17 51	06 36	17 49	06 38	17 47	06 40	17 45	06 42	17 43	06 45	17 41	
	06 26	17 57	06 27	17 56	06 29	17 54	06 30	17 53	06 32	17 51	06 33	17 50	
	06 18	18 03	06 19	18 02	06 19	18 01	06 20	18 00	06 21	17 59	06 22	17 59	
	06 09	18 08	06 10	18 08	06 10	18 08	06 10	18 08	06 10	18 07	06 11	18 07	
	06 01	18 14	06 00	18 14	06 00	18 15	06 00	18 15	05 59	18 15	05 59	18 16	
	05 52	18 20	05 51	18 20	05 51	18 21	05 50	18 22	05 49	18 23	05 47	18 25	
Apr.	05 44	18 25	05 42	18 26	05 41	18 28	05 39	18 29	05 38	18 31	05 36	18 33	
	05 35	18 31	05 33	18 33	05 31	18 35	05 29	18 37	05 27	18 39	05 24	18 42	
	05 27	18 36	05 25	18 39	05 22	18 41	05 19	18 44	05 16	18 47	05 13	18 50	
	05 19	18 42	05 16	18 45	05 13	18 48	05 10	18 51	05 06	18 55	05 02	18 59	
	05 11	18 47	05 08	18 51	05 04	18 54	05 00	18 58	04 56	19 03	04 51	19 07	
	05 04	18 53	05 00	18 57	04 56	19 01	04 51	19 05	04 46	19 10	04 41	19 16	
May	04 57	18 58	04 52	19 03	04 48	19 07	04 43	19 12	04 37	19 18	04 31	19 24	
	04 50	19 04	04 45	19 09	04 40	19 14	04 35	19 19	04 29	19 26	04 22	19 32	
	04 44	19 09	04 39	19 14	04 33	19 20	04 27	19 26	04 21	19 33	04 13	19 41	
	04 39	19 14	04 33	19 20	04 27	19 26	04 21	19 33	04 13	19 40	04 05	19 48	
	04 35	19 19	04 28	19 25	04 22	19 32	04 15	19 39	04 07	19 47	03 58	19 56	
	04 31	19 24	04 24	19 30	04 17	19 37	04 10	19 45	04 01	19 53	03 52	20 03	
June	04 28	19 28	04 21	19 35	04 14	19 42	04 06	19 50	03 57	19 59	03 47	20 09	
	04 26	19 32	04 19	19 39	04 11	19 46	04 03	19 55	03 54	20 04	03 43	20 14	
	04 24	19 35	04 17	19 42	04 09	19 50	04 01	19 58	03 51	20 08	03 41	20 18	
	04 24	19 37	04 17	19 44	04 09	19 52	04 00	20 01	03 50	20 11	03 40	20 22	
	04 24	19 39	04 17	19 46	04 09	19 54	04 00	20 03	03 50	20 13	03 40	20 23	
	04 26	19 40	04 18	19 47	04 10	19 55	04 01	20 04	03 52	20 13	03 41	20 24	
July	04 30	19 39	04 23	19 46	04 15	19 53	04 07	20 02	03 58	20 11	03 47	20 21	
	04 34	19 37	04 27	19 44	04 19	19 51	04 11	19 59	04 02	20 08	03 52	20 18	
	04 37	19 34	04 31	19 41	04 24	19 48	04 16	19 56	04 07	20 04	03 57	20 14	
	04 42	19 31	04 35	19 37	04 28	19 44	04 21	19 51	04 13	19 59	04 04	20 08	
	04 46	19 26	04 40	19 32	04 34	19 39	04 27	19 45	04 19	19 53	04 11	20 01	
	04 51	19 21	04 45	19 27	04 40	19 33	04 33	19 39	04 26	19 46	04 18	19 54	
Aug.	04 56	19 16	04 51	19 21	04 45	19 26	04 39	19 32	04 33	19 38	04 26	19 45	
	05 01	19 09	04 57	19 14	04 52	19 19	04 46	19 24	04 40	19 30	04 34	19 36	
	05 06	19 02	05 02	19 07	04 58	19 11	04 53	19 16	04 48	19 21	04 42	19 27	
	05 12	18 55	05 08	18 59	05 04	19 03	05 00	19 07	04 55	19 11	04 50	19 16	
	05 17	18 47	05 14	18 51	05 10	18 54	05 06	18 58	05 02	19 01	04 58	19 06	
	05 22	18 39	05 19	18 42	05 16	18 45	05 13	18 48	05 10	18 51	05 06	18 55	
Sept.	05 27	18 31	05 25	18 33	05 23	18 35	05 20	18 38	05 17	18 41	05 14	18 44	
	05 32	18 23	05 31	18 24	05 29	18 26	05 27	18 28	05 25	18 30	05 22	18 32	
	05 37	18 14	05 36	18 15	05 35	18 16	05 34	18 17	05 32	18 19	05 31	18 20	
	05 43	18 05	05 42	18 06	05 41	18 06	05 40	18 07	05 40	18 08	05 39	18 09	
	05 48	17 56	05 48	17 56	05 48	17 57	05 47	17 57	05 47	17 57	05 47	17 57	
	05 53	17 48	05 54	17 47	05 54	17 47	05 54	17 46	05 55	17 46	05 55	17 45	
Oct.	05 59	17 39	05 59	17 38	06 00	17 37	06 01	17 36	06 02	17 35	06 03	17 34	
	06 04	17 31	06 05	17 29	06 07	17 28	06 08	17 26	06 10	17 24	06 12	17 22	
	06 10	17 22	06 11	17 20	06 13	17 18	06 16	17 16	06 18	17 14	06 20	17 11	
	06 15	17 14	06 18	17 12	06 20	17 09	06 23	17 07	06 26	17 04	06 29	17 00	
	06 21	17 07	06 24	17 04	06 27	17 01	06 30	16 58	06 34	16 54	06 38	16 50	
	06 27	17 00	06 31	16 56	06 34	16 53	06 38	16 49	06 42	16 45	06 47	16 40	
Nov.	06 33	16 53	06 37	16 49	06 41	16 45	06 46	16 41	06 51	16 36	06 56	16 31	
	06 39	16 47	06 44	16 43	06 48	16 38	06 53	16 33	06 59	16 28	07 05	16 22	
	06 46	16 42	06 50	16 37	06 56	16 32	07 01	16 27	07 07	16 20	07 14	16 14	
	06 52	16 38	06 57	16 32	07 03	16 27	07 09	16 21	07 15	16 14	07 23	16 07	
	06 58	16 34	07 03	16 28	07 09	16 22	07 16	16 16	07 23	16 08	07 31	16 01	
	07 04	16 31	07 09	16 25	07 16	16 19	07 23	16 12	07 31	16 04	07 39	15 56	
Dec.	07 09	16 29	07 15	16 23	07 22	16 16	07 29	16 09	07 37	16 01	07 46	15 52	
	07 14	16 28	07 20	16 22	07 27	16 15	07 35	16 07	07 44	15 59	07 53	15 49	
	07 18	16 29	07 25	16 22	07 32	16 15	07 40	16 07	07 49	15 58	07 59	15 48	
	07 22	16 30	07 29	16 23	07 36	16 16	07 44	16 08	07 53	15 59	08 03	15 49	
	07 25	16 32	07 32	16 25	07 39	16 18	07 47	16 10	07 56	16 01	08 06	15 51	
	07 27	16 35	07 34	16 28	07 41	16 21	07 49	16 13	07 58	16 04	08 08	15 54	
Jan.	1	07 28	16 39	07 35	16 32	07 42	16 25	07 50	16 17	07 59	16 08	08 08	15 59

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

363

Date	54° N.		56° N.		58° N.		60° N.		62° N.		64° N.		
	Rise h. m.	Set h. m.											
Jan.	08 19	15 48	08 31	15 36	08 46	15 22	09 02	15 05	09 23	14 44	09 50	14 17	
	08 17	15 54	08 29	15 42	08 43	15 29	08 59	15 13	09 19	14 53	09 44	14 28	
	08 14	16 02	08 26	15 50	08 39	15 37	08 54	15 22	09 12	15 04	09 35	14 41	
	08 10	16 10	08 20	15 59	08 33	15 47	08 47	15 33	09 03	15 17	09 24	14 56	
	08 04	16 19	08 14	16 09	08 25	15 58	08 38	15 45	08 53	15 30	09 12	15 12	
	07 57	16 28	08 06	16 19	08 16	16 09	08 28	15 58	08 42	15 44	08 58	15 28	
	07 49	16 38	07 57	16 30	08 07	16 21	08 17	16 11	08 29	15 59	08 43	15 44	
Feb.	07 41	16 48	07 48	16 41	07 56	16 33	08 05	16 24	08 16	16 13	08 28	16 01	
	07 31	16 58	07 37	16 52	07 44	16 45	07 52	16 37	08 02	16 28	08 12	16 17	
	07 21	17 08	07 26	17 03	07 32	16 57	07 39	16 50	07 47	16 42	07 56	16 33	
	07 10	17 18	07 15	17 14	07 20	17 09	07 25	17 03	07 32	16 57	07 39	16 49	
	06 59	17 28	07 02	17 25	07 07	17 21	07 11	17 16	07 16	17 11	07 22	17 05	
Mar.	06 47	17 38	06 50	17 35	06 53	17 32	06 57	17 29	07 01	17 25	07 05	17 20	
	06 35	17 48	06 37	17 46	06 40	17 44	06 42	17 41	06 45	17 39	06 48	17 36	
	06 23	17 58	06 24	17 56	06 26	17 55	06 27	17 54	06 29	17 52	06 31	17 51	
	06 11	18 07	06 11	18 07	06 12	18 07	06 12	18 06	06 12	18 06	06 13	18 06	
	05 59	18 16	05 58	18 17	05 58	18 18	05 57	18 18	05 56	18 19	05 55	18 20	
	05 46	18 26	05 45	18 27	05 43	18 29	05 42	18 31	05 40	18 33	05 38	18 35	
Apr.	05 34	18 35	05 32	18 37	05 29	18 40	05 27	18 43	05 24	18 46	05 20	18 50	
	05 22	18 44	05 19	18 48	05 15	18 51	05 12	18 55	05 07	19 00	05 02	19 05	
	05 10	18 54	05 06	18 58	05 01	19 02	04 57	19 07	04 51	19 13	04 45	19 20	
	04 58	19 03	04 53	19 08	04 48	19 13	04 42	19 20	04 35	19 27	04 27	19 35	
	04 46	19 12	04 41	19 18	04 34	19 25	04 27	19 32	04 19	19 40	04 09	19 50	
	04 35	19 22	04 29	19 28	04 21	19 36	04 13	19 44	04 03	19 54	03 52	20 06	
May	04 25	19 31	04 17	19 39	04 09	19 47	03 59	19 57	03 48	20 08	03 35	20 22	
	04 14	19 40	04 06	19 49	03 57	19 58	03 46	20 09	03 33	20 22	03 18	20 38	
	04 05	19 49	03 56	19 58	03 45	20 09	03 33	20 21	03 19	20 36	03 01	20 54	
	03 56	19 58	03 46	20 08	03 35	20 20	03 21	20 33	03 05	20 50	02 45	21 10	
	03 49	20 06	03 38	20 17	03 25	20 30	03 10	20 45	02 52	21 03	02 30	21 26	
	03 42	20 13	03 30	20 25	03 16	20 39	03 00	20 55	02 40	21 16	02 15	21 41	
June	03 36	20 20	03 24	20 33	03 09	20 47	02 51	21 05	02 30	21 27	02 01	21 56	
	03 29	20 30	03 15	20 44	02 59	21 00	02 39	21 20	02 15	21 45	01 40	22 20	
	03 27	20 34	03 13	20 48	02 57	21 05	02 36	21 25	02 11	21 51	01 34	22 28	
	03 27	20 36	03 13	20 50	02 56	21 07	02 36	21 27	02 09	21 54	01 31	22 32	
	03 29	20 36	03 14	20 51	02 58	21 07	02 37	21 28	02 11	21 54	01 33	22 32	
	03 31	20 36	03 17	20 49	03 01	21 06	02 41	21 26	02 15	21 51	01 39	22 27	
July	03 35	20 33	03 22	20 47	03 06	21 03	02 47	21 22	02 22	21 46	01 49	22 19	
	03 41	20 29	03 27	20 42	03 12	20 57	02 54	21 16	02 31	21 38	02 01	22 08	
	03 47	20 24	03 34	20 37	03 20	20 51	03 03	21 08	02 42	21 28	02 14	21 55	
	03 54	20 18	03 42	20 30	03 29	20 43	03 13	20 58	02 54	21 17	02 29	21 41	
	04 01	20 11	03 50	20 21	03 38	20 43	03 24	20 48	03 06	21 05	02 45	21 26	
	04 09	20 02	03 59	20 12	03 48	20 23	03 35	20 36	03 20	20 51	03 01	21 10	
Aug.	04 18	19 53	04 09	20 02	03 59	20 12	03 47	20 24	03 33	20 37	03 16	20 54	
	04 26	19 43	04 18	19 51	04 09	20 00	03 59	20 11	03 47	20 23	03 32	20 37	
	04 35	19 33	04 28	19 40	04 20	19 48	04 11	19 57	04 00	20 07	03 48	20 20	
	04 44	19 22	04 38	19 28	04 31	19 35	04 23	19 43	04 14	19 52	04 03	20 02	
	04 53	19 11	04 48	19 16	04 42	19 22	04 35	19 28	04 27	19 36	04 18	19 45	
	05 02	18 59	04 58	19 03	04 52	19 08	04 47	19 14	04 40	19 20	04 33	19 27	
Sept.	05 11	18 47	05 07	18 50	05 03	18 54	04 59	18 59	04 53	19 04	04 47	19 10	
	05 20	18 35	05 17	18 37	05 14	18 40	05 10	18 44	05 06	18 47	05 02	18 52	
	05 29	18 22	05 27	18 24	05 25	18 26	05 22	18 28	05 19	18 31	05 16	18 34	
	05 38	18 10	05 37	18 11	05 35	18 12	05 34	18 13	05 32	18 15	05 30	18 16	
	05 47	17 57	05 46	17 57	05 46	17 58	05 46	17 58	05 45	17 58	05 45	17 59	
	05 56	17 45	05 56	17 44	05 57	17 44	05 57	17 43	05 58	17 42	05 59	17 41	
Oct.	06 05	17 33	06 06	17 31	06 08	17 30	06 09	17 28	06 11	17 26	06 13	17 24	
	06 14	17 20	06 16	17 18	06 19	17 16	06 21	17 13	06 24	17 10	06 28	17 06	
	06 23	17 08	06 26	17 05	06 30	17 02	06 33	16 58	06 38	16 54	06 42	16 49	
	06 33	16 57	06 37	16 53	06 41	16 49	06 46	16 44	06 51	16 38	06 57	16 32	
	06 42	16 46	06 47	16 41	06 52	16 35	06 58	16 29	07 05	16 23	07 13	16 15	
	06 52	16 35	06 58	16 29	07 04	16 23	07 11	16 16	07 19	16 08	07 28	15 58	
Nov.	07 02	16 25	07 08	16 18	07 15	16 11	07 24	16 03	07 33	15 53	07 44	15 42	
	07 11	16 15	07 19	16 08	07 27	15 59	07 37	15 50	07 47	15 39	08 00	15 26	
	07 21	16 06	07 29	15 58	07 39	15 49	07 49	15 38	08 02	15 26	08 16	15 11	
	07 31	15 59	07 40	15 49	07 50	15 39	08 02	15 27	08 16	15 13	08 32	14 56	
	07 40	15 52	07 50	15 42	08 01	15 30	08 14	15 17	08 30	15 02	08 48	14 43	
	07 48	15 46	07 59	15 35	08 11	15 23	08 26	15 09	08 43	14 52	09 04	14 31	
Dec.	07 56	15 42	08 08	15 30	08 21	15 17	08 36	15 02	08 55	14 44	09 18	14 20	
	08 03	15 39	08 15	15 27	08 29	15 13	08 45	14 57	09 05	14 37	09 30	14 12	
	08 09	15 38	08 22	15 25	08 36	15 11	08 53	14 54	09 14	14 33	09 41	14 06	
	08 14	15 38	08 27	15 25	08 41	15 10	08 59	14 53	09 20	14 32	09 48	14 04	
	08 17	15 40	08 30	15 27	08 45	15 12	09 02	14 55	09 24	14 33	09 52	14 04	
	08 19	15 43	08 31	15 30	08 46	15 16	09 04	14 58	09 25	14 37	09 53	14 09	
Jan.	1	08 19	15 48	08 31	15 36	08 46	15 21	09 02	15 04	09 23	14 44	09 50	14 17

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

Date	66° N.		68° N.		70° N.		72° N.		74° N.		76° N.	
	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.
Jan. 1	10 28	13 39	Rises 3 Jan.		Sun does not rise until 17 January		Sun does not rise until 26 January		Sun does not rise until 2 February		Sun does not rise until 9 February	
6	10 18	13 54	11 24	12 48								
11	10 05	14 11	10 54	13 22								
16	09 51	14 29	10 30	13 50								
21	09 35	14 48	10 07	14 17	10 59	13 24	11 47	12 39	10 39	13 49	10 39	13 49
26	09 18	15 08	09 45	14 41	10 23	14 03	11 27	12 27	10 27	13 27	10 27	13 27
31	09 01	15 27	09 23	15 05	09 53	14 35	10 39	13 49	10 39	13 49	10 39	13 49
Feb. 5	08 43	15 46	09 02	15 27	09 26	15 04	09 59	14 30	10 56	13 34	11 14	13 16
10	08 25	16 05	08 41	15 49	09 00	15 30	09 26	15 04	10 03	14 27	10 04	14 26
15	08 07	16 23	08 20	16 10	08 35	15 54	08 56	15 34	09 23	15 07	10 17	15 13
20	07 48	16 41	07 59	16 30	08 11	16 18	08 27	16 02	08 48	15 41	09 17	15 52
25	07 29	16 58	07 38	16 50	07 48	16 40	08 00	16 28	08 16	16 13	08 37	15 52
Mar. 2	07 11	17 15	07 17	17 09	07 24	17 02	07 33	16 53	07 45	16 42	08 00	16 27
7	06 52	17 32	06 56	17 28	07 01	17 23	07 07	17 17	07 15	17 09	07 25	17 00
12	06 33	17 49	06 35	17 46	06 38	17 44	06 42	17 40	06 46	17 36	06 51	17 31
17	06 14	18 05	06 14	18 05	06 15	18 04	06 16	18 03	06 17	18 03	06 18	18 02
22	05 54	18 21	05 53	18 23	05 52	18 24	05 50	18 26	05 48	18 29	05 45	18 32
27	05 35	18 38	05 32	18 41	05 29	18 45	05 24	18 49	05 19	18 55	05 12	19 03
Apr. 1	05 16	18 54	05 11	18 59	05 05	19 05	04 58	19 13	04 49	19 22	04 38	19 35
6	04 56	19 11	04 50	19 18	04 41	19 26	04 31	19 37	04 19	19 50	04 02	20 08
11	04 37	19 27	04 28	19 37	04 17	19 48	04 04	20 02	03 47	20 20	03 23	20 45
16	04 18	19 44	04 07	19 56	03 53	20 10	03 36	20 28	03 13	20 52	02 40	21 27
21	03 58	20 02	03 45	20 16	03 28	20 33	03 06	20 56	02 35	21 29	01 47	22 22
26	03 39	20 20	03 22	20 37	03 01	20 58	02 33	21 28	01 50	22 14	...	...
May 1	03 19	20 38	02 59	20 58	02 33	21 25	01 56	22 05	00 40	...	...	...
6	02 59	20 57	02 36	21 21	02 03	21 56	01 06	22 59	...	...	...	...
11	02 40	21 16	02 11	21 46	01 26	22 34	...	...	...	...	...	...
16	02 20	21 36	01 44	22 14	00 30	...	...	...	...	...	...	...
21	02 00	21 57	01 12	22 47	...	...	...	...	...	...	...	...
26	01 39	22 18	00 24	...	...	...	...	...	...	...	...	...
31	01 18	22 41	...	...	...	...	...	...	...	...	...	...
June 5	00 56	23 05										
10	00 31	23 34	Sun rises 12 June	Sun rises 26 May	Sun rises 16 May	Sun rises 8 May	Sun rises 1 May	Sun rises 25 April	Sun rises 11 August	Sun rises 18 August		
15	...	23 51	Sun sets 17 July	Sun sets 27 July	Sun sets 27 July	Sun sets 4 August	Sun sets 11 August	Sun sets 18 August				
July 5	00 45	23 19	...	...	...	...	...	...	...	...	...	...
10	01 11	22 56	...	...	...	...	...	...	...	...	...	...
15	01 34	22 34	...	...	...	...	...	...	...	...	...	...
20	01 55	22 14	00 53	23 11	...	...	...	...	...	...	...	...
25	02 16	21 54	01 33	22 35	...	...	...	...	...	...	...	...
30	02 36	21 34	02 02	22 06	01 02	23 01	...	...	...	...	...	...
Aug. 4	02 56	21 14	02 28	21 40	01 48	22 18	01 31	23 48	...	...	...	...
9	03 14	20 54	02 52	21 16	02 21	21 45	02 14	21 49	01 12	22 44	...	...
14	03 32	20 34	03 14	20 53	02 49	21 16	02 27	21 49	02 09	21 51	00 46	22 59
19	03 50	20 15	03 34	20 30	03 15	20 49	02 48	21 14	02 49	21 10	02 05	21 50
24	04 07	19 55	03 54	20 08	03 38	20 23	03 17	20 43	03 23	20 34	02 53	21 03
29	04 24	19 36	04 13	19 46	04 00	19 58	03 44	20 14	03 23	20 34	02 53	21 03
Sept. 3	04 40	19 16	04 32	19 24	04 22	19 34	04 09	19 46	03 53	20 02	03 31	20 22
8	04 56	18 57	04 50	19 03	04 43	19 10	04 33	19 19	04 21	19 31	04 06	19 45
13	05 12	18 38	05 08	18 42	05 03	18 47	04 56	18 53	04 48	19 01	04 38	19 10
18	05 28	18 18	05 26	18 21	05 23	18 24	05 19	18 27	05 14	18 31	05 08	18 37
23	05 44	17 59	05 43	18 00	05 42	18 00	05 41	18 01	05 40	18 02	05 38	18 04
28	06 00	17 40	06 01	17 39	06 02	17 37	06 03	17 36	06 05	17 34	06 08	17 31
Oct. 3	06 16	17 21	06 18	17 18	06 22	17 14	06 26	17 10	06 31	17 05	06 38	16 58
8	06 32	17 02	06 36	16 57	06 42	16 51	06 49	16 44	06 57	16 36	07 09	16 24
13	06 48	16 43	06 55	16 36	07 03	16 28	07 13	16 18	07 25	16 06	07 41	15 49
18	07 05	16 24	07 13	16 15	07 24	16 05	07 37	15 52	07 54	15 35	08 16	15 12
23	07 22	16 06	07 33	15 55	07 46	15 41	08 03	15 24	08 25	15 02	08 56	14 31
28	07 39	15 47	07 53	15 34	08 09	15 17	08 30	14 56	09 00	14 26	09 45	13 41
Nov. 2	07 57	15 29	08 13	15 13	08 34	14 52	09 01	14 25	09 41	13 45	11 13	12 13
7	08 16	15 11	08 35	14 51	09 00	14 26	09 35	13 51	10 39	12 47	...	...
12	08 34	14 53	08 57	14 30	09 28	13 59	10 18	13 09	...	...	...	...
17	08 53	14 36	09 20	14 08	10 00	13 28	...	...	...	...	...	...
22	09 12	14 19	09 45	13 46	10 41	12 50	...	...	...	...	...	...
27	09 31	14 03	10 11	13 23	...	...	...	...	...	...	...	...
Dec. 2	09 49	13 49	10 40	12 58	...	...	...	...	...	...	...	...
7	10 06	13 37	11 15	12 27	...	...	...	...	...	...	...	...
12	10 20	13 27										
17	10 30	13 22	Sun does not rise after 9 December		Sun does not rise after 25 November		Sun does not rise after 16 November		Sun does not rise after 9 November		Sun does not rise after 2 November	
22	10 35	13 22										
27	10 34	13 28										
Jan. 1	10 29	13 38	...	...	...	...	...	...	...	...	...	...

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

365

Date	0°		5° S.		10° S.		15° S.		20° S.		25° S.	
	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.
Jan.	06 00	18 07	05 51	18 16	05 42	18 24	05 33	18 33	05 24	18 43	05 13	18 53
	06 02	18 09	05 54	18 18	05 45	18 26	05 36	18 35	05 27	18 44	05 17	18 54
	06 04	18 12	05 56	18 20	05 48	18 28	05 39	18 36	05 30	18 45	05 21	18 55
	06 06	18 13	05 58	18 21	05 50	18 29	05 42	18 37	05 34	18 46	05 24	18 55
	06 08	18 15	06 00	18 22	05 53	18 30	05 45	18 37	05 37	18 45	05 28	18 54
	06 09	18 16	06 02	18 23	05 55	18 30	05 48	18 37	05 40	18 45	05 32	18 53
	06 10	18 17	06 04	18 23	05 57	18 30	05 50	18 36	05 43	18 43	05 36	18 51
Feb.	06 10	18 17	06 05	18 23	05 59	18 29	05 53	18 35	05 46	18 41	05 39	18 48
	06 11	18 18	06 06	18 23	06 00	18 28	05 55	18 33	05 49	18 39	05 43	18 45
	06 11	18 18	06 06	18 22	06 01	18 27	05 57	18 31	05 52	18 36	05 46	18 42
	06 10	18 17	06 06	18 21	06 02	18 25	05 58	18 29	05 54	18 33	05 49	18 38
	06 10	18 16	06 06	18 20	06 03	18 23	06 00	18 26	05 56	18 30	05 52	18 34
Mar.	06 09	18 15	06 06	18 18	06 04	18 21	06 01	18 23	05 58	18 26	05 55	18 29
	06 08	18 14	06 06	18 16	06 04	18 18	06 02	18 20	06 00	18 22	05 57	18 24
	06 07	18 13	06 05	18 14	06 04	18 15	06 03	18 17	06 01	18 18	06 00	18 20
	06 05	18 12	06 05	18 12	06 04	18 13	06 03	18 13	06 03	18 14	06 02	18 14
	06 04	18 10	06 04	18 10	06 04	18 10	06 04	18 10	06 04	18 09	06 04	18 09
	06 02	18 09	06 03	18 08	06 04	18 07	06 05	18 06	06 06	18 05	06 06	18 04
Apr.	06 01	18 07	06 02	18 06	06 04	18 04	06 05	18 02	06 07	18 01	06 09	17 59
	05 59	18 06	06 01	18 04	06 04	18 01	06 06	17 59	06 08	17 56	06 11	17 54
	05 58	18 04	06 01	18 01	06 04	17 59	06 07	17 56	06 10	17 52	06 13	17 49
	05 57	18 03	06 00	18 00	06 04	17 56	06 07	17 52	06 11	17 48	06 15	17 44
	05 55	18 02	06 00	17 58	06 04	17 54	06 08	17 49	06 13	17 45	06 17	17 40
	05 54	18 01	05 59	17 56	06 04	17 52	06 09	17 47	06 14	17 41	06 20	17 36
May	05 54	18 01	05 59	17 55	06 04	17 50	06 10	17 44	06 16	17 38	06 22	17 32
	05 53	18 00	05 59	17 54	06 05	17 48	06 11	17 42	06 18	17 35	06 24	17 29
	05 53	18 00	05 59	17 53	06 06	17 47	06 13	17 40	06 20	17 33	06 27	17 26
	05 53	18 00	06 00	17 53	06 07	17 46	06 14	17 39	06 21	17 31	06 29	17 23
	05 53	18 00	06 00	17 53	06 08	17 45	06 15	17 38	06 23	17 30	06 32	17 21
	05 53	18 01	06 01	17 53	06 09	17 45	06 17	17 37	06 25	17 28	06 34	17 19
June	05 55	18 02	06 03	17 54	06 12	17 45	06 20	17 37	06 29	17 28	06 39	17 18
	05 56	18 03	06 04	17 55	06 13	17 46	06 22	17 37	06 31	17 28	06 41	17 18
	05 57	18 04	06 05	17 55	06 14	17 47	06 23	17 38	06 33	17 28	06 43	17 18
	05 58	18 05	06 07	17 56	06 15	17 48	06 24	17 39	06 34	17 29	06 44	17 19
	05 59	18 06	06 08	17 58	06 16	17 49	06 25	17 40	06 35	17 30	06 45	17 20
	06 00	18 07	06 09	17 59	06 17	17 50	06 26	17 41	06 36	17 32	06 46	17 22
July	06 01	18 08	06 09	18 00	06 18	17 51	06 27	17 43	06 36	17 33	06 46	17 23
	06 02	18 09	06 10	18 01	06 18	17 53	06 27	17 44	06 36	17 35	06 45	17 25
	06 02	18 10	06 10	18 02	06 18	17 54	06 27	17 45	06 35	17 37	06 44	17 28
	06 03	18 10	06 10	18 02	06 18	17 55	06 26	17 47	06 34	17 39	06 43	17 30
	06 03	18 10	06 10	18 03	06 17	17 56	06 25	17 48	06 33	17 40	06 41	17 32
	06 03	18 10	06 10	18 03	06 17	17 56	06 24	17 50	06 31	17 42	06 39	17 35
Aug.	06 03	18 10	06 09	18 03	06 15	17 57	06 22	17 51	06 29	17 44	06 36	17 37
	06 02	18 09	06 08	18 03	06 14	17 58	06 20	17 52	06 26	17 46	06 32	17 39
	06 01	18 08	06 07	18 03	06 12	17 58	06 17	17 53	06 23	17 47	06 29	17 41
	06 00	18 07	06 05	18 03	06 10	17 58	06 14	17 53	06 19	17 48	06 24	17 43
	05 59	18 06	06 03	18 02	06 07	17 58	06 11	17 54	06 15	17 50	06 20	17 45
	05 58	18 04	06 01	18 01	06 04	17 58	06 08	17 54	06 11	17 51	06 15	17 47
Sept.	05 56	18 03	05 59	18 00	06 02	17 57	06 04	17 55	06 07	17 52	06 10	17 49
	05 55	18 01	05 57	17 59	05 59	17 57	06 01	17 55	06 03	17 53	06 05	17 51
	05 53	17 59	05 54	17 58	05 56	17 57	05 57	17 55	05 58	17 54	06 00	17 53
	05 51	17 57	05 52	17 57	05 52	17 56	05 53	17 56	05 54	17 55	05 54	17 54
	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56	05 49	17 56
	05 48	17 54	05 47	17 55	05 46	17 56	05 45	17 56	05 45	17 57	05 44	17 58
Oct.	05 46	17 52	05 45	17 54	05 43	17 55	05 42	17 57	05 40	17 58	05 38	18 00
	05 44	17 51	05 42	17 53	05 40	17 55	05 38	17 57	05 36	18 00	05 33	18 02
	05 43	17 50	05 40	17 52	05 38	17 55	05 35	17 58	05 32	18 01	05 28	18 05
	05 42	17 49	05 39	17 52	05 35	17 55	05 31	17 59	05 28	18 03	05 24	18 07
	05 41	17 48	05 37	17 52	05 33	17 56	05 29	18 00	05 24	18 05	05 19	18 10
	05 40	17 47	05 36	17 52	05 31	17 57	05 26	18 02	05 21	18 07	05 15	18 13
Nov.	05 40	17 47	05 35	17 52	05 30	17 58	05 24	18 03	05 18	18 09	05 12	18 16
	05 40	17 47	05 34	17 53	05 28	17 59	05 22	18 05	05 16	18 12	05 09	18 19
	05 41	17 48	05 34	17 54	05 28	18 01	05 21	18 07	05 14	18 15	05 06	18 22
	05 41	17 48	05 34	17 55	05 27	18 02	05 20	18 10	05 12	18 18	05 04	18 26
	05 42	17 50	05 35	17 57	05 28	18 05	05 20	18 12	05 12	18 21	05 03	18 30
	05 44	17 51	05 36	17 59	05 28	18 07	05 20	18 15	05 11	18 24	05 02	18 33
Dec.	05 46	17 53	05 37	18 01	05 29	18 09	05 21	18 18	05 12	18 27	05 02	18 37
	05 48	17 55	05 39	18 03	05 31	18 12	05 22	18 21	05 12	18 30	05 02	18 40
	05 50	17 57	05 41	18 06	05 33	18 15	05 23	18 24	05 14	18 33	05 04	18 44
	05 52	18 00	05 43	18 08	05 35	18 17	05 25	18 26	05 16	18 36	05 05	18 47
	05 55	18 02	05 46	18 11	05 37	18 20	05 28	18 29	05 18	18 39	05 07	18 49
	05 57	18 05	05 48	18 13	05 40	18 22	05 30	18 31	05 21	18 41	05 10	18 52
Jan.	06 00	18 07	05 51	18 16	05 42	18 24	05 33	18 33	05 24	18 43	05 13	18 53

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

Date	30° S.		32° S.		34° S.		36° S.		38° S.		40° S.		
	Rise h. m.	Set h. m.											
Jan.	05 02	19 05	04 57	19 09	04 52	19 15	04 47	19 20	04 41	19 26	04 35	19 32	
	05 06	19 05	05 01	19 10	04 56	19 15	04 51	19 20	04 45	19 26	04 39	19 32	
	05 10	19 06	05 05	19 10	05 00	19 15	04 55	19 20	04 50	19 25	04 44	19 31	
	05 14	19 05	05 10	19 09	05 05	19 14	05 00	19 19	04 55	19 24	04 49	19 29	
	05 18	19 04	05 14	19 08	05 10	19 12	05 05	19 17	05 00	19 22	04 55	19 27	
	05 23	19 02	05 19	19 05	05 15	19 10	05 11	19 14	05 06	19 18	05 01	19 23	
	05 27	18 59	05 24	19 03	05 20	19 06	05 16	19 10	05 12	19 14	05 07	19 19	
Feb.	05 05	18 56	05 28	18 59	05 25	19 02	05 21	19 06	05 18	19 10	05 13	19 14	
	05 36	18 52	05 33	18 55	05 30	18 58	05 27	19 01	05 23	19 05	05 20	19 08	
	05 40	18 48	05 37	18 50	05 35	18 53	05 32	18 56	05 29	18 59	05 26	19 02	
	05 44	18 43	05 42	18 45	05 39	18 48	05 37	18 50	05 34	18 52	05 32	18 55	
	05 48	18 38	05 46	18 40	05 44	18 42	05 42	18 44	05 40	18 46	05 37	18 48	
Mar.	05 51	18 33	05 50	18 34	05 48	18 36	05 47	18 37	05 45	18 39	05 43	18 41	
	05 55	18 27	05 54	18 28	05 52	18 29	05 51	18 30	05 50	18 32	05 49	18 33	
	05 58	18 21	05 57	18 22	05 57	18 23	05 56	18 23	05 55	18 24	05 54	18 25	
	06 01	18 15	06 01	18 15	06 01	18 16	06 00	18 16	06 00	18 17	05 59	18 17	
	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	
	06 07	18 03	06 08	18 03	06 08	18 02	06 09	18 02	06 09	18 01	06 10	18 01	
Apr.	06 10	17 57	06 11	17 56	06 12	17 55	06 13	17 55	06 14	17 54	06 15	17 53	
	06 13	17 51	06 15	17 50	06 16	17 49	06 17	17 48	06 18	17 46	06 20	17 45	
	06 16	17 45	06 18	17 44	06 19	17 42	06 21	17 41	06 23	17 39	06 25	17 37	
	06 19	17 40	06 21	17 38	06 23	17 36	06 25	17 34	06 27	17 32	06 30	17 30	
	06 22	17 35	06 25	17 32	06 27	17 30	06 29	17 28	06 32	17 25	06 35	17 22	
	06 26	17 30	06 28	17 27	06 31	17 25	06 34	17 22	06 36	17 19	06 40	17 16	
May	06 29	17 25	06 32	17 22	06 35	17 19	06 38	17 16	06 41	17 13	06 45	17 09	
	06 32	17 21	06 35	17 18	06 38	17 15	06 42	17 11	06 46	17 07	06 49	17 03	
	06 35	17 17	06 39	17 14	06 42	17 10	06 46	17 06	06 50	17 02	06 54	16 58	
	06 38	17 14	06 42	17 11	06 46	17 07	06 50	17 02	06 54	16 58	06 59	16 53	
	06 41	17 12	06 45	17 08	06 49	17 03	06 54	16 59	06 58	16 54	07 03	16 49	
	06 44	17 10	06 48	17 05	06 53	17 01	06 57	16 56	07 02	16 51	07 08	16 46	
	06 47	17 08	06 51	17 04	06 56	16 59	07 01	16 54	07 06	16 49	07 11	16 44	
June	06 50	17 07	06 54	17 03	06 59	16 58	07 04	16 53	07 09	16 48	07 15	16 42	
	06 52	17 07	06 56	17 02	07 01	16 57	07 07	16 52	07 12	16 47	07 18	16 41	
	06 54	17 07	06 58	17 02	07 03	16 57	07 09	16 52	07 14	16 47	07 20	16 41	
	06 55	17 08	07 00	17 03	07 05	16 58	07 10	16 53	07 16	16 47	07 22	16 41	
	06 56	17 09	07 01	17 04	07 06	16 59	07 11	16 54	07 17	16 48	07 23	16 43	
	06 57	17 11	07 01	17 06	07 06	17 01	07 11	16 56	07 17	16 50	07 23	16 45	
July	06 56	17 13	07 01	17 08	07 06	17 03	07 11	16 58	07 16	16 53	07 22	16 47	
	06 56	17 15	07 00	17 11	07 05	17 06	07 10	17 01	07 15	16 56	07 21	16 50	
	06 54	17 18	06 59	17 13	07 03	17 09	07 08	17 04	07 13	16 59	07 18	16 54	
	06 53	17 20	06 57	17 16	07 01	17 12	07 06	17 07	07 10	17 03	07 15	16 58	
	06 50	17 23	06 54	17 19	06 58	17 15	07 02	17 11	07 07	17 06	07 12	17 02	
	06 47	17 26	06 51	17 22	06 55	17 19	06 59	17 15	07 03	17 11	07 07	17 06	
Aug.	06 44	17 29	06 47	17 26	06 50	17 22	06 54	17 19	06 58	17 15	07 02	17 11	
	06 40	17 32	06 43	17 29	06 46	17 26	06 49	17 22	06 53	17 19	06 56	17 15	
	06 35	17 35	06 38	17 32	06 41	17 29	06 44	17 26	06 47	17 23	06 50	17 20	
	06 30	17 38	06 33	17 35	06 35	17 33	06 38	17 30	06 40	17 27	06 43	17 24	
	06 25	17 40	06 27	17 38	06 29	17 36	06 31	17 34	06 34	17 32	06 36	17 29	
	06 19	17 43	06 21	17 41	06 23	17 40	06 25	17 38	06 27	17 36	06 29	17 34	
Sept.	06 13	17 46	06 15	17 45	06 16	17 43	06 18	17 42	06 19	17 40	06 21	17 38	
	06 07	17 49	06 09	17 48	06 10	17 46	06 11	17 45	06 12	17 44	06 13	17 43	
	06 01	17 51	06 02	17 51	06 03	17 50	06 03	17 49	06 04	17 48	06 05	17 48	
	05 55	17 54	05 55	17 54	05 56	17 53	05 56	17 53	05 56	17 53	05 57	17 52	
	05 49	17 57	05 49	17 57	05 49	17 57	05 49	17 57	05 49	17 57	05 48	17 57	
	05 43	17 59	05 42	18 00	05 42	18 00	05 41	18 01	05 41	18 01	05 40	18 02	
Oct.	05 36	18 02	05 36	18 03	05 35	18 04	05 34	18 05	05 33	18 06	05 32	18 07	
	05 31	18 05	05 29	18 06	05 28	18 08	05 27	18 09	05 25	18 11	05 24	18 12	
	05 25	18 08	05 23	18 10	05 22	18 12	05 20	18 13	05 18	18 15	05 16	18 17	
	05 19	18 12	05 17	18 14	05 15	18 16	05 13	18 18	05 11	18 20	05 09	18 23	
	05 14	18 15	05 12	18 17	05 09	18 20	05 07	18 22	05 04	18 25	05 01	18 28	
	05 09	18 19	05 07	18 22	05 04	18 24	05 01	18 27	04 58	18 30	04 55	18 34	
Nov.	05 05	18 23	05 02	18 26	04 59	18 29	04 56	18 32	04 52	18 36	04 48	18 39	
	05 01	18 27	04 58	18 30	04 54	18 34	04 51	18 37	04 47	18 41	04 43	18 45	
	04 58	18 31	04 54	18 34	04 50	18 38	04 46	18 42	04 42	18 47	04 38	18 51	
	04 55	18 35	04 51	18 39	04 47	18 43	04 43	18 48	04 38	18 52	04 33	18 57	
	04 53	18 39	04 49	18 43	04 45	18 48	04 40	18 53	04 35	18 58	04 30	19 03	
	04 52	18 43	04 47	18 48	04 43	18 53	04 38	18 58	04 33	19 03	04 27	19 08	
Dec.	04 51	18 48	04 47	18 52	04 42	18 57	04 37	19 02	04 31	19 08	04 25	19 14	
	04 51	18 51	04 47	18 56	04 42	19 01	04 36	19 07	04 31	19 12	04 25	19 18	
	04 52	18 55	04 47	19 00	04 42	19 05	04 37	19 11	04 31	19 16	04 25	19 23	
	04 54	18 58	04 49	19 03	04 43	19 08	04 38	19 14	04 32	19 20	04 26	19 26	
	04 56	19 01	04 51	19 06	04 46	19 11	04 40	19 17	04 34	19 23	04 28	19 29	
	04 59	19 03	04 54	19 08	04 48	19 13	04 43	19 19	04 37	19 25	04 31	19 31	
Jan.	1	05 02	19 05	04 57	19 09	04 52	19 15	04 46	19 20	04 41	19 26	04 34	19 32

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

367

Date	42° S.		44° S.		46° S.		48° S.		50° S.		52° S.		
	Rise h. m.	Set h. m.											
Jan.	04 28	19 39	04 21	19 46	04 13	19 54	04 04	20 02	03 55	20 12	03 44	20 22	
	04 33	19 39	04 26	19 45	04 18	19 53	04 10	20 01	04 00	20 10	03 50	20 21	
	04 38	19 37	04 31	19 44	04 24	19 51	04 16	19 59	04 07	20 08	03 57	20 18	
	04 43	19 35	04 37	19 42	04 30	19 48	04 23	19 56	04 14	20 04	04 05	20 13	
	04 50	19 32	04 44	19 38	04 37	19 45	04 30	19 52	04 22	19 59	04 14	20 08	
	04 56	19 28	04 50	19 34	04 44	19 40	04 38	19 46	04 31	19 53	04 23	20 01	
	05 03	19 24	04 57	19 29	04 52	19 34	04 46	19 40	04 39	19 47	04 32	19 54	
Feb.	05 09	19 18	05 04	19 23	04 59	19 28	04 54	19 33	04 48	19 39	04 42	19 45	
	05 16	19 12	05 12	19 16	05 07	19 20	05 02	19 25	04 57	19 30	04 51	19 36	
	05 22	19 05	05 19	19 09	05 15	19 13	05 10	19 17	05 06	19 21	05 01	19 26	
	05 29	18 58	05 26	19 01	05 22	19 04	05 18	19 08	05 15	19 12	05 10	19 16	
	05 35	18 50	05 32	18 53	05 29	18 56	05 26	18 59	05 23	19 02	05 20	19 05	
Mar.	05 41	18 43	05 39	18 45	05 37	18 47	05 34	18 49	05 32	18 52	05 29	18 54	
	05 47	18 34	05 46	18 36	05 44	18 37	05 42	18 39	05 40	18 41	05 38	18 43	
	05 53	18 26	05 52	18 27	05 51	18 28	05 50	18 29	05 48	18 30	05 47	18 32	
	05 59	18 17	05 58	18 18	05 58	18 18	05 57	18 19	05 56	18 20	05 56	18 20	
	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09	
	06 10	18 00	06 10	18 00	06 11	17 59	06 12	17 59	06 12	17 58	06 13	17 57	
Apr.	06 16	17 52	06 17	17 51	06 18	17 50	06 19	17 48	06 20	17 47	06 21	17 46	
	06 21	17 43	06 23	17 42	06 24	17 40	06 26	17 38	06 28	17 36	06 30	17 34	
	06 27	17 35	06 29	17 33	06 31	17 31	06 33	17 29	06 36	17 26	06 38	17 23	
	06 32	17 27	06 34	17 25	06 37	17 22	06 40	17 19	06 43	17 16	06 47	17 12	
	06 37	17 20	06 40	17 17	06 44	17 13	06 47	17 10	06 51	17 06	06 55	17 02	
	06 43	17 12	06 46	17 09	06 50	17 05	06 54	17 01	06 58	16 57	07 03	16 52	
May	06 48	17 06	06 52	17 02	06 56	16 57	07 01	16 53	07 06	16 48	07 11	16 42	
	06 54	16 59	06 58	16 55	07 03	16 50	07 08	16 45	07 13	16 39	07 20	16 33	
	06 59	16 54	07 04	16 49	07 09	16 43	07 14	16 38	07 21	16 32	07 27	16 25	
	07 04	16 49	07 09	16 43	07 15	16 38	07 21	16 31	07 28	16 25	07 35	16 17	
	07 09	16 44	07 14	16 39	07 20	16 32	07 27	16 26	07 34	16 19	07 42	16 11	
	07 13	16 41	07 19	16 35	07 26	16 28	07 33	16 21	07 40	16 13	07 49	16 05	
	07 17	16 38	07 24	16 32	07 30	16 25	07 38	16 17	07 46	16 09	07 55	16 00	
June	07 21	16 36	07 27	16 29	07 34	16 22	07 42	16 15	07 50	16 06	08 00	15 57	
	07 24	16 35	07 31	16 28	07 38	16 21	07 46	16 13	07 54	16 04	08 04	15 55	
	07 26	16 34	07 33	16 28	07 41	16 20	07 49	16 12	07 57	16 03	08 07	15 54	
	07 28	16 35	07 35	16 28	07 42	16 21	07 50	16 13	07 59	16 04	08 09	15 54	
	07 29	16 36	07 36	16 29	07 43	16 22	07 51	16 14	08 00	16 05	08 10	15 55	
	07 29	16 38	07 36	16 32	07 43	16 24	07 51	16 16	08 00	16 07	08 10	15 58	
July	07 28	16 41	07 35	16 34	07 42	16 27	07 50	16 19	07 58	16 11	08 08	16 01	
	07 27	16 44	07 33	16 38	07 40	16 31	07 48	16 23	07 56	16 15	08 05	16 06	
	07 24	16 48	07 30	16 42	07 37	16 35	07 44	16 28	07 52	16 20	08 01	16 11	
	07 21	16 52	07 27	16 46	07 33	16 40	07 40	16 33	07 47	16 26	07 56	16 18	
	07 17	16 57	07 22	16 51	07 28	16 45	07 35	16 39	07 42	16 32	07 49	16 24	
	07 12	17 01	07 17	16 56	07 23	16 51	07 28	16 45	07 35	16 38	07 42	16 31	
Aug.	07 06	17 06	07 11	17 02	07 16	16 57	07 22	16 51	07 28	16 45	07 34	16 39	
	07 00	17 11	07 05	17 07	07 09	17 03	07 14	16 58	07 19	16 52	07 25	16 46	
	06 54	17 16	06 57	17 13	07 02	17 09	07 06	17 04	07 11	16 59	07 16	16 54	
	06 47	17 21	06 50	17 18	06 53	17 15	06 57	17 11	07 01	17 07	07 06	17 02	
	06 39	17 26	06 42	17 24	06 45	17 21	06 48	17 17	06 52	17 14	06 56	17 10	
	06 31	17 32	06 33	17 29	06 36	17 27	06 39	17 24	06 42	17 21	06 45	17 18	
Sept.	06 23	17 37	06 25	17 35	06 27	17 33	06 29	17 31	06 31	17 29	06 34	17 26	
	06 14	17 42	06 16	17 41	06 17	17 39	06 19	17 38	06 20	17 36	06 22	17 34	
	06 06	17 47	06 07	17 46	06 08	17 45	06 09	17 44	06 10	17 43	06 11	17 42	
	05 57	17 52	05 57	17 52	05 58	17 51	05 58	17 51	05 59	17 51	05 59	17 50	
	05 48	17 57	05 48	17 58	05 48	17 58	05 48	17 58	05 48	17 58	05 47	17 59	
	05 40	18 03	05 39	18 03	05 38	18 04	05 37	18 05	05 37	18 06	05 36	18 07	
Oct.	05 31	18 08	05 30	18 09	05 28	18 11	05 27	18 12	05 26	18 14	05 24	18 15	
	05 22	18 14	05 21	18 15	05 19	18 17	05 17	18 19	05 15	18 21	05 13	18 24	
	05 14	18 19	05 12	18 22	05 10	18 24	05 07	18 27	05 04	18 29	05 01	18 32	
	05 06	18 25	05 03	18 28	05 00	18 31	04 57	18 34	04 54	18 37	04 50	18 41	
	04 58	18 31	04 55	18 34	04 52	18 38	04 48	18 42	04 44	18 46	04 40	18 50	
	04 51	18 37	04 47	18 41	04 43	18 45	04 39	18 49	04 34	18 54	04 29	18 59	
Nov.	04 44	18 43	04 40	18 48	04 36	18 52	04 31	18 57	04 25	19 03	04 20	19 09	
	04 38	18 50	04 34	18 55	04 29	19 00	04 23	19 05	04 17	19 11	04 10	19 18	
	04 33	18 56	04 28	19 01	04 22	19 07	04 16	19 13	04 09	19 20	04 02	19 27	
	04 28	19 02	04 22	19 08	04 16	19 14	04 10	19 21	04 03	19 28	03 55	19 36	
	04 24	19 08	04 18	19 15	04 12	19 21	04 04	19 28	03 57	19 36	03 48	19 45	
	04 21	19 14	04 15	19 21	04 08	19 28	04 00	19 35	03 52	19 44	03 43	19 53	
Dec.	04 19	19 20	04 12	19 27	04 05	19 34	03 57	19 42	03 48	19 51	03 38	20 01	
	04 18	19 25	04 11	19 32	04 03	19 40	03 55	19 48	03 46	19 57	03 36	20 07	
	04 18	19 29	04 11	19 37	04 03	19 44	03 54	19 53	03 45	20 02	03 34	20 13	
	04 19	19 33	04 12	19 40	04 04	19 48	03 55	19 57	03 45	20 07	03 35	20 18	
	04 21	19 36	04 14	19 43	04 06	19 51	03 57	20 00	03 47	20 10	03 36	20 21	
	04 24	19 38	04 17	19 45	04 09	19 53	04 00	20 02	03 50	20 11	03 39	20 22	
Jan.	1	04 28	19 39	04 21	19 46	04 13	19 54	04 04	20 02	03 55	20 12	03 44	20 22

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 4.-SUNRISE AND SUNSET, 2011

Date	54° S.		56° S.		58° S.		60° S.	
	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.	Rise h. m.	Set h. m.
Jan. 1-----	03 32	20 34	03 18	20 48	03 02	21 04	02 42	21 24
6-----	03 39	20 32	03 25	20 45	03 10	21 01	02 51	21 19
11-----	03 46	20 29	03 34	20 41	03 19	20 56	03 01	21 13
16-----	03 55	20 24	03 43	20 35	03 29	20 49	03 13	21 05
21-----	04 04	20 17	03 53	20 28	03 40	20 41	03 26	20 55
26-----	04 14	20 10	04 04	20 20	03 52	20 31	03 39	20 44
31-----	04 24	20 02	04 15	20 11	04 04	20 21	03 53	20 32
Feb. 5-----	04 34	19 52	04 26	20 00	04 17	20 09	04 06	20 20
10-----	04 45	19 42	04 38	19 49	04 29	19 57	04 20	20 06
15-----	04 55	19 32	04 49	19 38	04 42	19 45	04 34	19 53
20-----	05 05	19 21	05 00	19 26	04 54	19 32	04 47	19 38
25-----	05 16	19 09	05 11	19 14	05 06	19 18	05 01	19 24
Mar. 2-----	05 26	18 58	05 22	19 01	05 18	19 05	05 14	19 09
7-----	05 35	18 46	05 33	18 48	05 30	18 51	05 27	18 54
12-----	05 45	18 33	05 43	18 35	05 41	18 37	05 39	18 39
17-----	05 55	18 21	05 54	18 22	05 53	18 23	05 52	18 24
22-----	06 04	18 09	06 04	18 09	06 04	18 09	06 04	18 09
27-----	06 14	17 56	06 14	17 56	06 15	17 55	06 16	17 54
Apr. 1-----	06 23	17 44	06 24	17 42	06 26	17 41	06 28	17 39
6-----	06 32	17 32	06 34	17 30	06 37	17 27	06 40	17 24
11-----	06 41	17 20	06 44	17 17	06 48	17 13	06 52	17 09
16-----	06 50	17 09	06 54	17 04	06 59	17 00	07 04	16 54
21-----	06 59	16 57	07 04	16 52	07 10	16 47	07 16	16 40
26-----	07 09	16 46	07 14	16 41	07 21	16 34	07 28	16 27
May 1-----	07 17	16 36	07 24	16 29	07 32	16 22	07 40	16 13
6-----	07 26	16 26	07 34	16 19	07 42	16 10	07 52	16 01
11-----	07 35	16 17	07 43	16 09	07 53	15 59	08 03	15 49
16-----	07 43	16 09	07 52	16 00	08 03	15 49	08 15	15 37
21-----	07 51	16 02	08 01	15 52	08 12	15 40	08 25	15 27
26-----	07 58	15 55	08 09	15 45	08 21	15 33	08 35	15 18
31-----	08 05	15 50	08 16	15 39	08 29	15 26	08 44	15 11
June 5-----	08 10	15 46	08 22	15 34	08 36	15 21	08 52	15 05
10-----	08 15	15 44	08 27	15 31	08 41	15 17	08 58	15 00
15-----	08 18	15 42	08 31	15 30	08 45	15 15	09 03	14 58
20-----	08 20	15 43	08 33	15 30	08 48	15 15	09 05	14 58
25-----	08 21	15 44	08 34	15 31	08 49	15 17	09 06	14 59
30-----	08 21	15 47	08 33	15 34	08 47	15 20	09 05	15 03
July 5-----	08 19	15 51	08 31	15 39	08 45	15 25	09 01	15 08
10-----	08 15	15 56	08 27	15 44	08 40	15 31	08 56	15 15
15-----	08 11	16 02	08 22	15 51	08 34	15 38	08 49	15 23
20-----	08 05	16 08	08 15	15 58	08 27	15 46	08 41	15 33
25-----	07 58	16 16	08 07	16 06	08 18	15 55	08 31	15 43
30-----	07 50	16 24	07 59	16 15	08 09	16 05	08 20	15 53
Aug. 4-----	07 41	16 32	07 49	16 24	07 58	16 15	08 09	16 04
9-----	07 32	16 40	07 39	16 33	07 47	16 25	07 56	16 16
14-----	07 22	16 49	07 28	16 42	07 35	16 35	07 43	16 27
19-----	07 11	16 57	07 16	16 52	07 23	16 46	07 30	16 39
24-----	07 00	17 06	07 04	17 01	07 10	16 56	07 15	16 50
29-----	06 48	17 15	06 52	17 11	06 56	17 07	07 01	17 02
Sept. 3-----	06 36	17 23	06 39	17 21	06 43	17 17	06 46	17 14
8-----	06 24	17 32	06 27	17 30	06 29	17 28	06 32	17 25
13-----	06 12	17 41	06 13	17 40	06 15	17 38	06 17	17 37
18-----	06 00	17 50	06 00	17 49	06 01	17 49	06 01	17 48
23-----	05 47	17 59	05 47	17 59	05 47	18 00	05 46	18 00
28-----	05 35	18 08	05 34	18 09	05 32	18 10	05 31	18 12
Oct. 3-----	05 22	18 17	05 20	18 19	05 18	18 21	05 16	18 24
8-----	05 10	18 26	05 07	18 29	05 04	18 32	05 01	18 36
13-----	04 58	18 36	04 54	18 40	04 50	18 44	04 46	18 48
18-----	04 46	18 45	04 42	18 50	04 37	18 55	04 31	19 01
23-----	04 35	18 55	04 29	19 01	04 23	19 07	04 16	19 14
28-----	04 24	19 05	04 17	19 12	04 10	19 19	04 02	19 27
Nov. 2-----	04 13	19 15	04 06	19 23	03 58	19 31	03 48	19 41
7-----	04 03	19 25	03 55	19 34	03 46	19 43	03 35	19 54
12-----	03 54	19 35	03 45	19 45	03 34	19 55	03 23	20 07
17-----	03 46	19 45	03 36	19 55	03 24	20 07	03 11	20 21
22-----	03 38	19 55	03 27	20 06	03 15	20 19	03 00	20 34
27-----	03 32	20 04	03 20	20 16	03 07	20 30	02 51	20 46
Dec. 2-----	03 27	20 12	03 15	20 25	03 00	20 40	02 43	20 57
7-----	03 24	20 19	03 11	20 33	02 55	20 48	02 37	21 07
12-----	03 22	20 25	03 09	20 39	02 52	20 55	02 33	21 15
17-----	03 22	20 30	03 08	20 44	02 51	21 01	02 31	21 21
22-----	03 24	20 33	03 10	20 47	02 53	21 04	02 32	21 25
27-----	03 27	20 34	03 13	20 48	02 56	21 05	02 36	21 25
Jan. 1-----	03 32	20 34	03 18	20 48	03 02	21 04	02 42	21 24

Local mean time. To obtain standard time of rise or set, see table 5.

TABLE 5.—REDUCTION OF LOCAL MEAN TIME TO STANDARD TIME

Difference of longitude between local and standard meridian	Correction to local mean time to obtain standard time	Difference of longitude between local and standard meridian	Correction to local mean time to obtain standard time	Difference of longitude between local and standard meridian	Correction to local mean time to obtain standard time
° ′ ° ′	Minutes	° ′ ° ′	Minutes	°	Hours
0 00 to 0 07	0	7 23 to 7 37	30	15	1
0 08 to 0 22	1	7 38 to 7 52	31	30	2
0 23 to 0 37	2	7 53 to 8 07	32	45	3
0 38 to 0 52	3	8 08 to 8 22	33	60	4
0 53 to 1 07	4	8 23 to 8 37	34	75	5
1 08 to 1 22	5	8 38 to 8 52	35	90	6
1 23 to 1 37	6	8 53 to 9 07	36	105	7
1 38 to 1 52	7	9 08 to 9 22	37	120	8
1 53 to 2 07	8	9 23 to 9 37	38	135	9
2 08 to 2 22	9	9 38 to 9 52	39	150	10
2 23 to 2 37	10	9 53 to 10 07	40	165	11
2 38 to 2 52	11	10 08 to 10 22	4	180	12
2 53 to 3 07	12	10 23 to 10 37	42		
3 08 to 3 22	13	10 38 to 10 52	43		
3 23 to 3 37	14	10 53 to 11 07	44		
3 38 to 3 52	15	11 08 to 11 22	45		
3 53 to 4 07	16	11 23 to 11 37	46		
4 08 to 4 22	17	11 38 to 11 52	47		
4 23 to 4 37	18	11 53 to 12 07	48		
4 38 to 4 52	19	12 08 to 12 22	49		
4 53 to 5 07	20	12 23 to 12 37	50		
5 08 to 5 22	21	12 38 to 12 52	51		
5 23 to 5 37	22	12 53 to 13 07	52		
5 38 to 5 52	23	13 08 to 13 22	53		
5 53 to 6 07	24	13 23 to 13 37	54		
6 08 to 6 22	25	13 38 to 13 52	55		
6 23 to 6 37	26	13 53 to 14 07	56		
6 38 to 6 52	27	14 08 to 14 22	57		
6 53 to 7 07	28	14 23 to 14 37	58		
7 08 to 7 22	29	14 38 to 14 52	59		

If local meridian is east of standard meridian, subtract the correction from local time.

If local meridian is west of standard meridian, add the correction to local time.

For differences of longitude less than 15° , use the first part of the table. For greater differences use both parts thus: $47^\circ 23'$ is equivalent to $45^\circ + 2^\circ 23'$, the correction for 45° is 3 hours, the correction for $2^\circ 23'$ is 10 minutes; therefore the total correction for the difference in longitude $47^\circ 23'$ is 3 hours and 10 minutes.

TABLE 6.—MOONRISE AND MOONSET

EXPLANATION OF TABLE

This table gives the time of rising and setting of the Moon's upper limb for every day in the year, at each of the following places:

Boston, Massachusetts	New York, New York	Baltimore, Maryland
Washington, D.C.	Charleston, South Carolina	Savannah, Georgia
Galveston, Texas	Panama Canal	

All of Table 6 was supplied by the Nautical Almanac Office of the United States Naval Observatory. Since Baltimore, Md., and Washington, D.C., are comparatively near to each other, a single table was compiled for a point midway between the two cities. The difference in time of moonrise and moonset at the point selected and at either city may vary between 0 and 2 minutes. In a similar way, a single table was made for Charleston, S.C., and Savannah, Ga.; and the difference in time of the moonrise or moonset at the point selected and at either city may vary between 0 and 4 minutes, which differences are of no practical importance in this table. For the Panama Canal the times were computed for a point about midway between the two ends and are applicable to the entire canal and are accurate to within a minute or two.

TABLE 6-MOONRISE AND MOONSET, 2011

Boston, Massachusetts

Day	JANUARY				FEBRUARY				MARCH				APRIL				MAY				Day
	Rise h m	Set h m																			
1	0545	1450	0555	1548	0429	1444	0414	1638	0329	1730	0346	1920	0346	1920	0346	1920	0346	1920	0346	1920	1
2	0636	1551	0627	1651	0458	1545	0437	1738	0357	1831	0436	2013	0436	2013	0436	2013	0436	2013	0436	2013	2
3	0720	1655	0654	1753	0523	1646	0500	1837	0429	1932	0534	2100	0534	2100	0534	2100	0534	2100	0534	2100	3
4	0755	1800	0719	1854	0547	1746	0526	1938	0506	2031	0637	2141	0637	2141	0637	2141	0637	2141	0637	2141	4
5	0959	2304	0742	1954	0609	1845	0554	2038	0550	2127	0745	2216	0745	2216	0745	2216	0745	2216	0745	2216	5
6	0825	1903	0804	2053	0632	1944	0627	2139	0642	2217	0854	2248	0854	2248	0854	2248	0854	2248	0854	2248	6
7	0851	2005	0826	2153	0655	2044	0706	2237	0741	2301	1005	2317	1005	2317	1005	2317	1005	2317	1005	2317	7
8	0915	2105	0850	2253	0721	2145	0752	2331	0845	2340	1116	2345	1116	2345	1116	2345	1116	2345	1116	2345	8
9	0937	2204	0917	2354	0751	2246	0846	2346	0953	2288	1228	2346	1228	2346	1228	2346	1228	2346	1228	2346	9
10	0959	2304	0949	....	0825	2346	0946	0019	1103	0014	1341	0014	1341	0014	1341	0014	1341	0014	1341	0014	10
11	1022	....	1026	0056	0906	....	1053	0102	1214	0045	1455	0044	1455	0044	1455	0044	1455	0044	1455	0044	11
12	1047	0004	1111	0157	0955	0043	1203	0140	1327	0114	1610	0119	1610	0119	1610	0119	1610	0119	1610	0119	12
13	1116	0106	1205	0255	1052	0137	1316	0214	1441	0142	1722	0200	1722	0200	1722	0200	1722	0200	1722	0200	13
14	1151	0208	1308	0347	1157	0225	1430	0244	1557	0212	1828	0248	1828	0248	1828	0248	1828	0248	1828	0248	14
15	1232	0311	1418	0434	1308	0307	1547	0314	1714	0246	1927	0343	1927	0343	1927	0343	1927	0343	1927	0343	15
16	1323	0413	1534	0515	1423	0344	1704	0344	1830	0324	2016	0446	2016	0446	2016	0446	2016	0446	2016	0446	16
17	1423	0510	1652	0551	1539	0417	1823	0416	1942	0408	2056	0552	2056	0552	2056	0552	2056	0552	2056	0552	17
18	1532	0601	1810	0623	1657	0448	1941	0452	2045	0501	2129	0659	2129	0659	2129	0659	2129	0659	2129	0659	18
19	1646	0645	1928	0653	1816	0518	2056	0534	2139	0601	2158	0805	2158	0805	2158	0805	2158	0805	2158	0805	19
20	1803	0723	2046	0722	1935	0549	2204	0622	2224	0705	2223	0908	2223	0908	2223	0908	2223	0908	2223	0908	20
21	1920	0756	2202	0753	2054	0623	2302	0718	2300	0811	2247	1010	2247	1010	2247	1010	2247	1010	2247	1010	21
22	2036	0825	2317	0827	2209	0701	2350	0819	2331	0917	2310	1110	2310	1110	2310	1110	2310	1110	2310	1110	22
23	2151	0854	....	0906	2319	0744	....	0923	2357	1020	2334	1209	2334	1209	2334	1209	2334	1209	2334	1209	23
24	2305	0923	0028	0950	....	0835	0029	1027	....	1122	2359	1309	2359	1309	2359	1309	2359	1309	2359	1309	24
25	....	0953	0132	1041	0020	0931	0102	1131	0021	1222	....	1409	1409	1409	1409	1409	1409	1409	1409	1409	25
26	0018	1027	0229	1138	0112	1032	0130	1232	0044	1321	0028	1510	0028	1510	0028	1510	0028	1510	0028	1510	26
27	0130	1106	0316	1238	0155	1134	0155	1332	0107	1420	0101	1610	0101	1610	0101	1610	0101	1610	0101	1610	27
28	0237	1152	0356	1341	0231	1237	0218	1431	0132	1520	0141	1709	0141	1709	0141	1709	0141	1709	0141	1709	28
29	0339	1244	....	....	0301	1339	0241	1530	0158	1621	0227	1805	0227	1805	0227	1805	0227	1805	0227	1805	29
30	0432	1342	....	....	0327	1440	0304	1630	0229	1722	0322	1855	0322	1855	0322	1855	0322	1855	0322	1855	30
31	0517	1444	....	....	0351	1539	....	....	0304	1823	....	....	0304	1823	....	....	0304	1823	....	....	31
Day	JULY				AUGUST				SEPTEMBER				OCTOBER				NOVEMBER				Day
	Rise h m	Set h m																			
1	0425	1939	0652	1952	0933	2000	1051	2015	1202	2216	1132	2313	1132	2313	1132	2313	1132	2313	1132	2313	1
2	0532	2017	0806	2021	1048	2040	1153	2114	1235	2320	1157	....	1157	....	1157	....	1157	....	1157	....	2
3	0643	2051	0920	2051	1159	2128	1244	2217	1304	....	1221	0013	1221	0013	1221	0013	1221	0013	1221	0013	3
4	0755	2121	1034	2123	1303	2221	1327	2321	1329	0022	1245	0113	1245	0113	1245	0113	1245	0113	1245	0113	4
5	0907	2149	1148	2159	1400	2321	1403	....	1354	0123	1311	0212	1311	0212	1311	0212	1311	0212	1311	0212	5
6	1019	2218	1300	2241	1448	....	1434	0025	1418	0222	1340	0311	1340	0311	1340	0311	1340	0311	1340	0311	6
7	1132	2247	1408	2329	1528	0023	1501	0128	1442	0321	1412	0410	1412	0410	1412	0410	1412	0410	1412	0410	7
8	1244	2320	1510	0025	1602	0128	1526	0229	1509	0420	1449	0509	1449	0509	1449	0509	1449	0509	1449	0509	8
9	1357	2358	1604	0025	1631	0232	1550	0329	1539	0520	1533	0606	1533	0606	1533	0606	1533	0606	1533	0606	9
10	1509	....	1649	0126	1657	0334	1614	0429	1612	0619	1623	0700	1623	0700	1623	0700	1623	0700	1623	0700	10
11	1616	0042	1727	0230	1721	0436	1639	0528	1652	0717	1719	0749	1719	0749	1719	0749	1719	0749	1719	0749	11
12	1716	0133	1800	0336	1745	0536	1706	0627	1737	0813	1821	0833	1821	0833	1821	0833	1821	0833	1821	0833	12
13	1808	0232	1828	0440	1809	0636	1737	0727	1829	0905	1926	0911	1926	0911	1926	0911	1926	0911	1926	0911	13
14	1852	0336	1853	0543	1835	0735	1812	0826	1926	0951	2032	0945	2032	0945	2032	0945	2032	0945	2032	0945	14
15	1928	0442	1917	0645	1903	0835	1852	0923	2028	1033	2140	1016	2140	1016	2140	1016	2140	1016	2140	1016	15
16	1958	0548	1941	0745	1934	0934	1939	1018	2133	1110	2249	1045	2249	1045	2249	1045	2249	1045	2249	1045	16
17	2025	0653	2005	0845	2011	1033	2033	1108	2240	1142	2359	1113	2359	1113	2359	1113	2359	1113	2359	1113	17
18	2050	0756	2031	0945	2054	1130	2132	1153	2349	1213	....	1142	1142	1142	1142	1142	1142	1142	1142	1142	18
19	2113	0857	2100	1044	2143	1224	2236	1233	....	1242	0111	1214	0111	1214	0111	1214	0111	1214	0111	1214	19
20	2137	0957	2133	1144	2240	1313	2344	1309	0100												

TABLE 6-MOONRISE AND MOONSET, 2011

373

New York, New York

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m											
1	0551	1509	0603	1605	0438	1500	0426	1650	0344	1739	0404	1927	1
2	0643	1609	0636	1707	0507	1600	0450	1748	0412	1839	0454	2020	2
3	0727	1713	0729	1908	0534	1700	0514	1847	0445	1939	0551	2107	3
4	0803	1816	0753	2006	0621	1857	0610	2046	0608	2133	0654	2149	4
5											0801	2225	5
6	0834	1918	0816	2104	0645	1955	0644	2146	0700	2224	0910	2258	6
7	0901	2019	0840	2203	0710	2054	0724	2243	0758	2309	1019	2328	7
8	0926	2118	0905	2302	0736	2153	0810	2337	0902	2348	1129	2357	8
9	0949	2216	0933	0002	0807	2253	0904	0026	1009	0000	1240	0000	9
10	1012	2315	1005	0002	0842	2353	1004	0026	1118	0023	1352	0027	10
11	1036	0000	1043	0103	0924	0000	1109	0110	1228	0055	1505	0059	11
12	1103	0014	1129	0203	1013	0050	1219	0148	1339	0125	1618	0135	12
13	1132	0114	1223	0301	1110	0143	1330	0223	1452	0155	1729	0217	13
14	1208	0216	1326	0354	1215	0232	1444	0255	1607	0226	1835	0305	14
15	1250	0318	1436	0442	1325	0314	1559	0326	1723	0301	1933	0402	15
16	1341	0419	1550	0523	1438	0353	1715	0357	1838	0340	2023	0504	16
17	1441	0517	1706	0600	1553	0427	1833	0431	1949	0426	2104	0609	17
18	1549	0608	1823	0633	1710	0459	1950	0508	2052	0519	2138	0715	18
19	1703	0653	1940	0705	1827	0531	2103	0551	2146	0619	2208	0820	19
20	1818	0732	2056	0736	1945	0603	2210	0640	2231	0723	2234	0922	20
21	1934	0806	2212	0808	2102	0638	2308	0736	2308	0828	2259	1023	21
22	2048	0837	2325	0843	2217	0717	2357	0837	2340	0933	2323	1122	22
23	2202	0906	0923	0923	2326	0802	0940	0000	1035	0000	2348	1220	23
24	2315	0936	0035	1008	0853	0037	1044	0007	1136	0000	1318	0000	24
25	....	1008	0139	1059	0027	0949	0111	1146	0033	1235	0014	1418	25
26	0027	1044	0235	1156	0119	1050	0140	1247	0057	1333	0044	1518	26
27	0137	1124	0323	1256	0203	1152	0206	1346	0121	1431	0118	1618	27
28	0244	1210	0403	1358	0239	1253	0230	1444	0146	1530	0158	1716	28
29	0345	1303	....	....	0310	1354	0254	1542	0214	1630	0245	1812	29
30	0438	1401	....	....	0337	1454	0318	1640	0245	1730	0340	1902	30
31	0524	1502	....	....	0402	1552	....	....	0321	1830	....	....	31
Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m											
1	0442	1947	0706	2003	0942	2015	1058	2032	1210	2232	1142	2326	1
2	0549	2026	0818	2034	1056	2057	1159	2131	1244	2335	1208	0000	2
3	0659	2100	0931	2105	1206	2145	1251	2234	1314	0000	1234	0026	3
4	0809	2132	1044	2138	1310	2239	1335	2338	1341	0036	1259	0124	4
5	0920	2201	1157	2216	1407	2338	1412	0000	1406	0136	1326	0222	5
6	1031	2231	1308	2258	1455	0000	1443	0041	1431	0234	1355	0320	6
7	1142	2302	1415	2347	1536	0041	1511	0143	1456	0332	1428	0419	7
8	1254	2336	1516	0000	1610	0144	1537	0243	1524	0430	1506	0517	8
9	1406	0000	1610	0043	1640	0247	1602	0342	1554	0529	1550	0613	9
10	1516	0014	1656	0144	1708	0349	1627	0440	1629	0627	1641	0707	10
11	1623	0059	1735	0247	1733	0449	1653	0539	1709	0725	1737	0756	11
12	1723	0151	1809	0352	1758	0548	1721	0637	1755	0820	1838	0840	12
13	1815	0250	1838	0455	1823	0647	1753	0735	1846	0912	1942	0919	13
14	1859	0353	1904	0557	1849	0746	1829	0834	1943	0959	2047	0954	14
15	1936	0459	1929	0658	1918	0844	1910	0930	2045	1041	2154	1026	15
16	2008	0604	1954	0757	1951	0943	1957	1024	2149	1118	2302	1056	16
17	2036	0708	2019	0856	2028	1040	2050	1115	2255	1152	0000	1126	17
18	2101	0809	2046	0954	2111	1137	2149	1200	0000	1223	0011	1156	18
19	2126	0909	2116	1053	2201	1230	2253	1241	0003	1253	0121	1229	19
20	2150	1008	2150	1152	2258	1320	2359	1318	0112	1324	0233	1306	20
21	2216	1107	2230	1250	....	1405	....	1352	0224	1356	0346	1349	21
22	2244	1205	2317	1347	0000	1446	0108	1423	0338	1432	0457	1440	22
23	2316	1305	1440	0107	1522	0219	1455	0454	1513	0604	1539	0604	23
24	2353	1404	0011	1529	0218	1556	0333	1527	0609	1601	0703	1644	24
25	....	1503	0112	1613	0330	1628	0448	1602	0720	1657	0754	1752	25
26	0036	1559	0219	1653	0445	1700	0605	1641	0824	1800	0836	1900	26
27	0127	1652	0330	1728	0601	1734	0723	1726	0919	1907	0911	2007	27
28	0226	1739	0443	1801	0718	1810	0836	1818	1004	2015	0942	2111	28
29	0331	1821	0557	1833	0835	1852	0944	1917	1042	2121	1010	2212	29
30	0441	1859	0712	1905	0949	1939	1042	2021	1114	2225	1036	2312	30
31	0553	1932	0827	1938	....	....	1130	2127	....	....	1101	....	31

Time meridian 75° W. 0000 is midnight. 1200 is noon.

TABLE 6-MOONRISE AND MOONSET, 2011

Baltimore, MD and Washington, DC

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m											
1	... .	... .	0610	1620	0445	1514	0437	1702	0358	1748	0421	1933	1
2	0557	1526	0644	1722	0516	1614	0502	1759	0427	1847	0511	2026	2
3	0649	1626	0713	1822	0543	1713	0527	1856	0501	1946	0608	2114	3
4	0733	1729	0739	1920	0608	1810	0555	1955	0540	2044	0711	2156	4
5	0811	1831	0804	2018	0633	1908	0625	2054	0625	2139	0817	2234	5
6	0843	1933	0828	2115	0657	2005	0700	2153	0717	2230	0924	2307	6
7	0911	2032	0853	2212	0723	2103	0740	2250	0815	2316	1033	2338	7
8	0936	2130	0919	2311	0751	2201	0827	2343	0918	2356	1141	...	8
9	1001	2227	0948	2300	0822	2300	0921	...	1024	...	1251	0009	9
10	1025	2325	1021	0010	0858	2359	1020	0033	1132	0032	1401	0040	10
11	1050	...	1100	0110	0941	...	1125	0117	1241	0105	1513	0113	11
12	1117	0023	1146	0210	1030	0056	1234	0156	1351	0136	1625	0150	12
13	1148	0122	1240	0307	1127	0149	1344	0232	1503	0207	1736	0233	13
14	1224	0223	1343	0400	1231	0238	1456	0305	1616	0240	1841	0322	14
15	1307	0325	1452	0448	1340	0322	1610	0337	1731	0315	1940	0419	15
16	1358	0425	1605	0531	1452	0401	1725	0410	1845	0356	2029	0521	16
17	1458	0523	1720	0609	1607	0436	1841	0445	1955	0442	2111	0626	17
18	1606	0614	1836	0643	1722	0510	1957	0523	2058	0536	2147	0731	18
19	1718	0700	1951	0716	1838	0543	2110	0607	2153	0636	2217	0834	19
20	1833	0740	2106	0748	1954	0616	2217	0657	2238	0739	2245	0936	20
21	1947	0815	2220	0822	2110	0653	2315	0753	2316	0844	2310	1035	21
22	2100	0847	2332	0858	2224	0733	...	0854	2349	0948	2335	1133	22
23	2213	0918	...	0939	2332	0818	0004	0957	...	1049	...	1230	23
24	2324	0950	0041	1025	...	0910	0045	1059	0017	1149	0001	1328	24
25	....	1023	0145	1117	0033	1006	0119	1201	0043	1246	0028	1426	25
26	0035	1059	0241	1213	0125	1106	0149	1300	0108	1344	0059	1525	26
27	0144	1140	0329	1313	0209	1208	0216	1358	0133	1441	0134	1624	27
28	0250	1227	0410	1414	0247	1309	0241	1455	0159	1539	0214	1723	28
29	0351	1320	....	....	0319	1409	0305	1552	0228	1638	0302	1818	29
30	0445	1418	....	....	0347	1507	0331	1650	0300	1737	0357	1908	30
31	0531	1518	....	....	0413	1605	....	....	0337	1836	....	....	31
Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m											
1	0459	1954	0719	2014	0951	2030	1105	2049	1218	2247	1152	2338	1
2	0605	2034	0830	2046	1103	2113	1206	2148	1253	2349	1220	...	2
3	0714	2109	0942	2118	1213	2202	1258	2250	1323	...	1246	0037	3
4	0823	2142	1053	2153	1317	2256	1342	2353	1351	0049	1312	0134	4
5	0933	2212	1205	2231	1413	2355	1420	...	1417	0148	1340	0232	5
6	1042	2243	1315	2315	1502	...	1452	0056	1443	0245	1410	0329	6
7	1152	2315	1421	...	1543	0057	1521	0157	1510	0342	1444	0426	7
8	1303	2350	1523	0004	1618	0200	1548	0256	1538	0440	1523	0524	8
9	1414	...	1617	0100	1650	0302	1614	0354	1609	0537	1607	0620	9
10	1523	0030	1703	0200	1718	0402	1639	0451	1645	0635	1657	0713	10
11	1629	0116	1743	0303	1744	0502	1706	0549	1725	0732	1753	0803	11
12	1729	0208	1817	0407	1810	0600	1736	0646	1811	0826	1854	0847	12
13	1822	0307	1847	0509	1836	0658	1808	0744	1903	0918	1957	0927	13
14	1906	0410	1914	0611	1903	0755	1844	0841	2000	1005	2102	1003	14
15	1944	0515	1940	0710	1933	0853	1926	0937	2100	1048	2207	1036	15
16	2017	0619	2006	0808	2006	0950	2014	1031	2204	1126	2314	1107	16
17	2046	0721	2032	0906	2044	1048	2107	1121	2309	1201	...	1137	17
18	2112	0822	2100	1004	2128	1143	2205	1207	...	1233	0021	1209	18
19	2137	0921	2131	1101	2218	1237	2308	1249	0015	1304	0131	1243	19
20	2203	1019	2206	1159	2314	1327	...	1326	0124	1336	0242	1321	20
21	2230	1116	2246	1257	...	1412	0014	1401	0234	1409	0354	1405	21
22	2259	1214	2334	1353	0016	1453	0122	1434	0347	1446	0504	1457	22
23	2331	1313	1446	0123	1531	0232	1506	0502	1528	0611	1555	23	
24	1411	0028	1536	0232	1605	0344	1540	0616	1617	0710	1700	24	
25	0009	1509	0128	1620	0343	1639	0458	1616	0727	1714	0801	1808	25
26	0053	1606	0235	1701	0457	1712	0614	1656	0831	1817	0844	1915	26
27	0144	1658	0344	1737	0611	1747	0730	1742	0925	1923	0920	2021	27
28	0243	1746	0456	1811	0727	1825	0843	1835	1012	2030	0952	2124	28
29	0347	1829	0609	1844	0843	1907	0950	1934	1050	2135	1020	2224	29
30	0456	1907	0723	1917	0956	1955	1048	2038	1123	2238	1047	2323	30
31	0607	1942	0837	1952	...	1137	2143	...	...	...	1114	...	31

Time meridian 75° W. 0000 is midnight. 1200 is noon.

TABLE 6-MOONRISE AND MOONSET, 2011

375

Charleston, SC and Savannah, GA

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m											
1	0552	1601	0610	1650	0448	1542	0452	1716	0421	1752	0454	1930	1
2	0552	1601	0647	1748	0521	1638	0520	1809	0454	1848	0545	2023	2
3	0645	1700	0719	1844	0552	1733	0549	1903	0531	1945	0642	2112	3
4	0732	1800	0749	1939	0621	1827	0620	1958	0612	2041	0742	2157	4
5	0812	1900	0818	2033	0649	1920	0653	2054	0659	2136	0845	2238	5
6	0847	1957	0845	2126	0717	2014	0731	2151	0751	2227	0949	2315	6
7	0919	2053	0913	2220	0746	2109	0813	2246	0848	2314	1054	2350	7
8	0948	2147	0943	2315	0817	2204	0901	2340	0949	2357	1158	...	8
9	1015	2241	1015	...	0852	2300	0955	...	1052	...	1303	0025	9
10	1043	2335	1051	0011	0930	2356	1053	0030	1156	0037	1410	0100	10
11	1112	...	1133	0108	1015	...	1156	0116	1301	0114	1517	0137	11
12	1142	0029	1220	0206	1105	0052	1300	0159	1407	0149	1626	0218	12
13	1216	0125	1315	0303	1202	0145	1407	0238	1514	0224	1733	0304	13
14	1256	0223	1417	0357	1304	0236	1515	0315	1623	0301	1838	0356	14
15	1341	0322	1523	0447	1409	0322	1624	0352	1734	0341	1936	0453	15
16	1433	0421	1632	0533	1518	0405	1734	0429	1844	0425	2028	0555	16
17	1533	0518	1743	0615	1627	0444	1846	0508	1952	0515	2112	0657	17
18	1639	0612	1854	0654	1738	0522	1958	0551	2054	0610	2151	0759	18
19	1748	0700	2005	0731	1849	0600	2108	0638	2150	0710	2225	0859	19
20	1858	0744	2115	0808	2001	0638	2213	0731	2238	0812	2256	0957	20
21	2008	0823	2225	0846	2113	0718	2311	0828	2319	0914	2325	1053	21
22	2116	0900	2333	0926	2222	0803	...	0928	2354	1015	2353	1147	22
23	2224	0935	...	1010	2328	0851	0002	1029	...	1113	...	1241	23
24	2331	1011	0039	1059	...	0944	0045	1128	0026	1209	0022	1335	24
25	...	1048	0141	1152	0029	1041	0122	1226	0056	1303	0053	1430	25
26	0038	1128	0237	1248	0122	1140	0156	1322	0124	1356	0127	1526	26
27	0144	1213	0326	1346	0208	1239	0226	1417	0152	1450	0204	1623	27
28	0247	1302	0410	1444	0248	1337	0254	1510	0222	1545	0247	1719	28
29	0346	1355	...	...	0323	1433	0323	1604	0254	1640	0336	1814	29
30	0440	1452	...	...	0355	1528	0351	1658	0329	1737	0431	1906	30
31	0528	1551	...	...	0424	1622	...	...	0409	1834	...	...	31
Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m											
1	0531	1953	0739	2027	0955	2058	1102	2123	1220	2314	1203	2357	1
2	0635	2036	0846	2103	1104	2144	1203	2222	1258	...	1233	...	2
3	0740	2116	0953	2139	1211	2235	1256	2323	1332	0013	1303	0052	3
4	0846	2152	1100	2218	1313	2330	1342	...	1403	0110	1333	0146	4
5	0951	2227	1208	2300	1410	...	1423	0023	1432	0205	1404	0240	5
6	1056	2302	1314	2347	1500	0029	1458	0122	1501	0259	1437	0334	6
7	1202	2338	1419	...	1544	0129	1530	0220	1531	0353	1513	0428	7
8	1308	...	1519	0038	1622	0229	1600	0315	1603	0446	1554	0523	8
9	1415	0017	1614	0134	1656	0327	1630	0410	1637	0541	1640	0618	9
10	1522	0100	1702	0234	1728	0424	1659	0504	1715	0636	1731	0711	10
11	1626	0149	1744	0334	1758	0520	1729	0558	1757	0730	1826	0800	11
12	1725	0243	1822	0435	1827	0615	1801	0652	1845	0824	1924	0847	12
13	1819	0341	1855	0534	1856	0709	1837	0746	1936	0915	2025	0929	13
14	1906	0443	1926	0631	1927	0803	1916	0841	2032	1003	2126	1008	14
15	1947	0545	1955	0727	2000	0857	1959	0935	2130	1048	2228	1044	15
16	2023	0646	2024	0822	2036	0952	2047	1028	2230	1129	2330	1119	16
17	2055	0745	2054	0916	2116	1047	2140	1118	2332	1207	...	1153	17
18	2125	0841	2125	1010	2201	1141	2237	1206	...	1243	0034	1229	18
19	2154	0937	2159	1105	2252	1234	2337	1249	0035	1318	0139	1307	19
20	2223	1031	2237	1200	2347	1324	...	1330	0139	1353	0246	1349	20
21	2253	1125	2319	1255	...	1411	0039	1408	0245	1431	0355	1436	21
22	2325	1219	...	1350	0047	1455	0143	1445	0354	1512	0503	1530	22
23	...	1315	0008	1443	0150	1536	0249	1521	0504	1558	0608	1629	23
24	0001	1411	0101	1533	0256	1614	0357	1559	0615	1650	0707	1733	24
25	0041	1507	0201	1620	0403	1652	0507	1639	0724	1748	0800	1838	25
26	0127	1602	0304	1704	0512	1730	0619	1724	0828	1850	0846	1943	26
27	0218	1655	0411	1744	0622	1809	0731	1813	0924	1955	0925	2045	27
28	0316	1745	0518	1822	0734	1851	0841	1908	1012	2059	1001	2144	28
29	0419	1830	0627	1859	0845	1937	0947	2008	1054	2201	1033	2241	29
30	0524	1912	0736	1937	0956	2028	1046	2110	1130	2300	1103	2336	30
31	0631	1950	0846	2016	...	1136	2213	...	1133	...	1133	...	31

Time meridian 75° W. 0000 is midnight. 1200 is noon.

TABLE 6-MOONRISE AND MOONSET, 2011

Galveston, Texas

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m											
1	0543	1609	0602	1655	0441	1546	0450	1714	0424	1747	0501	1921	1
2	0543	1609	0640	1752	0516	1641	0520	1806	0458	1842	0553	2014	2
3	0636	1707	0714	1846	0548	1734	0550	1859	0536	1938	0649	2104	3
4	0723	1806	0746	1940	0618	1826	0622	1953	0618	2033	0749	2150	4
5	0805	1904	0815	2032	0647	1919	0657	2048	0706	2127	0851	2232	5
6	0841	2000	0844	2124	0717	2011	0736	2143	0758	2219	0953	2310	6
7	0914	2055	0914	2216	0747	2104	0820	2238	0855	2306	1056	2347	7
8	0945	2147	0945	2310	0820	2158	0908	2331	0955	2350	1158	...	8
9	1014	2240	1019	...	0856	2253	1002	...	1057	...	1302	0024	9
10	1043	2332	1056	0005	0936	2348	1100	0021	1159	0031	1406	0101	10
11	1113	...	1139	0101	1021	...	1201	0109	1302	0110	1512	0140	11
12	1145	0025	1228	0158	1112	0043	1305	0152	1407	0147	1619	0222	12
13	1221	0120	1323	0254	1209	0137	1410	0233	1512	0224	1726	0310	13
14	1301	0216	1424	0348	1310	0227	1516	0312	1619	0302	1829	0403	14
15	1348	0314	1529	0439	1415	0315	1623	0350	1728	0344	1928	0501	15
16	1441	0413	1637	0526	1522	0359	1732	0429	1837	0430	2020	0602	16
17	1541	0510	1746	0610	1630	0440	1841	0510	1944	0521	2105	0704	17
18	1646	0603	1855	0650	1738	0520	1952	0555	2046	0618	2145	0804	18
19	1753	0653	2004	0729	1847	0559	2100	0644	2141	0718	2220	0903	19
20	1902	0738	2112	0808	1957	0639	2204	0738	2230	0819	2252	0959	20
21	2009	0819	2220	0848	2107	0722	2302	0835	2312	0920	2323	1053	21
22	2116	0858	2327	0930	2215	0808	2353	0935	2349	1019	2353	1146	22
23	2222	0935	...	1016	2320	0858	...	1035	...	1115	...	1238	23
24	2327	1012	0031	1106	0952	0038	1134	0022	1210	0023	1331	1424	24
25	...	1051	0132	1159	0020	1049	0116	1230	0053	1302	0056	1424	25
26	0032	1133	0228	1255	0113	1147	0151	1324	0123	1354	0131	1519	26
27	0137	1219	0318	1353	0200	1245	0222	1417	0153	1447	0210	1615	27
28	0239	1309	0402	1450	0241	1341	0252	1509	0224	1540	0254	1711	28
29	0338	1403	...	...	0317	1436	0322	1601	0257	1634	0343	1806	29
30	0431	1459	...	...	0350	1530	0352	1654	0334	1730	0439	1858	30
31	0520	1557	...	...	0421	1622	...	...	0415	1826	...	...	31
Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m											
1	0538	1946	0740	2025	0951	2102	1054	2130	1213	2319	1200	2357	1
2	0641	2030	0846	2102	1058	2150	1154	2229	1252	...	1231	...	2
3	0744	2111	0951	2141	1203	2242	1248	2329	1327	0016	1302	0051	3
4	0848	2149	1056	2221	1305	2338	1335	...	1400	0111	1333	0143	4
5	0952	2225	1202	2305	1401	...	1416	0029	1431	0205	1406	0236	5
6	1055	2302	1307	2353	1452	0036	1453	0126	1501	0257	1440	0329	6
7	1159	2340	1411	...	1536	0135	1526	0222	1533	0350	1518	0422	7
8	1304	...	1510	0045	1616	0234	1558	0316	1606	0442	1600	0516	8
9	1409	0021	1605	0142	1652	0331	1628	0409	1641	0535	1647	0610	9
10	1514	0106	1654	0241	1724	0427	1659	0502	1720	0629	1738	0702	10
11	1618	0155	1737	0340	1756	0521	1731	0554	1804	0723	1832	0752	11
12	1717	0250	1816	0440	1826	0614	1805	0647	1851	0816	1930	0839	12
13	1811	0348	1851	0537	1857	0707	1841	0740	1943	0907	2029	0922	13
14	1858	0449	1923	0633	1929	0759	1921	0834	2038	0955	2129	1002	14
15	1940	0550	1954	0727	2003	0852	2005	0927	2135	1040	2229	1040	15
16	2017	0650	2024	0820	2041	0946	2054	1020	2235	1122	2330	1116	16
17	2051	0747	2055	0913	2122	1039	2147	1110	2335	1201	...	1152	17
18	2123	0842	2128	1006	2208	1133	2243	1158	...	1239	0032	1230	18
19	2153	0936	2203	1059	2259	1225	2342	1242	0036	1316	0136	1309	19
20	2223	1029	2242	1153	2354	1316	...	1324	0139	1353	0241	1353	20
21	2255	1121	2326	1247	...	1403	0043	1403	0243	1432	0348	1442	21
22	2328	1214	...	1342	0053	1448	0146	1442	0350	1515	0455	1537	22
23	...	1308	0014	1435	0155	1530	0250	1520	0459	1603	0600	1637	23
24	0005	1403	0109	1525	0259	1610	0356	1600	0609	1656	0659	1740	24
25	0047	1459	0207	1613	0405	1650	0504	1642	0716	1755	0753	1844	25
26	0133	1554	0310	1658	0512	1729	0614	1728	0820	1857	0839	1947	26
27	0226	1647	0415	1739	0620	1810	0725	1819	0916	2001	0920	2047	27
28	0323	1737	0521	1819	0730	1854	0834	1915	1005	2104	0956	2145	28
29	0425	1823	0628	1858	0840	1942	0939	2015	1048	2205	1030	2240	29
30	0529	1906	0735	1938	0949	2034	1038	2117	1125	2302	1102	2334	30
31	0635	1947	0843	2019	...	1129	2219	...	...	1133	...	31	

Time meridian 90° W. 0000 is midnight. 1200 is noon.

TABLE 6-MOONRISE AND MOONSET, 2011

377

Panama Canal (East End)

Day	JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		Day
	Rise h m	Set h m											
1	0457	1650	0526	1724	0410	1610	0448	1708	0442	1721	0539	1837	1
2	0452	1655	0611	1813	0452	1657	0525	1753	0523	1809	0632	1931	2
3	0552	1745	0653	1900	0532	1742	0603	1837	0607	1859	0727	2024	3
4	0644	1839	0733	1945	0610	1826	0643	1924	0654	1950	0822	2115	4
5	0731	1930	0810	2029	0648	1910	0725	2012	0745	2043	0917	2204	5
6	0815	2019	0848	2113	0725	1954	0810	2102	0837	2136	1012	2252	6
7	0856	2105	0925	2157	0803	2040	0857	2154	0932	2228	1106	2338	7
8	0935	2149	1004	2243	0843	2126	0948	2247	1027	2318	1159	...	8
9	1012	2233	1045	2331	0926	2215	1041	2339	1121	...	1253	0023	9
10	1049	2317	1129	...	1011	2306	1136	...	1216	0006	1347	0110	10
11	1127	...	1216	0021	1100	2359	1232	0031	1310	0053	1444	0158	11
12	1207	0002	1308	0113	1152	...	1327	0121	1404	0140	1543	0249	12
13	1250	0049	1403	0208	1248	0052	1423	0211	1459	0227	1644	0343	13
14	1336	0139	1501	0304	1344	0146	1519	0259	1557	0315	1745	0441	14
15	1427	0232	1601	0400	1442	0239	1616	0347	1656	0406	1844	0540	15
16	1522	0327	1701	0454	1540	0331	1714	0436	1758	0500	1940	0639	16
17	1620	0424	1800	0546	1638	0422	1814	0527	1900	0557	2031	0737	17
18	1721	0521	1858	0637	1736	0511	1916	0621	2001	0657	2118	0831	18
19	1821	0617	1956	0727	1835	0601	2018	0717	2059	0757	2201	0922	19
20	1920	0710	2054	0816	1934	0652	2120	0816	2152	0855	2241	1010	20
21	2018	0801	2152	0906	2035	0744	2218	0915	2241	0950	2320	1056	21
22	2114	0850	2250	0957	2136	0838	2313	1013	2325	1042	2358	1141	22
23	2210	0937	2349	1050	2236	0934	...	1109	...	1131	...	1225	23
24	2305	1025	...	1144	2335	1031	0003	1201	0007	1217	0036	1310	24
25	...	1113	0047	1240	...	1128	0048	1251	0045	1302	0116	1356	25
26	0001	1203	0143	1335	0030	1224	0130	1337	0123	1346	0158	1444	26
27	0058	1255	0235	1429	0121	1317	0210	1422	0201	1430	0242	1535	27
28	0155	1349	0324	1520	0208	1407	0248	1506	0240	1516	0331	1628	28
29	0252	1444	...	...	0251	1455	0325	1550	0320	1603	0422	1722	29
30	0346	1539	...	...	0332	1540	0403	1635	0403	1652	0517	1816	30
31	0438	1632	...	...	0410	1625	...	...	0449	1744	...	...	31
Day	JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		Day
	Rise h m	Set h m											
1	0613	1909	0747	2018	0923	2128	1011	2208	1142	2343	1148	...	1
2	0710	2000	0843	2105	1022	2223	1111	2307	1228	...	1227	0002	2
3	0806	2049	0938	2153	1122	2319	1207	...	1310	0033	1306	0047	3
4	0901	2136	1034	2243	1221	...	1259	0003	1351	0121	1345	0132	4
5	0955	2222	1131	2334	1318	0016	1347	0057	1429	0206	1424	0217	5
6	1049	2308	1229	...	1412	0113	1431	0148	1507	0251	1505	0302	6
7	1143	2356	1328	0028	1502	0208	1512	0237	1546	0335	1549	0350	7
8	1239	...	1426	0124	1548	0301	1551	0323	1626	0420	1635	0438	8
9	1336	0045	1522	0220	1631	0351	1629	0408	1708	0507	1724	0529	9
10	1434	0137	1615	0317	1712	0439	1708	0453	1752	0555	1815	0620	10
11	1534	0232	1705	0412	1751	0525	1747	0538	1839	0644	1908	0711	11
12	1632	0329	1750	0505	1830	0610	1827	0623	1929	0734	2001	0802	12
13	1729	0427	1833	0555	1908	0655	1910	0710	2020	0825	2054	0850	13
14	1821	0524	1913	0643	1947	0740	1955	0758	2112	0915	2146	0937	14
15	1910	0620	1952	0729	2028	0826	2042	0847	2204	1004	2238	1023	15
16	1955	0712	2031	0814	2112	0913	2132	0938	2257	1052	2330	1108	16
17	2037	0802	2109	0859	2157	1001	2223	1028	2349	1139	...	1153	17
18	2116	0849	2149	0944	2246	1051	2316	1118	...	1224	0022	1239	18
19	2155	0934	2231	1030	2337	1142	...	1208	0042	1310	0117	1327	19
20	2233	1019	2315	1118	...	1234	0009	1256	0135	1356	0214	1419	20
21	2312	1104	...	1207	0030	1325	0103	1343	0230	1445	0313	1514	21
22	2352	1149	0003	1259	0124	1416	0157	1431	0327	1537	0415	1613	22
23	...	1236	0053	1351	0220	1505	0252	1518	0428	1632	0517	1714	23
24	0036	1325	0146	1444	0316	1554	0348	1607	0530	1731	0617	1815	24
25	0122	1417	0242	1537	0412	1643	0446	1659	0634	1832	0715	1914	25
26	0212	1510	0339	1628	0509	1732	0547	1754	0737	1934	0808	2011	26
27	0305	1604	0436	1718	0607	1823	0649	1852	0836	2034	0856	2103	27
28	0400	1657	0533	1808	0707	1916	0753	1952	0931	2131	0941	2153	28
29	0457	1750	0630	1857	0808	2012	0856	2053	1020	2225	1022	2240	29
30	0554	1841	0727	1946	0910	2109	0956	2153	1106	2314	1102	2326	30
31	0651	1930	0824	2036	...	1051	2249	...	1141	...	...	31	

Time meridian 75° W. 0000 is midnight. 1200 is noon.

TABLE 7. — CONVERSION OF FEET TO CENTIMETERS

Feet	Tenths of a Foot										Feet
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
0	0	3	6	9	12	15	18	21	24	27	0
1	30	34	37	40	43	46	49	52	55	58	1
2	61	64	67	70	73	76	79	82	85	88	2
3	91	94	98	101	104	107	110	113	116	119	3
4	122	125	128	131	134	137	140	143	146	149	4
5	152	155	158	162	165	168	171	174	177	180	5
6	183	186	189	192	195	198	201	204	207	210	6
7	213	216	219	223	226	229	232	235	238	241	7
8	244	247	250	253	256	259	262	265	268	271	8
9	274	277	280	283	287	290	293	296	299	302	9
10	305	308	311	314	317	320	323	326	329	332	10
11	335	338	341	344	347	351	354	357	360	363	11
12	366	369	372	375	378	381	384	387	390	393	12
13	396	399	402	405	408	411	415	418	421	424	13
14	427	430	433	436	439	442	445	448	451	454	14
15	457	460	463	466	469	472	475	479	482	485	15
16	488	491	494	497	500	503	506	509	512	515	16
17	518	521	524	527	530	533	536	539	543	546	17
18	549	552	555	558	561	564	567	570	573	576	18
19	579	582	585	588	591	594	597	600	604	607	19
20	610	613	616	619	622	625	628	631	634	637	20
21	640	643	646	649	652	655	658	661	664	668	21
22	671	674	677	680	683	686	689	692	695	698	22
23	701	704	707	710	713	716	719	722	725	728	23
24	732	735	738	741	744	747	750	753	756	759	24
25	762	765	768	771	774	777	780	783	786	789	25
26	792	796	799	802	805	808	811	814	817	820	26
27	823	826	829	832	835	838	841	844	847	850	27
28	853	856	860	863	866	869	872	875	878	881	28
29	884	887	890	893	896	899	902	905	908	911	29
30	914	917	920	924	927	930	933	936	939	942	30
31	945	948	951	954	957	960	963	966	969	972	31
32	975	978	981	985	988	991	994	997	1000	1003	32
33	1006	1009	1012	1015	1018	1021	1024	1027	1030	1033	33
34	1036	1039	1042	1045	1049	1052	1055	1058	1061	1064	34
35	1067	1070	1073	1076	1079	1082	1085	1088	1091	1094	35
36	1097	1100	1103	1106	1109	1113	1116	1119	1122	1125	36
37	1128	1131	1134	1137	1140	1143	1146	1149	1152	1155	37
38	1158	1161	1164	1167	1170	1173	1177	1180	1183	1186	38
39	1189	1192	1195	1198	1201	1204	1207	1210	1213	1216	39
40	1219	1222	1225	1228	1231	1234	1237	1241	1244	1247	40
41	1250	1253	1256	1259	1262	1265	1268	1271	1274	1277	41
42	1280	1283	1286	1289	1292	1295	1298	1301	1305	1308	42
43	1311	1314	1317	1320	1323	1326	1329	1332	1335	1338	43
44	1341	1344	1347	1350	1353	1356	1359	1362	1366	1369	44
45	1372	1375	1378	1381	1384	1387	1390	1393	1396	1399	45
46	1402	1405	1408	1411	1414	1417	1420	1423	1426	1430	46
47	1433	1436	1439	1442	1445	1448	1451	1454	1457	1460	47
48	1463	1466	1469	1472	1475	1478	1481	1484	1487	1490	48
49	1494	1497	1500	1503	1506	1509	1512	1515	1518	1521	49

Feet to Meters = Centimeters divided by 100 (from above table)

Example: 09.40 feet = (287 centimeters) / (100) = 02.87 meters.

1 Meter = 100 centimeters
1 Meter = 3.2808399 feet

1 Foot = 0.30480061 meters
1 Foot = 30.480061 centimeters

TABLE 8.—TIDE PREDICTION ACCURACY

EXPLANATION OF TABLE

The accuracy of National Ocean Service tide predictions is determined by comparing predicted and observed high and low waters at all stations for which data exists, primarily the U.S. and its territories. Each water-level station is unique; there is no single standard of accuracy when comparing astronomic tide predictions with observed water levels. Water-level station locations are examined on an individual basis to determine if the predictions are adequate. Comparisons are based on 1989 data except for those locations where the stations were not in operation or the data acquired were unacceptable. If a station was not in operation in 1989, the last good year of data was used. Comparisons are made by subtracting the observed times and heights of the high and low waters from the predicted tides to compute a difference.

Table Legend

Station ID—Each water-level station in the United States and dependent territories has a unique seven digit identification number (ID). The ID is unrelated to the four digit station number used in the published prediction tables.

90% Distribution Level—90% of the absolute values of the differences are less than or equal to the values in these columns.

Standard Deviation of Differences—Standard deviation of all the differences.

Average Difference—Average of the signed sum of all the differences.

Notes

Albany—This station, located on the Hudson River, experiences a significant change in river level and corresponding times and heights of high and low waters throughout the year.

Baltimore—Winds greatly affect the times and heights of the high and low tides, owing to the large shallow bay and small tidal range.

Gulf of Mexico locations—Water level is difficult to predict because the Gulf, being large, relatively shallow, and with a small tidal range, is greatly influenced by weather conditions.

Table 8. - TIDE PREDICTION ACCURACY

Station ID	Station Name	Year	90% Distribution Level			Height Differences			Standard Deviation of Differences			Times			Average Differences		
			Time Differences	High Water (Hours)	Low Water (Hours)	High Water (Feet)	Low Water (Feet)	High Water (Hours)	Low Water (Hours)	High Water (Feet)	Low Water (Feet)	High Water (Hours)	Low Water (Hours)	High Water (Feet)	Low Water (Feet)		
841-0140	Eastport, ME	1998	0.2	0.2	0.6	0.6	0.09	0.11	0.41	0.40	-0.07	-0.10	-0.08	-0.10	-0.10		
841-8150	Portland, ME	1998	0.3	0.2	0.6	0.6	0.14	0.13	0.40	0.39	-0.10	-0.07	-0.11	-0.06	0.06		
844-3970	Boston, MA	1998	0.3	0.3	0.8	0.7	0.14	0.14	0.49	0.48	-0.10	-0.10	-0.10	-0.09	-0.09		
844-7930	Woods Hole, MA	2003	0.5	>1.0	0.7	0.7	0.48	0.77	0.43	0.40	-0.03	0.01	-0.02	-0.01	-0.01		
844-9130	Nantucket, MA	2003	0.3	0.6	0.6	0.23	0.21	0.40	0.39	-0.03	0.03	-0.03	-0.03	0.03	0.03		
845-2660	Newport, RI	1997	0.3	0.6	0.7	0.7	0.19	0.14	0.41	0.40	-0.06	-0.04	-0.07	-0.05	-0.05		
846-1490	New London, CT	1998	0.4	0.3	0.7	0.7	0.25	0.22	0.47	0.47	-0.11	-0.08	-0.10	-0.09	-0.09		
846-7150	Bridgeport, CT	1998	0.3	0.8	0.8	0.13	0.13	0.55	0.56	-0.12	-0.15	-0.11	-0.16	-0.16			
841-6945	Kings Point, NY	1999	0.9	>1.0	0.8	0.8	0.59	0.54	0.55	0.56	-0.12	-0.15	-0.11	-0.16	-0.16		
851-8750	The Battery, NY	2003	0.6	0.5	0.9	0.9	0.37	0.31	0.59	0.60	-0.07	-0.06	0.03	-0.02	-0.02		
853-1680	Sandy Hook, NJ	2002	0.4	0.4	0.8	0.9	0.25	0.25	0.51	0.54	-0.13	-0.12	0.19	0.21	0.21		
853-4720	Atlantic City, NJ	2000	0.3	0.4	0.9	0.9	0.24	0.24	0.57	0.57	-0.02	-0.01	0.02	-0.02	-0.02		
854-5530	Philadelphia, PA	1989	0.5	0.6	1.0	1.0	0.30	0.36	0.72	0.65	0.14	0.11	-0.12	0.28	0.28		
855-1910	Reedy Point, DE	2002	0.5	0.7	0.9	0.9	0.23	0.31	0.55	0.56	-0.18	-0.35	0.09	-0.02	-0.02		
855-7380	Breakwater Harbor, DE	1998	0.3	0.3	0.9	0.9	0.18	0.18	0.62	0.68	-0.06	-0.03	-0.03	-0.01	-0.01		
857-4680	Baltimore, MD	1998	0.8	1.0	1.0	1.0	1.38	1.43	0.64	0.62	-0.21	-0.09	-0.21	-0.11	-0.11		
859-4900	Washington, DC	1998	0.5	0.8	1.0	1.0	0.33	0.48	0.73	0.83	-0.05	-0.19	-0.03	-0.23	-0.23		
863-8863	Chesapeake Bay Bri Tunnel	2002	0.3	0.4	0.8	0.8	0.25	0.27	0.50	0.52	-0.06	-0.08	-0.07	-0.08	-0.08		
863-8610	Hampton Roads, VA	1995	0.4	0.4	0.8	0.9	0.27	0.25	0.51	0.56	0.07	0.05	0.03	-0.01	-0.01		
865-8120	Wilmington, NC	2003	0.5	0.6	0.8	0.8	0.34	0.29	0.38	0.46	-0.01	-0.08	0.11	0.16	0.16		
8661070	Myrtle Beach, SC	2003	0.4	0.4	0.8	0.8	0.28	0.29	0.48	0.50	0.00	0.01	0.00	0.00	0.00		
866-5530	Charleston, SC	2000	0.4	0.6	0.7	0.7	0.19	0.20	0.42	0.47	0.14	-0.10	0.05	-0.02	-0.02		
867-0870	Savannah R. Ent., GA	1995	0.3	0.3	0.7	0.9	0.21	0.19	0.47	0.58	-0.01	-0.07	0.05	0.03	0.03		
872-0030	Fernandina Beach, FL	1995	0.2	0.3	0.9	0.9	0.15	0.19	0.48	0.56	-0.02	0.06	0.33	0.30	0.30		
872-0218	Mayport, FL	2003	0.2	0.3	0.6	0.8	0.14	0.21	0.41	0.51	-0.04	0.01	-0.02	0.01	0.01		
872-3178	Miami, Government Cut, FL	1985	0.3	0.3	0.4	0.4	0.18	0.17	0.25	0.24	-0.07	0.01	-0.02	-0.01	-0.01		
872-4580	Key West, FL	2000	0.5	0.4	0.3	0.3	0.29	0.25	0.19	0.20	-0.18	-0.06	-0.15	-0.10	-0.10		
872-6520	St. Petersburg, FL	2003	0.7	0.7	0.6	0.5	0.56	0.44	0.38	0.34	0.07	0.00	0.01	0.2	0.2		
872-9840	Pensacola, FL	1995	>1.0	0.6	0.9	2.61	2.72	0.48	0.41	0.04	0.10	-0.04	0.07	0.07	0.07		
873-7048	Mobile, AL	1984	>1.0	>1.0	0.8	0.7	2.56	2.49	0.48	0.45	0.05	-0.09	-0.05	0.04	0.04		
876-1724	Grand Isle, LA	2003	>1.0	>1.0	0.5	1.21	1.22	0.30	0.30	-0.24	-0.33	0.00	0.00	0.00	0.00		
877-1450	Galveston, TX	1995	>1.0	0.7	0.8	1.29	1.25	0.50	0.54	-0.15	-0.12	-0.03	-0.03	-0.03	0.00		

TABLE 9.— LOWEST/ HIGHEST ASTRONOMICAL TIDE AND OTHER TIDAL DATUMS

Explanation of table

Lowest Astronomical Tide (LAT) and Highest Astronomical Tide (HAT) are the lowest and highest predicted values for the tides at a given location over a 19 year period. These values were calculated by generating tide predictions for the time period of the latest National Tidal Datum Epoch (1983-2001) using the latest set of tidal harmonic constituents. The highest and lowest values predicted were recorded to the nearest 0.1 foot. It is important to note that the LAT and HAT values are derived solely from predicted tides based on astronomical forces. Observed water levels can be above the HAT level or below the LAT level due to storms, winds, or other meteorological effects which are not accounted for in the tide predictions.

Table Legend

Station - Each water level station in the United States and its territories has a unique seven digit identification number (ID). The ID is unrelated to the four digit indexing number used in the published prediction tables.

LAT - Lowest Astronomical Tide - The lowest predicted tidal level

MLLW - Mean Lower Low Water

MLW - Mean Low Water

MHW - Mean High Water

MHHW - Mean Higher High Water

HAT - Highest Astronomical Tide - The highest predicted tidal level

Notes

All elevations are provided in feet relative to Mean Lower Low Water (MLLW), the reference datum for tide predictions and soundings on NOAA nautical charts. The other tidal datums (Mean Low Water, Mean High Water, and Mean Higher High Water) in this table are included to provide additional information.

**TABLE 9.— LOWEST/ HIGHEST ASTRONOMICAL TIDE AND
OTHER TIDAL DATUMS RELATIVE TO MLLW (feet)**

Station	Name	LAT	MLW	MHW	MHHW	HAT
8410140	Eastport, Maine	-3.4	0.4	18.8	19.3	22.9
8413320	Bar Harbor, Maine	-2.2	0.4	10.9	11.4	13.7
8418150	Portland, Maine	-2.0	0.3	9.5	9.9	11.9
8443970	Boston, Massachusetts	-2.2	0.3	9.8	10.3	12.4
8449130	Nantucket Island, Massachusetts	-0.8	0.2	3.2	3.6	4.5
8447930	Woods Hole, Massachusetts	-0.7	0.1	1.9	2.2	3.2
8452660	Newport, Rhode Island	-1.0	0.1	3.6	3.9	5.2
8510560	Montauk, Fort Pond, New York	-0.9	0.2	2.2	2.5	3.5
8461490	New London, Connecticut	-0.8	0.2	2.8	3.1	3.9
8467150	Bridgeport, Connecticut	-1.4	0.2	7.0	7.3	8.8
8516945	Kings Point, New York	-1.5	0.3	7.4	7.8	9.7
8518750	New York (The Battery), New York	-1.5	0.2	4.7	5.1	6.4
8519483	Bayonne Bridge, New York	-1.6	0.2	5.2	5.5	6.9
8518995	Albany, New York	-1.1	0.2	5.1	5.5	6.3
8531680	Sandy Hook, New Jersey	-1.4	0.2	4.9	5.2	6.6
8534720	Atlantic City, New Jersey	-1.3	0.2	4.2	4.6	5.8
8557380	Breakwater Harbor, Delaware	-1.1	0.2	4.2	4.7	5.8
8551910	Reedy Point, Delaware	-1.0	0.2	5.5	5.8	6.9
8545530	Philadelphia, Pennsylvania	-0.6	0.2	6.4	6.8	8.0
8570280	Ocean City, Maryland	-1.2	0.2	3.5	3.9	5.1
8574680	Baltimore, Maryland	-0.6	0.2	1.4	1.7	2.3
8594900	Washington, DC	-0.6	0.2	2.9	3.2	3.8
8638863	Chesapeake Bay Bridge Tunnel, Virginia	-0.9	0.1	2.7	2.9	4.0
8638610	Hampton Roads, Sewells Point, Virginia	-0.7	0.1	2.6	2.8	3.6
8651370	Duck Pier, North Carolina	-1.0	0.1	3.4	3.7	4.9
8652587	Oregon Inlet Marina, North Carolina	-0.2	0.1	1.0	1.2	1.7
8654400	Cape Hatteras, North Carolina	-1.0	0.1	3.1	3.5	4.7
8658120	Wilmington, North Carolina	-0.4	0.2	4.4	4.7	5.4
8661070	Myrtle Beach, South Carolina	-1.5	0.2	5.2	5.6	7.2
8665530	Charleston, South Carolina	-1.5	0.2	5.4	5.8	7.3
8670870	Savannah River Entrance, Georgia	-1.7	0.2	7.1	7.5	9.2
8670681	Savannah, Georgia	-1.9	0.3	8.1	8.6	10.1
8720030	Fernandina Beach, Florida	-1.7	0.2	6.2	6.6	8.2
8720218	Mayport, Florida	-1.6	0.2	4.7	5.0	6.4
8721604	Port Canaveral, Florida	-1.2	0.2	3.6	4.0	5.4
8723178	Miami, Government Cut, Florida	-0.9	0.1	2.5	2.5	3.6
8723970	Vaca Key, Florida	-0.5	0.2	0.9	1.0	1.7
8724580	Key West, Florida	-0.8	0.2	1.5	1.8	2.6
8725110	Naples, Florida	-1.4	0.6	2.6	2.9	3.8
8726520	St. Petersburg, Florida	-1.1	0.4	2.0	2.3	3.1
8727520	Cedar Key, Florida	-1.4	0.6	3.5	3.8	4.8
8728130	St. Marks River Entrance, Florida	-1.6	0.6	3.3	3.5	4.5
8728690	Apalachicola, Florida	-1.0	0.4	1.5	1.6	2.1
8729840	Pensacola, Florida	-1.2	0.0	1.2	1.3	2.2
8735180	Dauphin Island, Alabama	-1.0	0.0	1.2	1.2	2.0
8737048	Mobile, Alabama	-1.2	0.1	1.5	1.6	2.4
8760551	South Pass, Louisiana	-1.2	0.0	1.2	1.2	2.2
8761724	Grand Isle, Louisiana	-0.9	0.0	1.1	1.1	1.8
8771450	Galveston, Texas	-1.2	0.3	1.3	1.4	2.0
8773701	Port O'Connor, Texas	-0.9	0.0	0.8	0.8	1.7
8779750	Padre Island, Texas	-1.5	0.2	1.4	1.5	2.4
2695540	Bermuda Esso Pier, Bermuda	-0.8	0.1	2.6	2.9	3.9
9710441	Settlement Point, Grand Bahamas Island	-0.8	0.1	2.8	3.1	4.1
9759110	Magueyes Island, Puerto Rico	-0.5	0.0	0.7	0.7	1.1
9755371	San Juan, Puerto Rico	-0.6	0.2	1.3	1.6	2.2
9751639	Charlotte Amalie, St. Thomas Island	-0.5	0.0	0.7	0.8	1.2
9751401	Lime Tree Bay, St. Croix Island	-0.5	0.0	0.7	0.7	1.1

PUBLICATIONS RELATING TO TIDES AND TIDAL CURRENTS

TIDE TABLES

Advance information relative to the rise and fall of the tide is given in annual tide tables. These tables include the predicted times and heights of high and low waters for every day in the year for a number of reference stations and differences for obtaining similar predictions for numerous other places.

Tide Tables, Central and Western Pacific Ocean and Indian Ocean.

Tide Tables, East Coast of North and South America (Including Greenland).

Tide Tables, Europe and West Coast of Africa (Including the Mediterranean Sea).

Tide Tables, West Coast of North and South America (Including the Hawaiian Islands).

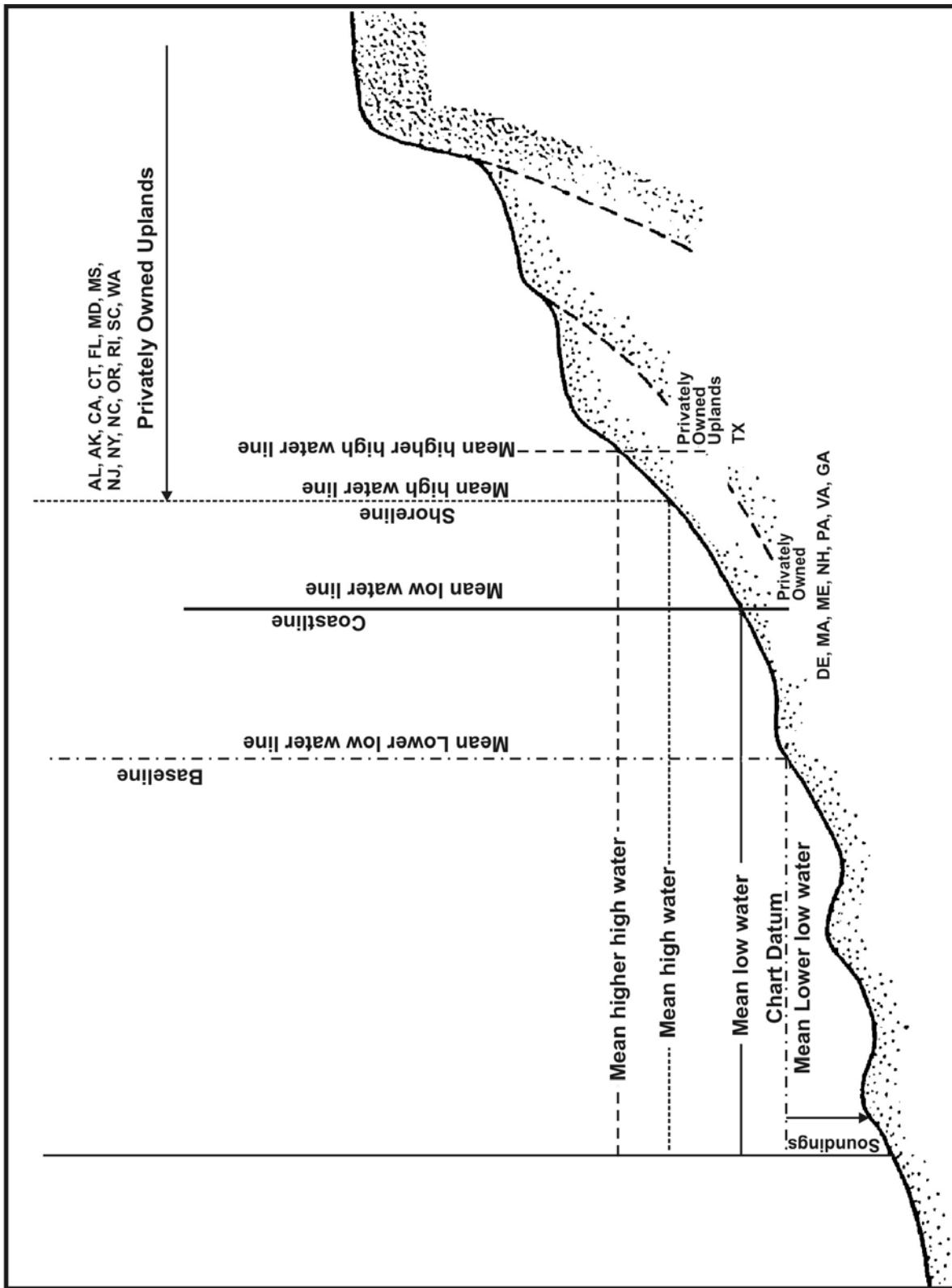
TIDAL CURRENT TABLES

Accompanying the rise and fall of the tide is a periodic horizontal flow of the water known as the tidal current. Advance information relative to these currents is made available in annual tidal current tables which include daily predictions of the times of slack water and the times and velocities of strength of flood and ebb currents for a number of waterways together with differences for obtaining predictions for numerous other places.

Tidal Current Tables, Atlantic Coast of North America.

Tidal Current Tables, Pacific Coast of North America and Asia.

OFFICIAL U.S. DATUMS



GLOSSARY OF TERMS

ANNUAL INEQUALITY—Seasonal variation in the water level or current, more or less periodic, due chiefly to meteorological causes.

APOGEAN TIDES OR TIDAL CURRENTS—Tides of decreased range or currents of decreased speed occurring monthly as the result of the Moon being in apogee (farthest from the Earth).

AUTOMATIC TIDE GAGE—An instrument that automatically registers the rise and fall of the tide. In some instruments, the registration is accomplished by recording the heights at regular intervals in digital format, in others by a continuous graph in which the height versus corresponding time of the tide is recorded.

BENCH MARK (BM)—A fixed physical object or marks used as reference for a vertical datum. A *tidal bench mark* is one near a tide station to which the tide staff and tidal datums are referred. A *Geodetic bench mark* identifies a surveyed point in the National Geodetic Vertical Network.

CHART DATUM—The tidal datum to which soundings on a chart are referred. It is usually taken to correspond to low water elevation of the tide, and its depression below mean sea level is represented by the symbol Zo.

CURRENT—Generally, a horizontal movement of water. Currents may be classified as *tidal* and *nontidal*. Tidal currents are caused by gravitational interactions between the Sun, Moon, and Earth and are a part of the same general movement of the sea that is manifested in the vertical rise and fall, called *tide*. Nontidal currents include the permanent currents in the general circulatory systems of the sea as well as temporary currents arising from more pronounced meteorological variability.

CURRENT DIFFERENCE—Difference between the time of slack water (or minimum current) or strength of current in any locality and the time of the corresponding phase of the tidal current at a reference station, for which predictions are given in the *Tidal Current Tables*.

CURRENT ELLIPSE—A graphic representation of a rotary current in which the velocity of the current at different hours of the tidal cycle is represented by radius vectors and vectorial angles. A line joining the extremities of the radius vectors will form a curve roughly approximating an ellipse. The cycle is completed in one-half tidal day or in a whole tidal day according to whether the tidal current is of the semidiurnal or the diurnal type. A current of the mixed type will give a curve of two unequal loops each tidal day.

CURRENT METER—An instrument for measuring the speed and direction or just the speed of a current. The measurements are usually Eulerian since the meter is most often fixed or moored at a specific location.

DATUM (vertical)—For marine applications, a base elevation used as a reference from which to reckon heights or depths. It is called a *tidal datum* when defined by a certain phase of the tide. Tidal datums are local datums and should not be extended into areas which have differing topographic features without substantiating measurements. In order that they may be recovered when needed, such datums are referenced to fixed points known as *bench marks*.

DAYLIGHT SAVING TIME—A time used during the summer in some localities in which clocks are advanced 1 hour from the usual standard time.

DIURNAL—Having a period or cycle of approximately 1 tidal day. Thus, the tide is said to be diurnal when only one high water and one low water occur during a tidal day, and the tidal current is said to be diurnal when there is a single flood and single ebb period in the tidal day. A rotary current is diurnal if it changes its direction through all points of the compass once each tidal day.

DIURNAL INEQUALITY—The difference in height of the two high waters or of the two low waters of each day; also the difference in speed between the two flood tidal currents or the two ebb tidal currents of each day. The difference changes with the declination of the Moon and to a lesser extent with the declination of the Sun. In general, the inequality tends to increase with an increasing declination, either north or south, and to diminish as the Moon approaches the Equator. *Mean diurnal high water inequality* (DHQ) is one-half the average difference between the two high waters of each day observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). It is obtained by subtracting the mean of all high waters from the mean of the higher high waters. *Mean diurnal low water inequality* (DLQ) is one-half the average difference between the two low waters of each day observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). It is obtained by subtracting the mean of the lower low waters from the mean of all low waters. *Tropic high water inequality* (HWQ) is the average difference between the two high waters of the day at the times of the tropic tides. *Tropic low water inequality* (LWQ) is the average difference between the two low waters of the day at the times of the tropic tides. Mean and tropic inequalities as

GLOSSARY OF TERMS

defined above are applicable only when the type of tide is either semidiurnal or mixed. Diurnal inequality is sometimes called *declinational inequality*.

DOUBLE EBB—An ebb tidal current where, after ebb begins, the speed increases to a maximum called *first ebb*; it then decreases, reaching a *minimum ebb* near the middle of the ebb period (and at some places it may actually run in a flood direction for a short period); it then again ebbs to a maximum speed called *second ebb* after which it decreases to slack water.

DOUBLE FLOOD—A flood tidal current where, after flood begins, the speed increases to a maximum called *first flood*; it then decreases, reaching a *minimum flood* near the middle of the flood period (and at some places it may actually run in an ebb direction for a short period); it then again floods to a maximum speed called *second flood* after which it decreases to slack water.

DOUBLE TIDE—A double-headed tide, that is, a high water consisting of two maxima of nearly the same height separated by a relatively small depression, or a low water consisting of two minima separated by a relatively small elevation. Sometimes, it is called an *agger*.

DURATION OF FLOOD AND DURATION OF EBB—Duration of flood is the interval of time in which a tidal current is flooding, and the *duration of ebb* is the interval in which it is ebbing. Together they cover, on an average, a period of 12.42 hours for a semidiurnal tidal current or a period of 24.84 hours for a diurnal current. In a normal semidiurnal tidal current, the duration of flood and duration of ebb will each be approximately equal to 6.21 hours, but the times may be modified greatly by the presence of a nontidal flow. In a river the duration of ebb is usually longer than the duration of flood because of the freshwater discharge, especially during the spring when snow and ice melt are the predominant influences.

DURATION OF RISE AND DURATION OF FALL—*Duration of rise* is the interval from low water to high water, and *duration of fall* is the interval from high water to low water. Together they cover, on an average, a period of 12.42 hours for a semidiurnal tide or a period of 24.84 hours for a diurnal tide. In a normal semidiurnal tide, the duration of rise and duration of fall will each be approximately equal to 6.21 hours, but in shallow waters and in rivers there is a tendency for a decrease in the duration of rise and a corresponding increase in the duration of fall.

EBB CURRENT—The movement of a tidal current away from shore or down a tidal river or estuary. In the

mixed type of reversing tidal current, the terms *greater ebb* and *lesser ebb* are applied respectively to the ebb tidal currents of greater and lesser speed of each day. The terms *maximum ebb* and *minimum ebb* are applied to the maximum and minimum speeds of a current running continuously ebb, the speed alternately increasing and decreasing without coming to a slack or reversing. The expression *maximum ebb* is also applicable to any ebb current at the time of greatest speed.

EQUATORIAL TIDAL CURRENTS—Tidal currents occurring semimonthly as a result of the Moon being over the Equator. At these times the tendency of the Moon to produce a diurnal inequality in the tidal current is at a minimum.

EQUATORIAL TIDES—Tides occurring semi monthly as the result of the Moon being over the Equator. At these times the tendency of the Moon to produce a diurnal inequality in the tide is at a minimum.

FLOOD CURRENT—The movement of a tidal current toward the shore or up a tidal river or estuary. In the mixed type of reversing current, the terms *greater flood* and *lesser flood* are applied respectively to the flood currents of greater and lesser speed of each day. The terms *maximum flood* and *minimum flood* are applied to the maximum and minimum speeds of a flood current, the speed of which alternately increases and decreases without coming to a slack or reversing. The expression *maximum flood* is also applicable to any flood current at the time of greatest speed.

GREAT DIURNAL RANGE (Gt)—The difference in height between mean higher high water and mean lower low water. The expression may also be used in its contracted form, *diurnal range*.

GREENWICH INTERVAL—An interval referred to the transit of the Moon over the meridian of Greenwich as distinguished from the local interval which is referred to the Moon's transit over the local meridian. The relation in hours between Greenwich and local intervals may be expressed by the formula:

$$\text{Greenwich interval} = \text{local interval} + 0.069 L$$

where L is the west longitude of the local meridian in degrees. For east longitude, L is to be considered negative.

GULF COAST LOW WATER DATUM—A chart datum. Specifically, the tidal datum formerly designated for the coastal waters of the Gulf Coast of the United States. It was defined as *mean lower low water* when the type of tide was mixed and *mean low water* when the type of tide was diurnal.

HALF-TIDE LEVEL—See *mean tide level*.

GLOSSARY OF TERMS

HARMONIC ANALYSIS—The mathematical process by which the observed tide or tidal current at any place is separated into basic harmonic constituents.

HARMONIC CONSTANTS—The amplitudes and epochs of the harmonic constituents of the tide or tidal current at any place.

HARMONIC CONSTITUENT—One of the harmonic elements in a mathematical expression for the tide-producing force and in corresponding formulas for the tide or tidal current. Each constituent represents a periodic change or variation in the relative positions of the Earth, Moon, and Sun. A single constituent is usually written in the form $y=A \cos (at+\alpha)$, in which y is a function of time as expressed by the symbol t and is reckoned from a specific origin. The coefficient A is called the amplitude of the constituent and is a measure of its relative importance. The angle $(at+\alpha)$ changes uniformly and its value at any time is called the phase of the constituent. The speed of the constituent is the rate of change in its phase and is represented by the symbol a in the formula. The quantity α is the phase of the constituent at the initial instant from which the time is reckoned. The period of the constituent is the time required for the phase to change through 360° and is the cycle of the astronomical condition represented by the constituent.

HIGH WATER (HW)—The maximum height reached by a rising tide. The height may be due solely to the periodic tidal forces or it may have superimposed upon it the effects of prevailing meteorological conditions. Use of the synonymous term, *high tide*, is discouraged.

HIGHER HIGH WATER (HHW)—The higher of the two high waters of any tidal day.

HIGHER LOW WATER (HLW)—The higher of the two low waters of any tidal day.

HYDRAULIC CURRENT—A current in a channel caused by a difference in the surface level at the two ends. Such a current may be expected in a strait connecting two bodies of water in which the tides differ in time or range. The current in the East River, N.Y., connecting Long Island Sound and New York Harbor, is an example.

KNOT—A unit of speed, one international nautical mile (1,852.0 meters or 6,076.11549 international feet) per hour.

LOW WATER (LW)—The minimum height reached by a falling tide. The height may be due solely to the periodic tidal forces or it may have superimposed

upon it the effects of meteorological conditions. Use of the synonymous term, *low tide*, is discouraged.

LOWER HIGH WATER (LHW)—The lower of the two high waters of any tidal day.

LOWER LOW WATER (LLW)—The lower of the two low waters of any tidal day.

LUNAR DAY—The time of the rotation of the Earth with respect to the Moon, or the interval between two successive upper transits of the Moon over the meridian of a place. The mean lunar day is approximately 24.84 solar hours long, or 1.035 times as long as the mean solar day.

LUNAR INTERVAL—The difference in time between the transit of the Moon over the meridian of Greenwich and over a local meridian. The average value of this interval expressed in hours is $0.069 L$, in which L is the local longitude in degrees, positive for west longitude and negative for east longitude. The lunar interval equals the difference between the local and Greenwich interval of a tide or current phase.

LUNICURRENT INTERVAL—The interval between the Moon's transit (upper or lower) over the local or Greenwich meridian and a specified phase of the tidal current following the transit. Examples: *strength of flood interval and strength of ebb interval*, which may be abbreviated to *flood interval and ebb interval*, respectively. The interval is described as local or Greenwich according to whether the reference is to the Moon's transit over the local or Greenwich meridian. When not otherwise specified, the reference is assumed to be local.

LUNITIDAL INTERVAL—The interval between the Moon's transit (upper or lower) over the local or Greenwich meridian and the following high or low water. The average of all high water intervals for all phases of the Moon is known as *mean high water lunitidal interval* and is abbreviated to high water interval (HWI). Similarly the *mean low water lunitidal interval* is abbreviated to *low water interval (LWI)*. The interval is described as local or Greenwich according to whether the reference is to the transit over the local or Greenwich meridian. When not otherwise specified, the reference is assumed to be local.

MEAN HIGH WATER (MHW)—A tidal datum. The arithmetic mean of the high water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). For stations with shorter series, simultaneous observational comparisons are made with a primary control tide station in order to derive the equivalent of a 19-year value.

GLOSSARY OF TERMS

MEAN HIGHER HIGH WATER (MHHW)—A tidal datum. The arithmetic mean of the higher high water heights of a mixed tide observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Only the higher high water of each pair of high waters, or the only high water of a tidal day is included in the mean.

MEAN HIGHER HIGH WATER LINE (MHHWL)—The intersection of the land with the water surface at the elevation of mean higher high water.

MEAN LOW WATER (MLW)—A tidal datum. The arithmetic mean of the low water heights observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). For stations with shorter series, simultaneous observational comparisons are made with a primary control tide station in order to derive the equivalent of a 19-year value.

MEAN LOW WATER SPRINGS (MLWS)—A tidal datum. Frequently abbreviated *spring low water*. The arithmetic mean of the low water heights occurring at the time of the spring tides observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch).

MEAN LOWER LOW WATER (MLLW)—A tidal datum. The arithmetic mean of the lower low water heights of a mixed tide observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Only the lower low water of each pair of low waters, or the only low water of a tidal day is included in the mean.

MEAN RANGE OF TIDE (Mn)—The difference in height between mean high water and mean low water.

MEAN RIVER LEVEL—A tidal datum. The average height of the surface of a tidal river at any point for all stages of the tide observed over a 19-year Metonic cycle (the National Tidal Datum Epoch), usually determined from hourly height readings. In rivers subject to occasional freshets the river level may undergo wide variations, and for practical purposes certain months of the year may be excluded in the determination of tidal datums. For charting purposes, tidal datums for rivers are usually based on observations during selected periods when the river is at or near low water stage.

MEAN SEA LEVEL (MSL)—A tidal datum. The arithmetic mean of hourly water elevations observed over a specific 19-year Metonic cycle (the National Tidal Datum Epoch). Shorter series are specified in the name; e.g., monthly mean sea level and yearly mean sea level.

MEAN TIDE LEVEL (MTL)—Also called half-tide level. A tidal datum midway between mean high water and mean low water.

MIXED TIDE—Type of tide with a large inequality in the high and/or low water heights, with two high waters and two low waters usually occurring each tidal day. In strictness, all tides are mixed but the name is usually applied to the tides intermediate to those predominantly semidiurnal and those predominantly diurnal.

NATIONAL TIDAL DATUM EPOCH—The specific 19-year period adopted by the National Ocean Service as the official time segment over which tide observations are taken and reduced to obtain mean values (e.g., mean lower low water, etc.) for tidal datums. It is necessary for standardization because of periodic and apparent secular trends in sea level. The present National Tidal Datum Epoch is 1960 through 1978. It is reviewed annually for possible revision and must be actively considered for revision every 25 years.

NEAP TIDES OR TIDAL CURRENTS—Tides of decreased range or tidal currents of decreased speed occurring semimonthly as the result of the Moon being in quadrature. The *neap range* (Np) of the tide is the average semidiurnal range occurring at the time of neap tides and is most conveniently computed from the harmonic constants. It is smaller than the mean range where the type of tide is either semidiurnal or mixed and is of no practical significance where the type of tide is diurnal. The average height of the high waters of the neap tides is called *neap high water* or *high water neaps* (MHWN) and the average height of the corresponding low waters is called *neap low water* or *low water neaps* (MLWN).

PERIGEAN TIDES OR TIDAL CURRENTS—Tides of increased range or tidal currents of increased speed occurring monthly as the result of the Moon being in perigee or nearest the Earth. The *perigean range* (Pn) of tide is the average semidiurnal range occurring at the time of perigean tides and is most conveniently computed from the harmonic constants. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of no practical significance where the type of tide is diurnal.

RANGE OF TIDE—The difference in height between consecutive high and low waters, the *mean range* is the difference in height between mean high water and mean low water. Where the type of tide is diurnal the mean range is the same as the diurnal range.

GLOSSARY OF TERMS

For other ranges, see great diurnal, spring, neap, perigean, apogean, and tropic tides.

REFERENCE STATION—A tide or current station for which independent daily predictions are given in the *Tide Tables and Tidal Current Tables*, and from which corresponding predictions are obtained for subordinate stations by means of differences and ratios.

REVERSING CURRENT—A tidal current which flows alternately in approximately opposite directions with a slack water at each reversal of direction. Currents of this type usually occur in rivers and straits where the direction of flow is more or less restricted to certain channels. When the movement is towards the shore or up a stream, the current is said to be flooding, and when in the opposite direction it is said to be ebbing. The combined flood and ebb movement including the slack water covers, on an average, 12.42 hours for the semidiurnal current. If unaffected by a nontidal flow, the flood and ebb movements will each last about 6 hours, but when combined with such a flow, the durations of flood and ebb may be quite unequal. During the flow in each direction the speed of the current will vary from zero at the time of slack water to a maximum about midway between the slacks.

ROTARY CURRENT—A tidal current that flows continually with the direction of flow changing through all points of the compass during the tidal period. Rotary currents are usually found offshore where the direction of flow is not restricted by any barriers. The tendency for the rotation in direction has its origin in the Coriolis force and, unless modified by local conditions, the change is clockwise in the Northern Hemisphere and counterclockwise in the Southern. The speed of the current usually varies throughout the tidal cycle, passing through the two maxima in approximately opposite directions and the two minima with the direction of the current at approximately 90° from the direction at time of maximum speed.

SEMIIDIURNAL—Having a period or cycle of approximately one-half of a tidal day. The predominating type of tide throughout the world is semidiurnal, with two high waters and two low waters each tidal day. The tidal current is said to be semidiurnal when there are two flood and two ebb periods each day.

SET (OF CURRENT)—The direction *towards* which the current flows.

SLACK WATER—The state of a tidal current when its speed is near zero, especially the moment when a

reversing current changes direction and its speed is zero. The term is also applied to the entire period of low speed near the time of turning of the current when it is too weak to be of any practical importance in navigation. The relation of the time of slack water to the tidal phases varies in different localities. For standing tidal waves, slack water occurs near the times of high and low water, while for progressive tidal waves, slack water occurs midway between high and low water.

SPRING TIDES OR TIDAL CURRENTS—Tides of increased range or tidal currents of increased speed occurring semimonthly as the result of the Moon being new or full. The *spring range* (Sg) of tide is the average semidiurnal range occurring at the time of spring tides and is most conveniently computed from the harmonic constants. It is larger than the mean range where the type of tide is either semidiurnal or mixed, and is of no practical significance where the type of tide is diurnal. The mean of the high waters of the spring tide is called *spring high water or mean high water springs* (MHWS), and the average height of the corresponding low waters is called *spring low water or mean low water springs* (MLWS).

STAND OF TIDE—Sometimes called a platform tide. An interval at high or low water when there is no sensible change in the height of the tide. The water level is stationary at high and low water for only an instant, but the change in level near these times is so slow that it is not usually perceptible. In general, the duration of the apparent stand will depend upon the range of tide, being longer for a small range than for a large range, but where there is a tendency for a double tide the stand may last for several hours even with a large range of tide.

STANDARD TIME—A kind of time based upon the transit of the Sun over a certain specified meridian, called the *time meridian*, and adopted for use over a considerable area. With a few exceptions, standard time is based upon some meridian which differs by a multiple of 15° from the meridian of Greenwich.

STRENGTH OF CURRENT—Phase of tidal current in which the speed is a maximum; also the speed at this time. Beginning with slack before flood in the period of a reversing tidal current (or minimum before flood in a rotary current), the speed gradually increases to flood strength and then diminishes to slack before ebb (or minimum before ebb in a rotary current), after which the current turns in direction, the speed increases to ebb strength and then diminishes to slack before flood completing the cycle. If it is assumed that the speed throughout the cycle varies as the ordinates of a cosine curve, it can

GLOSSARY OF TERMS

be shown that the average speed for an entire flood or ebb period is equal to $2/\pi$ or 0.6366 of the speed of the corresponding strength of current.

SUBORDINATE CURRENT STATION—(1) A current station from which a relatively short series of observations is reduced by comparison with simultaneous observations from a control current station. (2) A station listed in the *Tidal Current Tables* for which predictions are to be obtained by means of differences and ratios applied to the full predictions at a reference station.

SUBORDINATE TIDE STATION—(1) A tide station from which a relatively short series of observations is reduced by comparison with simultaneous observations from a tide station with a relatively long series of observations. (2) A station listed in the *Tide Tables* for which predictions are to be obtained by means of differences and ratios applied to the full predictions at a reference station.

TIDAL CURRENT TABLES—Tables which give daily predictions of the times and speeds of the tidal currents. These predictions are usually supplemented by current differences and constants through which additional predictions can be obtained for numerous other places.

TIDAL DIFFERENCE—Difference in time or height of a high or low water at a subordinate station and at a reference station for which predictions are given in the *Tide Tables*. The difference, when applied according to sign to the prediction at the reference station, gives the corresponding time or height for the subordinate station.

TIDE—The periodic rise and fall of the water resulting from gravitational interactions between the Sun, Moon, and Earth. The vertical component of the particulate motion of a tidal wave. Although the accompanying horizontal movement of the water is part of the same phenomenon, it is preferable to designate the motion as tidal current.

TIDE TABLES—Tables which give daily predictions of the times and heights of high and low waters. These predictions are usually supplemented by tidal differences and constants through which additional predictions can be obtained for numerous other places.

TIME MERIDIAN—A meridian used as a reference for time.

TROPIC CURRENTS—Tidal currents occurring semimonthly when the effect of the Moon's maximum declination is greatest. At these times the tendency of the Moon to produce a diurnal inequality in the current is at a maximum.

TROPIC RANGES—The *great tropic range* (G_c), or *tropic range*, is the difference in height between tropic higher high water and tropic lower low water. The *small tropic range* (S_c) is the difference in height between tropic lower high water and tropic higher low water. The *mean tropic range* (M_c) is the mean between the great tropic range and the small tropic range. The small tropic range and the mean tropic range are applicable only when the type of tide is semidiurnal or mixed. Tropic ranges are most conveniently computed from the harmonic constants.

TROPIC TIDES—Tides occurring semimonthly when the effect of the Moon's maximum declination is greatest. At these times there is a tendency for an increase in the diurnal range. The tidal datums pertaining to the tropic tides are designated as *tropic higher high water* (T_{cHHW}), *tropic lower high water* (T_{cLHW}), *tropic higher low water* (T_{cHLW}), and *tropic lower low water* (T_{cLLW}).

TYPE OF TIDE—A classification based on characteristic forms of a tide curve. Qualitatively, when the two high waters and two low waters of each tidal day are approximately equal in height, the tide is said to be *semidiurnal*; when there is a relatively large diurnal inequality in the high or low waters or both, it is said to be *mixed*; and when there is only one high water and one low water in each tidal day, it is said to be *diurnal*.

VANISHING TIDE—In a mixed tide with very large diurnal inequality, the lower high water (or higher low water) frequently becomes indistinct (or vanishes) at time of extreme declinations. During these periods the diurnal tide has such overriding dominance that the semidiurnal tide, although still present, cannot be readily seen on the tide curve.

INDEX TO STATIONS
(Numbers refer to table 2)

[Stations marked with an asterisk (*) are reference stations for which daily predictions are given in table 1. Page numbers of reference stations are given in parentheses.]

A	No.	No.	
Abbapoola Creek ent., S.C.....	2715	Apalachicola Bay, Fla.....	4119-4131
Abbots Meadow, N.J.....	1729	Apalachicola * (196).....	4125
Abraham Bay, Bahamas.....	4499	Apalachicola River (A&N RR bridge) ..	4127
Abrolhos Anchorage, Brazil.....	4797	Lower Anchorage.....	4129
Absecon Channel, N.J.....	1561	West Pass.....	4131
Absecon Creek, N.J.....	1559	Ape Hole Creek, Md.....	1939
Absecon, N.J.....	1559	Appomattox River, Va.....	2275
Acklin Island, Bahamas.....	4495	Aquia Creek, Va.....	2129
Adams Key, Fla.....	3527	Aracaju, Brazil.....	4777
Admiralty Bay, South Shetland Islands..	4981	Arctic Archipelago.....	1-41
Airy Hall Plantation, S.C.....	2807	Argentina, Newfoundland * (4).....	239
Alabama.....	4189-4207	Argentina.....	4845-4959
Alabama Point, Al.....	4187	Arichat, Nova Scotia.....	471
Albany, N.Y. * (80).....	1343	Arieger Bay, Newfoundland.....	215
Albemarle and Pamlico Sounds, N.C.....	2317	Aripeka, Fla.....	4045
Albergottie Creek, S.C.....	2883	Armacao dos Buzios, Brazil.....	4807
Alberton, Prince Edward Island.....	411	Arroyo, Puerto Rico.....	4595
Alert, Arctic.....	35	Arsuk Fjord, Greenland.....	71
Alexandria, Va.....	2141	Arthur Kill.....	1383-1393
Allanton, East Bay, Fla.....	4147	Artificial Island, N.J.....	1725
Allied Chemical Corp. Docks, Ga.....	3095	Aruba, Lesser Antilles.....	4649
Alligator Bayou, Fla.....	4151	Arundel Plantation, S.C.....	2535
Alligator Point, Fla.....	4107	Ashe Inlet, Hudson Strait.....	127
Alligator Point, Texas.....	4375	Ashepoo, S.C.....	2809
Alligator Reef Light, Fla.....	3597	Ashepoo-Coosaw Cutoff, S.C.....	2797
Alloway Creek, N.J.....	1727-1737	Ashepoo River, S.C.....	2795-2809
Alloway, N.J.....	1737	Ashley River, S.C.....	2683-2701
Allston Creek, S.C.....	2485	Assateague Beach, Toms Cove, Va.....	1867
Almirante Bay, Panama.....	4453	Assiscunk Creek, N.J.....	1839
Alpine, N.J.....	1319	Assistance Bay.....	25
Altamaha Sound, Ga.....	3059-3077	Atchafalaya Bay, La.....	4317-4329
Alvarado, Mexico.....	4415	Atlantic Beach, Fla.....	3257
Amazon River.....	4731-4735	Atlantic Beach Bridge, N.C.....	2389
Amelia City, Fla.....	3159	Atlantic Beach, N.C.....	2385,2393
Amelia Earhart Dam, Mass.....	853	Atlantic City, N.J. * (88).....	1563
Amelia River, Fla.....	3155,3159	Atlantic Heights, N.H.....	807
Amherst Harbour, Gulf of St. Lawrence..	433	Atlantic Highlands, N.J.....	1421
Amherst Point, Nova Scotia.....	555	Auburn, N.J.....	1779
Amityville, N.Y.....	1255	Aucilla River, Fla.....	4095
Amuay, Venezuela * (268).....	4671	Auld Cove, Nova Scotia.....	447
Anacostia River.....	2147-2153	Avalon, Md.....	2005
Anclope, Fla.....	4031	Avon River, Nova Scotia.....	543
Anclope Keys, Fla.....	4029,4035	Awandaw Creek, S.C.....	2597
Anclope River, Fla.....	4031,4033		
Ancona, Fla.....	3347	B	
Andrews Ave. bridge, New River, Fla.....	3451	Babylon, N.Y.....	1251
Andros Island, Bahamas.....	4469	Back Bay, New Brunswick.....	589
Androscoggin River, Maine.....	727,729	Back Cove, Maine.....	761
Anglin Fishing Pier, Fla.....	3447	Back Creek, N.J.....	1687,1689
Angmagssalik, Greenland.....	57	Back River, Ga.....	2973
Angra dos Reis, Brazil.....	4815	Back River, Maine.....	713
Aningaq, Greenland.....	85	Back River, S.C.....	2973
Anna Maria Key, Fla.....	3975,3977	Back River, Va.....	2221
Annapolis, Severn River, Md.....	2069	Back River Reservoir, S.C.....	2667
Annapolis River, Nova Scotia.....	533	Baffin Bay, Greenland.....	101-109
Annapolis Royal, Nova Scotia.....	533	Baffin Bay, Texas.....	4395
Annette Key, Fla.....	3721	Baffin Island.....	111-115,129
Annisquam, Mass.....	835	Bahamas.....	4465-4501
Anthony Point, R.I.....	995	Bahia Anegada, Argentina.....	4883
Anticosti Island, Quebec.....	303-307	Bahia Blanca, Argentina.....	4865-4873
Antigonish Harbour, Nova Scotia.....	443	Bahia Bustamante, Argentina.....	4935
Antilla, Cuba.....	4515	Bahia Camarones, Argentina.....	4925
Apalachee Bay, Fla.....	4095-4109	Bahia Cruz, Argentina.....	4921
		Bahia de Caledonia, Panama.....	4457

	No.		No.
Bahia de Cartagena, Columbia.....	4657	Bayonne Bridge, N.Y. *	(76).....
Bahia de Cienfuegos, Cuba.....	4535,4537	Bayou BouFouca, La.....	4239
Bahia de Levisa entrance, Cuba.....	4517	Bayou Cumbest, Miss.....	4209
Bahia de los Nodales, Argentina.....	4945	Bayou La Batre, Ala.....	4207
Bahia de Nipe, Cuba.....	4513,4515	Bayou Rigaud, Grand Isle, La.....	4293
Bahia de Nuevitas, Cuba.....	4505,4507	Bayport, Fla.....	4049
Bahia de Sagua de Tanamo, Cuba.....	4519	Bayport, Va.....	2173
Bahia de Tablazos, Venezuela.....	4667	Bayville, Va.....	2291
Bahia Engano, Argentina.....	4913	Bayville Bridge, N.Y.....	1169
Bahia Gil, Argentina.....	4929	Beach Channel (bridge), N.Y.....	1283
Bahia Honda, Cuba.....	4545	Beach Creek, Ga.....	3131
Bahia Honda Channel, Fla.....	3695,3703	Beach Hammock, Ga.....	2981
Bahia Honda Key, Fla.....	3693,3695	Beach Haven Crest, N.J.....	1519
Bahia Honda Key Channel, Fla.....	3693	Beach Haven Coast Guard Station, N.J.....	1531
Bahia Janssen, Argentina.....	4917	Beach Point, Mass.....	893
Bahia Laura, Argentina.....	4947	Bear Cut, Fla.....	3499
Bahia Mar Yacht Club, Fla.....	3449	Bear River, Ga.....	3005,3015
Bahia Oso Marino, Argentina.....	4943	Bear River Entrance, Ga.....	3017
Bahia San Blas, Argentina.....	4885	Beaufort Inlet Channel Range, N.C.....	2367
Bahia San Julian, Argentina.....	4949	Beaufort, N.C.....	2369,2371
Bahia San Sebastian, Argentina.....	4961	Beaufort River, S.C.....	2865-3235
Bahia Thetis, Argentina.....	4967	Beaufort, S.C.....	2879
Baie Verte, New Brunswick.....	407	Beaujeu Channel, Quebec.....	345
Bailey Cut, Ga.....	3117	Beaver Dam, N.J.....	1749
Baileys Landing, S.C.....	2899	Beaverdam Creek, N.J.....	1453,1455
Bakers Haulover Inlet (inside), Fla.....	3483	Beavertail Point, R.I.....	1003
Bald Head, N.C.....	2411	Beckwiths Creek, Md.....	1989
Bald Point, Fla.....	4103	Beechy Island, Arctic.....	23
Baldwin Bay, N.Y.....	1271	Bees Ferry, S.C.....	2695
Ballast Point, Fla.....	3993	Beesleys Point, N.J.....	1573
Baltimore, Md. * (108).....	2059	Belem (Para), Brazil.....	4741
Baltimore Harbor, Md.....	2059-2061	Belfast, Ga.....	3021
Banana Creek, Fla.....	3299	Belfast River, Ga.....	3021
Banana River, Fla.....	3299-3309	Belfast, Maine.....	665
Banco Chico, Argentina.....	4849	Belize.....	4423,4425
Banco Cuirassier, Argentina.....	4851	Belize City, Belize.....	4423
Bangor, Maine.....	663	Belleoram, Newfoundland.....	251
Bannermans Bridge, N.C.....	2433	Belleville, N.J.....	1357
Bar Harbor, Maine * (32).....	623	Belleville, Va.....	2197
Baracoa, Cuba.....	4521	Bellevue, D.C.....	2143
Barahona, Dominican Republic.....	4583	Bellmore, N.Y.....	1267
Barataria Bay, La.....	4293-4297	Bellmore Creek, N.Y.....	1267
Barataria Pass, La.....	4289	Bellot Strait, Arctic.....	17
Barbados, Lesser Antilles.....	4641	Bellville Point, Ga.....	3047
Barbour Island, Ga.....	3041	Bells River, Fla.....	3151,3149
Barbour Island River, Ga.....	3039-3041	Belmar, N.J.....	1445
Barnegat Bay, N.J.....	1463-1503	Ben Sawyer Bridge, S.C.....	2625
Barnegat Inlet, N.J.....	1497	Benedict, Md.....	2093
Barnegat Pier, N.J.....	1479	Bennet's Dock, S.C.....	2495
Barnes Sound, Fla.....	3545,3547	Berkeley Sound, Falkland Is.....	4969
Barnstable Harbor, Mass.....	893	Bermuda Esso Pier * (240).....	4463
Barra de Maturin, Venezuela.....	4687	Bermuda Islands.....	4459,4461
Barra do Rio Grande, Brazil.....	4839	Bernard Bayou, Miss.....	4225
Barren Island, Jamaica Bay, N.Y.....	1281	Berrys Creek, N.J.....	1367
Barren Island, Md.....	1981	Berthier, Quebec.....	349
Barrington Passage, Nova Scotia.....	517	Betchewun Harbour, Quebec.....	297
Barron River, Fla.....	3895	Betsiamites River, Quebec.....	325
Barrow Strait, Arctic.....	23-27	Betterton, Md.....	2039
Bass Harbor, Maine.....	627	Biddeford, Maine.....	779
Bass River, Mass.....	915	Bidwell Creek, N.J.....	1635,1637
Bastian Island, La.....	4285	Big Bay Creek, S.C.....	2763-2767
Batiscan, Quebec.....	367	Big Coppitt Key, Fla.....	3851
Bath, Maine.....	723	Big Island, Ashe Inlet, Hudson Bay.....	127
Bathurst, New Brunswick.....	387	Big Marco River, Fla.....	3921
Battery Creek, S.C.....	2877	Big Paradise Island, S.C.....	2679
Battle Harbour, Labrador.....	205	Big Pine Key, Fla.....	3697-3745
Bay Aristocrat Village, Fla.....	4005	Big Spanish Channel, Fla.....	3703-3725
Bay d'Espoir, Newfoundland.....	253,255	Big Spanish Key, Fla.....	3725
Bay Gardene, La.....	4257	Big Timber Creek, N.J.....	1809,1811
Bay of Fundy.....	521-593	Big Torch Key, Fla.....	3761,3749
Bay of Islands, Newfoundland.....	273	Billingsport, N.J.....	1797
Bay Point, Fla.....	4177	Billys Point, Fla.....	3521
Bay Shore, N.Y.....	1247	Biloxi, Biloxi Bay, Miss.....	4223
Bay Spring, R.I.....	1021	Biltmore Shores, N.Y.....	1257

No.		No.	
Bing Landing, Fla.	3277	Brant Rock, Mass.	879
Biological Station, Bermuda Is.	4461	Brazil	4725-4839
Birch Islands, Maine	601	Breach Inlet, S.C.	2621
Bird Key, Fla.	3843	Breakwater Harbor, Del *	(92)
Biscayne Bay, Fla.	3491-3497	Breton Islands, La.	1695
Biscayne Creek, Fla.	3475, 3477	Brewer Point, Severn River, Md.	2067
Biscayne Channel, Fla.	3503	Briars Creek, S.C.	2839
Bishop Head, Md.	1977	Brickyard Creek, S.C.	2843, 2881
Bivalve, N.J.	1657	Brickyard Ferry, S.C.	2805
Black Creek, Fla.	3239	Brickyard Point, S.C.	2843
Black Mingo Creek, S.C.	2527	Bridesburg, Pa.	1819
Black River, S.C.	2519-2527	Bridgeboro, Rancocas Creek, N.J.	1829
Blackbeard Creek, Ga.	3059	Bridgeport, Conn. *	(64)
Blackbeard Island, Ga.	3043, 3059	Bridgeport, N.J.	1113
Blackbird Creek, Del.	1723	Bridgetown, Barbados	1783
Blacks Creek, N.J.	1847	Bridgewater, Nova Scotia	4641
Blackwater River, Fla.	4177, 4179	Bridport Inlet, Melville Island	509
Blackwater Sound, Fla.	3553, 3555	Brielle, N.J.	7
Bladensburg, Md.	2153	Brigantine Channel, N.J.	1449
Blake Cove, Va.	1881	Bristol Ferry, R.I.	1555
Blessing Plantation, S.C.	2657	Bristol Harbor, R.I.	1011
Block Island, R.I.	1041, 1043	Bristol Highlands, R.I.	1013
Blomsterbugten, Greenland	53	Broad Bay Canal, Va.	1015
Bloody Point, S.C.	2945	Broad Creek, Md.	2297
Blount Island Bridge, Fla.	3203	Broad Creek, S.C.	2001
Bluefields Lagoon, Nicaragua	4447	Broad River, S.C.	2925, 2927
Blue Angels Park, Fla.	4181	Brooklyn Bridge, N.Y.	2903-2921
Blue Hill Bay, Maine	629-633	Broomes Island, Md.	1155
Blue Hill Harbor, Maine	629	Brosewere Bay, N.Y.	2091
Bluff Island, S.C.	2803	Broughton Point, S.C.	1275
Bluff Plantation, S.C.	2833	Broward River, Fla.	2905
Bluff Point, S.C.	2753	Brown Cove, Va.	3209
Bluffton, S.C.	2941	Brown Island, S.C.	2295
Boca Chica Key, Fla.	3855-3863	Browns Bay, Va.	2577
Boca Chita Key, Fla.	3511	Brunswick, East River, Ga.	2199
Boca Ciega Bay, Fla.	4011-4019	Brunswick, Maine	3091
Boca Pedernales entrance, Venezuela	4691	Buchanan Creek entrance, Va.	729
Boca Raton, Fla.	3435	Buck Hall, S.C.	2293
Bocas del Toro, Panama	4453	Bucksport, Maine	2597
Boggy Creek, Fla.	3175	Bucksport, S.C.	657
Bogie Channel, Fla.	3699, 3701	Buenos Aires, Argentina *	(292)
Bogie Channel Bridge, Fla.	3701	Buffalo Bluff, Fla.	4845
Bogue Inlet, N.C.	2397	Buffalo River entrance, Ga.	3251
Bogue Sound, N.C.	2387	Bulkhead Shoal Channel, Del.	3099
Bogues Bay, Va.	1873	Bulls Bay, S.C.	1763
Bohicket Creek, S.C.	2731, 2733, 2735	Bull Creek, Waccamaw R., S.C.	2591-2601
Bon Secour, Bon Secour River, Ala.	4195	Bull Creek, Calibogue Sd., S.C.	2551, 2553
Bonasse Pier, Trinidad	4701	Bull Island, S.C.	2931, 2935
Bonne Bay, Newfoundland	275	Bull River, S.C.	2931, 2939
Bonneau Ferry, S.C.	2655	Bullock Cove, R.I.	2837, 2839
Boot Key Harbor, Fla.	3661	Burlington, N.J.	1021
Boothbay Harbor, Maine	701	Burnside River, Ga.	1837
Boston, Mass. * (40)	849	Burnt Coat Harbor, Maine	2995
Boston Harbor, Mass.	845-859	Burnt Fort, Ga.	635
Boston Light, Mass.	845	Burnt Island, Maine	3121
Boston Neck, R.I.	1035	Burntcoat Head, Nova Scotia	673
Bourndale, Cape Cod Canal	889	Burwell Bay, Va.	547
Bourne Bridge, Cape Cod Canal	891	Bush River, Md.	2251
Bow Channel, Fla.	3791, 3793	Button Islands, Labrador	2051
Bowdoinham, Maine	731	Buttonwood Sound, Fla.	167
Bowen Point, N.C.	2439	Buzzards Bay, Mass.	3567
Bowles Island, S.C.	2823	Byam Martin Island, Arctic	957-985
Boy Scout Dock, Fla.	3395	C	9
Boyd's Creek, S.C.	2909, 2911	Cabedelo, Brazil	4767
Boynton Beach, Fla.	3421	Cabo Blanco, Argentina	4939
Braddock Point, S.C.	2923	Cabo Frio, Brazil	4809
Bradenton, Fla.	3979	Cabo Gracias a Dios, Nicaragua	4439
Bradenton Beach, Fla.	3975	Cabo Raso, Argentina	4919
Bradley Point, Ga.	3009	Cabo San Antonio, Cuba	4543
Bradley River, Ga.	3009	Cabo San Pablo, Argentina	4965
Bradore Bay, Quebec	285	Cabo Virgenes, Argentina	4959
Brandypot Islands, Quebec	335	Caillou Bay, La.	4313
Brandywine Shoal Light, N.J.	1625		
Branford, Conn.	1095		

	No.		No.
Caillou Boca, La.....	4311	Cape Sable, East Cape, Fla.....	3881
Cainhoy, S.C.....	2677	Cape Sheridan, Arctic.....	37
Calcasieu Pass, La.....	4339	Cape Tormentine, New Brunswick.....	405
Caleta de los Loros, Argentina.....	4891	Capers Creek, S.C.....	2611
Caleta Horno, Argentina.....	4929	Capers Creek, Beaufort R., S.C.....	2873
Caleta Leones, Argentina.....	4927	Capers Inlet, S.C.....	2609
Caleta Valdes, Argentina.....	4903	Capers Island, S.C.....	2605, 2607, 2611
Calibogue Cay, S.C.....	2925	Capers Island, Port Royal Sound, S.C....	2853
Calibogue Sound, S.C.....	2923-2957	Captain Alex's Marina, S.C.....	2481
Callawassie Creek, S.C.....	2893	Captiva Island, Fla.....	3943-3947
Callawassie Island, S.C.....	2895	Carapachibey, Cuba.....	4539
Callawassie Island Bridge, S.C.....	2897	Caraquez Harbour, New Brunswick.....	389
Caloosahatchee River, Fla.....	3933-3937	Caravelas, Brazil.....	4795
Camamu, Brazil.....	4785	Card Sound, Fla.....	3531-3541
Cambridge, Md.....	1991	Cardenas, Cuba.....	4551
Cambridge Bay, Arctic.....	11	Carenage Bay, Trinidad.....	4697
Caminada Pass, La.....	4299	Carenero, Venezuela.....	4675
Camocim, Brazil.....	4753	Carleton Point, Quebec.....	381
Camp Ellis, Maine.....	777	Carlos Point, Fla.....	3923
Camp Lloyd, Greenland.....	79	Carlstadt, N.J.....	1369
Camp Michigan, Greenland.....	83	Carr Creek, S.C.....	2531
Campbellton, New Brunswick.....	383	Carrabelle, Carrabelle River, Fla.....	4113
Campobello Island, New Brunswick....	585, 587	Cartagena, Colombia.....	4657
Canaday Landing, S.C.....	2785	Carteret, N.J.....	1389
Canal Bermejo, Argentina.....	4877	Carter's Cut, Fla.....	3309
Canal de Braganca, Brazil.....	4737	Carters Dock, S.C.....	2765
Canal del Sur, Argentina.....	4875	Cartwright Harbour, Labrador.....	195
Cananeia, Brazil.....	4823	Carupano, Venezuela.....	4681
Canarsie, N.Y.....	1293	Carysfort Reef, Fla.....	3551
Canavieiras, Brazil.....	4789	Casco Bay, Maine.....	733-773
Cane Patch Creek, Ga.....	3007	Casilda, Cuba.....	4533
Canova Beach, Fla.....	3317	Casino Creek, S.C.....	2589
Canso, Strait of, Nova Scotia.....	473	Castine, Maine.....	653
Canso Harbour, Nova Scotia.....	477	Castle Hayne, N.C.....	2431
Canton, N.J.....	1711	Castle Hill, R.I.....	999
Cap a la Roche, Quebec.....	365	Castleton-on-Hudson, N.Y.....	1341
Cap Chat, Quebec.....	317	Castors Harbour, Newfoundland.....	281
Cape Adair, Arctic.....	107	Castries, St. Lucia.....	4635
Cape Bear, Prince Edward Island.....	425	Cat Island, Bahamas.....	4487
Cape Borgen, Arctic.....	45	Cat Island, Miss.....	4227
Cape Breton Island, Nova Scotia....	449-453	Cat Point, Fla.....	4123
Cape Bryant, Arctic.....	39	Cathance River, Maine.....	731
Cape Canaveral, Fla.....	3289	Cawee Islands, Quebec.....	313
Cape Cassipore, Brazil.....	4725	Caxambas Pass, Fla.....	3903
Cape Charles Harbor, Va.....	1919	Cay Sal Bank, Bahamas.....	4467
Cape Cod, Mass.....	901-907	Cayenne, French Guiana.....	4723
Cape Cod Bay, Mass.....	881-899	Cayos de Perlas, Nicaragua.....	4443
Cape Cod Canal, Mass.....	885-891, 965	Cedar Beach, New York.....	1183
Cape Columbia, Arctic.....	33	Cedar Creek, Delaware Bay, N.J....	1683, 1685
Cape Coral Bridge, Fla.....	3935	Cedar Creek, Barnegat Bay, N.J.....	1483
Cape Dyer, Baffin Island.....	115	Cedar Heights, Fla.....	3209
Cape Fear, N.C.....	2409	Cedar Island, S.C.....	2569
Cape Fear River, N.C.....	2411-2433	Cedar Island Point, S.C.....	2575
Cape George, Nova Scotia.....	441	Cedar Key, Fla. * (188).....	4079
Cape Hatteras, N.C. * (132).....	2341, 2343	Cedar Run, N.J.....	1515
Cape Henry, Va.....	2301	Cedar Swamp Creek, N.J.....	1579
Cape Hewett, Arctic.....	109	Cedar Tree Neck, Mass.....	941
Cape Hooper, Baffin Island.....	111	Cedaryville, N.J.....	1685
Cape Island Creek, N.J.....	1621	Center Harbor, Maine.....	637
Cape Jack, Nova Scotia.....	445	Centreville Landing, Md.....	2023
Cape Lawrence, Arctic.....	103	Ceylon, Ga.....	3119
Cape Lookout, N.C.....	2353, 2355	Chaleur Bay, Canada.....	377-391
Cape May Inlet, N.J.....	1615-1619	Champlain, Quebec.....	369
Cape May, N.J.....	1621, 1623	Champney Island, Ga.....	3073
Cape May (ferry terminal), N.J.....	1629	Chance, Md.....	1957
Cape May Harbor, N.J.....	1619	Chandeleur Light, La.....	4253
Cape May Point, N.J.....	1627	Channel Five, Fla.....	3627, 3629
Cape Morris Jesup, Arctic.....	41	Channel Key, Fla.....	3857
Cape Nednick, Maine.....	787	Channel Marker Lt. #59, N.C.....	2361
Cape Porpoise, Maine.....	781	Channel No. 3, Saddlebunch Keys, Fla....	3841
Cape Romain, S.C.....	2585	Channel No. 4, Saddlebunch Keys, Fla....	3839
Cape Romain, S.C., 46 miles E. of.....	2587	Channel No. 5, Saddlebunch Keys, Fla....	3837
Cape Romano, Fla.....	3907	Channel Two, Fla.....	3623, 3625
Cape Sabine, Greenland.....	105	Chappaquiddick Island, Mass.....	933

No.		No.	
Chappaquoit Pt., Mass.....	959	Club Bridge Creek, S.C.....	2855
Charles City, Va.....	2269	Coan River, Va.....	2103
Charles River, Mass.....	851	Coates Point, N.J.....	1473
Charleston, S.C. * (144).....	2635	Coatzacoalcos, Mexico.....	4417
Charleston Harbor, S.C.....	2627-2701	Cobscook Bay, Maine.....	597-601
Charlestown, Md.....	2045	Cocheco River, N.H.....	811
Charlestown, Mass.....	851	Cocoa Beach, Fla.....	3295
Charlotte Amalie, VI * (256).....	4619	Cocoanut Key, Fla.....	3679
Charlotte Harbor, Fla.....	3955,3957	Cocodrie, La.....	4309
Charlottetown, Prince Edward Island.....	427	Cocohatchee River, Fla.....	3915,3917
Charlton Island, Hudson Bay.....	145	Coconut Point, Fla.....	3921
Chassahowitzka Bay, Fla.....	4051	Codroy Road, Newfoundland.....	267
Chassahowitzka, Fla.....	4053	Coffee Bluff, Ga.....	2997
Chateau Bay, Labrador.....	207	Coffins Point, Maine.....	599
Chatham, Mass.....	901,903	Cohansey River, N.J.....	1691,1693
Chatham River, Florida.....	3891	Cohasset Harbor, Mass.....	873
Cheatham Annex, Va.....	2209	Colburn Creek, Md.....	1947
Chechessee Bluff, S.C.....	2901	Cold Spring Harbor, N.Y.....	1171
Chechessee River, S.C.....	2889	Coles Neck, Va.....	2109
Cheesquake Creek, N.J.....	1409	College Point, N.Y.....	1133
Chef Menteur Pass, La.....	4245	Colleton River, S.C.....	2891-2899
Chehaw River, S.C.....	2825	Colombia.....	4651-4663
Chelsea, N.Y.....	1387	Colon, Panama.....	4455
Chelsea River, Mass.....	855	Colonia, Uruguay.....	4843
Cherry Grove, S.C.....	2457	Colonial Beach, Va.....	2117
Cherry Island, Md.....	1989	Colton's Point, Md.....	2113
Chesapeake and Delaware Canal.....	1753-1757	Combahee River, S.C.....	2823-2835
Chesapeake Bay.....	1913-2301	Combahee River Highway Bridge, S.C.....	2831
Chesapeake Bay Bridge Tunnel * (116)...	2287	Combination Bridge, ICWW, S.C.....	2467
Chesapeake Beach, Md.....	2083	Comfort Bight, Labrador.....	199
Chesapeake City, Md.....	1757	Comfort Island, La.....	4255
Chesconessex Creek, Va.....	1927	Comodoro Rivadavia, Argentina * (300)...	4937
Chester, Bells River, Fla.....	3149	Compton Creek, N.J.....	1419
Chester, Mahone Bay, Nova Scotia.....	501	Conanicut Island, R.I.....	1003-1007
Chester River, Md.....	2019-2031	Conception Bay, Newfoundland.....	231
Chester, Va.....	2279	Conch Bar, Jupiter Sound, Fla.....	3375
Chesterfield Inlet, Hudson Bay.....	135	Coney Island, N.Y.....	1297
Chestertown, Md.....	2029	Connecticut.....	1051-1123
Cheticamp, Nova Scotia.....	453	Connecticut River.....	1061-1085
Chickahominy River, Va.....	2261-2263	Connestquot River, N.Y.....	1245
Chicoutimi, Quebec.....	333	Connioire Bay, Newfoundland.....	261
Chignecto Bay, Nova Scotia.....	551	Constable Hook, N.J.....	1347
Chincoteague Bay, Md. and Va.....	1867-1887	Content Keys, Fla.....	3767
Chincoteague Channel, Va.....	1871	Content Passage, Fla.....	3767
Chincoteague Island, Va.....	1875-1881	Conway, S.C.....	2563
Choctawhatchee Bay, Fla.....	4157,4159	Cook Landing, S.C.....	2955
Chokoloskee, Fla.....	3893	Coon Key, Fla.....	3905
Choptank River, Md.....	1991-1995	Coon Point, Fla.....	3515
Christiansted, Virgin Islands.....	4623	Cooper R., Charleston Hbr., S.C....	2639-2669
Christina River, Del.....	1771-1773	Cooper R., Calibogue Sd., S.C....	2929-2935
Christmas Point, Fla.....	3525	Cooper R., Delaware River, N.J.....	1831
Christmas Bay, Texas.....	4377	Cooper R., RR Bridge, N.J.....	1817
Church Creek, S.C.....	2757	Coopers Creek, N.J.....	1733
Church Creek, Bohicket Ck., S.C.....	2759	Coosaw River, S.C.....	2837-2849
Church Flats, S.C.....	2725	Coosawhatchie River, S.C.....	2919
Churchill, Hudson Bay.....	137	Coral Bay, N.C.....	2393
Cienfuegos, Cuba.....	4537	Coral Harbour, Hudson Bay.....	133
Cinnaminson, N.J.....	1823	Coral Shoal, Fla.....	3503
City Point, Va.....	2273	Core Creek Bridge, N.C.....	2377
Claiborne, Md.....	2009	Corey Causeway, Fla.....	4015
Clambank Creek Dock, S.C.....	2489	Cormorant Point, Fla.....	3539
Clapboard Creek, Fla.....	3199	Cornfield Creek, Md.....	2065
Clarence Harbor, Bahamas.....	4491	Cornfield Harbor, Md.....	2099
Claremont, Va.....	2265	Corning Landing, S.C.....	2913
Clarks Point, Mass.....	977	Cornwells Heights, Pa.....	1835
Clear Lake, Texas.....	4359	Corpus Christi, Texas.....	4393
Clearwater Fiord, Canada.....	117	Corrotoman River, Va.....	2169
Clearwater, Fla.....	4023	Corsica River, Md.....	2023
Clearwater Beach, Fla.....	4025	Corson Inlet, N.J.....	1585-1589
Cliff Island, Maine.....	751	Cortez, Fla.....	3971
Cliffs Point, Md.....	2025	Cos Cob Harbor, Conn.....	1123
Cliffs Wharf, Md.....	2027	Cosgrove Bridge.....	2691
Clifton Beach, Md.....	2131	Costa Rica.....	4451
Clouter Creek, S.C.....	2639,2647	Cote Blanche, La.....	4331

	No.		No.
Cotuit Highlands, Mass.....	919	Davis Bayou, Miss.....	4211
County Landing, Station Creek, S.C.....	2863	Davis Island, Fla.....	3997
Coupon Bight, Fla.....	3737	Davis Slough, N.C.....	2337
Cove Point, Md.....	2087	Davis Strait.....	111-119
Covenas, Colombia.....	4655	Dawho, S.C.....	2775
Cow Island, Maine.....	757	Dawho Bridge, S.C.....	2745
Cow Key Channel, Fla.....	3867	Daytona Beach Shores, Fla.....	3283
Cowen Creek, S.C.....	2869-2875	Deadman Bay, Fla.....	4087
Cowpens Anchorage, Fla.....	3585	Dean Hall, S.C.....	2653
Crab Haul Creek, S.C.....	2487	Dease Strait, Arctic.....	11
Cramers Boatyard, Mullica River, N.J.....	1543	Deception Island, Sough Shetlands Is.....	4979
Crandall, St. Marys River, Fla.....	3141	Deep Creek, Va.....	2235
Crane Keys, Fla.....	3579	Deep Creek Meadow, N.Y.....	1261
Craney Island, Va.....	2227	Deep Landing, Md.....	2033
Crawl Key, Fla.....	3717	Deep Neck Point, Md.....	2001
Creighton Narrows Ent., Ga.....	3053	Deep Six Marina, Fla.....	3555
Crescent River, Ga.....	3053	Deer Island, Mass.....	847
Crisfield, Md.....	1945	Deer Isle, Maine.....	643
Crispen Island, Ga.....	3093	Deerfield Beach, Fla.....	3437
Cristobal, Panama * (236).....	4455	Delaware.....	1695-1857
Cromakill Creek, N.J.....	1375	Delaware Bay.....	1625-1703
Crooked River, Ga.....	3135.3137	Delaware City	1759,1761
Cross River entrance, Maine.....	707	Delaware River.....	1705-1853
Crosswicks Creek, N.J.....	1849.1851	Delray Beach, Fla.....	3427,3429
Crow Point, Mass.....	865	Democrat Point, N.Y.....	1233
Crumpton, Md.....	2031	Dennis Creek, N.J.....	1639-1643
Crystal Bay, Fla.....	4067-4065	Dennsport, Mass.....	913
Crystal River, Fla.....	4069-4075	Despair Bay, Newfoundland.....	253,255
Cuba.....	4503-4551	Destin, Fla.....	4157
Cuba Island, N.Y.....	1265	Dewees Inlet, S.C.....	2613
Cuckolds Creek, S.C.....	2835	Dewees Island, S.C.....	2609,2613
Cudjoe Bay, Fla.....	3773.3777	Diana Bay, Hudson Strait.....	155
Cudjoe Channel, Fla.....	3795.3797	Dias Creek, N.J.....	1633
Cudjoe Key, Fla.....	3777.3781-3785.3789	Dickerson bay, Fla.....	4105
Culebra Island, P.R.....	4607	Digby, Nova Scotia.....	531
Culebrina, Isla, P.R.....	4599	Diggs Harbour, Hudson Strait.....	147
Cumana, Venezuela.....	4677	Dillard Creek, Ga.....	3097
Cumberland, S.C.....	2517	Dinner Key Marina, Biscayne Bay, Fla.....	3497
Cumberland Dividings, Ga.....	3135	Dinner Point Creek, N.J.....	1517
Cumberland Island, Ga.....	3131.3133	Discovery Harbor, Arctic.....	101
Cumberland Sound, Ga. and Fla.....	3129-3157	Disko Island, Greenland.....	89
Cumberland River, Ga.....	3123	Distant Island, S.C.....	2869
Cumberland Wharf, Ga.....	3123	Distant Island Creek, S.C.....	2871
Cumuruxatiba, Brazil.....	4793	District of Columbia.....	2143-2153
Cundy Harbor, Maine.....	733	Dividing Creek, N.J.....	1667-1671
Cuno, Fla.....	3169	Divine's Dock, S.C.....	2477
Curacao, Lesser Antilles.....	4647	Dixie, Va.....	2191
Curlew Harbour, Labrador.....	197	Dixie Bay, Fla.....	4067
Cushing Island, Maine.....	767	Doboy Sound, Ga.....	3059-3077
Customhouse Wharf, Charleston, S.C.....	2635	Dock Thorofare, Risley Channel, N.J.....	1569
Cutler, Biscayne Bay, Fla.....	3505	Doctors Arm, Fla.....	3699
Cutler, Maine.....	603.605	Doctors Lake, Fla.....	3235
Cuttis Island, Maine.....	793	Dodge Island, Fla.....	3495
Cuttyhunk, Mass.....	955	Dog Hammock, Ga.....	3045
		Dog Island, west end, Fla.....	4111
		Dogwood Harbor, Md.....	2005
Dahlgren, Va.....	2119	Dominican Republic.....	4567-4585
Dalhousie, New Brunswick.....	385	Donald Ross Bridge, Fla.....	3405
Dallas Bluff, Ga.....	3037	Double Creek, N.J.....	1501
Damariscotta River, Maine.....	693-697	Doughboy Island, S.C.....	2951
Damariscove Harbor, Maine.....	699	Dover, N.H.....	811
Damariscove Island, Maine.....	699	Dover Bluff, Ga.....	3113
Dame Point, Fla.....	3205	Dover Bridge, Md.....	1993
Damons Point, Mass.....	877	Dover Creek, Ga.....	3113
Dania Cut-off Canal, Fla.....	3461	Dover Point, N.H.....	809
Danmarks Havn, Greenland.....	43	Doyle Point, Maine.....	745
Danmarks Island, Greenland.....	55	Drayton, S.C.....	2695
Darby Creek, Pa.....	1787-1795	Dry Tortugas, Fla.....	3879
Darien River, Ga.....	3065.3067	Duck Island Roads, Conn.....	1087
Datum Bay, Bahamas.....	4495	Duck Island, S.C.....	2689
Daufuskie Island, S.C.....	2945-2949	Duck Key, Fla.....	3645,3833
Daufuskie Landing, S.C.....	2949	Duke Marine Lab., N.C.....	2371
Dauphin Island, La. * (204).....	4191	Duck Pier, N.C. * (124).....	2315
		Dumfoundling Bay, Fla.....	3473

D

	No.		No.		
Dunbar, Fla.	2521	Enterprise Landing, S.C.	2557		
Dunedin, Fla.	4027	Erin Bay, Trinidad	4703		
Dunn Sound, S.C.	2447-2451	Escambia Bay, Fla.	4173		
Dunns Creek, Fla.	3249	Essequibo River, Guiana	4709		
Dupont, S.C.	2653	Essex, Conn.	1067		
Duxbury, Mass.	881	Essex, Mass.	833		
E					
Eagle Creek, Ga.	3051	Esso Pier, Bermuda	4463		
Eagle Neck, Ga.	3031	Esterio Bay, Fla.	3919-3925		
Eagle Point, Texas	4357	Esterio Island, Fla.	3927		
East 41st Street, N.Y.	1147	Esterio River, Fla.	3925		
East 90th Street, N.Y.	1143	Eugene Island, La.	4317		
East Arsenicker, Fla.	3531	Euhaw Creek, S.C.	2907		
East Bahia Honda Key, Fla.	3677	Everglades City, Fla.	3895		
East Bay, Fla.	4143-4149	Ewell, Md.	1953		
East Bay, Pensacola Bay	4175	Exploits Lower Harbour, Newfoundland	221		
East Bay, Texas	4371	F			
East Boothbay, Maine	693	Falkland Islands	4969, 4971		
East Branch, Cooper River, S.C.	2655-2663	Fall River, Mass.	1017		
East Cape, Fla.	3881	Falmouth Foreside, Maine	747		
East Creek, N.J.	1645	Falmouth Heights, Mass.	923		
East Dennis, Mass.	895	Farmdale, Fla.	4145		
East Greenwich, R.I.	1031	Faro Recalada, Argentina	4861		
East Key, Fla.	3581	Faro Segunda Barranca, Argentina	4887		
East Point, N.J.	1655	Fat Deer Key, Fla.	3653, 3655		
East Point, Grand Isle, La. * (216)	4291	Father Point, Quebec	327		
East River, Ga.	3091	Federal Point, N.C.	2419		
East River, N.Y.	1131-1157	Fenwick Island, S.C.	2771		
Brooklyn Bridge	1155	Fernandina Beach, Fla. * (156)	3155		
Williamsburg Bridge	1151	Fernando de Noronha, Brazil	4759		
East River, Va.	2195	Ferry Cove, Md.	2007		
East Rockaway Inlet, N.Y.	1277	Ferry Point, Va.	2261		
East Rutherford, N.J.	1359	Ferry Reach, St. Georges Island	4461		
Eastern Bay, Md.	2007, 2009	Fields Cut, S.C.	2959		
Eastern Channel, Maine	655	Fields Point, S.C.	2827		
Eastport, Maine * (28)	595	Fieldsboro, N.J.	1843		
Eatons Neck Point, N.Y.	1173	Finnsbu, Greenland	59		
Eau Gallie, Fla.	3319	Finsch Islands, Greenland	49		
Eclipse Harbour, Labrador	171	Fire Island Coast Guard Station, N.Y.	1235		
Edding Point Creek, S.C.	2815	Fire Island Inlet, N.Y.	1233		
Eden, Fla.	3349	Fire Island Light, N.Y.	1237		
Edgartown, Mass.	945	Fish Creek, N.J.	1367		
Edgeley, Pa.	1841	Fishermans Channel, Fla.	3495		
Edgemoor, Del.	1775	Fishermans Island, Va.	1913		
Edgewater, Md.	2073	Fishermans Rest, Fla.	4089		
Edgewater, N.J.	1313	Fishers Island, N.Y.	1051		
Edisto Beach, S.C.	2761	Fishing Bay, Md.	1973		
Edisto Island, S.C.	2761	Fishing Bend, Fla.	4165		
Edisto Marina, S.C.	2763	Fishing Creek, N.J.	1673		
Edisto River, S.C.	2777-2787	Fishmaster's Harbor, Greenland	77		
Edwards Creek, Fla.	3167	Five Fathom Creek, S.C.	2591		
Eel Point, Mass.	929	Fivemile River, Conn.	1117		
Egg Islands, Ga.	2993	Flagler Beach, Fla.	3279		
Eggemoggin Reach, Maine	637-639	Flamingo, Fla.	3599		
Egmont Channel, Fla.	3973	Flat Creek, N.J.	1505		
Egmont Key, Fla.	3973	Fleeton Point, Va.	2159		
El Chara (Punta Laberinto), Argentina	4881	Fleming Key, Fla.	3871		
El Jobean, Fla.	3961	Florianopolis, Brazil	4833		
Elbow Cay, Bahamas	4467	Florida	3141-4179		
Eleuthera Island, Bahamas	4483, 4485	Florida Bay	3607, 3599		
Elizabeth River, Va.	2227-2231	Florida Keys	3499-3879		
Elk River, Md.	2041-2043	Florida Passage, Ga.	3003-3005		
Elliot Cut, S.C.	2717	Florida Power, Fla.	4069		
Elliot Key, Fla.	3515, 3517, 3521-3525	Floyd Creek, Ga.	3125		
Elliot Key Harbor, Fla.	3517	Flushing Bay, N.Y.	1133		
Ellis Bay, Quebec	307	Fogo Harbour, Newfoundland	223		
Ellsworth, Maine	633	Folly River Bridge, S.C.	2707		
Elsinboro, N.J.	1739	Folly Creek, Va.	1897		
Empire Jetty, La.	4283	Folly Creek, S.C.	2709		
Englewood, Fla.	3965	Folly Island, S.C.	2705-2711		
Englishman Bay, Maine	611	Folly River, S.C.	2707-2711		
Ensenada Honda, P.R.	4607	Fore River, Maine	771		
		Forest River, Ga.	2997		

	No.		No.
Forge Pond, N.J.....	1457	Gardiners Bay, N.Y.....	1211
Forked River, N.J.....	1489	Garfield, N.J.....	1361
Fort Caswell, N.C.....	2413	Gargathy Neck, Va.....	1893
Fort Conger, Arctic.....	101	Garnet Point, Maine.....	597
Fort-de-France, Martinique.....	4633	Garnier Bayou, Fla.....	4159
Fort Eustis, Va.....	2253	Garretts Reach, N.J.....	1369, 1371
Fort Fremont, S.C.....	2865	Garrison Bight Channel, Fla.....	3869
Fort Gaines, Ala.....	4191	Gaskins Point, Va.....	1921
Fort George Island, Fla.....	3185	Gasparilla Sound, Fla.....	3963
Fort George River, Fla.....	3185	Gaspe Bay, Quebec.....	373
Fort Hamilton, N.Y.....	1303	Gay Head, Mass.....	939
Fort Jackson, Ga.....	2967	Geiger Key, Fla.....	3849
Fort Johnson, S.C.....	2631	General Daniel Cerri, Argentina.....	4873
Fort Lauderdale, Fla.....	3449, 3451	General Dynamics Pier, S.C.....	2651
Fort Macon, N.C.....	2379	Georges Islands, Maine.....	673
Fort Matanzas, Fla.....	3275	Georges Shoal, Mass.....	907
Fort McAllister, Ga.....	2999	Georgetown, Guiana.....	4711
Fort McHenry, Md.....	2059-2061	Georgetown, Fla.....	3255
Fort Morgan, Ala.....	4189	Georgetown, S.C.....	2513
Fort Moultrie, S.C.....	2629	Georgetown Harbour, Prince Edward I....	423
Fort Myers, Fla.....	3937	Georgetown Lighthouse, S.C.....	2505
Fort Pierce, Fla.....	3345	Georgia.....	2963-3157
Fort Pierce Inlet, Fla.....	3341, 3343	Gerrish Island, Maine.....	797
Fort Point, Maine.....	791	Gilchrist, Texas.....	4371
Fort Point, N.H.....	799	Gilgo Heading, N.Y.....	1253
Fort Pond Bay, N.Y.....	1217	Gingerville Creek, South River, Md....	2075
Fort Popham, Maine.....	719	Glace Bay, Nova Scotia.....	463
Fort Pulaski, Ga.....	2965	Glebe Pt., Va.....	2161
Fort Sumter, S.C.....	2627	Glen Cove, N.Y.....	1165
Fort Wadsworth, N.Y.....	1301	Gloucester Harbor, Mass.....	839
Fortaleza, Brazil.....	4757	Gloucester Point, Va.....	2207
Forteau Bay, Labrador.....	211	Goat Island, S.C.....	2501
Fortescue, N.J.....	1675	Godhavn, Greenland.....	89
Fortune Bay, Newfoundland.....	249, 251	Godthaab, Greenland.....	75
Foster Bay, Greenland.....	51	Golden Beach, Fla.....	3471
Fowl River, Ala.....	4197	Golfo de Guacanayabo, Cuba.....	4531
Fox Channel, Arctic.....	131	Golfo Nuevo, Argentina.....	4907-4911
Foxe Basin, Artic.....	15, 131	Golfo San Jorge, Argentina.....	4927-4937
Franklin City, Va.....	1885	Golfo San Jose, Argentina.....	4895-4899
Frazier Point, S.C.....	2511	Golfo San Matias, Argentina.....	4891, 4893
Frederica River, Ga.....	3085	Gomez, South Jupiter Narrows, Fla.....	3369
Frederica River Bridge, Ga.....	3083	Good Hope Landing, S.C.....	2953
Frederiksdal, Greenland.....	63	Goodwin Neck, Va.....	2203
Frederikshaab, Greenland.....	73	Goose Bay, Labrador.....	193
Freeport, N.Y.....	1271	Goose Bay, Md.....	2125
Freeport Harbor, Texas.....	4383	Goose Creek, N.J.....	1471
French Guiana.....	4719-4723	Goose Creek, S.C.....	2641-2645
Frenchman Bay, Maine.....	621	Gooseneck Point, N.J.....	1433
Frenchman's Cove, Newfoundland.....	273	Gopher Key, Fla.....	3773
Fresh Creek, Bahamas.....	4469	Gosport Harbor, N.H.....	817
Friendship Harbor, Maine.....	685	Government Cut, Fla.....	3489
Fripp Inlet Bridge, S.C.....	2851	Gowanus Bay, N.Y.....	1307
Frobisher Bay, Canada.....	119	Grahamville, S.C.....	2565
Frontera, Mexico.....	4419	Grand Bahamas Island.....	4477
Fulton, Fla.....	3201	Grand Bay, La.....	4263
Fury and Hecla Strait, Arctic.....	13	Grand Cayman, Jamaica.....	4565
G			
Gabarus Cove, Nova Scotia.....	467	Grand Isle, La.....	4291, 4293
Galesville, Md.....	2079	Grand le Pierre Harbour, Newfoundland..	249
Gallant Channel, N.C.....	2373	Grand Manan Island, New Brunswick...	577, 579
Galleon Harbour, Jamaica.....	4557	Grand Pass, La.....	4251
Galt Island, Fla.....	3941	Grassy Bay (bridge), Jamaica Bay.....	1291
Galveston, Texas * (220).....	4351	Grassy Key, Fla.....	3649, 3651
Galveston Bay, Texas.....	4355-4373	Grassy Sound, N.J.....	1609
Galveston Bay Entrance, Texas.....	4349	Grassy Sound Channel, N.J.....	1607
Galveston Pleasure Pier, Texas.....	4379	Graveling Point, N.J.....	1539
Gandy Bridge, Fla.....	4003	Gravesend Bay, N.Y.....	1299
Garden City Pier, S.C.....	2473	Gray Gables, Mass.....	963
Garden City Bridge, S.C.....	2475	Great Bay, N.J.....	1533-1539
Garden Cove, Fla.....	3557	Great Chebeague Island, Maine.....	749
Garden Key, Fla.....	3879	Great Diamond Island, Maine.....	763
Garden State Parkway, N.J.....	1409	Great Egg Harbor Bay, N.J.....	1573-1579
		Great Egg Harbor Inlet, N.J.....	1567, 1571
		Great Egg Harbor River, N.J.....	1581, 1583
		Great Hill, Mass.....	969

INDEX TO STATIONS

401

	No.		No.
Great Inagua Island, Bahamas.....	4497	Hammer Point, Fla.....	3569
Great Jervis Harbour, Newfoundland.....	255	Hammock Creek, Fla.....	4045
Great Kills Harbor, N.Y.....	1395	Hampton Harbor, N.H.....	819
Great Machipongo Inlet, Va.....	1903	Hampton River, Ga.....	3075,3077
Great Pee Dee River, S.C.....	2519-2541	Hampton Roads, Va.....	2223-2225
Great Pocket, Fla.....	3365	Hampton Roads, Sewells Pt, Va. * (120).....	2225
Great Point, Mass.....	925	Hanahan, S.C.....	2645
Great Point Clear, Ala.....	4199	Harbor Bay, Great Swan Island.....	4437
Great River, N.Y.....	1245	Harbor Channel, Fla.....	3747-3751
Great St. Lawrence Hbr., Newfoundland.....	245	Harbor of Refuge, Va.....	1869
Great Shoals Light, Md.....	1961	Harbor River Bridge, S.C.....	2793
Great Sound, N.J.....	1601	Harbor River entrance, Bull Bay, S.C.....	2595
Great South Bay, N.Y.....	1235-1253	Harbour Grace, Newfoundland.....	231
Great Swan Island, Honduras.....	4437	Hare Bay, Newfoundland.....	257
Great Wicomico River, Va.....	2161	Hargray Pier, S.C.....	2947
Great Wicomico River Light, Va.....	2157	Harkers Island, N.C.....	2357
Green Bank, N.J.....	1549	Harkers Island Bridge, N.C.....	2359
Green Cove Springs, Fla.....	3241	Harlem River, Randalls Island, N.Y.....	1157
Green Harbor River, Mass.....	879	Harriets Bluff, Ga.....	3137
Green Island, Maine.....	617	Harrington Harbour, Quebec * (12).....	289
Green Island, N.J.....	1465	Harris, Fla.....	4161
Green Island, N.Y.....	1263	Harris Neck, Ga.....	3039
Greenland.....	43-99	Hart Bluff, S.C.....	2787
Greenport, N.Y.....	1199	Hartford, Conn.....	1085
Greenwich Pier, N.J.....	1691	Hashamomuck Beach, N.Y.....	1191
Greggs Landing, S.C.....	2699	Hatteras, N.C.....	2345
Grenada, Lesser Antilles.....	4643	Hatteras Inlet, N.C.....	2347
Grey River, Newfoundland.....	259	Haulover Pier, Fla.....	3481
Greytown, Nicaragua.....	4449	Havana, Cuba.....	4547
Griffith Island, Arctic.....	27	Haverstraw, N.Y.....	1323
Grindstone Island, New Brunswick.....	557	Havre de Grace, Md.....	2047
Grondines, Quebec.....	363	Havre St. Pierre, Quebec.....	299
Gross Point, Maine.....	655	Hawk Channel, Fla.	
Grosse Ile, Quebec.....	347	Alligator Reef.....	3597
Guadeloupe, Lesser Antilles.....	4629	Channel Two.....	3625
Guanaja, Isla de, Honduras.....	4435	Channel Five.....	3627,3629
Guanica, P.R.....	4589	Duck Key.....	3645
Guantanamo Bay, Cuba.....	4525	Grassy Key.....	3651
Guarapari, Brazil.....	4801	Indian Key.....	3603
Guard Shore, Va.....	1935	Key West.....	3873
Guatemala.....	4427	Little Duck Key.....	3675
Guayaguayare Bay, Trinidad.....	4705	Pigeon Key.....	3667
Guildford Harbor, Conn.....	1091	Plantation Key.....	3583
Guinchos Cay, Bahamas.....	4465	Sombrero Key.....	3663
Gulf Beach, Conn.....	1101	Tavernier Creek, Hwy 1 Bridge.....	3575
Gulf Harbors, Fla.....	4037	Tavernier Harbor.....	3573
Gulf of Mexico.....	3881-4421	Upper Matecumbe Key.....	3595,3601
Gulf of Paria, Venezuela.....	4683-4691	Whale Harbor, Windley Key.....	3591
Gulf of St. Lawrence.....	285-453	Hawkins Point, Md.....	2057
Gulf Shores, Ala.....	4193	Hawks Nest Anchorage, Bahamas.....	4501
Gulfport, Fla.....	4013	Haxall, Va.....	2277
Gulfport Harbor, Miss.....	4221	Hazzard Creek, S.C.....	2905
Guyana.....	4709,4711	Head of Bay, N.Y.....	1287
Guysborough, Nova Scotia.....	475	Heath Point, Quebec.....	303
 H			
Hackensack River, N.J.....	1363-1381	Hebron, Hebron Fjord, Labrador.....	179
Haddam, Conn.....	1073	Heislerville, N.J.....	1653
Hadlyme, Conn.....	1069	Hell Gate, Ward's Island, N.Y.....	1141
Hagley Landing, S.C.....	2545	Hempstead Bay, N.Y.....	1261-1275
Haig Point, S.C.....	2929	Hempstead Harbor, N.Y.....	1165
Hainesport, Rancocas Creek, N.J.....	1833	Hereford Inlet, N.J.....	1601-1611
Haiti.....	4567-4575	Hernando Beach, Fla.....	4047
Halfmoon, Ga.....	3029	Herring Cove, New Brunswick.....	565
Halfmoon Island, Fla.....	3173	Higganum Creek, Conn.....	1075
Halifax, Nova Scotia * (20).....	493	High Bar, N.J.....	1499
Halifax River, Fla.....	3281,3287	Highlands, N.J.....	1425
Hall Beach, Foxe Basin.....	15	Highway A1A Bridge, Simpson Cr., Fla.....	3181
Hall Island, S.C.....	2915	Highway 1 Bridge, Fla.	
Halls River, Fla.....	4059	Manatee Creek, Fla.....	3549
Hamilton Inlet.....	187-191	Snake Creek, Fla.....	3587
Hamlin Creek, S.C.....	2619	Tavernier Creek, Fla.....	3575
Hamlin Sound, S.C.....	2615	Toms Harbor Channel, Fla.....	3647
		Whale Harbor Channel, Fla.....	3593
		Highway 17 Bridge, Back River, S.C.....	2973
		Hwy. 19 Bridge, Pithlachascotee R., Fla.	4039

No.	No.
Highway 170 Bridge, Broad River, S.C....	2903
Highway 171 Bridge, Folly Creek, S.C....	2709
Highway 704 Bridge, Palm Beach, Fla....	3415
Hillsboro, Md.....	1995
Hillsboro Beach, Fla.....	3439
Hillsboro Inlet, Fla.....	3441, 3443, 3445
Hillsboro River, Fla.....	3437
Hillsborough Bay, Fla.....	3995, 3997
Hilton Head Island, S.C.	
Braddock Point.....	2923
Broad Creek.....	2927
Calibogue Cay.....	2925
Port Royal Plantation.....	2857
Skull Creek.....	2885, 2887
The Folly.....	2859
Hingham Harbor, Mass.....	865
Hingham, Mass.....	867
Hingham Bay, Mass.....	861-871
Hix Bridge, Mass.....	985
Hobcaw Point, S.C.....	2671
Hobe Sound, Fla.....	3371, 3373
Hoffman Thorofare, N.J.....	1555
Hog Inlet Pier, S.C.....	2459
Holland Island Bar Light, Md.....	1955
Holidays Point, Va.....	2241
Hollingsworth Point, Miss.....	4211
Holly Grove Plantation, S.C.....	2537
Hollywood Beach, Fla.....	3465-3469
Hollywood Beach, N.J.....	1677
Holsteinsborg, Greenland.....	81
Homosassa Bay, Fla.....	4055
Homosassa River, Fla.....	4057, 4059
Honduras.....	4429-4437
Hooper Island, Md.....	1979
Hooper Strait, Md.....	1975-1977
Hope Creek, N.J.....	1719, 1721
Hope Creek, S.C.....	2779
Hopedale Harbour, Labrador.....	183
Hopes Advance Bay, Ungava Bay.....	157
Hopewell, Va.....	2273
Hopewell Cape, New Brunswick.....	559
Hopyard Landing, Va.....	2185
Horlbeck Creek, S.C.....	2673
Horn Island, Miss.....	4215
Horns Hook, N.Y.....	1143
Horseshoe Keys, Fla.....	3683
Horton Bluff, Nova Scotia.....	543
Housatonic River, Conn.....	1105-1111
Howard Point, Maine.....	735
Howe Key, Fla.....	3747, 3753
Howland Hook, N.Y.....	1383
Hudson, Fla.....	4043
Hudson, N.Y.....	1339
Hudson Creek entrance, Ga.....	3063
Hudson Creek, Fla.....	4043
Hudson River.....	1311-1345
Hudson Strait and Bay.....	121-165
Huger Landing, S.C.....	2663
Hull, Mass.....	871
Hunters Point, N.Y.....	1149
Hunting Island, S.C.....	2791
Huntington Bay, N.Y.....	1175
Huntington Park, Va.....	2245
Hunts Point, N.Y.....	1135
Huspa Creek, S.C.....	2849
Husted Landing, N.J.....	1689
Hutchinson Island, S.C.....	2801
Hyannis Port, Mass.....	917
Hyde Park, N.Y.....	1333
I	
I-95 Bridge, Tully River, S.C.....	2921
I-295 Bridge, St. Johns River, FL.....	3231
Georgia	
Mackay River.....	3089
Florida	
Delray Beach.....	3427
Donald Ross Bridge.....	3405
Golden Beach.....	3471
Hillsboro Beach.....	3439
Indian Creek Golf Club.....	3485
Lake Worth Creek.....	3401
Lake Wyman.....	3433
Oak Landing.....	3261
Ocean Ridge.....	3425
Pablo Creek.....	3195
Palm Valley.....	3263
Peck Lake.....	3367
PGA Boulevard Bridge.....	3407
South Delray Beach.....	3429
South Port Everglades.....	3457
Yamato.....	3431
South Carolina	
AhsePoo-Coosaw Cutoff.....	2797
Ben Sawyer Bridge.....	2625
Casino Creek.....	2589
Little River (town).....	2455
Moores Landing.....	2603
Myrtle Beach Airport.....	2463
Myrtle Beach, Combination Bridge..	2467
Nixon Crossroads.....	2461
North Myrtle Beach.....	2465
South Island Ferry.....	2509
Igloolik, Arctic.....	13
Ile aux Coudres, Quebec.....	341
Ile Haute, Nova Scotia.....	537
Iles du Salut, French Guiana.....	4721
Ilha de Maraca, Brazil.....	4729
Ilha do Brigue, Brazil.....	4731
Ilhas de Sao Joao, Brazil.....	4743
Ilheus, Brazil.....	4787
Imbituba, Brazil.....	4835
Independence Island, La.....	4295
Indian Creek, Fla.....	3485
Indian Harbour, Labrador.....	187
Indian Head, Md.....	2137
Indian Key, Fla.....	3897, 3617
Indian Key, Florida Keys, Fla.....	3603
Indian River, Fla.....	3311-3351
Indian River Inlet, Del.....	1857
Indian Rocks Beach, Fla.....	4021
Indiantown, New Brunswick.....	571
Ingeniero White, Argentina.....	4871
Ingnerit, Greenland.....	91
Ingonish Island, Nova Scotia.....	457
Ingram Thorofare, N.J.....	1597, 1599
Inner Narrows, Snipe Keys, Fla.....	3825
Iona Shores, Fla.....	3933
Ireland Island, Bermuda.....	4459
Isaacs Harbour, Nova Scotia.....	481
Isla Bermejo, Argentina.....	4875
Isla de Culebrita, P.R.....	4599
Isla de Margarita, Venezuela.....	4679
Isla de Pintos, Cuba.....	4539
Isla de Providencia, Colombia.....	4651
Isla de Roatan, Honduras.....	4431
Isla de Vieques, P.R.....	4601, 4603
Isla del Maiz Grande, Nicaragua.....	4445
Isla Escondida, Argentina.....	4915
Isla Ramon Isidro, Venezuela.....	4693
Isla Tova, Argentina.....	4933
Isla Trinidad, Argentina.....	4877, 4879
Isla Zapara, Venezuela * (264).....	4665
Islamorada, Fla.....	3615
Island Beach, N.J.....	1485, 1493

No.	No.
Isle au Haut, Maine.....	641
Isle of Hope, Ga.....	2991
Isle of Palms, S.C.....	2617-2621
Isle of Palms Pier, S.C.....	2617
Isle of Shoals, N.H.....	817
Isle of Springs, Maine.....	705
Isle of Wight Bay, Md.....	1863, 1865
Itacurussa, Brazil.....	4813
Itajai, Brazil.....	4829
Ivigtut, Greenland.....	71
J	
Jack Bay, La.....	4261
Jack Creek, S.C.....	2599
Jackson Creek, Va.....	2189
Jacksonboro Camp, S.C.....	2783
Jacksonville, Fla.....	3211, 3221, 3225
Jacksonville Beach, Fla.....	3259
Jacmel, Haiti.....	4585
Jacobs Wharf, S.C.....	2515
Jaffrey Point, N.H.....	795
Jamaica.....	4553-4565
Jamaica Bay, N.Y.....	1279-1295
Jamaica Beach, Texas.....	4373
James Bay, Canada.....	141-145
James Island Creek, S.C.....	2683
James River, Va.....	2243-2283
Jamestown, R.I.....	1005
Jamestown Bridge, S.C.....	2583
Jamestown Island, Va.....	2259
Jeddore Harbour, Nova Scotia.....	491
Jekyll Island Marina, Ga.....	3103
Jenkins Creek, S.C.....	2817, 2819
Jenkins Sound, N.J.....	1605
Jennettes Pier, N.C.....	2321
Jensen Beach, Fla.....	3351
Jeremy Creek, McClellanville, S.C.....	2593
Jesters Island, Va.....	1883
Jewfish Creek, Fla.....	3553
Jewfish Hole, Fla.....	3631
Joggins, Nova Scotia.....	553
John F. Kennedy International Airport..	1289
Johns Bay, Maine.....	691
Johns Island, S.C.....	2757
Johns Island, Fla.....	4051
Johns Pass, Fla.....	4017
Johnson Creek, S.C.....	2791
Johnson Keys, Fla.....	3685, 3687
Johnston Key, Fla.....	3799
Jointer Island, Jointer Creek, Ga.....	3105
Jones Creek, Ga.....	3077
Jones Inlet, N.Y.....	1259
Jones Neck, Maine.....	687
Jordan Point, Va.....	2271
Joseph Bayou, La.....	4277
Julianehaar.....	67
Julington River, Ga.....	3037
Julington Creek, Fla.....	3237
Jupiter, Lake Worth Creek, Fla.....	3401
Jupiter Inlet, Fla.....	3379, 3381
Jupiter Island, Fla.....	3373
Jupiter Sound, south end, Fla.....	3377
K	
Kangalaksiorvik Fiord, Labrador.....	173
Kap Farvel, Greenland.....	61
Kates Creek Meadow, N.J.....	1745
Kearny Point, N.J.....	1363
Keasbey, N.J.....	1401
Kegaska, Quebec.....	293
Kemp Channel, Fla.....	3779-3785
Kenilworth Aquatic Garden, D.C.....	2151
L	
La Argentina, Argentina.....	4899
La Coloma, Cuba.....	4541
La Guaira, Venezuela.....	4673
La Have River, Nova Scotia.....	507, 509
La Isabela, Cuba.....	4503
La Plata, Argentina.....	4847
La Poile Bay, Newfoundland.....	263
La Romana, Dominican Republic.....	4579
Labrador.....	167-211
Laguna, Brazil.....	4837
Laird Bayou, Fla.....	4143
Lake Boca Raton, Fla.....	3435
Lake Borgne, La.....	4249
Lake Forest, Fla.....	3215
Lake Maracaibo, Venezuela.....	4665, 4667
Lake Melville, Labrador.....	187-193
Lake Montauk, N.Y.....	1213
Lake Pontchartrain, La.....	4243, 4241
Lake Rudee, Va.....	2311
Lake Wesley, Va.....	2309
Lake Worth, Fla.....	3409-3421
Lake Worth Creek, Fla.....	3401, 3403
Lake Worth Pier (ocean), Fla.....	3423
Lake Wyman, Fla.....	3433
Lakes Bay, N.J.....	1571
Lanceford Creek, Fla.....	3153
Largo Sound, Fla.....	3559
Larrie Island, South Orkney Is.....	4977
Lauderdale-by-the-Sea, Fla.....	3447
Leadenhaw Creek, S.C.....	2739
Leaf Bay, Hudson Strait.....	159
Leaf Lake, Hudson Strait.....	161
Leipsic, Delaware.....	1703

	No.		No.
Leith Harbor, S. Georgia Island.....	4975	Long Key Lake, Fla.....	3635
Lemon Bay, Fla.....	3965	Long Neck Point, Conn.....	1119
Lenoxville Point, N.C.....	2363	Long Point, Fla.....	3855
Lepreau Harbour, New Brunswick.....	573	Long Point, Md.....	1949
Lesser Antilles.....	4617-4649	Long Reach, N.J.....	1599
Lester Manor, Va.....	2217	Long Sound, Fla.....	3549
L'Etang Harbour, New Brunswick.....	575	Longport, N.J.....	1567
Letite Harbour, New Brunswick.....	589	Lora Point, Fla.....	4173
Lewis Creek, Va.....	1877	Lostmans River, Fla.....	3887
Lewisetta, Va.....	2101	Louisburg Harbour, Nova Scotia.....	465
Lighthouse Point, New Haven, Conn.....	1097	Louisiana.....	4239-4339
Lighthouse Point, La.....	4329	Love Point, Md.....	2019
Lighthouse Wharf, Calcasieu Pass, La.....	4339	Loveladies Harbor, N.J.....	1503
Lignumvitae Basin, Fla.....	3613	Lower Cedar Point, Md.....	2121
Lignumvitae Key, Fla.....	3607,3609	Lower East Pubnico, Nova Scotia.....	521
Lille Pendulum, Greenland.....	47	Lower Hall Landing, Ala.....	4205
Lime Tree Bay, St. Croix * (260).....	4625	Lower Marlboro, Md.....	2095
Limehouse Bridge, S.C.....	2723	Lower Matecumbe Key, Fla.....	3617-3623
Limon, Costa Rica.....	4451	Lower New York Bay.....	1395-1415
Lincoln Sea, Arctic.....	33-37	Lower Savage Islands, Hudson Strait....	125
Liscomb Harbour, Nova Scotia.....	485	Lower Sugarloaf Sound, Fla.....	3811-3823
L'Islet, Quebec.....	343	Lower Toogoodoo Creek, S.C.....	2751
Litchfield Beach bridge, S.C.....	2491	Lower Topsaw Landing, S.C.....	2539
Little Annemessex River, Md.....	1945	Loxahatchee River, Fla.....	3383-3399
Little Back River, Ga.....	2973	Luckse Sound, Maine.....	751
Little Basin, Fla.....	3611	Lucy Point Creek, S.C.....	2821,2841
Little Bull Creek, S.C.....	2553	Ludlam Bay, N.J.....	1589
Little Card Sound, Fla.....	3541	Luis Correia, Brazil.....	4751
Little Choptank River, Md.....	1985-1989	Lunenburg, Nova Scotia.....	505
Little Creek, Va.....	2285	Lyme, Highway Bridge, Conn.....	1065
Little Deer Isle, Maine.....	639	Lynchburg Landing, Tx.....	4363
Little Duck Key, Fla.....	3675,3689	Lynn, Lynn Harbor, Mass.....	843
Little Duck Key Channel.....	3689	Lynn Haven, Fla.....	4153
Little Egg Harbor, N.J.....	1513-1531	Lynnhaven Bay, Va.....	2291-2299
Little Egg Inlet, N.J.....	1533	Lynnhaven Inlet, Va.....	2289
Little Gull Island, N.Y.....	1195		M
Little Hickory Island, Fla.....	3919		
Little Pine I. Bay, Fla.....	4047		
Little Pine Key, Fla.....	3705,3713	Mabou River entrance, Nova Scotia.....	451
Little Pottsburg Creek, Fla.....	3223	Macae, Brazil.....	4805
Little River, Maine.....	603	Macapa, Brazil.....	4735
Little River, S.C.....	2447,2453,2455	Macau, Rio Acu, Brazil.....	4763
Little River Inlet, S.C.....	2447	McClellanville, S.C.....	2593
Little River Neck, S.C.....	2453	McCreedy's Creek, Md.....	1973
Little St. Marys River, Fla.....	3145	Maceio, Brazil.....	4773
Little Satilla River, Ga.....	3107,3109,3111	Machadoc Creek, Va.....	2119
Little Sheephead Creek, N.J.....	1535	Machias River, Maine.....	609
Little Spanish Key, Fla.....	3723	Machias Seal Island, New Brunswick.....	583
Little Talbot Island, Fla.....	3183	Machiasport, Maine.....	609
Little Torch Key, Fla.....	3733,3739	Mackay Creek, S.C.....	2889
Little Wicomico River, Va.....	2155	Mackay River, Ga.....	3087-3089
Liverpool Bay, Nova Scotia.....	511	Mackerel Cove, Maine.....	631
Liverpool Point, Md.....	2133	Macuro, Venezuela.....	4683
Lloyd Harbor entrance, N.Y.....	1175	Mad Horse Creek, N.J.....	1713-1717
Lobeco, S.C.....	2847	Madeira Beach Causeway, Fla.....	4019
Lockeport, Nova Scotia.....	513	Madero, Tampico Harbor, Mexico.....	4409
Lockwoods Folly Inlet, N.C.....	2437	Madison, Conn.....	1089
Lofton, Fla.....	3153	Magdalen Islands, Nova Scotia.....	433
Lofton Creek, Fla.....	3169	Magens Bay, Virgin Islands.....	4617
Lonesome Bayou, La.....	4265	Magnolia Gardens, S.C.....	2697
Long Beach, Md.....	2085	Magothy River, Md.....	2063,2065
Long Beach, Hempstead Bay, N.Y.....	1273	Magueyes Island, P.R. * (248).....	4587
Long Branch, Fla.....	3221	Mahone Bay, Nova Scotia.....	501,503
Long Branch, N.J.....	1435,1437	Mahone Harbour, Nova Scotia.....	503
Long Creek, Va.....	2299	Mahon River entrance, Del.....	1701
Long Hill, Conn.....	1109	Main Creek, Murrells Inlet, S.C.....	2475
Long Island, Bahamas.....	4491	Main Key, Fla.....	3545
Long Island, Maine.....	755	Main Marsh Thorofare, N.J.....	1553
Long Island, N.Y.....	1219-1295	Maine.....	595-819
Long Island Sound.....	1051-1295	Malapartis Creek, N.J.....	1715
Long Key, Fla.....	3631,3633,3635,3637	Maligiaq Fjord, Greenland.....	83
Long Key, Tampa Bay, Fla.....	4015	Malpeque Bay, Prince Edward Island.....	413
Long Key Bight, Fla.....	3633	Manahawkin Bay, N.J.....	1505-1511
Long Key Channel, Fla.....	3637,3639	Manahawkin Drawbridge, N.J.....	1511

	No.		No.
Manahawkin Creek, N.J.	1509	Merigomish Harbour, Nova Scotia	439
Manasquan Inlet, N.J.	1447	Mermenau River, La.	4337
Manasquan River, N.J.	1449, 1451	Merrimack River, Mass.	821-829
Manatee Bay, Fla.	3547	Merrimacport, Mass.	827
Manatee Creek, Fla.	3547, 3549	Merritt Island, Fla.	3299, 3301, 3309
Manatee Pocket, Fla.	3361	Merrymeeting Bay, Maine	725
Manatee River, Fla.	3979, 3981	Mesquite Point, Texas	4347
Manchester, Texas	4365	Messick Point, Va.	2221
Mandalay, Fla.	4095	Metedeconk River, N.J.	1453-1459
Mangrove Pt., Fla.	4063	Metis-sur-Mer, Quebec	323
Manhasset Bay, N.Y.	1163	Metompkin Inlet, Va.	1895, 1897
Manilla, La.	4297	Mexico	4407-4421
Manokin River, Md.	1951	Miacomet Rip, Mass.	931
Mantoloking, N.J.	1463	Miami, Marina, Fla.	3493
Mantua, Mantua Creek, N.J.	1801	Miami Harbor Entrance, Fla. * (168)	3487
Mantua Creek, N.J.	1799, 1801	Micco, Fla.	3325
Manumuskin River, N.J.	1661	Michoud Substation, ICWW, La.	4247
Manzanillo, Cuba	4531	Middle Bay, Maine	739
Mar del Plata, Argentina	4857	Middle Narrows, Snipe Keys, Fla.	3827
Marco, Big Marco River, Fla.	3909	Middle Thorofare, N.J.	1587
Marco Island, Caxambas Pass, Fla.	3903	Middle Torch Key, Fla.	3731
Marcus Hook, Pa.	1781	Middletown, Conn.	1079
Marine Corp Recruit Depot, S.C.	2867	Midjik Bluff, New Brunswick	591
Marion, Mass.	971	Midway Inlet North, S.C.	2493
Market Street Bridge, Pa.	1807	Miles River, Md.	2011
Maromas, Conn.	1077	Milford Harbor, Conn.	1103
Marsh Island, La.	4327	Mill Basin, N.Y.	1295
Marshall Hall, Md.	2139	Mill Cove, Fla.	3207
Martha's Vineyard, Mass.	933-945	Mill Creek, Hackensack R., N.J.	1371, 1373
Martinique, Lesser Antilles	4633	Mill Creek, Little Egg Harbor, N.J.	1513
Maryland	1859-2139	Mill Creek, Penns Neck, N.J.	1765
Mason Creek, Fla.	4055	Mill Creek, Va.	2167
Massachusetts	823-1037	Mill Creek, Elsinboro, N.J.	1739
Massacre, Dominican Republic	4569	Mill Point, Maine	717
Massaponax, Va.	2187	Mills Point, Wicomic River, Md.	2115
Matagorda Bay, Texas	4385, 4387	Millbridge, Maine	615
Matamoros, Mexico	4407	Millenbeck, Va.	2169
Matane, Quebec	321	Millside R.R. Bridge, Del.	1773
Matanzas, Cuba	4549	Millview, Fla.	4185
Matanzas Pass, Fla.	3927	Millville, N.J.	1665
Matanzas River, Fla.	3271-3277	Milton, Fla.	4179
Matapeake, Md.	2015	Minas Basin, Nova Scotia	541-549
Matawan Creek, N.J.	1413	Mingan, Quebec	301
Matceba Gardens, S.C.	2699	Minim Creek, S.C.	2571
Matecumbe Bight, Fla.	3619	Mink Creek, Fla.	3171
Matecumbe Harbor, Fla.	3621	Miramichi Bay, New Brunswick	397
Mathew Town, Bahamas	4497	Miramichi River, New Brunswick	399
Mathias Point, Va.	2123	Miscou Harbour, New Brunswick	391
Matinicus Harbor, Maine	645	Mispillion River entrance, Del.	1697
Matlacha Pass, Fla.	3951	Mississippi	4209-4237
Mattapoisett, Mattapoisett Hbr, Mass.	975	Mississippi River	4267-4279
Mattaponi River, Va.	2215	Mississippi Sound, Ala. and Miss.	4207-4229
Mattituck Inlet, N.Y.	1189	Missouri Key, Fla.	3689, 3691
Maurice River, Delaware Bay	1657-1665	Mistanoque Harbour, Quebec	287
Maurice River Cove, Del.	1655	Mobbly Bayou, Fla.	4009
Mauricetown, N.J.	1659	Mobile, Ala. * (208)	4203
Mayaguana Island, Bahamas	4499	Mobile Bay, Ala.	4197, 4199
Mayaguez, P.R.	4613	Mobile, Coast Guard Station, Ala.	4201
Mayan Lake, Fla.	3453	Mobile Point, Ala.	4189
Mayport, Fla. * (160)	3191	Mobile River, Ala.	4203
Nayport Naval Station	3187, 3189	Mobjack, Va.	2195
May River, S.C.	2937-2943	Mobjack Bay, Va.	2195-2199
Mayo Key, Fla.	3711	Moisie Bay, Quebec	309
Mays Landing, N.J.	1583	Molasses Key Channel, Fla.	3671
McKay Bay entrance, Fla.	3999	Moltke Harbor, South Georgia, Is.	4973
Meadowville, Va.	2281	Moncrief Creek, Fla.	3213
Medomak River, Maine	687, 689	Moncton, New Brunswick	561
Medway River, Ga.	3019	Money Island, N.J.	1679
Melbourne, Fla.	3321	Money Key, Fla.	3673
Melville Island	5.7	Money Point, Va.	2233
Memory Rock, Bahamas	4475	Monie Bay, Md.	1961
Menantico Creek, N.J.	1663	Monhegan Island, Maine	671
Menchville, Va.	2247	Montauk, N.Y. * (56)	1217
Mercy Bay, Banks Island	3	Montauk Harbor, N.Y.	1215

	No.		No.
Montego Bay, Jamaica.....	4561	Navarre Beach, Fla.....	4163
Monte Hermoso, Argentina.....	4863	Navesink River, N.J.....	1427, 1429
Montevideo, Uruguay.....	4841	Navy Fuel Depot, Jacksonville, Fla.....	3211
Monument Beach, Mass.....	961	Neds Creek, N.Y.....	1269
Moon Head, Mass.....	859	Neil Harbour, Nova Scotia.....	455
Moose Factory, Hudson Bay.....	143	Nelson River, Greenland.....	139
Moosonee, Canada.....	141	Neponset, Neponset River, Mass.....	857
Morehead City, N.C.....	2381, 2383	Nettles Island, Fla.....	3349
Moreland Cemetery, S.C.....	2937	New Bedford, Mass.....	979
Morgan River, S.C.....	2811-2821	New Bedford, N.J.....	1443
Morgans Point, Texas.....	4361	New Brunswick.....	383-407, 557-593
Moriches Inlet, N.Y.....	1227	New Brunswick, N.J.....	1407
Moriches Coast Guard Station, N.Y.....	1229	New Canal USCG station, La.....	4243
Morro de Sao Paulo, Brazil.....	4783	New Castle, Del.....	1767
Mortier Bay, Newfoundland.....	243	New Chehaw River, S.C.....	2823
Mosquito Creek, S.C.....	2799	New Gretna, N.J.....	1545
Mosquito Lagoon, Fla.....	3291	New Hamburg, N.Y.....	1329
Motts Basin, N.Y.....	1285	New Hampshire.....	795-819
Mount Desert Island, Maine.....	623-627	New Harbor, Maine.....	681
Mount Holly, Va.....	2111	New Haven Harbor, Conn.....	1099
Mount Pleasant Plantation, S.C.....	2525	New Jersey.....	1297-1853
Mount Sinai Harbor, N.Y.....	1185	New London, Conn. * (60).....	1053
Mountain Point, Md.....	2063	New Meadows River, Maine.....	733, 735
Muddy Creek entrance, Va.....	1933	New Millford, N.J.....	1381
Mud River, Ga.....	3051, 3055	New Orleans, La.....	4279
Mulberry Point, Va.....	2253	New Port Richey, Fla.....	4041
Mullet Key Channel, Fla.....	3983	New Providence Island, Bahamas.....	4481
Mullica River, N.J.....	1541-1551	New River, Fort Lauderdale, Fla.....	3451
Mullica River Marina, N.J.....	1551	New River, S.C.....	2945-2957
Munson Island, Fla.....	3727	New River Inlet, N.C.....	2399
Murderkill River, Del.....	1699	New Rochelle, N.Y.....	1127
Murray Bay, Quebec.....	337	New Suffolk, N.Y.....	1207
Murrells Inlet.....	2475-2489	New Topsail Inlet, N.C.....	2403
Muscongus Bay, Maine.....	681	New York, East 41st Street.....	1147
Muscongus Harbor, Maine.....	683	New York, East 90th Street.....	1143
Muskeget Island, Mass.....	931	New York Harbor.....	1297-1309
Musseilboro Island, S.C.....	2799	New York State.....	1125-1345
Myakka River, Fla.....	3961	New York, The Battery * (72).....	1309
Myggbukta, Greenland.....	51	Newark Bay.....	1347-1379
Myrtle Beach, S.C.....	2463-2469	Newbold, Pa.....	1845
Myrtle Beach, Springmaid Pier * (140) ..	2469	Newburgh, N.Y.....	1327
Mystic River, Mass.....	853	Newburyport, Mass.....	823
N			
Nachvak Bay, Labrador.....	175	Newcastle, Maine.....	697
Nacote Creek, N.J.....	1541	Newcastle, New Brunswick.....	399
Nags Head, N.C.....	2321	Newfound Harbor, Fla.....	3727, 3729, 3735
Nain, Labrador.....	181	Newfound Harbor Channel, Fla.....	3727, 3735
Nannaquaket Neck, R.I.....	993	Newfoundland.....	213-283
Nanortalik, Greenland.....	65	Newmans Thorofare, N.J.....	1537
Nansemond River, Va.....	2237-2241	Newport, R.I. * (52).....	1001
Nantasket Beach, Mass.....	869	Newport Fishing Pier, Miami Beach, Fla.....	3479
Nanticoke River, Md.....	1967-1971	Newport Landing, N.J.....	1681
Nantucket, Mass. * (44).....	927	Newport Meadows, N.J.....	1709
Nantucket Island, Mass.....	925-931	Newport News, Va.....	2243
Nantucket Sound, Mass.....	909-923	Newport River, N.C.....	2375
Nantuxent Creek, N.J.....	1679, 1681	Newtown Creek, N.Y.....	1149
Nantuxent Cove, N.J.....	1679-1689	Niantic, Conn.....	1059
Naples, Fla. * (180).....	3911, 3913	Nickerie River, Surinam.....	4713
Naples Bay, Fla.....	3911	Niles Channel, Fla.....	3755-3761
Nariva River, Trinidad.....	4707	Nix Point, Fla.....	4183
Narragansett Bay.....	987-1037	Nixon Crossroads, S.C.....	2461
Narragansett Pier, R.I.....	1037	No Name Key, Fla.....	3703
Narraguagus River, Maine.....	615	Nomans Land, Mass.....	937
Narrow Bay, N.Y.....	1231	Nomini Creek, Va.....	2111
Narsarssuaq, Greenland.....	69	Norfolk, Va.....	2229
Nassau, Bahamas.....	4481	Norris Cove, Newfoundland.....	275
Nassau River, Fla.....	3161-3175	North Anclote Key, Fla.....	4035
Nassau Sound, Fla.....	3159-3181	North Beach, N.J.....	1507
Nassauville, Fla.....	3163	North Bimini, Bahamas.....	4473
Natal, Brazil.....	4765	North Brother Island, N.Y.....	1137
Natashquan, Quebec.....	295	North Carolina.....	2315-2445
Naufrage, Prince Edward Island.....	419	North Carolina State Fisheries, N.C....	2391
		North Cat Cay, Bahamas.....	4471
		North Dawson Landing, S.C.....	2919
		North Dewees Island, S.C.....	2609

No.		No.	
North Edisto River, S.C.....	2729-2759	Old Capers Landing, S.C.....	2607
North Fork, Loxahatchee River, Fla.....	3391	Old Frenchtown Wharf, Md.....	2043
North Fork, St. Lucie River, Fla.....	3353	Old Harbor, R.I.....	1041
North Greenland.....	39,41	Old House Channel, N.C.....	2333
North Harris Channel, Fla.....	3805	Old Orchard Beach, Maine.....	775
North Haven, Maine.....	649	Old Plantation Flats, Va.....	1917
North Haven Island, Maine.....	651	Old Point Comfort, Va.....	2223
North Head, Grand Manan Island.....	577	Old Port Tampa, Fla.....	4001
North Highlands Beach, N.J.....	1631	Old Rice Mill, S.C.....	2665
North Inlet, S.C.....	2501	Old Tampa Bay, Fla.....	4003-4007
North Jetty, St. Marys River, Ga.....	3127	Old Tea Kettle Creek, Ga.....	3057
North Miami Beach, Fla.....	3479	Old Tower, Ga.....	3061
North Myrtle Beach, S.C.....	2465	Old Tracadie Gully ent., New Brunswick.	393
North Newport River, Ga.....	3023,3025,3027	Old Turtle Thorofare, N.J.....	1611
North Palm Beach, Lake Worth Cr., Fla..	3409	Oldmans Creek, N.J.....	1777,1779
North Point, Md.....	2053	Onancock, Va.....	1925
North River, Mass.....	877	Onion Key, Fla.....	3889
North River Bridge, N.C.....	2365	Onset Beach, Onset Bay, Mass.....	967
North Rustico, Prince Edward Island.....	415	Orange Park, Fla.....	3233
North Santee Bay, S.C.....	2569,2571	Oregon Inlet, N.C.....	2325-2333
North Santee Bridge, S.C.....	2573	Oregon Inlet Marina, N.C. * (128).....	2325
North Santee River Inlet, S.C.....	2567	Orient, N.Y.....	1197
North Star Bay, Greenland.....	93	Ormond Beach, Fla.....	3281
North Sydney, Cape Breton Island.....	461	Orsino Causeway, Fla.....	3303
Northbury, Va.....	2219	Ortega River entrance, Fla.....	3227
Northeast River, Md.....	2045	Orton Point, N.C.....	2427
Northeast River, N.C.....	2431,2433	Oslo, Fla.....	3335
Northport, Northport Bay, N.Y.....	1177	Ossabaw Sound, Ga.....	2993-3007
Northville, N.Y.....	1187	Otis Cove, Maine.....	677
Norton Point, Gravesend Bay.....	1299	Otter Island, S.C.....	2789
Norton Point, Jamaica Bay.....	1287	Outer Wood Island, New Brunswick.....	581
Norwich, Conn.....	1057	Oxford, Md.....	1997
Norwood City, Pa.....	1789	Oyster Bay, Va.....	1879
Nottingham Island, Greenland.....	149	Oyster Bay, N.Y.....	1167-1171
Nova Scotia.....	435-555	Oyster Bay Harbor, N.Y.....	1167
Nowell Creek, S.C.....	2675	Oyster Bay, Bayville Bridge, N.Y.....	1169
Noyack Bay, N.Y.....	1203	Oyster Creek, N.J.....	1491
Nuevitas, Cuba.....	4507	Oyster Harbor, Va.....	1909
Nummy Island, N.J.....	1607	Oyster landing, S.C.....	2487
Nunarsuaq, Greenland.....	87	Ozello, Fla.....	4065,4061
Nurse Channel, Bahamas.....	4493		
Nut Island, Mass.....	861		

O

Oak Beach, N.Y.....	1249
Oak Bluffs, Mass.....	943
Oak Branch, S.C.....	2735
Oaks Creek, S.C.....	2489
Oak Hill, Mosquito Lagoon, Fla.....	3291
Oak Island, N.C.....	2435
Oak Landing, Fla.....	3261
Oaks Creek Inlet, S.C.....	2483
Occhobanock Creek, Va.....	1921
Ocean Beach, N.J.....	1467
Ocean City, Md. * (104).....	1859-1863
Ocean City Beach, N.C.....	2401
Ocean Drive Bridge, N.J.....	1587,1591
Ocean Reef Harbor, Key Largo, Fla.....	3543
Ocean Ridge, Fla.....	3425
Oceanic Bridge, N.J.....	1427
Oceanographic Institution, Mass.....	949
Ocella Creek, S.C.....	2729
Ochlockonee Bay, Fla.....	4103
Ocracoke, N.C.....	2351
Ocracoke Inlet, N.C.....	2349
Ogden Creek, N.J.....	1689
Ogeechee River, Ga.....	2999,3001,3003
O'Hara Key, Fla.....	3835
Ohio Key, Fla.....	3691,3693
Ohio Key Channel, Fla.....	3691
Okatee River, S.C.....	2899
Old Bic Harbour, Quebec.....	329
Old Bridge, N.J.....	1405

P

Pablo Creek, Fla.....	3193,3195
Padre Island (south end), Tex. * (228).....	4397
Pagan River, Va.....	2249
Palatka, Fla.....	3247
Palm Bay, Fla.....	3323
Palm Beach, Fla.....	3413,3415
Palm Beach, Port of, Fla.....	3411
Palm Valley, Fla.....	3263
Palmetto Bluff, Fla.....	3245
Palmyra, N.J.....	1821
Pamlico Sound, N.C.....	2317,2339
Pamunkey River, Va.....	2217-2219
Panacea, Fla.....	4105
Panama.....	4453-4457
Panama City, Fla.....	4137
Panama City Beach, Fla.....	4139
Panuco R., Mexico.....	4409,4411
Paramaribo, Surinam.....	4717
Paranagua, Brazil.....	4825
Parati, Brazil.....	4817
Parika, British Guiana.....	4709
Paris Road Bridge, New Orleans, La.....	4281
Park Channel, Fla.....	3803
Park Island, S.C.....	2747
Park Turn, Va.....	2183
Parker, Fla.....	4141
Parker Island, S.C.....	2673
Parker Run, N.J.....	1525
Parris Island, S.C.....	2867
Parrsboro, Nova Scotia.....	541
Parsonage Creek, S.C.....	2481

No.	No.
Partridge Island, Nova Scotia.....	541
Pascagoula, Miss.....	4217,4219
Paspebiac, Quebec.....	379
Pass-a-Grille Beach, Fla.....	4011
Pass a Loutre entrance, La.....	4267
Pass Christian, Miss.....	4229
Passaic River, N.J.....	1355-1361
Passamaquoddy Bay.....	591,593
Patapsco River, Md.....	2053-2061
Patchogue, N.Y.....	1243
Patcong Creek, N.J.....	1575
Patrick Air Force Base, Fla.....	3297
Patuxent River, Md.....	2089-2095
Paulsboro, N.J.....	1799
Pavonia, N.J.....	1817
Pawcatuck River, R.I.....	1049
Pawtuxet, R.I.....	1023
Pawleys Island, S.C.....	2479-2489
Pawleys Island Pier, S.C.....	2483
Pawtucket, R.I.....	1029
Payer Harbour, Baffin Bay.....	105
Payne River, Greenland.....	121
Peace River, Fla.....	3959
Pea Patch Island, Del.....	1763
Peak Island, Maine.....	765
Pearlington, Miss.....	4237
Peck Lake, Fla.....	3367
Peconic Bays, N.Y.....	1207,1209
Pedricktown, Oldmans Creek, N.J.....	1777
Peekskill, N.Y.....	1325
Pelican Harbor, Bahamas.....	4479
Pelican Islands, La.....	4305
Pelotes Island, Fla.....	3199
Pemaquid Harbor, Maine.....	691
Pendola Point, Fla.....	3995
Penikese Island, Mass.....	957
Pennamquan River, Maine.....	597
Penniman Creek, New York.....	1225
Penns Neck, N.J.....	1765
Pennsauken Creek, N.J.....	1821,1823
Pennsylvania.....	1781-1819
Penny Creek, south of.....	2781
Penny Strait, Arctic.....	31
Pennys Creek, S.C.....	2719,2721
Penobscot Bay, Maine.....	637-667
Penobscot River, Maine.....	655-663
Penrose Ave. Bridge, Pa.....	1805
Pensacola, Fla. * (200).....	4171
Pensacola Bay, Fla.....	4167-4179
Pensacola Bay entrance, Fla.....	4167
Peoria Point, Fla.....	3235
Pepperfish Keys, Fla.....	4085
Perdido Bay, Fla & Ala.....	4181-4185
Perdido Pass, Ala.....	4187
Perky, Fla.....	3801
Peters Point, S.C.....	2769
Petit Manan Bar, Maine.....	617
Petitcodiac River, New Brunswick....	557-563
Pews Creek, N.J.....	1417
PGA Boulevard, Fla.....	3407
Philadelphia, Bridesburg, Pa.....	1819
Philadelphia, Pier 11, Pa.....	1813
Philadelphia, USCG Station * (100).....	1815
Phippsburg, Maine.....	721
Phoenix Park, Fla.....	3219
Piankatank River, Va.....	2189-2191
Pictou, Nova Scotia * (8).....	437
Pig Point, Va.....	2237
Pigeon Key, Fla.....	3667,3669
Pikyulik Island.....	121
Pilot Island, S.C.....	2911
Pimlico, S.C.	2669
Pinckney Island, S.C.....	2889
Pine Channel, Fla.....	3741-3745
Pine Channel Bridge, Fla.....	3739-3743
Pine Harbor, Ga.....	3049
Pine Island, Fla.....	3939,3949,3953
Pine Island, N.J.....	1715
Pine Island, S.C.....	2933
Pine Island Sound, Fla.....	3941,3945
Pine Landing, S.C.....	2773
Pineda, Fla.....	3315
Pineland, Pine Island, Fla.....	3953
Piney Point, Fla.....	3229
Piney Point, Md.....	2107
Piney Point, Mass.....	973
Pirates Cove, Fla.....	3775,3789
Piscataqua River, Maine and N.H.....	807-815
Pistolet Bay, Newfoundland.....	213
Pitch Landing, S.C.....	2561
Pithlachascotee River, Fla.....	4039,4041
Placentia Bay, Newfoundland.....	239-243
Placida, Fla.....	3963
Plantation Key, Fla.....	3577,3583,3585,3589
Playa Cortada, P.R.....	4593
Playa de Fajardo, P.R.....	4609
Playa de Ponce, P.R.....	4591
Pleasant Bay, Mass.....	905
Pleasant Hill Landing, S.C.....	2581
Pleasantville, N.J.....	1571
Plumb Beach Channel, N.Y.....	1279
Plum Gut Harbor, N.Y.....	1193
Plum Island, Mass.....	821
Plum Island Sound, Mass.....	831
Plymouth, Mass.....	883
Pocomoke River, Md.....	1941-1943
Pocomoke Sound, Md.....	1937,1939
Pocotaligo River, S.C.....	2917
Point Au Fer, La.....	4319
Point Barrow, Texas.....	4369
Point Charles, Fla.....	3563
Point Chevreuil, La.....	4323
Point Judith Harbor of Refuge, R.I.....	1039
Point Lookout, Md.....	2097
Point Lookout, N.Y.....	1259
Point No Point, Passaci River, N.J.....	1355
Point o'Woods, N.Y.....	1241
Point of Pines, S.C.....	2737
Point of Pines, Miss.....	4209
Point Pinellas, Fla.....	3989
Point St. Peter, Quebec.....	375
Point Ybel, Fla.....	3929
Pointe-a-Pitre, Guadeloupe.....	4629
Pointe aux Orignaux, Quebec.....	339
Pointe des Monts, Quebec.....	319
Pointe Platon, Quebec.....	361
Polaris Bugt, Greenland.....	99
Polawana Island, S.C.....	2819
Pompeston Creek, N.J.....	1827
Ponce de Leon Inlet, Fla.....	3285
Ponce Inlet, Fla.....	3287
Pond Point, Md.....	2051
Ponqueque Point, New York.....	1223
Ponta da Areia, Brazil.....	4781
Ponta Pedreira, Brazil.....	4733
Poponesset Island, Poponsset Bay, Mass.....	921
Porlamar, Venezuela.....	4679
Porpoise Key, Fla.....	3707
Port-au-Port, Newfoundland.....	271
Port-au-Prince, Haiti.....	4567
Port Aransas, Texas.....	4391
Port Aux Basques, Newfoundland.....	265
Port Boca Grande, Fla.....	3955
Port Bolivar, Texas.....	4353
Port Bowen, Arctic.....	19
Port Burwell, Hudson Strait.....	165
Port Canaveral, Fla. * (164).....	3293
Port Canaveral Locks, Fla.....	3305

INDEX TO STATIONS

409

	No.		No.
Port Clyde, Maine.....	675	Puerto de Gibara, Cuba.....	4511
Port Daniel, Quebec.....	377	Puerto de Hierro, Venezuela.....	4685
Port de Boucherville, Hudson Strait.....	149	Puerto de Pilon, Cuba.....	4529
Port Deposit, Md.....	2049	Puerto de Santiago de Cuba, Cuba.....	4527
Port Eads, South Pass, La.....	4273	Puerto Deseado, Argentina.....	4941
Port Elizabeth, N.J.....	1351	Puerto Ferro, P.R.....	4601
Port Elizabeth (Manumuskin R.), N.J.....	1661	Puerto Ingeniero White * (296), Arg.....	4871
Port Everglades, Fla.....	3455, 3457	Puerto Madryn, Argentina.....	4911
Port Foster, S. Shetland Islands.....	4979	Puerto Maunabo, P.R.....	4597
Port Fouchon, La.....	4301	Puerto Melo, Argentina.....	4931
Port Foulke, Greenland.....	95	Puerto Padre, Cuba.....	4509
Port George, Nova Scotia.....	535	Puerto Piramides, Argentina.....	4909
Port Hastings, Nova Scotia.....	473	Puerto Plata, Dominican Republic.....	4571
Port Hood, Nova Scotia.....	449	Puerto Real, P.R.....	4615
Port Isabel, Texas.....	4403	Puerto Rico.....	4587-4615
Port Ivory, N.Y.....	1383	Puerto Rosales, Argentina.....	4867
Port Jefferson, N.Y.....	1181	Puerto Santa Elena, Argentina.....	4923
Port Jefferson Harbor, N.Y.....	1179	Puerto San Antonio, Argentina.....	4893
Port Kennedy, Arctic.....	17	Pueyrredon, Argentina.....	4897
Port Laudania, Fla.....	3461	Pugwash, Nova Scotia.....	435
Port Lavaca, Texas.....	4387	Pulpit Harbor, Maine.....	651
Port Leopold, Arctic.....	21	Pumpkin Bay, Fla.....	3901
Port Louis, Falkland Islands.....	4969	Pumpkin Hill Creek, Fla.....	3165
Port Manatee, Fla.....	3985	Pumpkin Key, Fla.....	3535, 3793
Port Manvers, Labrador.....	177	Pungoteague Creek, Va.....	1923
Port Marnham, Labrador.....	203	Punta Ancla, Argentina.....	4865
Port Morant, Jamaica.....	4553	Punta Delgada, Argentina.....	4905
Port Morris, N.Y.....	1139	Punta de Palmas, Venezuela.....	4669
Port Nelson, Hudson Bay.....	139	Punta Gorda, Belize.....	4425
Port Newark Terminal, N.J.....	1353	Punta Gorda, Fla.....	3957
Port O'Connor, Texas * (224).....	4385	Punta Gorda, Venezuela * (272).....	4689
Port of Spain, Trinidad.....	4699	Punta Laberinto, Argentina.....	4881
Port Royal Plantation, S.C.....	2857	Punta Lobos, Argentina.....	4879
Port Royal, Jamaica.....	4555	Punta Loyola, Argentina * (304).....	4955
Port Royal, Va.....	2181	Punta Maisi, Cuba.....	4523
Port Royal, Honduras.....	4431	Punta Mulas, P.R.....	4603
Port Royal Sound, S.C.....	2857-2885	Punta Ninfas, Argentina.....	4907
Port Saint Joe, Fla.....	4133	Punta Norte, Argentina.....	4901
Port Salerno, Fla.....	3361	Punta Norte del Cabo San Antonio.....	4855
Port Saunders, Newfoundland.....	279	Punta Pasacaballos, Cuba.....	4535
Port Tobacco River, Md.....	2125	Punta Pena, Argentina.....	4949
Port Union, Newfoundland.....	227	Punta Piedras, Argentina.....	4853
Port Washington, N.Y.....	1163	Punta Quilla, Argentina.....	4951
Port Wentworth, Ga.....	2971	Punta Rassa, Fla.....	3931
Portage Island, New Brunswick.....	397	Punta Redonda, Argentina.....	4889
Portland Head Light, Maine.....	773	Purrysburg Landing, Ga.....	2977
Portland, Maine * (36).....	769		
Portland Cove, Newfoundland.....	277		
Porto Belo, Brazil.....	4831		
Portsmouth, N.H.....	805		
Portsmouth, Va.....	2231		
Portsmouth Harbor, Maine and N.H.....	795-805		
Potomac River, D.C., Md., Va.....	2099-2153		
Potts Harbor, Maine.....	737		
Poughkeepsie, N.Y.....	1331		
Presumpscot River Bridge, Maine.....	759		
Prince Creek, S.C.....	2605		
Prince Edward Island.....	409-429		
Prince Point, Maine.....	743		
Prince Regent Inlet.....	19, 21		
Princes Bay, N.Y.....	1397		
Princess Royal Islands, Arctic.....	1		
Progreso, Mexico.....	4421		
Prospect Harbor, Maine.....	619		
Providence, R.I.....	1025	Rabbit Island, La.....	4325
Provincetown, Mass.....	899	Raccoon Creek, N.J.....	1783, 1785
Prudence Island, R.I.....	1009	Raccoon Ditch, N.J.....	1709
Public Landing, Md.....	1887	Raccoon Key, Fla.....	3765
Puddledock, Va.....	2275	Raccoon Point, La.....	4313
Puerto Belgrano, Argentina.....	4869	Ragged Keys, Fla.....	3509
Puerto Cabezas, Nicaragua.....	4441	Ragged Point, Va.....	2109
Puerto Castilla, Honuras.....	4433	Rahway River, RR. Bridge, N.J.....	1385
Puerto Colombia, Colombia.....	4659	Ramrod Key, Fla.....	3729, 3759
Puerto Cortes, Honduras.....	4429	Ramshorn Creek, S.C.....	2933

Q

Quaco Bay, New Brunswick.....	567
Quantico, Va.....	2135
Quatre Bayous Pass, La.....	4287
Quebec.....	285-381
Quebec, Quebec * (16).....	353
Queen Isabella Causeway, Tx.....	4399, 4401
Queensboro Bridge, N.Y.....	1145
Queenstown, Md.....	2021
Quequen, Argentina.....	4859
Quicks Hole (north side), Mass.....	953
Quinby Creek, S.C.....	2661
Quinton, N.J.....	1735

R

Rabbit Island, La.....	4325
Raccoon Creek, N.J.....	1783, 1785
Raccoon Ditch, N.J.....	1709
Raccoon Key, Fla.....	3765
Raccoon Point, La.....	4313
Ragged Keys, Fla.....	3509
Ragged Point, Va.....	2109
Rahway River, RR. Bridge, N.J.....	1385
Ramrod Key, Fla.....	3729, 3759
Ramshorn Creek, S.C.....	2933

	No.		No.
Rancocas Creek, N.J.....	1829-1833	Rose Dew Creek, S.C.....	2943
Randalls Island, N.Y.....	1157	Rose Haven, Md.....	2081
Random Head Harbour, Newfoundland.....	229	Roses Bluff, Fla.....	3151
Rappahannock River, Va.....	2167-2187	Rossville, N.Y.....	1391
Raritan Bay.....	1395-1415	Round Hill Point, Mass.....	981
Raritan River, N.J.....	1399-1407	Round Key, Fla.....	3899
Rattlesnake Cove, Fla.....	4117	Round Point, Texas.....	4367
Reaves Point, N.C.....	2423	Route 21 Bridge, Albergottie Cr., S.C.....	2883
Recife, Brazil * (280).....	4771	Route 21 Bridge, Cowen Creek, S.C.....	2875
Red Bank, N.J.....	1429	Route 35 Bridge, Matawan Creek, N.J.....	1413
Red Bay, Labrador.....	209	Route 47 Bridge, Big Timber Cr., N.J.....	1809
Redfish Pass, Fla.....	3947	Route 47 Bridge, Del.....	
Redfish Point, Fla.....	3981	Bidwell Creek, Del.....	1637
Reed Bay, N.J.....	1557	Dennis Creek, Del.....	1643
Reedy Point, Del. * (96).....	1751	Dias Creek, Del.....	1633
Refuge Cove, Arctic.....	29	East Creek, Del.....	1645
Rehoboth Beach, Del.....	1855	Sluice Creek, Del.....	1641
Rensselaer Bugt, Greenland.....	97	West Creek, Del.....	1649
Resolution Island.....	123	Route 73 Bridge, Pennsauken Cr., N.J.....	1821
Revel Creek, Revel Island, Va.....	1901	Route 87 Bridge, Abescon Channel, N.J.....	1561
Rhems, Black Mingo Creek, S.C.....	2527	Route 130 Bridge, N.J.....	
Rhode Island.....	987-1049	Assiscunk Creek, N.J.....	1839
Rhode River, Md.....	2077	Blacks Creek, N.J.....	1847
Ria Coig, Argentina.....	4953	Crosswicks Creek, N.J.....	1851
Ribault River, Fla.....	3215	Pennsauken Creek, N.J.....	1823
Richibucto River ent., New Brunswick.....	401	Route 170 Bridge, New River, S.C.....	2957
Richmond, Va.....	2283	Route 206 Bridge, Crosswicks Cr., N.J.....	1849
Richmond Plantation, S.C.....	2659	Rowayton, Conn.....	1117
Ridgefield Park, N.J.....	1377	Royal Bay, South Georgia Island.....	4973
Rifikol, Greenland.....	85	Rudee Heights, Va.....	2309
Riggins Ditch, N.J.....	1651, 1653	Rudee Inlet, Va.....	2305-2311
Rigolet, Labrador.....	191	Runford, R.I.....	1027
Rio Ceara (bar), Brazil.....	4755	Russe1 Creek, S.C.....	2743
Rio Cunani entrance, Brazil.....	4727	Rye Beach, N.Y.....	1125
Rio de Janeiro, Brazil * (284).....	4811		S
Rio de La Plata.....	4843-4853		
Rio Dulce, Guatemala.....	4427		
Rio Gallegos, Argentina.....	4957	Sabine Bank Lighthouse, Texas.....	4341
Rio Grande (Muelle), Argentina.....	4963	Sabine Pass (jetty), Texas.....	4343
Rio Maroni entrance, French Guiana.....	4719	Sabine Pass, Texas.....	4345, 4347
Rio Negro ent., Argentina.....	4889	Sable Island (north side), Nova Scotia.....	495
Rio Orinoco, Venezuela.....	4693	Sable Island (south side), Nova Scotia.....	497
Rio Para Entrance, Brazil.....	4737	Sachem Head, Conn.....	1093
Rio San Juan, Venezuela.....	4689	Sachuest, R.I.....	989
Rio Sao Francisco, Brazil.....	4775	Saco River, Maine.....	777, 779
Riohacha, Colombia.....	4663	Saddlebunch Keys, Fla.....	3817-3847
Risley Channel, N.J.....	1569	Safety Harbor, Fla.....	4007
River Bend Marina, N.J.....	1581	Sag Harbor, N.Y.....	1205
Riverdale, N.Y.....	1317	Sagamore, Cape Cod Canal, Mass.....	887
Riverport, Nova Scotia.....	507	Sagua de Tanamo, Bahia de, Cuba.....	4519
Riverside, Md.....	2127	Saguenay River, Quebec.....	331, 333
Riviera Beach, Baffin Bay, Texas.....	4395	Saint John, New Brunswick * (24).....	569
Riviera Beach, N.J.....	1451	St. Andrew Bay, Fla.....	4135-4155
Roane Point, Va.....	2211	St. Andrew Sound, Ga.....	3103-3125
Roanoke Sound Channel, N.C.....	2323	St. Andrews, New Brunswick.....	593
Roaring Point, Md.....	1967	Ste. Anne des Monts, Quebec.....	315
Robinhood, Maine.....	715	St. Anns Bay, Jamaica.....	4563
Rocas, Atol das, Brazil.....	4761	St. Anns Harbour, Nova Scotia.....	459
Rock Harbor, Fla.....	3565	St. Augustin, Quebec.....	357
Rock Islands, Fla.....	4093	St. Augustine, Fla.....	3267
Rockaway Inlet, N.Y.....	1281	St. Augustine Beach, Fla.....	3269
Rockdedundy River, Ga.....	3069	St. Barbe Bay, Newfoundland.....	283
Rockland, Maine.....	667	St. Barthelemy, Lesser Antilles.....	4627
Rockland Channel Bridge, Fla.....	3853	St. Catherines Sound, Ga.....	3011-3055
Rockland Key, Fla.....	3853	Ste. Croix, Quebec.....	359
Rockport, Mass.....	837	St. Croix Islands, Virgin Islands.....	4623-4625
Rockport, Texas.....	4389	St. George, N.Y.....	1305
Rockville, S.C.....	2731	St. George Island, Fla.....	4115-4121
Rocky Creek, Fla.....	4047	St. George River, Maine.....	675-679
Rocky Hill, Conn.....	1081	St. George Sound, Fla.....	4111-4121
Rodanthe, N.C.....	2339	St. Georges, Del.....	1753
Romerly Marsh Creek, Ga.....	2983	St. Georges Harbour, Newfoundland.....	269
Roosevelt Roads, P.R.....	4605	St. Georges Island, Bermuda.....	4463
Roseau, Dominica.....	4631	St. Helena Sound, S.C.....	2789-2851

No.		No.	
St. James City, Fla.....	3939	Sands Key, Fla.....	3513
St. James Island, Fla.....	4107,4109	Sandy Hook, N.J. * (84).....	1423
St. John Bay, Newfoundland.....	281	Sandy Point, Maine.....	661
St. John River, New Brunswick.....	571	Santa Barbara de Samana, Dominican Rep.	4573
St. John's, Newfoundland.....	233	Santa Cruz Cabralia, Brazil.....	4791
St. Johns River, Fla.....	3191-3255	Santa Cruz (Punta Quilla), Argentina.....	4951
St. Joseph Bay, Fla.....	4133	Santa Domingo, Dominican Republic.....	4581
St. Joseph Sound, Fla.....	4027	Santa Elena, Puerto, Argentina.....	4923
St. Laurent d'Orleans, Quebec.....	351	Santa Marta, Colombia.....	4661
St. Lawrence River.....	315-371	Santa Rosa Sound, Fla.....	4165
St. Louis Bay, Miss.....	4233	Santana, Recifes de, Brazil.....	4747
St. Lucia, Lesser Antilles.....	4635,4637	Santee Pass, S.C.....	2607
St. Lucie, Fla.....	3337	Santee River, S.C.....	2581,2583
St. Lucie River, Fla.....	3353-3359	Santos, Brazil * (288).....	4821
St. Margarets Bay, Nova Scotia.....	499	Sao Francisco do Sul, Brazil.....	4827
St. Marks, Fla.....	4099	Sao Joao da Barra, Brazil.....	4803
St. Marks River Entrance, Fla. * (192).....	4097	Sao Luiz, Brazil.....	4745
St. Martins River, Fla.....	4061	Sao Sebastiao, Brazil.....	4819
St. Mary Bay, Newfoundland.....	237	Saona, Isla, Dominican Republic.....	4577
St. Mary Bay, Nova Scotia.....	525-529	Sapelo Island, Ga.....	3061
St. Mary Harbour, Newfoundland.....	237	Sapelo River, Ga.....	3045-3049
St. Mary River, Nova Scotia.....	483	Sapelo Sound, Ga.....	3011-3055,3061
St. Marys, Ga.....	3139	Saquatucket Harbor.....	909
St. Marys Entrance, Ga.....	3127	Sarasota, Fla.....	3969
St. Marys River, Ga. and Fla.....	3139-3147	Sarasota Bay, Fla.....	3969,3971
St. Michaels, Md.....	2003	Sasanoa River, Maine.....	715,717
St. Michaels, Miles River, Md.....	2011	Sassafras River, Md.....	2039
St. Nicolaas Bay, Aruba.....	4649	Satilla River, Ga.....	3115-3121
St. Nicolas, Quebec.....	355	Saunders Wharf, Va.....	2179
St. Paul Island, Nova Scotia.....	431	Savage Creek, S.C.....	2935
St. Peter Bay, Cape Breton Island.....	469	Savage Island, S.C.....	2935
St. Peters Bay, Prince Edward Island....	417	Savannah, Ga. * (152).....	2969
St. Petersburg, Fla. * (184).....	3991	Savannah River, Ga.....	2963-2977
St. Pierre Creek, S.C.....	2769	Savannah River Entrance, Ga. * (148)....	2965
St. Pierre Harbor, Newfoundland.....	247	Sawpit Creek, Fla.....	3177,3179
St. Pierre Island, Newfoundland.....	247	Sawyer Key, Fla.....	3795,3797
St. Simons Light, Ga.....	3081	Saxis, Va.....	1937
St. Simons Sound, Ga.....	3079-3101	Saybrook Jetty, Conn.....	1061
St. Simons Sound Bar, Ga.....	3079	Saybrook Point, Conn.....	1063
St. Thomas Island, Virgin Islands.....	4617-4621	Sayreville, N.J.....	1403
St. Vincent, Lesser Antilles.....	4639	Scarborough, Tobago.....	4645
Sakonnet, R.I.....	987	Schooner Bay, Va.....	1927
Sakonnet River, R.I.....	987-997	Schooner Harbour, Baffin Island.....	129
Salem, Mass.....	841	Schottegat, Curacao.....	4647
Salem, N.J.....	1743	Schuylkill River, Pa.....	1805-1807
Salem Canal entrance, N.J.....	1769	Scituate, Mass.....	875
Salem Nuclear Plant, N.J.....	1725	Scoresby Sound, Greenland.....	55
Salem River, N.J.....	1741-1749	Scotia Bay, S. Orkney Islands.....	4977
Salinopolis, Brazil.....	4739	Scotland, Va.....	2257
Salisbury, Md.....	1965	Scott Creek, S.C.....	2767
Salisbury, New Brunswick.....	563	Sea Bright, Shrewsbury River, N.J.....	1431
Salisbury Point, Mass.....	825	Sea Grape Point, Fla.....	3523
Salmon Falls River, N.H.....	813	S.C.L. RR. bridge, Savannah River, Ga..	2975
Salt River, Fla.....	4067	Seabrook, S.C.....	2795
Salt Water Creek, S.C.....	2961	Seacamp Dock, Ga.....	3133
Salvador, Brazil.....	4779	Seal Cove, New Brunswick.....	579
Salvesborg Landing, S.C.....	2909	Seapoint, Maine.....	793
Sam Worth Game Management Area, S.C....	2533	Seaside Heights, N.J.....	1461
Sampit River, S.C.....	2513-2517	Seaside Park, N.J.....	1477
San Carlos Bay, Fla.....	3929,3931	Seavey Island, Maine.....	803
San Domingo Creek, Md.....	2003	Sebastian, Fla.....	3329
San Jacinto River, Tx.....	4363	Sebastian Inlet, Fla.....	3327
San Juan, P.R. * (252).....	4611	Secaucus, N.J.....	1371
San Juan del Norte, Nicaragua.....	4449	Secessionville, Secessionville Cr.,S.C.....	2703
San Luis Pass, Texas.....	4381	Sedge Islands, N.J.....	1493
San Marino Island, Fla.....	3491	Seekonk River, R.I.....	1027,1029
San Roman, Argentina.....	4895	Seminole Shores, Fla.....	3363
San Salvador, Bahamas.....	4489	Sept Iles, Quebec.....	311
Sanchez, Dominican Republic.....	4575	Sesuit Harbor, Mass.....	895
Sand Key Lighthouse, Fla.....	3877	Settlement Point, Bahamas * (244).....	4477
Sand Key Channel, Fla.....	3877	Seven Island, N.J.....	1537
Sand Shoal Inlet, Va.....	1907	Severn River, Md.....	2067-2069
Sandblasters, S.C.....	2721	Sewall Point, Fla.....	3359
Sandbridge, Va.....	2313	Sewee Bay, S.C.....	2603

	No.		No.
Sewells Point, Va.....	2225	Sops Island, Newfoundland.....	219
Shalimar, Fla.....	4159	Sorry Harbor.....	123
Shallotte Inlet, N.C.....	2439	Souris Head, Prince Edward Island.....	421
Shark Key, Fla.....	3845	South Altamaha River, Ga.....	3073
Shark River entrance, Fla.....	3883	South Amboy, N.J.....	1399
Shark River Hills, N.J.....	1441	South America.....	4651-4967
Shark River Island, N.J.....	1439	South Ashley Bridge, S.C.....	2687
Sharkfin Shoal Light, Md.....	1959	South Atlantic Ocean Islands.....	4969-4979
Sharptown, Md.....	1971	South Bay, Tx.....	4405
Shediac Bay, New Brunswick.....	403	South Brunswick River, Ga.....	3101
Sheepscot, Maine.....	711	South Bull Island, S.C.....	2931
Sheepscot River, Maine.....	705-717	South Carolina.....	2447-2961
Sheet Harbour, Nova Scotia.....	487	South Delray Beach, Fla.....	3429
Shelburne, Nova Scotia.....	515	South Edisto River, S.C.....	2763-2787
Sheldon, S.C.....	2849	South Fork, St. Lucie River, Fla.....	3357
Shell Beach, Lake Borgne, La.....	4249	South Freeport, Maine.....	741
Shell Island, Fla.....	4071	South Georgia Island.....	4973,4975
Shell Island, La.....	4321	South Harpswell, Maine.....	737
Shell Key, Fla.....	3605,3613	South Hartford, Conn.....	1083
Shell Point, Apalachee Bay, Fla.....	4101	South Is. Plantation, S.C.....	2507
Shell Point, N.C.....	2357	South Is. Ferry, S.C.....	2509
Shell Point, Peace River, Fla.....	3959	South Jamesport, N.Y.....	1209
Shell Point, Tampa Bay, Fla.....	3987	South Jetty, Winyah Bay Entr., S.C.....	2503
Shelltown, Md.....	1941	South Jupiter Narrows, Fla.....	3369
Shelter Island Sound, N.Y.....	1197-1205	South Negril Point, Jamaica.....	4559
Shelton, Conn.....	1111	South Newport Cut, Ga.....	3027
Shem Creek, S.C.....	2633	South Newport River, Ga.....	3031-3035
Sherwood Forest, Fla.....	3217	South Norwalk, Conn.....	1115
Shinnecock Bay, N.Y.....	1221-1225	South Orkney Islands.....	4977
Shinnecock Inlet, N.Y.....	1219	South Oyster Bay, N.Y.....	1257
Ship Cove, Newfoundland.....	253	South Pass, La. * (212).....	4271
Ship Island, Miss.....	4213	South Point, Marsh Island, La.....	4327
Ship Harbour, Nova Scotia.....	489	South Point, Sinepuxent Neck, Md.....	1889
Ship Shoal Light, La.....	4315	South River, Md.....	2073,2075
Shipyard Creek, S.C.....	2637	South River, N.J.....	1405
Shooting Thorofare, N.J.....	1533	South Santee River, S.C.....	2575-2579
Shoppee Point, Maine.....	611	South Shetland Islands.....	4979,4981
Shrewsbury River, N.J.....	1425-1433	South Sound, Fla.....	3561
Sigsbee Park, Fla.....	3869	South Yarmouth, Mass.....	915
Sikes Cut, Fla.....	4121	Southeast Pass, Mississippi River, La..	4269
Silver Bay, Silver Bay Marina, N.J.....	1469	Southampton Island, Greenland.....	133
Silver Eel Pond, Fishers Island, N.Y....	1051	Southold, N.Y.....	1201
Silver Lake Fork, N.J.....	1717	Southport, Maine.....	703
Similar Sound, Fla.....	3843-3847	Southport, N.C.....	2415
Simpson Creek, Fla.....	3181	SW Fork, Loxahatchee River, Fla... 3399,3397	
Sinepuxent Neck, Md.....	1889	Southwest Harbor, Maine.....	625
Sinnickson Landing, N.J.....	1741	Southwest Pass, Mississippi River, La..	4275
Sippican Harbor, Mass.....	971	Southwest Pass, Vermilion Bay, La.....	4333
Sisters Creek, Fla.....	3197	Southwest Point, Quebec.....	305
Skidaway River, Ga.....	2991	Spanish Banks, Fla.....	3723
Skull Creek (north entrance), S.C.....	2885	Spanish Harbor, Fla.....	3697
Skull Creek (south entrance), S.C.....	2887	Spencer Island, Nova Scotia.....	539
Slaughter Creek, Md.....	1985	Spicer Cove, Nova Scotia.....	551
Sloop Creek, N.J.....	1481	Spooner Creek, N.C.....	2395
Sluice Creek, N.J.....	1641	Spring Bluff, Ga.....	3111
Smith Creek, Fla.....	3279	Spring Warrior Creek, Fla.....	4091
Smith Island, Va.....	1911	Springmaid Pier, S.C.....	2469
Smith Point Bridge, N.Y.....	1231	Spuyten Duyvil Creek, N.Y.....	1315
Smith's Dock, S.C.....	2467	Squamscott River, N.H.....	815
Smithfield, Va.....	2249	Square Island Harbour, Labrador.....	201
Smithville, Md.....	1983	Squibnocket Point, Mass.....	935
Snake Creek, Fla.....	3587,3589	Stage Harbor, Mass.....	901
Snake Island, S.C.....	2713	Stamford, Conn.....	1121
Sniffens Pt., Housatonic River, Conn...	1105	Stanley Harbor, Falkland Islands.....	4971
Snipe Keys, Fla.....	3825,3827,3829	Staten Island, N.Y.....	1305-1353
Snipe Point, Fla.....	3829	Stathems Neck, N.J.....	1705
Snow Hill (city park), Md.....	1943	Station Creek, S.C.....	2863,2861
Snow Point, S.C.....	2649	Stauples Bay, Trinidad.....	4695
Socastee Bridge, S.C.....	2471	Steamboat Creek Landing, S.C.....	2741
Soldier Key, Fla.....	3507	Steelmanville, N.J.....	1575
Solomons Island, Md.....	2089	Steele Harbor Island, Maine.....	613
Sombrero Key, Fla.....	3663	Steep brook, Mass.....	1019
Sondre Stromfjord, Greenland.....	77,79	Steinhatchee River, Fla.....	4087
Sonora, Nova Scotia.....	483	Stites Sound, N.J.....	1595

	No.		No.
Stock Island, Fla.	3865	Terrebonne Bay, La.	4307, 4309
Stone Harbor, N.J.	1603	Texas	4341-4405
Stone Island, Maine	607	Texas City, Texas	4355
Stonington, Maine	643	Thames River, Conn.	1053-1057
Stono River, S.C.	2713-2725	Thank God Harbor, Greenland	99
Stony Creek, Md.	2055	The Bight, Cat Island, Bahamas	4487
Stony Point, N.Y.	1139	The Battery, N.Y.	1309
Stouts Creek, N.J.	1487	The Cove, Charleston Harbor, S.C.	2629
Stow Creek, N.J.	1705-1711	The Folly, S.C.	2859
Strait of Belle Isle	207-211	The Glades, Del.	1677
Strait of Canso, Nova Scotia	473	The Glen, R.I.	991
Stratford, Conn.	1107	The Narrows, Harris, Fla.	4161
Strathmere, Strathmere Bay, N.J.	1585	The Narrows, N.Y.	1301, 1303
Stuart, Fla.	3355	Thomas Landing, Ga.	3033
Stupart Bay	153	Thomas Point Shoal Light, Md.	2071
Sturgeon Island, Maine	725	Thomasin, La.	4265
Sturgeon Point, Va.	2267	Thomaston, Maine	679
Sugarloaf Beach (inside), Fla.	3813	Thoroughfare Creek, S.C.	2547
Sugarloaf Key, Fla.	3771, 3775, 3787, 3791	Three-mile Cut, Ga.	3065
Sugarloaf Shores, Fla.	3807, 3811, 3815	Three-mile Harbor entrance, N.Y.	1211
Sullivans Island, S.C.	2623	Throgs Neck, N.Y.	1129
Summerhouse Point, S.C.	2837	Thunderbolt, Ga.	2987
Summerland Key, Fla.	3755, 3757, 3779	Ticoralaq Island, Labrador	189
Summerside Harbour, Prince Edward I.	429	Tidnish Head, New Brunswick	407
Summit Bridge, Del.	1755	Tierra Del Fuego	4961-4967
Sunbury, Ga.	3019	Tiger Point, Fla.	3165
Sunglow Pier, Fla.	3283	Tignish, Prince Edward Island	409
Sunnybank, Va.	2155	Tilghman Island, Md.	2007
Sunny Isles, Biscayne Creek, Fla.	3475	Timbalier Bay, La.	4303, 4305
Sunny Point Army Base, N.C.	2421, 2425	Timbalier Island, La.	4303
Sunset Beach, Cape May, N.J.	2443, 1627	Timmons River, Ga.	3029
Sunset Beach, Del. River, N.J.	1811	Tinicum Nat. Wildlife Refuge, Pa.	1791-1795
Sunset Beach, N.C.	2445	Titusville, Fla.	3311
Sunset Cove, Fla.	3567	Tiverton, Nova Scotia	527
Sunset Lake, N.J.	1617	Tivoli, N.Y.	1337
Surinam	4713-4717	Tocoi, Fla.	3243
Suriname River Entrance * (276)	4715	Todd Creek, Ga.	3115
Susquehanna River, Md.	2047, 2049	Tolchester, Md.	2035
Sutherlands Still, Fla.	3249	Tolomato River, Fla.	3265
Swananee, Fla.	4083	Tom Point Creek, S.C.	2747
Swananee River, Fla.	4081	Toms Cove, Assateague Beach, Md.	1867
Swain Channel, N.J.	1615	Toms Harbor, Fla.	3643
Swan Creek, Md.	2033	Toms Harbor Channel, Fla.	3647
Swans Island, Maine	635	Toms Harbor Cut, Fla.	3641
Swedesboro, N.J.	1785	Toms River, N.J.	1475
Sweetwater, N.J.	1551	Toogoodoo Creek, S.C.	2749
Swim Point, Nova Scotia	519	Torch Channel, Fla.	3733
Swing Bridge, Brickyard Ferry, S.C.	2805	Torch Ramrod Channel, Fla.	3731
Sykes Creek, Fla.	3307	Totten Key, Fla.	3529
Sylvan Glen, N.J.	1849	Town Point, Va.	2239
T			
Tacony-Palmyra Bridge, N.J.	1825	Town Point Wharf, Md.	2041
Tadoussac, Quebec	331	Townsend Gut, Maine	703
Tall Pines Camp, N.J.	1459	Townsend Sound, N.J.	1593
Tambau, Brazil	4769	Townsends Inlet, N.J.	1591-1599
Tampa Bay, Fla.	3973-4019	Tracadie, New Brunswick	395
Tampico Harbor, Mexico * (232)	4409	Travis Point, Va.	2103
Tangier Island, Va.	1931	Tred Avon River, Md.	1997, 1999
Tappahannock, Va.	2177	Trenchards Inlet, S.C.	2853, 2855
Tarpon Creek, Fla.	3771, 3809	Trenton, N.J.	1853
Tarpon Springs, Fla.	4033	Trepassey Harbour, Newfoundland	235
Tarrytown, N.Y.	1321	Trinidad	4695-4705
Taunton River, Mass.	1019	Trinity Bay, Newfoundland	229
Tavernier, Fla.	3571-3575	Trinity Bay, Texas	4367, 4369
Taylor Sound, N.J.	1615	Triple ESS Marina, N.C.	2387
Taylors Bridge, Del.	1723	Trois Rivieres, Quebec	371
Taylors Island, Md.	1985	Tropical Homesites Landing, Fla.	3949
Tchefuncta River, La.	4243	Trout River, Fla.	3213-3217
Teague Creek, Md.	1951	Troy, N.Y.	1345
Tenants Harbor, Maine	669	Truro, Nova Scotia	549
Tensaw River, Ala.	4205	Tubbs Inlet, N.C.	2441
Tequesta, Fla.	3385-3389	Tuckahoe, N.J.	1577
		Tuckahoe Creek, Md.	1995
		Tuckahoe River, N.J.	1577, 1579
		Tuckers Island, Fla.	4057

	No.		No.
Tuckerton, Tuckerton Creek, N.J.....	1529	Virginia Beach, Va.....	2303
Tuckerton Creek, N.J.....	1527	Virginia Key, Fla.....	3499
Tue Marshes Light, Va.....	2201	Vitoria, Brazil.....	4799
Tulifiny River, S.C.....	2921		
Turbo, Colombia.....	4653		
Turkey Basin, Fla.....	3799		
Turkey Creek, S.C.....	2645	Waackaack Creek, N.J.....	1415
Turkey Creek, Miss.....	4225	Wabasso, Fla.....	3331
Turkey Point, Apalachee Bay, Fla.....	4109	Waccamaw River, S.C.....	2543-2565
Turkey Point, Biscayne Bay, FLa.....	3519	Wachapreague Inlet, Va.....	1899
Turks Island, Bahamas.....	4501	Wachesaw Landing, S.C.....	2549
Turnbridge Landing, S.C.....	2961	Wading River, N.J.....	1547
Turning Basin, Port Everglades, Fla.....	3455	Wadmalaw River, S.C.....	2755-2759
Turning Basin, Texas City, Texas.....	4355	Wakeham Bay, Hudson Strait.....	151
Turtle Cove, N.J.....	1557	Wakema, Va.....	2215
Turtle River, Ga.....	3095-3099	Walburg Creek, Ga.....	3011
Tutoia, Baia da, Brazil.....	4749	Waldoboro, Maine.....	689
Tuxpan, Mexico.....	4411	Wallabout Bay, N.Y.....	1153
Twin Rivers Marina, Fla.....	4073	Wallops Island, Va.....	1891
Tybee Creek, Ga.....	2979	Walpole, Maine.....	695
Tybee Creek entrance, Ga.....	2979	Waltz Key, Fla.....	3831
Tybee Light, Ga.....	2963	Waltz Key Basin, Fla.....	3831-3835
Tyerville, Conn.....	1071	Wanamaker Bridge, Pa.....	1787
		Wando River, S.C.....	2671-2681
		Wapitagan Harbour, Quebec.....	291
		Wappoo Creek, S.C.....	2685
		Ward's Dock, S.C.....	2499
		Wards Island, N.Y.....	1141
		Wares Wharf, Va.....	2175
		Waretown, N.J.....	1495
		Warrington, Fla.....	4169
		Washington, D.C. * (112).....	2145
		Washington Channel, D.C.....	2145
		Washington Navy Yard, D.C.....	2147
		Wasque Point, Mass.....	933
		Wassaw Sound, Ga.....	2979-2991
		Watch Hill Point, R.I.....	1047
		Watchogue Creek, N.Y.....	1247
		Water Key, Fla.....	3709
		Water Keys, Fla.....	3751
		Watts Island, Va.....	1929
		Waveland, Miss.....	4235
		Webeck Harbour, Labrador.....	185
		Webhannet River, Maine.....	785
		Wednesday Point, Fla.....	3537
		Weehawken, N.J.....	1311
		Weekapaug Point, R.I.....	1045
		Weeks Bay, La.....	4335
		Weir Creek, N.J.....	1669
		Weir River, Mass.....	869
		Welaka, Fla.....	3253
		Wellfleet, Mass.....	897
		Wellington Channel, Artic.....	29
		Wells, Maine.....	785
		Welshpool, New Brunswick.....	585
		West Bahia Honda Key, Fla.....	3681
		West Bay Creek, Fla.....	4155
		West Bay, Texas.....	4373,4375
		West Branch, Boyds Creek, S.C.....	2909,2911
		West Branch, Cooper River, S.C.....	2667,2669
		West Cote Blanche Bay, La.....	4331
		West Creek, N.J.....	1647,1649
		West Creek, Westecunk Creek, N.J.....	1523
		West Falmouth Harbor, Mass.....	959
		West Fire Island, N.Y.....	1239
		West Lake, Fla.....	3465,3467
		West Palm Beach Canal, Fla.....	3417
		West Point, Cat Island, Miss.....	4227
		West Point, Va.....	2213
		West River, Md.....	2079
		West Wildwood, N.J.....	1609
		Westbrook, Duck I. Roads, Conn.....	1087
		Westecunk Creek, N.J.....	1521,1523
		Westerly, Pawcatuck River, R.I.....	1049

No.		No.	
Westport, Nova Scotia.....	525	Winslow Farms, N.J.....	1747
Westport Harbor, Mass.....	983	Winter Harbor, Maine.....	621
Westport River, Mass.....	983, 985	Winter Harbour, Melville Island.....	5
Westville, N.J.....	1809	Winter Island, Fox Channel.....	131
Wetappo Creek, Fla.....	4149	Winterport, Maine.....	659
Weymouth, Nova Scotia.....	529	Winyah Bay, S.C.....	2503-2565
Weymouth Fore River Bridge.....	863	Winyah Bay Entrance, S.C.....	2503
Weymouth Plantation, S.C.....	2529	Wiscasset, Maine.....	709
Whale Branch, S.C.....	2845-2849	Wishart Point, Va.....	1873
Whale Harbor, Fla.....	3591, 3593	Withlacoochee River entrance, Fla.....	4077
Wharf Creek, S.C.....	2601	Wolf Island, Ga.....	3071
Whiskey Creek, Fla.....	3459, 3463	Wolf River, Miss.....	4231
White Bay, Newfoundland.....	219	Wolf Trap Light, Va.....	2193
Whitehaven, Md.....	1963	Wolstenholme Fjord, Greenland.....	93
Whitehaven Harbour, Nova Scotia.....	479	Woodbridge Creek, N.J.....	1393
Whitestone, N.Y.....	1131	Woodbury Creek, N.J.....	1803
Whitewater Bay, Fla.....	3885	Woodland Beach, Del.....	1707
Wickford, R.I.....	1033	Woodmere, N.Y.....	1275
Wicomico River, Md.....	1963, 1965	Woods Hole, Mass.....	947-951
Wicomico River, Potomac River.....	2115	Woods Hole Oceanographic Inst. * (48) ..	949
Wiggins, S.C.....	2825	Woodville, S.C.....	2681
Wiggins Pass, Fla.....	3915	Woody Island, Newfoundland.....	241
Wild Cove, Newfoundland.....	217	Woolford, Md.....	1987
Wildwood Crest, N.J.....	1613, 1617	Worton Creek, Md.....	2037
Willcox Wharf, Va.....	2269	Wrightsville Beach, N.C.....	2405
Willlets Point, N.Y.....	1159	Wright Island Landing, Va.....	2263
Williams Harbour, Labrador.....	169	Wright River, S.C.....	2959
Williams Point, Fla.....	3313	Wychmere Harbor, Mass.....	911
Williamsburg Bridge, N.Y.....	1151		
Willtown Bluff, S.C.....	2777	Y	
Wilmington Beach, N.C.....	2407	Yale, Conn.....	1055
Wilmington Marine Terminal, Del.....	1771	Yamato, Fla.....	3431
Wilmington, N.C. * (136).....	2429	Yarmouth Harbour, Nova Scotia.....	523
Wilmington River, Ga.....	2985-2989	Yauhannah Bridge, S.C.....	2541
Wilson Cove, Maine.....	739	Yeaman's Hall, S.C.....	2643
Wilsons Beach, New Brunswick.....	587	Yeocomico River, Va.....	2105
Wimbee Creek, S.C.....	2839	Yonges Island, S.C.....	2755
Windley Key, Fla.....	3587, 3591, 3593	York Harbor, Maine.....	789, 791
Windmill Point, Rappahannock River, Va.....	2165	York River, Va.....	2201-2219
Windmill Point Light, Va.....	2163	Yorktown, Va.....	2203, 2205
Windsor, Nova Scotia.....	545		
Windsor Plantation, N. Edisto R., S.C..	2743		
Windsor Plantation, Black R., S.C.....	2519		
Wine Island, La.....	4307		
Winea Plantation, S.C.....	2523	Zekese Island, N.C.....	2417

ASTRONOMICAL DATA, 2011

January			
	d	h	m
S	1	02	..
●	4	09	03
E	9	16	..
A	10	05	..
○	12	11	31
N	16	23	..
O	19	21	21
P	22	00	..
E	23	05	..
○	26	12	57
S	29	17	..

February			
	d	h	m
●	3	02	31
E	6	00	..
A	6	23	..
○	11	07	18
N	13	09	..
O	18	08	36
P	19	07	..
E	19	15	..
○	24	23	26
S	25	22	..

March			
	d	h	m
●	4	20	46
E	5	06	..
A	6	08	..
N	12	17	..
○	12	23	45
E	19	02	..
O	19	18	10
P	19	19	..
Q _m	20	23	21
S	25	05	..
○	26	12	07

April			
	d	h	m
E	1	12	..
A	2	09	..
●	3	14	32
N	8	23	..
○	11	12	05
E	15	13	..
P	17	06	..
O	18	02	44
S	21	14	..
○	25	02	47
E	28	18	..
A	29	18	..

May			
	d	h	m
●	3	06	51
N	6	04	..
○	10	20	33
E	12	20	..
P	15	11	..
O	17	11	09
S	19	00	..
○	24	18	52
E	26	00	..
A	27	04	..

June			
	d	h	m
●	1	21	03
N	2	10	..
○	9	02	11
E	9	02	..
P	12	01	..
S	15	09	..
O	15	20	14
Q _j	21	17	16
E	22	08	..
○	23	11	48
A	24	04	..
N	29	18	..

July			
	d	h	m
●	1	08	54
E	6	08	..
P	7	14	..
○	8	06	29
S	12	17	..
O	15	06	40
E	19	17	..
A	21	23	..
○	23	05	02
N	27	03	..
●	30	18	40

August			
	d	h	m
E	2	15	..
P	2	21	..
○	6	11	08
S	9	00	..
O	13	18	57
E	16	01	..
A	18	16	..
○	21	21	54
N	23	13	..
●	29	03	04
E	30	00	..
P	30	17	..

September			
	d	h	m
○	4	17	39
S	5	05	..
E	12	08	..
○	12	09	27
A	15	06	..
N	19	21	..
○	20	13	39
Q _s	22	09	05
E	26	11	..
●	27	11	09
P	28	01	..

October			
	d	h	m
S	2	12	..
○	4	03	15
E	9	14	..
O	12	02	06
A	12	12	..
N	17	03	..
○	20	02	30
E	23	21	..
P	26	12	..
●	26	19	56
S	29	20	..

November			
	d	h	m
○	2	16	38
E	5	19	..
A	8	13	..
O	10	20	16
N	13	08	..
○	18	15	09
E	20	05	..
P	23	23	..
●	25	06	10
S	26	07	..

December			
	d	h	m
○	2	09	52
E	3	02	..
A	6	01	..
N	10	14	..
O	10	14	36
E	17	11	..
○	18	00	48
P	22	03	..
Q _d	22	05	30
S	23	18	..
●	24	18	06
E	30	10	..

LUNAR DATA

- -- new Moon
 - -- first quarter
 - -- full Moon
 - -- last quarter
- A -- Moon in apogee
 P -- Moon in perigee
 N -- Moon farthest north of Equator
 E -- Moon on Equator
 S -- Moon farthest south of Equator

SOLAR DATA

- Q_m -- March equinox
 Q_j -- June solstice
 Q_s -- September equinox
 Q_d -- December solstice

Greenwich mean time (GMT) or universal time (UT) is the mean solar time on the Greenwich meridian reckoned in days of 24 mean solar hours written as 00^h at midnight and 12^h at noon. To convert the above times to those of other standard time meridians, add 1 hour for each 15° of east longitude of the desired meridian and subtract 1 hour for each 15° of west longitude. This table was compiled from data supplied by the Nautical Almanac Office, United States Naval Observatory.