

Sample for Construction

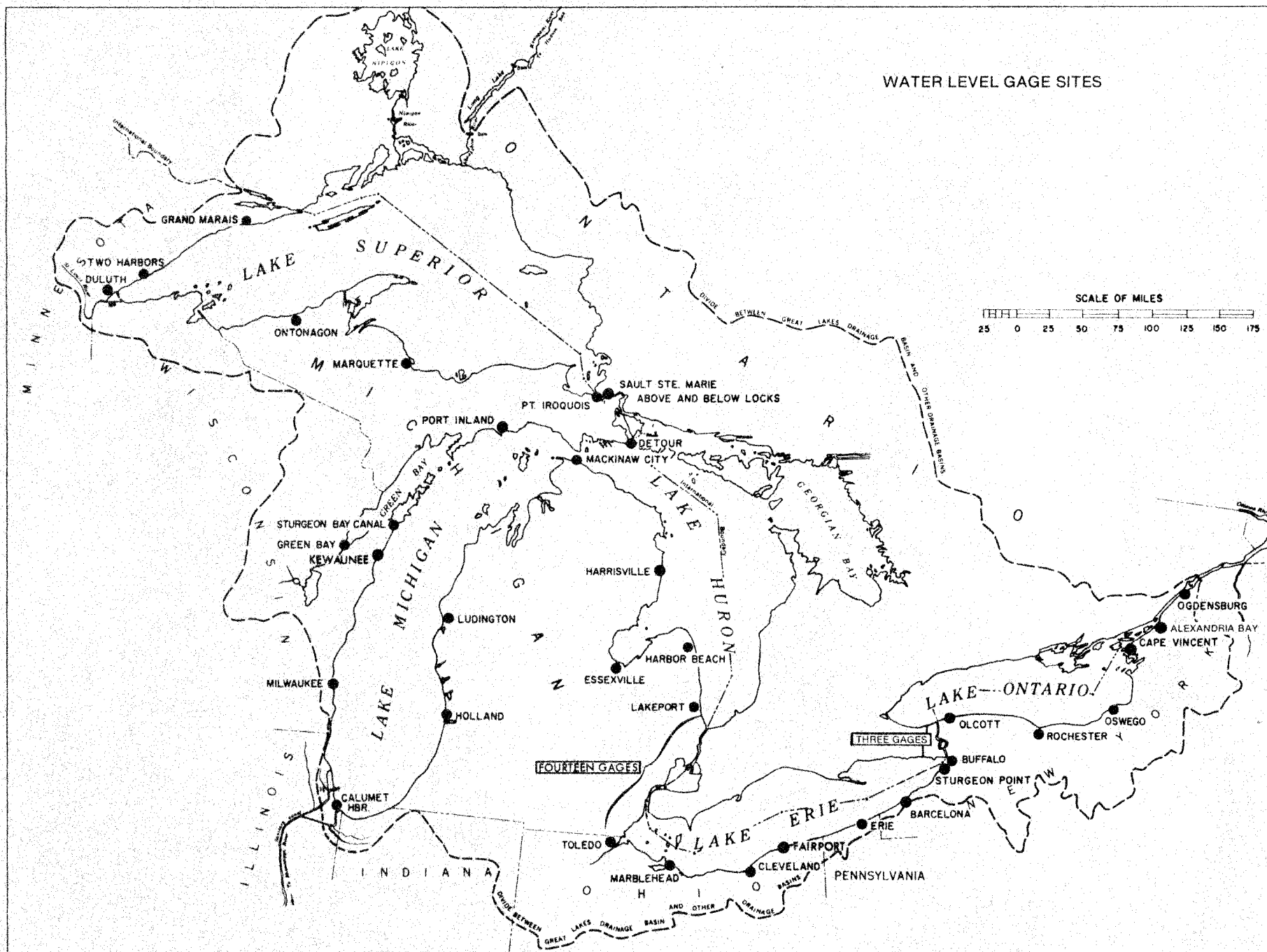


Great Lakes Water Levels, 1984

U.S. DEPARTMENT OF COMMERCE, National Oceanic and Atmospheric Administration, National Ocean Service



WATER LEVEL GAGE SITES





GREAT LAKES WATER LEVELS

1984

Daily and Monthly Average Water Surface Elevations



I N T R O D U C T I O N

GENERAL: This annual publication contains Great Lakes water level gage records in both feet and meters. The publication shows, in tabular form for the calendar year, daily and monthly average levels for each gage in the network, the highest and lowest daily average level for each month, a frequency distribution of daily average levels showing the number of times each month the recorded levels were at, or above, specific elevations, and monthly average level stages for each lake from 1900 to the present. The gages record water levels in either analog or digital form on strip charts retained by the National Ocean Service. Recorded hourly values are used to compute the daily averages, and the monthly values are derived from the daily averages. The original data is in feet. The converted metric data is less precise than the feet data (1 cm vs. 0.01 ft.); therefore, data reconverted to feet will often disagree with the original data.

The location of the recording water level gages is shown on the preceding page. An index on the following pages lists the gage locations, identification numbers, and geographic coordinates.

A separate publication, printed every five years, shows monthly and annual averages and highest and lowest monthly averages for the period of record (latest issue: Great Lakes Water Levels, 1860-1980). A hydrograph depicting master control gage data for each lake is available free of charge by writing: National Ocean Service, N/OMA12, Rockville, Maryland 20852.

DATUM OF REFERENCE: All tabulated elevations are referred to the International Great Lakes Datum (1955). An explanation of the datum can be obtained by writing: National Ocean Service, N/OMA12, Rockville, Maryland 20852.

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STATION NUMBER AND LOCATION	LATITUDE NORTH	LONGITUDE WEST	PAGE FEET	PAGE METERS
ST. LAWRENCE RIVER				
1030 Ogdensburg, New York	44 42 10	75 29 40	1✓	113✓
1062 Alexandria Bay C.G., New York	44 19 56	75 56 06	3✓	115✓
LAKE ONTARIO (CHART DATUM 242.8)				
2000 Cape Vincent, New York	44 07 45	76 20 15	5✓	117✓
2030 OSWEGO, NEW YORK	43 27 51	76 30 42	7✓	119✓
2058 Rochester, New York	43 16 10	77 37 34	9✓	121✓
2076 Olcott, New York	43 20 17	78 43 39	11✓	123✓
NIAGARA RIVER				
3007 Ashland Avenue, Niagara Falls, New York	43 06 00	79 03 35	13✓	125✓
3009 American Falls, Niagara Falls, New York	43 04 54	79 03 42	15✓	127✓
3012 Niagara Intake, Niagara Falls, New York	43 04 40	79 00 55	17✓	129✓
LAKE ERIE (CHART DATUM 568.6)				
3020 Buffalo, New York	42 52 39	78 53 27	19✓	131✓
3028 Sturgeon Point, New York	42 41 27	79 02 52	21✓	133✓
3032 Barcelona, New York	42 20 35	79 35 50	23✓	135✓
3038 Erie, Pennsylvania	42 09 15	80 04 32	25✓	137✓
3053 Fairport, Ohio	41 45 00	81 17 00	27✓	139✓
3063 CLEVELAND, OHIO	41 32 27	81 38 08	29✓	141✓
3079 Marblehead, Ohio	41 32 40	82 43 53	31✓	143✓
3085 Toledo, Ohio	41 41 36	83 28 20	33✓	145✓
3087 Monroe, Michigan	41 53 54	83 21 42	35✓	147✓
3090 Fermi Power Plant, Stony Point, Michigan	41 57 35	83 15 30	37✓	149✓

NOTE: Locations shown in CAPITAL letters are master gages.

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STATION NUMBER AND LOCATION	LATITUDE NORTH	LONGITUDE WEST	PAGE FEET	PAGE METERS
DETROIT RIVER				
4020 Gibraltar, Michigan	42 05 30	83 11 10	39✓	151✓
4030 Wyandotte, Michigan	42 12 12	83 08 50	41✓	153✓
4036 Fort Wayne, Detroit, Michigan	42 17 53	83 05 34	43✓	155✓
4049 Windmill Point, Detroit, Michigan	42 21 26	82 55 45	45✓	157✓
LAKE ST. CLAIR (CHART DATUM 571.7)				
4052 ST. CLAIR SHORES, MICHIGAN	42 28 24	82 52 45	47✓	159✓
ST. CLAIR RIVER				
4070 Algonac, Michigan	42 37 15	82 31 37	49✓	161✓
4080 St. Clair S.P., St. Clair, Michigan	42 48 45	82 29 09	51✓	163✓
4084 Marysville, Michigan	42 54 22	82 27 58	53✓	165✓
4087 Dry Dock, Port Huron, Michigan	42 56 43	82 26 37	55✓	167✓
4090 Mouth of the Black River, Port Huron, MI	42 58 25	82 25 16	57✓	169✓
4096 Dunn Paper Company, Port Huron, MI	43 00 12	82 25 20	59✓	171✓
4098 Fort Gratiot, Port Huron, MI	43 00 23	82 25 21	61✓	173✓
LAKE HURON (CHART DATUM 576.8)				
5002 Lakeport, Michigan	43 08 30	82 29 35	63✓	175✓
5014 HARBOR BEACH, MICHIGAN	43 50 45	82 38 38	65✓	177✓
5035 Essexville, Michigan	43 38 29	83 50 48	67✓	179✓
5059 Harrisville, Michigan	44 39 34	83 17 11	69✓	181✓
5080 Mackinaw City, Michigan	45 46 40	84 43 10	71✓	183✓
5099 DeTour Village, Michigan	45 59 30	83 53 48	73✓	185✓

NOTE: Locations shown in CAPITAL letters are master gages.

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STATION NUMBER AND LOCATION	LATITUDE NORTH	LONGITUDE WEST	PAGE FEET	PAGE METERS
ST. MARY'S RIVER				
6060 U.S. Slip below locks, Sault Ste. Marie, MI	46 30 03	84 20 24	75 ✓	187 ✓
6070 S.W. Pier above locks, Sault Ste. Marie, MI	46 30 05	84 22 21	77 ✓	189 ✓
LAKE MICHIGAN (CHART DATUM 576.8)				
7023 Ludington, Michigan	43 56 48	86 26 30	79 ✓	191 ✓
7031 Holland, Michigan	42 46 05	86 12 06	81 ✓	193 ✓
7044 Calumet Harbor, S. Chicago, Illinois	41 43 48	87 32 18	83 ✓	195 ✓
7057 Milwaukee, Wisconsin	43 00 05	87 53 13	85 ✓	197 ✓
7068 Kewaunee, Wisconsin	44 27 48	87 30 00	87 ✓	199 ✓
7072 Sturgeon Bay Canal, Wisconsin	44 47 40	87 18 48	89 ✓	201 ✓
7079 Green Bay, Wisconsin	44 32 27	88 00 30	91 ✓	203 ✓
7096 Port Inland, Michigan	45 58 10	85 52 20	93 ✓	205 ✓
LAKE SUPERIOR (CHART DATUM 600.0)				
9004 POINT IROQUOIS, Michigan	46 29 06	84 37 52	95 ✓	207 ✓
9018 Marquette C.G., Michigan	46 32 42	87 22 42	97 ✓	209 ✓
9044 Ontonagon, Michigan	46 52 40	89 19 15	99 ✓	211 ✓
9064 Duluth, Minnesota	46 46 32	92 05 34	101 ✓	213 ✓
9070 Two Harbors, Minnesota	47 01 03	91 40 30	103 ✓	215 ✓
9090 Grand Marais, Minnesota	47 44 53	90 20 30	105 ✓	217 ✓
Lake Ontario Stages at Oswego, New York			106	218
Lake Erie Stages at Cleveland, Ohio			107	219
Lake St. Clair Stages at St. Clair Shores, Michigan			108	220
Lakes Huron-Michigan Stages at Harbor Beach, Michigan			109	221
Lake Superior Stages at Marquette, Michigan			110	222

NOTE: Locations shown in CAPITAL letters are master gages.

ANNUAL SUMMARY OF LEVELS, 1984
Station 1030: Ogdensburg, New York on St. Lawrence River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 245.56 May
Daily mean elevation: 245.95 1 May
Instant/hourly Elevation: 246.54 2200/30 Apr

LOWEST
Monthly mean elevation: 243.03 Dec
Daily mean elevation: 242.37 14 Dec
Instant/hourly Elevation: 242.06 2000/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
243.90	11 Jan
244.30	26 Feb
244.39	31 Mar
245.63	30 Apr
245.95	1 May
245.75	4 Jun
245.51	7 Jul
244.79	1 Aug
244.15	1 Sep
243.78	3 Oct
243.74	16 Nov
243.50	8 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
243.41	1 Jan
243.16	13 Feb
243.61	18 Mar
244.24	5 Apr
245.06	4 May
245.23	23 Jun
244.78	27 Jul
244.15	25 Aug
243.55	30 Sep
242.99	31 Oct
242.81	27 Nov
242.37	14 Dec

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 245.80         |     |     |     |     | 3   |     |     |     |     |     |     |     | 245.80         | 3                          |
| 245.60         |     |     |     | 1   | 11  | 9   |     |     |     |     |     |     | 245.60         | 24                         |
| 245.40         |     |     |     | 2   | 12  | 17  | 1   |     |     |     |     |     | 245.40         | 56                         |
| 245.20         |     |     |     | 8   | 3   | 4   | 19  |     |     |     |     |     | 245.20         | 90                         |
| 245.00         |     |     |     | 3   | 2   |     | 4   |     |     |     |     |     | 245.00         | 99                         |
| 244.80         |     |     |     | 4   |     |     | 5   |     |     |     |     |     | 244.80         | 108                        |
| 244.60         |     |     |     | 7   |     |     | 2   | 7   |     |     |     |     | 244.60         | 124                        |
| 244.40         |     |     |     | 3   |     |     |     | 6   |     |     |     |     | 244.40         | 133                        |
| 244.20         |     | 5   | 7   | 2   |     |     |     | 12  |     |     |     |     | 244.20         | 159                        |
| 244.00         |     | 4   | 9   |     |     |     |     | 6   |     |     |     |     | 244.00         | 179                        |
| 243.80         | 10  | 2   | 6   |     |     |     |     |     | 1   |     |     |     | 243.80         | 213                        |
| 243.60         | 12  | 1   | 9   |     |     |     |     |     | 16  | 1   | 1   |     | 243.60         | 248                        |
| 243.40         | 9   | 5   |     |     |     |     |     |     | 2   | 6   | 2   | 2   | 243.40         | 274                        |
| 243.20         |     | 11  |     |     |     |     |     |     |     | 15  | 3   | 6   | 243.20         | 309                        |
| 243.00         |     | 1   |     |     |     |     |     |     |     | 8   | 13  | 8   | 243.00         | 339                        |
| 242.80         |     |     |     |     |     |     |     |     |     | 1   | 11  | 11  | 242.80         | 362                        |
| 242.60         |     |     |     |     |     |     |     |     |     |     |     | 2   | 242.60         | 364                        |
| 242.40         |     |     |     |     |     |     |     |     |     |     |     | 1   | 242.40         | 365                        |
| 242.20         |     |     |     |     |     |     |     |     |     |     |     | 1   | 242.20         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 1030: Ogdensburg, New York on St. Lawrence River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 243.41  | 243.42  | 244.16  | 244.49  | 245.95  | 245.62  | 245.30  | 244.79  | 244.15  | 243.46* | 243.30  | 243.20  |
| 2    | 243.63  | 243.31  | 244.10  | 244.53  | 245.65  | 245.56  | 245.36  | 244.73  | 243.95  | 243.44  | 243.51  | 243.04  |
| 3    | 243.76  | 243.38  | 244.12  | 244.44  | 245.34  | 245.70  | 245.36  | 244.72  | 243.75  | 243.78  | 243.07  | 243.07  |
| 4    | 243.85  | 243.36  | 244.01  | 244.33  | 245.06  | 245.75  | 245.37  | 244.69  | 243.95  | 243.60  | 243.22  | 243.45  |
| 5    | 243.74  | 243.34  | 243.97  | 244.24  | 245.42  | 245.68  | 245.28  | 244.68  | 243.93  | 243.33  | 243.26  | 243.01  |
| 6    | 243.80  | 243.40  | 244.16  | 244.81  | 245.45  | 245.65  | 245.29  | 244.65  | 243.89  | 243.37  | 243.17  | 242.90  |
| 7    | 243.74  | 243.43  | 244.08  | 244.82  | 245.34  | 245.64  | 245.51  | 244.65  | 243.86  | 243.41  | 243.05  | 243.02  |
| 8    | 243.82  | 243.46  | 243.97  | 244.82  | 245.47  | 245.61  | 245.37  | 244.50  | 243.90  | 243.44  | 243.00  | 243.50  |
| 9    | 243.90  | 243.35  | 243.99  | 244.68  | 245.81  | 245.72  | 245.32  | 244.54  | 243.96  | 243.33  | 243.11  | 242.98  |
| 10   | 243.86  | 243.35  | 244.04  | 244.80  | 245.72  | 245.60  | 245.22  | 244.56  | 243.99  | 243.36  | 243.18  | 242.92  |
| 11   | 243.90  | 243.33  | 244.30  | 244.81  | 245.55  | 245.68  | 245.28  | 244.35  | 243.84  | 243.36  | 243.06  | 242.85  |
| 12   | 243.81  | 243.27  | 243.98  | 244.80  | 245.70  | 245.59  | 245.39  | 244.36  | 243.78  | 243.34  | 243.08  | 242.96  |
| 13   | 243.75  | 243.16  | 243.79  | 244.63  | 245.63  | 245.56  | 245.32  | 244.38  | 243.90  | 243.31  | 243.06  | 242.91  |
| 14   | 243.88  | 243.36  | 243.90  | 244.67  | 245.61  | 245.57  | 245.34  | 244.42  | 243.84  | 243.31  | 243.02  | 242.37  |
| 15   | 243.80  | 243.55  | 243.78  | 244.64  | 245.55  | 245.47  | 245.26  | 244.58  | 243.63  | 243.27  | 243.20  | 242.80  |
| 16   | 243.76  | 243.54  | 243.75  | 244.76  | 245.52  | 245.47  | 245.35  | 244.51  | 243.87  | 243.15  | 243.74  | 243.01  |
| 17   | 243.82  | 243.62  | 243.72  | 245.10  | 245.58  | 245.45  | 245.22  | 244.34  | 243.84  | 243.05  | 243.42  | 243.22  |
| 18   | 243.75  | 243.87  | 243.61  | 245.14  | 245.53  | 245.52  | 245.20  | 244.34  | 243.83  | 243.16  | 243.18  | 242.99  |
| 19   | 243.82  | 243.93  | 243.73  | 245.20  | 245.55  | 245.57  | 245.28  | 244.26  | 243.86  | 243.19  | 242.94  | 242.91  |
| 20   | 243.87  | 244.25  | 243.69  | 245.49  | 245.53  | 245.40  | 245.26  | 244.22  | 243.95  | 243.44  | 243.00  | 243.31  |
| 21   | 243.68  | 244.11  | 243.74  | 245.33  | 245.51  | 245.46  | 245.16  | 244.30  | 243.72  | 243.26  | 242.94  | 242.67  |
| 22   | 243.70  | 244.28  | 244.08  | 245.30  | 245.48  | 245.33  | 245.07  | 244.27  | 243.60  | 243.27  | 243.00  | 243.39  |
| 23   | 243.58  | 244.24  | 244.39  | 245.23  | 245.66  | 245.23  | 245.26  | 244.28  | 243.78  | 243.30  | 243.20  | 243.30  |
| 24   | 243.56  | 244.28  | 244.32  | 245.24  | 245.70  | 245.46  | 245.11  | 244.18  | 243.62  | 243.24  | 243.10  | 243.17  |
| 25   | 243.70  | 244.20  | 244.26  | 245.35  | 245.68  | 245.54  | 244.99  | 244.15  | 243.67  | 243.30  | 242.96  | 243.22  |
| 26   | 243.52  | 244.30  | 244.26  | 245.34  | 245.81  | 245.46  | 244.95  | 244.22  | 243.76  | 243.02  | 242.87  | 243.11  |
| 27   | 243.59  | 244.16  | 244.27  | 245.23  | 245.70  | 245.43  | 244.78  | 244.18  | 243.63  | 243.10  | 242.81  | 242.53  |
| 28   | 243.47  | 243.29  | 243.97  | 245.29  | 245.31  | 245.60  | 244.80  | 244.16  | 243.62  | 243.37  | 242.92  | 242.86  |
| 29   | 243.45  | 244.14  | 243.74  | 245.43  | 245.16  | 245.41  | 244.85  | 244.17  | 243.66  | 243.16  | 243.00  | 243.29  |
| 30   | 243.45  |         | 244.09  | 245.63  | 245.61  | 245.29  | 244.84  | 244.19  | 243.55  | 243.16  | 242.95  | 242.98  |
| 31   | 243.47  |         | 244.39  |         | 245.68  |         | 244.88  | 244.21  |         | 242.99  |         | 242.93  |
| MEAN | 243.70  | 243.68  | 244.01  | 244.95  | 245.56  | 245.53  | 245.19  | 244.41  | 243.81  | 243.30  | 243.11  | 243.03  |
| MAX. | 244.04  | 244.46  | 244.69  | 246.54  | 246.43  | 245.90  | 245.72  | 244.89  | 244.24  | 244.00  | 243.94  | 243.92  |
| MIN. | 0300/09 | 1400/22 | 1800/11 | 2200/30 | 1300/01 | 1700/04 | 1300/07 | 0200/01 | 1100/20 | 1800/03 | 2100/16 | 0500/08 |
|      | 243.30  | 242.66  | 243.43  | 243.95  | 244.70  | 245.11  | 244.70  | 243.98  | 243.38  | 242.70  | 242.68  | 242.06  |
|      | 0200/29 | 1800/28 | 0500/18 | 0300/05 | 0600/29 | 2400/23 | 1700/27 | 2000/29 | 0900/03 | 2300/31 | 1300/28 | 2000/14 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 244.19

ANNUAL SUMMARY OF LEVELS, 1984  
Station 1062: Alexandria Bay C.G., New York on St. Lawrence River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 246.08 Jun  
Daily mean elevation: 246.26 26 May  
Instant/hourly Elevation: 246.63 2000/30 Apr

LOWEST  
Monthly mean elevation: 243.50 Dec  
Daily mean elevation: 243.02 14 Dec  
Instant/hourly Elevation: 242.85 1900/14 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 244.47 | 20 Jan |
| 244.81 | 29 Feb |
| 244.94 | 23 Mar |
| 246.00 | 30 Apr |
| 246.26 | 26 May |
| 246.22 | 4 Jun  |
| 246.01 | 7 Jul  |
| 245.39 | 1 Aug  |
| 244.81 | 1 Sep  |
| 244.31 | 3 Oct  |
| 244.06 | 16 Nov |
| 243.82 | 22 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 244.15 | 1 Jan  |
| 244.00 | 13 Feb |
| 244.45 | 18 Mar |
| 244.86 | 4 Apr  |
| 245.77 | 4 May  |
| 245.87 | 23 Jun |
| 245.44 | 31 Jul |
| 244.82 | 29 Aug |
| 244.14 | 30 Sep |
| 243.55 | 31 Oct |
| 243.34 | 27 Nov |
| 243.02 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 246.20 | | | | | 1 | 1 | | | | | | | 246.20 | 2 |
| 246.00 | | | | | 20 | 25 | 1 | | | | | | 246.00 | 48 |
| 245.80 | | | | 5 | 9 | 4 | 17 | | | | | | 245.80 | 83 |
| 245.60 | | | | 8 | 1 | | 7 | | | | | | 245.60 | 99 |
| 245.40 | | | | 1 | | | 6 | | | | | | 245.40 | 106 |
| 245.20 | | | | 9 | | | | 8 | | | | | 245.20 | 123 |
| 245.00 | | | | 2 | | | | 10 | | | | | 245.00 | 135 |
| 244.80 | | 1 | 8 | 5 | | | | 13 | 1 | | | | 244.80 | 163 |
| 244.60 | | 7 | 15 | | | | | | 3 | | | | 244.60 | 188 |
| 244.40 | | 3 | 8 | | | | | | 15 | | | | 244.40 | 216 |
| 244.20 | 2 | 4 | | | | | | | 10 | 1 | | | 244.20 | 255 |
| 244.00 | 5 | 13 | | | | | | | 1 | 3 | 1 | | 244.00 | 278 |
| 243.80 | | 1 | | | | | | | | 13 | 2 | 2 | 243.80 | 296 |
| 243.60 | | | | | | | | | | 13 | 9 | 6 | 243.60 | 324 |
| 243.40 | | | | | | | | | | 1 | 15 | 16 | 243.40 | 356 |
| 243.20 | | | | | | | | | | | 3 | 5 | 243.20 | 364 |
| 243.00 | | | | | | | | | | | | 2 | 243.00 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 1062: Alexandria Bay C.G., New York on St. Lawrence River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 244.15 | 244.14 | 244.80 | 244.98 | 246.19 | 246.14 | 245.92 | 245.39 | 244.81 | 244.08 | 243.82 | 243.60 |
| 2 | 244.32 | 244.06 | 244.80 | 244.99 | 246.00 | 246.14 | 245.93 | 245.36 | 244.66 | 244.07 | 243.90 | 243.45 |
| 3 | 244.37 | 244.14 | 244.83 | 244.95 | 245.82 | 246.17 | 245.92 | 245.33 | 244.56 | 244.31 | 243.56 | 243.57 |
| 4 | 244.39 | 244.13 | 244.72 | 244.86 | 245.77 | 246.22 | 245.91 | 245.30 | 244.66 | 244.13 | 243.72 | 243.78 |
| 5 | 244.31 | 244.14 | 244.70 | 244.91 | 245.95 | 246.15 | 245.86 | 245.29 | 244.61 | 243.92 | 243.74 | 243.44 |
| 6 | 244.38 | 244.18 | 244.86 | 245.27 | 245.94 | 246.16 | 245.89 | 245.27 | 244.56 | 243.94 | 243.68 | 243.42 |
| 7 | 244.30 | 244.19 | 244.80 | 245.29 | 245.87 | 246.15 | 246.01 | 245.29 | 244.52 | 243.97 | 243.56 | 243.51 |
| 8 | 244.32 | 244.18 | 244.67 | 245.28 | 245.99 | 246.13 | 245.92 | 245.18 | 244.56 | 243.97 | 243.53 | 243.82 |
| 9 | 244.35 | 244.06 | 244.70 | 245.19 | 246.16 | 246.18 | 245.88 | 245.22 | 244.58 | 243.90 | 243.64 | 243.41 |
| 10 | 244.31 | 244.07 | 244.74 | 245.28 | 246.11 | 246.12 | 245.84 | 245.20 | 244.60 | 243.92 | 243.68 | 243.40 |
| 11 | 244.35 | 244.09 | 244.93 | 245.30 | 246.03 | 246.18 | 245.88 | 245.07 | 244.50 | 243.90 | 243.57 | 243.35 |
| 12 | 244.25 | 244.05 | 244.63 | 245.30 | 246.14 | 246.10 | 245.92 | 245.09 | 244.46 | 243.89 | 243.60 | 243.45 |
| 13 | 244.24 | 244.00 | 244.53 | 245.20 | 246.08 | 246.11 | 245.87 | 245.09 | 244.56 | 243.85 | 243.57 | 243.40 |
| 14 | 244.37 | 244.15 | 244.67 | 245.26 | 246.12 | 246.16 | 245.87 | 245.12 | 244.50 | 243.86 | 243.53 | 243.02 |
| 15 | 244.32 | 244.25 | 244.59 | 245.27 | 246.07 | 246.07 | 245.82 | 245.20 | 244.34 | 243.83 | 243.68 | 243.36 |
| 16 | 244.31 | 244.21 | 244.58 | 245.39 | 246.05 | 246.03 | 245.88 | 245.16 | 244.48 | 243.76 | 244.06 | 243.46 |
| 17 | 244.39 | 244.25 | 244.52 | 245.57 | 246.08 | 246.02 | 245.78 | 245.04 | 244.43 | 243.70 | 243.78 | 243.58 |
| 18 | 244.34 | 244.41 | 244.45 | 245.61 | 246.02 | 246.08 | 245.81 | 245.01 | 244.45 | 243.76 | 243.67 | 243.48 |
| 19 | 244.43 | 244.43 | 244.60 | 245.65 | 246.08 | 246.12 | 245.83 | 244.96 | 244.47 | 243.74 | 243.47 | 243.42 |
| 20 | 244.47 | 244.66 | 244.54 | 245.82 | 246.03 | 246.02 | 245.80 | 244.93 | 244.52 | 243.88 | 243.51 | 243.70 |
| 21 | 244.31 | 244.58 | 244.54 | 245.74 | 246.02 | 246.03 | 245.75 | 244.93 | 244.38 | 243.78 | 243.45 | 243.23 |
| 22 | 244.32 | 244.64 | 244.74 | 245.71 | 246.00 | 245.95 | 245.68 | 244.92 | 244.29 | 243.80 | 243.48 | 243.82 |
| 23 | 244.23 | 244.65 | 244.94 | 245.68 | 246.15 | 245.87 | 245.77 | 244.95 | 244.40 | 243.80 | 243.65 | 243.67 |
| 24 | 244.23 | 244.69 | 244.84 | 245.79 | 246.16 | 246.05 | 245.73 | 244.86 | 244.27 | 243.76 | 243.54 | 243.61 |
| 25 | 244.36 | 244.67 | 244.82 | 245.85 | 246.14 | 246.10 | 245.62 | 244.83 | 244.30 | 243.76 | 243.44 | 243.69 |
| 26 | 244.19 | 244.72 | 244.82 | 245.81 | 246.26 | 246.03 | 245.59 | 244.85 | 244.38 | 243.63 | 243.38 | 243.54 |
| 27 | 244.30 | 244.63 | 244.80 | 245.76 | 246.16 | 246.01 | 245.48 | 244.83 | 244.26 | 243.68 | 243.34 | 243.15 |
| 28 | 244.17 | 244.21 | 244.66 | 245.80 | 245.92 | 246.10 | 245.48 | 244.83 | 244.24 | 243.83 | 243.40 | 243.43 |
| 29 | 244.20 | 244.81 | 244.63 | 245.88 | 245.90 | 245.99 | 245.46 | 244.82 | 244.24 | 243.69 | 243.49 | 243.67 |
| 30 | 244.17 | | 244.78 | 246.00 | 246.13 | 245.93 | 245.44 | 244.85 | 244.14 | 243.68 | 243.42 | 243.48 |
| 31 | 244.22 | | 244.92 | | 246.17 | | 245.44 | 244.85 | | 243.55 | | 243.44 |
| MEAN | 244.30 | 244.32 | 244.71 | 245.45 | 246.05 | 246.08 | 245.77 | 245.07 | 244.46 | 243.85 | 243.60 | 243.50 |
| MAX. | 244.59 | 244.96 | 245.24 | 246.63 | 246.57 | 246.37 | 246.12 | 245.47 | 244.88 | 244.52 | 244.23 | 244.13 |
| MIN. | 1800/20 | 1800/29 | 1700/11 | 2000/30 | 1100/01 | 1300/14 | 1600/07 | 0300/01 | 0500/01 | 1700/03 | 2200/16 | 0600/08 |
| | 0200/27 | 1700/28 | 0400/18 | 0200/05 | 0500/29 | 1400/23 | 2000/30 | 1800/29 | 1000/30 | 2300/31 | 1200/28 | 1900/14 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 244.76

ANNUAL SUMMARY OF LEVELS, 1984
Station 2000: Cape Vincent, New York on Lake Ontario

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 246.55 Jun
Daily mean elevation: 246.66 26 May
Instant/hourly Elevation: 246.88 1900/30 Apr

LOWEST
Monthly mean elevation: 243.80 Dec
Daily mean elevation: 243.48 14 Dec
Instant/hourly Elevation: 243.17 1700/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 244.56 | 6 Jan |
| 245.27 | 29 Feb |
| 245.31 | 23 Mar |
| 246.37 | 30 Apr |
| 246.66 | 26 May |
| 246.64 | 14 Jun |
| 246.46 | 7 Jul |
| 245.89 | 1 Aug |
| 245.27 | 1 Sep |
| 244.66 | 3 Oct |
| 244.24 | 16 Nov |
| 244.12 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 244.36 | 1 Jan |
| 244.35 | 13 Feb |
| 244.86 | 18 Mar |
| 245.20 | 4 Apr |
| 246.23 | 3 May |
| 246.38 | 23 Jun |
| 245.93 | 31 Jul |
| 245.29 | 29 Aug |
| 244.54 | 30 Sep |
| 243.96 | 31 Oct |
| 243.71 | 27 Nov |
| 243.48 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 246.60         |     |     |     |     | 1   | 7   |     |     |     |     |     |     | 246.60         | 8                          |
| 246.40         |     |     |     |     | 24  | 22  | 3   |     |     |     |     |     | 246.40         | 57                         |
| 246.20         |     |     |     | 5   | 6   | 1   | 20  |     |     |     |     |     | 246.20         | 89                         |
| 246.00         |     |     |     | 6   |     |     | 5   |     |     |     |     |     | 246.00         | 100                        |
| 245.80         |     |     |     | 4   |     |     | 3   |     |     |     |     |     | 245.80         | 112                        |
| 245.60         |     |     |     | 7   |     |     |     | 11  |     |     |     |     | 245.60         | 130                        |
| 245.40         |     |     |     | 3   |     |     |     | 6   |     |     |     |     | 245.40         | 139                        |
| 245.20         |     | 1   | 5   | 4   |     |     |     | 9   | 1   |     |     |     | 245.20         | 159                        |
| 245.00         |     |     | 18  | 1   |     |     |     |     | 7   |     |     |     | 245.00         | 185                        |
| 244.80         |     | 8   | 8   |     |     |     |     |     | 14  |     |     |     | 244.80         | 215                        |
| 244.60         |     | 4   |     |     |     |     |     |     | 7   | 1   |     |     | 244.60         | 227                        |
| 244.40         | 6   | 7   |     |     |     |     |     |     | 1   | 3   |     |     | 244.40         | 244                        |
| 244.20         | 1   | 1   |     |     |     |     |     |     |     | 12  | 1   |     | 244.20         | 259                        |
| 244.00         |     |     |     |     |     |     |     |     |     | 14  | 8   | 1   | 244.00         | 282                        |
| 243.80         |     |     |     |     |     |     |     |     |     | 1   | 14  | 8   | 243.80         | 305                        |
| 243.60         |     |     |     |     |     |     |     |     |     |     | 7   | 14  | 243.60         | 326                        |
| 243.40         |     |     |     |     |     |     |     |     |     |     |     | 1   | 243.40         | 327                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2000: Cape Vincent, New York on Lake Ontario

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 244.36  | /       | 245.12  | 245.31  | 246.44  | 246.60  | 246.42  | 245.89  | 245.27  | 244.49  | 244.19  | 243.88  |
| 2    | 244.52  | /       | 245.15  | 245.31  | 246.33  | 246.63  | 246.42  | 245.85  | 245.14  | 244.50  | 244.17  | 243.72  |
| 3    | 244.55  | /       | 245.18  | 245.28  | 246.23  | 246.63  | 246.40  | 245.84  | 245.12  | 244.66  | 243.94  | 243.95  |
| 4    | 244.55  | /       | 245.08  | 245.20  | 246.29  | 246.64  | 246.38  | 245.82  | 245.15  | 244.50  | 244.08  | 243.98  |
| 5    | 244.48  | /       | 245.11  | 245.36  | 246.39  | 246.59  | 246.36  | 245.81  | 245.08  | 244.34  | 244.08  | 243.74  |
| 6    | 244.56  | /       | 245.21  | 245.59  | 246.35  | 246.61  | 246.38  | 245.79  | 245.02  | 244.34  | 244.03  | 243.78  |
| 7    | 244.49  | /       | 245.16  | 245.61  | 246.30  | 246.59  | 246.46  | 245.79  | 244.98  | 244.35  | 243.95  | 243.89  |
| 8    | /       | /       | 245.03  | 245.60  | 246.43  | 246.59  | 246.39  | 245.72  | 245.02  | 244.33  | 243.92  | 243.99  |
| 9    | /       | 244.72* | 245.07  | 245.56  | 246.52  | 246.61  | 246.35  | 245.77  | 244.99  | 244.28  | 244.00  | 243.72  |
| 10   | /       | 244.60  | 245.12  | 245.64  | 246.48  | 246.58  | 246.32  | 245.74  | 245.01  | 244.30  | 244.01  | 243.74  |
| 11   | /       | 244.62* | 245.30  | 245.66  | 246.43  | 246.64  | 246.38  | 245.64  | 244.94  | 244.31  | 243.94  | 243.70  |
| 12   | /       | 244.59* | 244.99  | 245.66  | 246.52  | 246.56  | 246.39  | 245.65  | 244.92  | 244.29  | 243.99  | 243.76  |
| 13   | /       | 244.35  | 244.93  | 245.63  | 246.48  | 246.58  | 246.35  | 245.65  | 245.00  | 244.26  | 243.96  | 243.72  |
| 14   | /       | 244.48  | 245.06  | 245.66  | 246.53  | 246.64  | 246.34  | 245.66  | 244.95  | 244.25  | 243.91  | 243.48  |
| 15   | /       | 244.57  | 244.99  | 245.71  | 246.52  | 246.55  | 246.29  | 245.67  | 244.85  | 244.22  | 244.03  | 243.72  |
| 16   | /       | 244.56  | 245.01  | 245.85  | 246.50  | 246.49  | 246.32  | 245.61  | 244.90  | 244.18  | 244.24  | 243.77  |
| 17   | /       | 244.60  | 244.91  | 245.91  | 246.51  | 246.48  | 246.26  | 245.55  | 244.84  | 244.13* | 244.01  | 243.79  |
| 18   | /       | 244.72  | 244.86  | 245.93  | 246.45  | 246.56  | 246.30  | 245.50  | 244.88  | 244.18* | 243.98  | 243.77  |
| 19   | /       | 244.74  | 245.00  | 245.97  | 246.52  | 246.57  | 246.30  | 245.47  | 244.89  | 244.17  | 243.84  | 243.77  |
| 20   | /       | 244.91  | 244.94  | 246.09  | 246.47  | 246.51  | 246.27  | 245.44  | 244.93  | 244.23  | 243.85  | 243.93  |
| 21   | /       | 244.86  | 244.97  | 246.04  | 246.46  | 246.50  | 246.24  | 245.41  | 244.81  | 244.16  | 243.80  | 243.61  |
| 22   | /       | 244.89  | 245.16  | 246.02  | 246.45  | 246.44  | 246.20  | 245.40  | 244.75  | 244.18  | 243.84  | 244.12  |
| 23   | /       | 244.91  | 245.31  | 246.03  | 246.60  | 246.38  | 246.25  | 245.43  | 244.81  | 244.18  | 243.92  | 243.89  |
| 24   | /       | 244.96  | 245.20  | 246.15  | 246.58  | 246.52  | 246.22  | 245.34  | 244.71  | 244.15  | 243.84  | 243.87* |
| 25   | /       | 244.97  | 245.18  | 246.23  | 246.57  | 246.55  | 246.15  | 245.32  | 244.73  | 244.10  | 243.77  | /       |
| 26   | /       | 244.99  | 245.18  | 246.21  | 246.66  | 246.51  | 246.10  | 245.35  | 244.77  | 244.07  | 243.73  | /       |
| 27   | /       | 244.90  | 245.15  | 246.17  | 246.58  | 246.48  | 246.03  | 245.31  | 244.70  | 244.08  | 243.71  | /       |
| 28   | /       | 244.60  | 245.03  | 246.22  | 246.42  | 246.51  | 246.01  | 245.30  | 244.68  | 244.15  | 243.76  | /       |
| 29   | /       | 245.27  | 245.09  | 246.27  | 246.52  | 246.47  | 245.96  | 245.29  | 244.64  | 244.08  | 243.80  | /       |
| 30   | /       |         | 245.22  | 246.37  | 246.60  | 246.43  | 245.94  | 245.31  | 244.54  | 244.07  | 243.76  | /       |
| 31   | /       |         | 245.29  |         | 246.60  |         | 245.93  | 245.31  |         | 243.96  |         | /       |
| MEAN | 244.50  | 244.75  | 245.10  | 245.81  | 246.48  | 246.55  | 246.26  | 245.57  | 244.90  | 244.24  | 243.94  | 243.80  |
| MAX. | 244.70  | 245.37  | 245.69  | 246.88  | 246.83  | 246.82  | 246.56  | 245.96  | 245.38  | 244.85  | 244.57  | 244.47  |
| MIN. | 0100/04 | 1500/29 | 1500/11 | 1900/30 | 1500/26 | 1400/14 | 1800/11 | 0100/01 | 0300/03 | 1400/03 | 0100/02 | 1500/03 |
|      | 244.29  | 244.22  | 244.67  | 245.02  | 246.12  | 246.32  | 245.88  | 245.09  | 244.44  | 243.83  | 243.52  | 243.17  |
|      | 1100/01 | 0900/13 | 0200/18 | 2400/04 | 2000/07 | 1100/23 | 1800/31 | 1400/30 | 0800/30 | 2100/31 | 1100/28 | 1700/14 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 245.16

ANNUAL SUMMARY OF LEVELS, 1984  
Station 2030: Oswego, New York on Lake Ontario

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 246.56 Jun  
Daily mean elevation: 246.69 2 Jun  
Instant/hourly Elevation: 246.80 2400/13 Jun

LOWEST  
Monthly mean elevation: 243.89 Dec  
Daily mean elevation: 243.69 21 Dec  
Instant/hourly Elevation: 242.88 2400/21 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 244.81 | 20 Jan |
| 245.42 | 29 Feb |
| 245.46 | 11 Mar |
| 246.32 | 30 Apr |
| 246.64 | 31 May |
| 246.69 | 2 Jun  |
| 246.45 | 7 Jul  |
| 245.85 | 1 Aug  |
| 245.39 | 1 Sep  |
| 244.68 | 3 Oct  |
| 244.27 | 2 Nov  |
| 244.07 | 25 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 244.54 | 13 Jan |
| 244.43 | 13 Feb |
| 245.03 | 13 Mar |
| 245.33 | 4 Apr  |
| 246.34 | 3 May  |
| 246.43 | 27 Jun |
| 245.87 | 31 Jul |
| 245.33 | 28 Aug |
| 244.67 | 30 Sep |
| 244.12 | 30 Oct |
| 243.78 | 28 Nov |
| 243.69 | 21 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 246.60 | | | | | 6 | 12 | | | | | | | 246.60 | 18 |
| 246.40 | | | | | 21 | 18 | 3 | | | | | | 246.40 | 60 |
| 246.20 | | | | 7 | 4 | | 19 | | | | | | 246.20 | 90 |
| 246.00 | | | | 6 | | | 5 | | | | | | 246.00 | 101 |
| 245.80 | | | | 3 | | | 4 | 5 | | | | | 245.80 | 113 |
| 245.60 | | | | 9 | | | | 13 | | | | | 245.60 | 135 |
| 245.40 | | 1 | 1 | 1 | | | | 9 | | | | | 245.40 | 147 |
| 245.20 | | | 16 | 4 | | | | 4 | 3 | | | | 245.20 | 174 |
| 245.00 | | 5 | 14 | | | | | | 7 | | | | 245.00 | 200 |
| 244.80 | 2 | 4 | | | | | | | 14 | | | | 244.80 | 220 |
| 244.60 | 22 | 8 | | | | | | | 6 | 3 | | | 244.60 | 259 |
| 244.40 | 7 | 11 | | | | | | | | 4 | | | 244.40 | 281 |
| 244.20 | | | | | | | | | | 18 | 3 | | 244.20 | 302 |
| 244.00 | | | | | | | | | | 6 | 10 | 4 | 244.00 | 322 |
| 243.80 | | | | | | | | | | | 15 | 21 | 243.80 | 358 |
| 243.60 | | | | | | | | | | | 2 | 6 | 243.60 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2030: Oswego, New York on Lake Ontario

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 244.57 | 244.59 | 245.34 | 245.38 | 246.39 | 246.68 | 246.45 | 245.85 | 245.39 | 244.67 | 243.94 | 243.94 |
| 2 | 244.63 | 244.49 | 245.31 | 245.39 | 246.37 | 246.69 | 246.40 | 245.84 | 245.27 | 244.60 | 244.27 | 243.86 |
| 3 | 244.64 | 244.50 | 245.32 | 245.38 | 246.34 | 246.66 | 246.37 | 245.84 | 245.23 | 244.68 | 244.00 | 243.88 |
| 4 | 244.62 | 244.53 | 245.19 | 245.33 | 246.46 | 246.66 | 246.35 | 245.81 | 245.18 | 244.64 | 243.93 | 244.05 |
| 5 | 244.57 | 244.57 | 245.14 | 245.50 | 246.44 | 246.62 | 246.38 | 245.78 | 245.19 | 244.54 | 244.11 | 243.83 |
| 6 | 244.66 | 244.66 | 245.29 | 245.62 | 246.43 | 246.65 | 246.37 | 245.78 | 245.14 | 244.45 | 244.18 | 243.93 |
| 7 | 244.71 | 244.67 | 245.32 | 245.73 | 246.39 | 246.63 | 246.45 | 245.82 | 245.03 | 244.40 | 244.06 | 243.99 |
| 8 | 244.65 | 244.63 | 245.21 | 245.72 | 246.47 | 246.62 | 246.41 | 245.78 | 244.96 | 244.38 | 243.96 | 243.93 |
| 9 | 244.70 | 244.53 | 245.20 | 245.74 | 246.49 | 246.63 | 246.36 | 245.72 | 244.94 | 244.41 | 243.91 | 243.80 |
| 10 | 244.70 | 244.45 | 245.17 | 245.76 | 246.50 | 246.60 | 246.31 | 245.70 | 244.97 | 244.36 | 243.95 | 243.80 |
| 11 | 244.72 | 244.49 | 245.46 | 245.80 | 246.47 | 246.64 | 246.35 | 245.66 | 245.04 | 244.37 | 244.02 | 243.83 |
| 12 | 244.63 | 244.48 | 245.15 | 245.80 | 246.53 | 246.59 | 246.36 | 245.63 | 245.01 | 244.34 | 244.14 | 243.76 |
| 13 | 244.54 | 244.43 | 245.03 | 245.77 | 246.53 | 246.58 | 246.32 | 245.60 | 244.99 | 244.32 | 244.23 | 243.86 |
| 14 | 244.73 | 244.52 | 245.17 | 245.79 | 246.57 | 246.65 | 246.29 | 245.65 | 245.08 | 244.31 | 244.10 | 243.74 |
| 15 | 244.72 | 244.73 | 245.09 | 245.84 | 246.60 | 246.61 | 246.27 | 245.70 | 244.99 | 244.29 | 243.97 | 243.83 |
| 16 | 244.67 | 244.72 | 245.22 | 245.95 | 246.60 | 246.53 | 246.31 | 245.72 | 244.98 | 244.28 | 244.21 | 243.73 |
| 17 | 244.71 | 244.71 | 245.16 | 245.99 | 246.55 | 246.46 | 246.28 | 245.66 | 244.96 | 244.24 | 244.20 | 243.85 |
| 18 | 244.70 | 244.80 | 245.10 | 246.04 | 246.52 | 246.52 | 246.33 | 245.63 | 244.92 | 244.29 | 244.04 | 243.90 |
| 19 | 244.81 | 244.79 | 245.15 | 246.09 | 246.56 | 246.55 | 246.32 | 245.64 | 244.92 | 244.25 | 244.01 | 243.88 |
| 20 | 244.81 | 244.96 | 245.05 | 246.14 | 246.53 | 246.53 | 246.25 | 245.52 | 244.94 | 244.28 | 244.05 | 244.00 |
| 21 | 244.71 | 244.99 | 245.05 | 246.19 | 246.52 | 246.51 | 246.23 | 245.46 | 244.89 | 244.20 | 243.98 | 243.69 |
| 22 | 244.64 | 244.95 | 245.13 | 246.13 | 246.50 | 246.50 | 246.19 | 245.44 | 244.83 | 244.25 | 243.90 | 244.03 |
| 23 | 244.58 | 244.97 | 245.40 | 246.13 | 246.61 | 246.45 | 246.15 | 245.60 | 244.82 | 244.26 | 243.96 | 243.92 |
| 24 | 244.59 | 245.02 | 245.26 | 246.24 | 246.61 | 246.45 | 246.26 | 245.51 | 244.79 | 244.24 | 243.93 | 243.89 |
| 25 | 244.76 | 245.18 | 245.28 | 246.32 | 246.59 | 246.51 | 246.16 | 245.49 | 244.74 | 244.21 | 243.86 | 244.07 |
| 26 | 244.64 | 245.17 | 245.28 | 246.30 | 246.62 | 246.50 | 246.10 | 245.42 | 244.97 | 244.22 | 243.81 | 243.98 |
| 27 | 244.71 | 245.04 | 245.28 | 246.31 | 246.60 | 246.43 | 246.04 | 245.35 | 244.79 | 244.15 | 243.79 | 243.83 |
| 28 | 244.60 | 245.11 | 245.26 | 246.29 | 246.60 | 246.46 | 245.98 | 245.33 | 244.72 | 244.16 | 243.78 | 243.89 |
| 29 | 244.55 | 245.42 | 245.37 | 246.32 | 246.63 | 246.48 | 245.93 | 245.35 | 244.71 | 244.18 | 243.98 | 243.99 |
| 30 | 244.64 | | 245.37 | 246.32 | 246.62 | 246.48 | 245.91 | 245.35 | 244.67 | 244.12 | 243.82 | 244.04 |
| 31 | 244.69 | | 245.36 | | 246.64 | | 245.87 | 245.43 | | 244.13 | | 243.99 |
| MEAN | 244.66 | 244.76 | 245.23 | 245.91 | 246.53 | 246.56 | 246.25 | 245.61 | 244.97 | 244.33 | 244.00 | 243.89 |
| MAX. | 245.02 | 245.62 | 245.83 | 246.59 | 246.80 | 246.80 | 246.66 | 245.96 | 245.51 | 244.96 | 244.49 | 244.43 |
| | 1900/25 | 2000/29 | 1500/11 | 1900/30 | 2000/08 | 2400/13 | 1900/06 | 1200/01 | 0400/01 | 1800/03 | 0900/17 | 1900/22 |
| MIN. | 244.33 | 244.28 | 244.88 | 245.23 | 246.18 | 246.31 | 245.81 | 245.19 | 244.57 | 243.84 | 243.56 | 242.88 |
| | 0400/24 | 0300/14 | 0700/21 | 1800/04 | 2100/08 | 1100/24 | 2000/31 | 0600/29 | 0600/25 | 2400/28 | 0700/28 | 2400/21 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 245.22

ANNUAL SUMMARY OF LEVELS, 1984
Station 2058: Rochester, New York on Lake Ontario

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 246.59 Jun
Daily mean elevation: 246.72 2 Jun
Instant/hourly Elevation: 246.96 1700/25 May

LOWEST
Monthly mean elevation: 243.88 Dec
Daily mean elevation: 243.76 12 Dec
Instant/hourly Elevation: 243.50 1400/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 244.79 | 10 Jan |
| 245.43 | 28 Feb |
| 245.39 | 29 Mar |
| 246.40 | 29 Apr |
| 246.72 | 28 May |
| 246.72 | 2 Jun |
| 246.47 | 1 Jul |
| 245.92 | 1 Aug |
| 245.38 | 1 Sep |
| 244.65 | 1 Oct |
| 244.15 | 13 Nov |
| 244.05 | 30 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 244.51 | 2 Jan |
| 244.53 | 13 Feb |
| 245.18 | 21 Mar |
| 245.40 | 1 Apr |
| 246.40 | 1 May |
| 246.46 | 24 Jun |
| 245.90 | 31 Jul |
| 245.36 | 29 Aug |
| 244.68 | 30 Sep |
| 244.16 | 31 Oct |
| 243.81 | 28 Nov |
| 243.76 | 12 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 246.60         |     |     |     |     | 11  | 13  |     |     |     |     |     |     | 246.60         | 24                         |
| 246.40         |     |     |     |     | 19  | 17  | 8   |     |     |     |     |     | 246.40         | 68                         |
| 246.20         |     |     |     | 10  | 1   |     | 14  |     |     |     |     |     | 246.20         | 93                         |
| 246.00         |     |     |     | 4   |     |     | 5   |     |     |     |     |     | 246.00         | 102                        |
| 245.80         |     |     |     | 6   |     |     | 4   | 7   |     |     |     |     | 245.80         | 119                        |
| 245.60         |     |     |     | 5   |     |     |     | 12  |     |     |     |     | 245.60         | 136                        |
| 245.40         |     | 1   |     | 4   |     |     |     | 8   |     |     |     |     | 245.40         | 149                        |
| 245.20         |     | 1   | 22  | 1   |     |     |     | 4   | 3   |     |     |     | 245.20         | 180                        |
| 245.00         |     | 7   | 9   |     |     |     |     |     | 9   |     |     |     | 245.00         | 205                        |
| 244.80         |     | 4   |     |     |     |     |     |     | 15  |     |     |     | 244.80         | 224                        |
| 244.60         | 28  | 7   |     |     |     |     |     |     | 3   | 2   |     |     | 244.60         | 264                        |
| 244.40         | 3   | 9   |     |     |     |     |     |     |     | 5   |     |     | 244.40         | 281                        |
| 244.20         |     |     |     |     |     |     |     |     |     | 19  |     |     | 244.20         | 300                        |
| 244.00         |     |     |     |     |     |     |     |     |     | 5   | 15  | 2   | 244.00         | 322                        |
| 243.80         |     |     |     |     |     |     |     |     |     |     | 15  | 28  | 243.80         | 365                        |
| 243.60         |     |     |     |     |     |     |     |     |     |     |     | 1   | 243.60         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2058: Rochester, New York on Lake Ontario

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 244.52  | 244.64  | 245.30  | 245.40  | 246.40  | 246.69  | 246.47  | 245.92  | 245.38  | 244.65  | 244.00  | 243.87  |
| 2    | 244.51  | 244.61  | 245.30  | 245.42  | 246.43  | 246.72  | 246.44  | 245.89  | 245.28  | 244.57  | 244.12  | 243.87  |
| 3    | 244.56  | 244.54  | 245.30  | 245.45  | 246.42  | 246.69  | 246.42  | 245.85  | 245.23  | 244.54  | 244.11  | 243.84  |
| 4    | 244.66  | 244.61  | 245.25  | 245.48  | 246.49  | 246.71  | 246.42  | 245.84  | 245.20  | 244.61  | 244.02  | 243.86  |
| 5    | 244.64  | 244.59  | 245.24  | 245.58  | 246.47  | 246.69  | 246.42  | 245.82  | 245.19  | 244.57  | 244.10  | 243.82  |
| 6    | 244.65  | 244.62  | 245.28  | 245.63  | 246.48  | 246.66  | 246.42  | 245.81  | 245.13  | 244.47  | 244.12  | 243.90  |
| 7    | 244.68  | 244.64  | 245.31  | 245.72  | 246.48  | 246.68  | 246.44  | 245.83  | 245.07  | 244.38  | 244.09  | 243.89  |
| 8    | 244.66  | 244.59  | 245.29  | 245.77  | 246.52  | 246.66  | 246.43  | 245.80  | 245.02  | 244.39  | 244.00  | 243.86  |
| 9    | 244.70  | 244.58  | 245.24  | 245.78  | 246.52  | 246.66  | 246.38  | 245.73  | 244.97  | 244.41  | 243.95  | 243.86  |
| 10   | 244.79  | 244.54  | 245.19  | 245.80  | 246.55  | 246.64  | 246.33  | 245.70  | 244.99  | 244.40  | 243.98  | 243.86  |
| 11   | 244.77  | 244.53  | 245.23  | 245.83  | 246.55  | 246.64  | 246.32  | 245.71  | 245.08  | 244.38  | 244.05  | 243.83  |
| 12   | 244.72  | 244.53  | 245.27  | 245.84  | 246.59  | 246.60  | 246.34  | 245.69  | 245.05  | 244.36  | 244.11  | 243.76  |
| 13   | 244.64  | 244.53  | 245.18  | 245.88  | 246.57  | 246.59  | 246.34  | 245.65  | 244.97  | 244.35  | 244.15  | 243.87  |
| 14   | 244.72  | 244.60  | 245.20  | 245.91  | 246.60  | 246.62  | 246.30  | 245.66  | 245.09  | 244.33  | 244.09  | 243.81  |
| 15   | 244.75  | 244.72  | 245.18  | 245.96  | 246.62  | 246.62  | 246.26  | 245.67  | 245.06  | 244.31  | 243.98  | 243.86  |
| 16   | 244.72  | 244.77  | 245.27  | 245.99  | 246.63  | 246.56  | 246.31  | 245.76  | 245.00  | 244.30  | 244.03  | 243.81  |
| 17   | 244.68  | 244.81  | 245.27  | 246.04  | 246.60  | 246.49  | 246.32  | 245.77  | 244.99  | 244.26  | 244.06  | 243.86  |
| 18   | 244.70  | 244.84  | 245.18  | 246.08  | 246.59  | 246.52  | 246.32  | 245.70  | 244.96  | 244.27  | 244.03  | 243.89  |
| 19   | 244.69  | 244.87  | 245.18  | 246.12  | 246.60  | 246.56  | 246.30  | 245.64  | 244.94  | 244.25  | 244.04  | 243.91  |
| 20   | 244.67  | 244.92  | 245.19  | 246.16  | 246.60  | 246.57  | 246.25  | 245.56  | 244.94  | 244.23  | 244.02  | 243.87  |
| 21   | 244.71  | 245.01  | 245.18  | 246.22  | 246.58  | 246.54  | 246.24  | 245.50  | 244.94  | 244.23  | 243.97  | 243.85  |
| 22   | 244.63  | 245.02  | 245.19  | 246.22  | 246.57  | 246.52  | 246.20  | 245.43  | 244.87  | 244.29  | 243.89  | 243.90  |
| 23   | 244.64  | 245.03  | 245.27  | 246.23  | 246.63  | 246.49  | 246.12  | 245.55  | 244.81  | 244.26  | 243.88  | 243.89  |
| 24   | 244.64  | 245.06  | 245.30  | 246.27  | 246.68  | 246.46  | 246.22  | 245.56  | 244.81  | 244.25  | 243.89  | 243.92  |
| 25   | 244.67  | 245.14  | 245.33  | 246.33  | 246.65  | 246.53  | 246.15  | 245.49  | 244.82  | 244.20  | 243.87  | 243.93  |
| 26   | 244.69  | 245.15  | 245.35  | 246.36  | 246.68  | 246.51  | 246.08  | 245.43  | 244.92  | 244.20  | 243.87  | 243.92  |
| 27   | 244.68  | 245.14  | 245.34  | 246.38  | 246.68  | 246.48  | 246.02  | 245.39  | 244.84  | 244.21  | 243.84  | 243.95  |
| 28   | 244.67  | 245.43  | 245.33  | 246.38  | 246.72  | 246.54  | 245.99  | 245.37  | 244.74  | 244.20  | 243.81  | 243.90  |
| 29   | 244.61  | 245.26  | 245.39  | 246.40  | 246.66  | 246.55  | 245.96  | 245.36  | 244.70  | 244.23  | 243.92  | 243.98  |
| 30   | 244.67  |         | 245.38  | 246.36  | 246.68  | 246.52  | 245.92  | 245.37  | 244.68  | 244.17  | 243.87  | 244.05  |
| 31   | 244.68  |         | 245.38  |         | 246.69  |         | 245.90  | 245.41  |         | 244.16  |         | 244.04  |
| MEAN | 244.67  | 244.80  | 245.27  | 245.97  | 246.58  | 246.59  | 246.26  | 245.64  | 244.99  | 244.34  | 244.00  | 243.88  |
| MAX. | 244.89  | 245.90  | 245.68  | 246.57  | 246.96  | 246.85  | 246.73  | 245.99  | 245.50  | 244.80  | 244.34  | 244.24  |
|      | 1800/26 | 1900/28 | 2000/21 | 1400/29 | 1700/25 | 1600/08 | 1900/06 | 1500/01 | 2300/01 | 1600/01 | 0900/05 | 0100/22 |
| MIN. | 244.44  | 244.39  | 244.96  | 245.33  | 246.30  | 246.18  | 245.83  | 245.20  | 244.44  | 243.81  | 243.69  | 243.50  |
|      | 2400/02 | 0700/03 | 1800/21 | 1600/04 | 1100/03 | 1400/27 | 0400/31 | 1900/30 | 1200/13 | 0700/26 | 1200/28 | 1400/14 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 245.25

ANNUAL SUMMARY OF LEVELS, 1984  
Station 2076: Oicott, New York on Lake Ontario

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 246.64 Jun  
Daily mean elevation: 246.76 5 Jun  
Instant/hourly Elevation: 246.99 2200/28 May

LOWEST  
Monthly mean elevation: 243.95 Dec  
Daily mean elevation: 243.84 25 Dec  
Instant/hourly Elevation: 243.56 2300/7 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 244.86 | 12 Jan |
| 245.33 | 28 Feb |
| 245.45 | 28 Mar |
| 246.47 | 28 Apr |
| 246.75 | 31 May |
| 246.76 | 5 Jun  |
| 246.52 | 4 Jul  |
| 245.96 | 1 Aug  |
| 245.36 | 1 Sep  |
| 244.66 | 1 Oct  |
| 244.18 | 3 Nov  |
| 244.13 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 244.60 | 25 Jan |
| 244.57 | 8 Feb  |
| 245.11 | 11 Mar |
| 245.43 | 1 Apr  |
| 246.43 | 1 May  |
| 246.51 | 30 Jun |
| 245.95 | 31 Jul |
| 245.39 | 31 Aug |
| 244.69 | 30 Sep |
| 244.22 | 28 Oct |
| 243.85 | 23 Nov |
| 243.84 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 246.60 | | | | | 18 | 21 | | | | | | | 246.60 | 39 |
| 246.40 | | | | | 13 | 9 | 9 | | | | | | 246.40 | 75 |
| 246.20 | | | | | 5 | | 12 | | | | | | 246.20 | 92 |
| 246.00 | | | | | 6 | | 7 | | | | | | 246.00 | 105 |
| 245.80 | | | | | 6 | | 3 | 7 | | | | | 245.80 | 121 |
| 245.60 | | | | | 4 | | | 12 | | | | | 245.60 | 137 |
| 245.40 | | | | | 4 | | | 10 | | | | | 245.40 | 155 |
| 245.20 | | 1 | 26 | | | | | 2 | 3 | | | | 245.20 | 187 |
| 245.00 | | 8 | 1 | | | | | | 14 | | | | 245.00 | 210 |
| 244.80 | 2 | 5 | | | | | | | 9 | | | | 244.80 | 226 |
| 244.60 | 28 | 12 | | | | | | | 4 | 2 | | | 244.60 | 272 |
| 244.40 | 1 | 3 | | | | | | | | 10 | | | 244.40 | 286 |
| 244.20 | | | | | | | | | | 19 | | | 244.20 | 305 |
| 244.00 | | | | | | | | | | | 17 | 6 | 244.00 | 328 |
| 243.80 | | | | | | | | | | | 13 | 25 | 243.80 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2076: Olcott, New York on Lake Ontario

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 244.73 | 244.67 | 245.27 | 245.43 | 246.43* | 246.75 | 246.48 | 245.96 | 245.36 | 244.66 | 244.18 | 243.90 |
| 2 | 244.64 | 244.73 | 245.29 | 245.47 | 246.44 | 246.72 | 246.46 | 245.94 | 245.34 | 244.57 | 244.09 | 244.03 |
| 3 | 244.62 | 244.66 | 245.26 | 245.51 | 246.50 | 246.72 | 246.49 | 245.89 | 245.27 | 244.55 | 244.18 | 243.96 |
| 4 | 244.64 | 244.68 | 245.31 | 245.60 | 246.47 | 246.72 | 246.52 | 245.86 | 245.16 | 244.62 | 244.16 | 243.86 |
| 5 | 244.70 | 244.64 | 245.31 | 245.63 | 246.51 | 246.76 | 246.50 | 245.84 | 245.18 | 244.59 | 244.13 | 243.99 |
| 6 | 244.68 | 244.61 | 245.27 | 245.65 | 246.53 | 246.75 | 246.47 | 245.80 | 245.18 | 244.53 | 244.10 | 243.98 |
| 7 | 244.72 | 244.59 | 245.28 | 245.72 | 246.55 | 246.70 | 246.45 | 245.84 | 245.19 | 244.45 | 244.12 | 243.91 |
| 8 | 244.75 | 244.57 | 245.34 | 245.77 | 246.50 | 246.70 | 246.45 | 245.80 | 245.14 | 244.44 | 244.11 | 243.85 |
| 9 | 244.74 | 244.62 | 245.26 | 245.83 | 246.58 | 246.71 | 246.42 | 245.77 | 245.11 | 244.47 | 244.10 | 244.00 |
| 10 | 244.78 | 244.61 | 245.23 | 245.84 | 246.58 | 246.71 | 246.39 | 245.76 | 245.07 | 244.44 | 244.08 | 243.95 |
| 11 | 244.79 | 244.58 | 245.11 | 245.87 | 246.63 | 246.66 | 246.35 | 245.71 | 245.10 | 244.42 | 244.10 | 243.94 |
| 12 | 244.86 | 244.63 | 245.29 | 245.89 | 246.62 | 246.67 | 246.36 | 245.69 | 245.04 | 244.41 | 244.12 | 243.95 |
| 13 | 244.85 | 244.67 | 245.34 | 246.00 | 246.61 | 246.65 | 246.37 | 245.71 | 245.11 | 244.40 | 244.11 | 243.93 |
| 14 | 244.77 | 244.70 | 245.23 | 245.99 | 246.58 | 246.64 | 246.36 | 245.76 | 245.12 | 244.39 | 244.06 | 244.02 |
| 15 | 244.80 | 244.76 | 245.29 | 246.07 | 246.60 | 246.63 | 246.35 | 245.76 | 245.06 | 244.38 | 244.03 | 243.94 |
| 16 | 244.80 | 244.84 | 245.28 | 246.03 | 246.60 | 246.62 | 246.36 | 245.81 | 245.01 | 244.38 | 243.92 | 243.97 |
| 17 | 244.74 | 244.89 | 245.32 | 246.12 | 246.63 | 246.60 | 246.36 | 245.73 | 245.05 | 244.38 | 243.98 | 243.94 |
| 18 | 244.76 | 244.90 | 245.31 | 246.17 | 246.65 | 246.61 | 246.33 | 245.69 | 245.00 | 244.32 | 244.04 | 243.93 |
| 19 | 244.67 | 244.98 | 245.23 | 246.19 | 246.63 | 246.61 | 246.32 | 245.65 | 244.98 | 244.36 | 244.04 | 243.95 |
| 20 | 244.65 | 244.90 | 245.31 | 246.17 | 246.65 | 246.62 | 246.33 | 245.56 | 244.95 | 244.35 | 243.97 | 243.84 |
| 21 | 244.72 | 245.01 | 245.34 | 246.22 | 246.65 | 246.56 | 246.29 | 245.60 | 244.92 | 244.37 | 243.96 | 244.03 |
| 22 | 244.67 | 245.07 | 245.27 | 246.29 | 246.66 | 246.57 | 246.20 | 245.60 | 244.91 | 244.33 | 243.94 | 243.85 |
| 23 | 244.72 | 245.09 | 245.26 | 246.31 | 246.64 | 246.57 | 246.16 | 245.57 | 244.84 | 244.31 | 243.85 | 243.94 |
| 24 | 244.71 | 245.09 | 245.35 | 246.28 | 246.67 | 246.57 | 246.14 | 245.53 | 244.86 | 244.29 | 243.89 | 243.95 |
| 25 | 244.60 | 245.09 | 245.38 | 246.33 | 246.75 | 246.58 | 246.13 | 245.50 | 244.79 | 244.27 | 243.92 | 243.84 |
| 26 | 244.74 | 245.12 | 245.35 | 246.42 | 246.70 | 246.60 | 246.09 | 245.47 | 244.83 | 244.27 | 243.90 | 243.90 |
| 27 | 244.66 | 245.19 | 245.41 | 246.47 | 246.70 | 246.61 | 246.06 | 245.44 | 244.81 | 244.29 | 243.94 | 244.02 |
| 28 | 244.74 | 245.33 | 245.45 | 246.47 | 246.75 | 246.61 | 246.02 | 245.43 | 244.76 | 244.22 | 243.91 | 243.93 |
| 29 | 244.68 | 245.16 | 245.41 | 246.43 | 246.74 | 246.57 | 246.00 | 245.40 | 244.71 | 244.23 | 243.87 | 243.97 |
| 30 | 244.71 | | 245.41 | 246.45* | 246.74 | 246.51 | 245.98 | 245.41 | 244.69 | 244.23 | 243.99 | 244.07 |
| 31 | 244.66 | | 245.40 | | 246.75 | | 245.95 | 245.39 | | 244.26 | | 244.13 |
| MEAN | 244.72 | 244.84 | 245.31 | 246.02 | 246.61 | 246.64 | 246.29 | 245.67 | 245.02 | 244.39 | 244.03 | 243.95 |
| MAX. | 245.03 | 245.57 | 245.55 | 246.66 | 246.99 | 246.87 | 246.64 | 246.03 | 245.88 | 244.76 | 244.69 | 244.27 |
| MIN. | 0500/13 | 1600/28 | 0600/21 | 1100/30 | 2200/28 | 2200/06 | 1900/06 | 1000/01 | 2300/13 | 1400/01 | 1200/13 | 2400/31 |
| | 244.48 | 244.39 | 244.93 | 245.37 | 246.26 | 246.44 | 245.87 | 245.20 | 244.60 | 244.00 | 243.76 | 243.56 |
| | 0800/25 | 2200/08 | 1400/11 | 2200/01 | 1900/08 | 1200/30 | 2200/31 | 1400/30 | 2000/12 | 2400/28 | 0100/02 | 2300/07 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 245.29

ANNUAL SUMMARY OF LEVELS, 1984
Station 3007: Ashland Avenue, Niagara Falls, New York on Niagara River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 323.61 Jun
Daily mean elevation: 327.12 23 Mar
Instant/hourly Elevation: 331.04 0500/23 Mar

LOWEST
Monthly mean elevation: 318.61 Jan
Daily mean elevation: 316.71 14 Dec
Instant/hourly Elevation: 314.09 2300/31 Oct

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 320.88 | 8 Jan |
| 320.97 | 29 Feb |
| 327.12 | 23 Mar |
| 325.04 | 6 Apr |
| 324.76 | 1 May |
| 324.25 | 19 Jun |
| 323.69 | 16 Jul |
| 324.10 | 31 Aug |
| 323.90 | 26 Sep |
| 324.34 | 3 Oct |
| 324.13 | 16 Nov |
| 322.83 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 316.83 | 29 Jan |
| 317.02 | 2 Feb |
| 317.81 | 18 Mar |
| 322.26 | 22 Apr |
| 322.23 | 3 May |
| 322.48 | 30 Jun |
| 322.38 | 29 Jul |
| 322.17 | 12 Aug |
| 321.17 | 30 Sep |
| 320.55 | 6 Oct |
| 317.86 | 27 Nov |
| 316.71 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(ft.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 327.00 | | | 1 | | | | | | | | | | 327.00 | 1 |
| 326.50 | | | | | | | | | | | | | 326.50 | 1 |
| 326.00 | | | | | | | | | | | | | 326.00 | 1 |
| 325.50 | | | | | | | | | | | | | 325.50 | 1 |
| 325.00 | | | 1 | 1 | | | | | | | | | 325.00 | 3 |
| 324.50 | | | | | 1 | | | | | | | | 324.50 | 4 |
| 324.00 | | | | 6 | 7 | 8 | | 1 | | 1 | 1 | | 324.00 | 28 |
| 323.50 | | | | 8 | 11 | 13 | 5 | 10 | 3 | | | | 323.50 | 78 |
| 323.00 | | | | 11 | 7 | 5 | 18 | 10 | 8 | | | | 323.00 | 137 |
| 322.50 | | | 2 | 3 | 4 | 2 | 6 | 9 | 10 | 1 | | 1 | 322.50 | 175 |
| 322.00 | | | 3 | 1 | 1 | 2 | 2 | 1 | 6 | 4 | | | 322.00 | 195 |
| 321.50 | | | 3 | | | | | | 1 | 9 | | | 321.50 | 210 |
| 321.00 | | | 3 | | | | | | 2 | 14 | 1 | 2 | 321.00 | 232 |
| 320.50 | 5 | 2 | 4 | | | | | | | 2 | 2 | 5 | 320.50 | 252 |
| 320.00 | 2 | 4 | 4 | | | | | | | | 5 | 1 | 320.00 | 268 |
| 319.50 | 2 | 3 | 1 | | | | | | | | 5 | 2 | 319.50 | 281 |
| 319.00 | 2 | 5 | 3 | | | | | | | | 4 | 2 | 319.00 | 297 |
| 318.50 | 3 | 4 | 2 | | | | | | | | 4 | 4 | 318.50 | 314 |
| 318.00 | 3 | 2 | 2 | | | | | | | | 5 | 7 | 318.00 | 333 |
| 317.50 | 6 | 7 | 2 | | | | | | | | 3 | 3 | 317.50 | 354 |
| 317.00 | 4 | 2 | | | | | | | | | | 1 | 317.00 | 361 |
| 316.50 | 4 | | | | | | | | | | | 1 | 316.50 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3007: Ashland Avenue, Niagara Falls, New York on Niagara River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 318.88 | 318.04 | 322.22 | 324.35 | 324.76 | 323.84 | 323.08 | 322.89 | 323.26 | 321.39 | 318.66 | 320.97 |
| 2 | 319.97 | 317.02 | 322.71 | 323.83 | 323.63 | 323.59 | 323.24 | 322.61 | 322.97 | 322.13 | 320.59 | 318.31 |
| 3 | 319.54 | 317.68 | 322.17 | 323.48 | 322.23 | 323.59 | 323.06 | 322.61 | 322.92 | 324.34 | 318.20 | 320.79 |
| 4 | 320.71 | 317.66 | 320.40 | 323.41 | 322.57 | 324.06 | 323.32 | 322.54 | 323.31 | 322.79 | 318.41 | 321.88 |
| 5 | 320.57 | 317.62 | 320.51 | 323.45 | 323.31 | 323.71 | 323.36 | 322.77 | 323.17 | 321.28 | 319.80 | 319.66 |
| 6 | 320.35 | 317.91 | 321.11 | 325.04 | 322.65 | 324.07 | 323.53 | 323.12 | 322.96 | 320.55 | 320.07 | 319.35 |
| 7 | 320.50 | 318.58 | 319.83 | 324.02 | 323.35 | 324.21 | 323.57 | 323.66 | 322.86 | 321.56 | 319.45 | 321.16 |
| 8 | 320.88 | 318.32 | 318.21 | 323.64 | 323.79 | 324.05 | 323.17 | 323.49 | 322.65 | 321.81 | 319.42 | 321.98 |
| 9 | 320.83 | 317.85 | 317.88 | 323.83 | 324.37 | 323.70 | 323.47 | 323.63 | 322.80 | 321.89 | 320.02 | 317.73 |
| 10 | 320.76 | 317.79 | 321.32 | 323.25 | 324.28 | 323.55 | 323.43 | 323.53 | 323.62 | 321.53 | 318.57 | 318.03 |
| 11 | 319.42 | 318.61 | 322.65 | 324.09 | 323.92 | 324.14 | 323.34 | 322.58 | 323.16 | 321.36 | 319.63 | 318.18 |
| 12 | 318.12 | 318.81 | 320.27 | 323.25 | 323.93 | 323.81 | 323.67 | 322.17 | 323.08 | 321.36 | 320.62 | 318.10 |
| 13 | 317.14 | 318.80 | 320.47 | 322.87 | 323.05 | 323.70 | 323.62 | 322.90 | 323.26 | 321.12 | 319.66 | 318.46 |
| 14 | 318.30 | 320.06 | 320.10 | 323.30 | 323.64 | 323.99 | 323.24 | 323.26 | 323.24 | 321.05 | 319.14 | 316.71 |
| 15 | 317.63 | 320.15 | 318.82 | 323.34 | 323.72 | 323.46 | 322.90 | 323.50 | 322.20 | 321.77 | 319.86 | 317.60 |
| 16 | 317.72 | 319.60 | 321.98 | 323.76 | 323.54 | 322.50 | 323.69 | 323.69 | 322.48 | 321.49 | 324.13 | 317.32 |
| 17 | 318.91 | 319.37 | 319.14 | 324.18 | 323.38 | 322.51 | 323.44 | 323.54 | 322.81 | 321.48 | 321.27 | 318.92 |
| 18 | 317.86 | 320.20 | 317.81 | 323.87 | 323.38 | 323.86 | 323.49 | 322.57 | 322.67 | 322.38 | 319.34 | 318.89 |
| 19 | 318.96 | 319.54 | 319.36 | 323.92 | 323.43 | 324.25 | 323.40 | 323.09 | 323.64 | 321.68 | 318.00 | 319.00 |
| 20 | 319.04 | 320.93 | 319.31 | 323.46 | 322.93 | 323.83 | 323.16 | 322.66 | 323.44 | 321.74 | 318.40 | 320.79 |
| 21 | 318.36 | 320.46 | 320.94 | 323.18 | 323.10 | 323.43 | 323.11 | 323.21 | 322.87 | 320.91 | 318.43 | 318.36 |
| 22 | 317.88 | 319.28 | 325.29 | 322.26 | 323.62 | 323.04 | 322.65 | 323.59 | 321.20 | 322.06 | 318.32 | 322.83 |
| 23 | 317.69 | 319.46 | 327.12 | 322.72 | 324.15 | 322.72 | 323.10 | 323.55 | 322.32 | 321.57 | 320.04 | 320.55 |
| 24 | 317.13 | 319.16 | 322.41 | 323.81 | 324.30 | 323.33 | 323.37 | 323.56 | 322.34 | 321.62 | 318.60 | 319.08 |
| 25 | 316.96 | 319.87 | 321.19 | 324.31 | 324.19 | 324.01 | 322.84 | 323.15 | 322.80 | 321.31 | 317.92 | 321.15 |
| 26 | 316.90 | 319.31 | 320.95 | 323.70 | 323.54 | 323.75 | 323.12 | 323.06 | 323.90 | 322.19 | 318.62 | 320.60 |
| 27 | 317.14 | 317.70 | 320.80 | 323.20 | 323.51 | 323.69 | 322.43 | 323.50 | 322.17 | 321.11 | 317.86 | 317.78 |
| 28 | 317.09 | 317.07 | 318.94 | 323.23 | 322.79 | 324.04 | 322.62 | 323.49 | 322.20 | 321.35 | 320.08 | 319.52 |
| 29 | 316.83 | 320.97 | 318.22 | 322.75 | 323.56 | 323.37 | 322.38 | 323.70 | 321.78 | 321.14 | 319.88 | 320.07 |
| 30 | 316.88 | | 321.70 | 324.20 | 324.26 | 322.48 | 322.68 | 323.95 | 321.17 | 321.18 | 320.30 | 318.62 |
| 31 | 317.88 | | 321.81 | | 324.01 | | 322.70 | 324.10 | | 321.32 | | 318.23 |
| MEAN | 318.61 | 318.89 | 320.83 | 323.59 | 323.58 | 323.61 | 323.17 | 323.22 | 322.78 | 321.63 | 319.44 | 319.37 |
| MAX. | 323.10 | 324.05 | 331.04 | 328.97 | 329.46 | 327.93 | 327.55 | 328.18 | 328.29 | 328.19 | 329.49 | 328.62 |
| MIN. | 2400/08 | 1900/29 | 0500/23 | 1900/30 | 0900/01 | 1600/05 | 1400/06 | 1500/30 | 1400/19 | 1400/03 | 0500/16 | 2200/22 |
| | 315.39 | 315.50 | 315.16 | 315.76 | 314.51 | 316.44 | 315.57 | 315.20 | 315.36 | 314.09 | 314.44 | 314.25 |
| | 0600/13 | 2000/27 | 0300/29 | 0100/05 | 2400/03 | 0200/23 | 0100/29 | 0100/12 | 0400/15 | 2300/31 | 0100/01 | 1300/14 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 321.56

ANNUAL SUMMARY OF LEVELS, 1984
Station 3009: American Falls, Niagara Falls, New York on Niagara River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST

Monthly mean elevation: 559.04 Jun
Daily mean elevation: 559.86 16 Nov
Instant/hourly Elevation: 560.22 0700/16 Nov

LOWEST

Monthly mean elevation: 558.44 Feb
Daily mean elevation: 557.72 14 Dec
Instant/hourly Elevation: 557.35 1900/6 Oct

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 558.95 | 28 Jan |
| 558.76 | 20 Feb |
| 559.74 | 23 Mar |
| 559.45 | 6 Apr |
| 559.32 | 1 May |
| 559.39 | 19 Jun |
| 559.37 | 7 Jul |
| 559.06 | 16 Aug |
| 558.84 | 3 Sep |
| 559.24 | 3 Oct |
| 559.86 | 16 Nov |
| 559.55 | 25 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 557.86 | 13 Jan |
| 557.87 | 28 Feb |
| 557.96 | 18 Mar |
| 558.41 | 9 Apr |
| 558.34 | 3 May |
| 558.66 | 23 Jun |
| 558.54 | 27 Jul |
| 558.34 | 20 Aug |
| 558.45 | 22 Sep |
| 558.06 | 31 Oct |
| 558.21 | 19 Nov |
| 557.72 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 559.80         |     |     |     |     |     |     |     |     |     |     | 1   |     | 559.80         | 1                          |
| 559.60         |     |     | 2   |     |     |     |     |     |     |     |     |     | 559.60         | 3                          |
| 559.40         |     |     | 2   | 1   |     |     |     |     |     |     | 1   | 4   | 559.40         | 11                         |
| 559.20         |     |     | 3   | 1   | 2   | 6   | 2   |     |     | 1   | 1   | 6   | 559.20         | 33                         |
| 559.00         |     |     | 2   | 2   | 6   | 12  | 5   | 1   |     |     | 3   | 2   | 559.00         | 66                         |
| 558.80         | 3   |     | 5   | 5   | 5   | 9   | 13  | 5   | 1   |     | 7   | 4   | 558.80         | 123                        |
| 558.60         | 7   | 5   | 3   | 12  | 15  | 3   | 8   | 9   | 8   | 1   | 10  | 5   | 558.60         | 209                        |
| 558.40         | 11  | 13  | 4   | 9   | 2   |     | 3   | 15  | 21  | 21  | 3   | 2   | 558.40         | 313                        |
| 558.20         | 3   | 8   | 6   |     | 1   |     |     | 1   |     | 7   | 4   | 4   | 558.20         | 347                        |
| 558.00         | 4   | 2   | 3   |     |     |     |     |     |     | 1   |     | 2   | 558.00         | 359                        |
| 557.80         | 3   | 1   | 1   |     |     |     |     |     |     |     |     | 1   | 557.80         | 365                        |
| 557.60         |     |     |     |     |     |     |     |     |     |     |     | 1   | 557.60         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3009: American Falls, Niagara Falls, New York on Niagara River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 558.58  | 558.48  | 558.86  | 559.31  | 559.32  | 559.08  | 559.23  | 558.48  | 558.61  | 558.49  | 558.68  | 559.36  |
| 2    | 558.63  | 558.16  | 559.24  | 558.99  | 558.61  | 558.89  | 559.14  | 558.49  | 558.55  | 558.56  | 559.31  | 558.78  |
| 3    | 558.54  | 558.08  | 558.92  | 558.88  | 558.34  | 559.08  | 559.11  | 558.55  | 558.84  | 559.24  | 558.74  | 559.10  |
| 4    | 558.43  | 558.39  | 558.35  | 558.60  | 558.56  | 559.10  | 559.07  | 558.66  | 558.60  | 558.50  | 558.94  | 559.51  |
| 5    | 558.62  | 558.37  | 558.29  | 558.97  | 558.79  | 558.92  | 559.05  | 558.69  | 558.53  | 558.37  | 558.99  | 558.84  |
| 6    | 558.82  | 558.36  | 558.47  | 559.45  | 558.68  | 559.11  | 558.93  | 558.89  | 558.46  | 558.34  | 558.78  | 558.71  |
| 7    | 558.70  | 558.46  | 558.54  | 559.07  | 558.66  | 559.13  | 559.37  | 558.93  | 558.53  | 558.43  | 558.67  | 559.31  |
| 8    | 558.93  | 558.64  | 558.26  | 558.64  | 558.65  | 559.08  | 559.10  | 558.64  | 558.58  | 558.49  | 558.72  | 559.53  |
| 9    | 558.79  | 558.41  | 558.20  | 558.41  | 559.12  | 559.02  | 558.92  | 558.90  | 558.70  | 558.48  | 558.87  | 558.26  |
| 10   | 558.55  | 558.32  | 558.84  | 558.49  | 559.08  | 558.98  | 558.68  | 558.90  | 558.75  | 558.46  | 558.75  | 557.90  |
| 11   | 558.59  | 558.32  | 558.79  | 558.61  | 558.82  | 559.09  | 558.91  | 558.50  | 558.67  | 558.43  | 559.08  | 558.14  |
| 12   | 558.46  | 558.38  | 558.10  | 558.52  | 558.74  | 558.77  | 558.87  | 558.49  | 558.58  | 558.51  | 559.20  | 558.37  |
| 13   | 557.86  | 558.54  | 558.34  | 558.55  | 558.55  | 558.86  | 558.79  | 558.55  | 558.62  | 558.50  | 558.74  | 558.45  |
| 14   | 558.26  | 558.66  | 558.66  | 558.48  | 558.80  | 559.03  | 558.92  | 558.66  | 558.49  | 558.44  | 558.54  | 557.72  |
| 15   | 558.18  | 558.76  | 558.48  | 558.55  | 558.62  | 558.81  | 558.86  | 558.90  | 558.52  | 558.40  | 558.77  | 558.31  |
| 16   | 558.24  | 558.48  | 558.65  | 558.62  | 558.63  | 558.74  | 558.98  | 559.06  | 558.64  | 558.44  | 559.86  | 558.22  |
| 17   | 558.69  | 558.52  | 558.11  | 558.81  | 558.65  | 558.93  | 558.92  | 558.69  | 558.58  | 558.44  | 559.47  | 558.80  |
| 18   | 558.54  | 558.58  | 557.96  | 558.71  | 558.64  | 559.39  | 558.92  | 558.55  | 558.52  | 558.46  | 559.02  | 558.74  |
| 19   | 558.58  | 558.46  | 558.39  | 558.71  | 558.79  | 559.39  | 558.79  | 558.53  | 558.55  | 558.34  | 558.21  | 558.73  |
| 20   | 558.02  | 558.76  | 558.38  | 558.70  | 558.76  | 559.06  | 558.78  | 558.34  | 558.75  | 558.62  | 558.28  | 559.21  |
| 21   | 557.92  | 558.63  | 558.88  | 558.66  | 558.79  | 558.90  | 559.00  | 558.48  | 558.45  | 558.52  | 558.42  | 558.14  |
| 22   | 557.93  | 558.37  | 559.63  | 558.44  | 558.90  | 558.84  | 558.82  | 558.51  | 558.45  | 558.57  | 558.37  | 559.55  |
| 23   | 558.26  | 558.43  | 559.74  | 558.60  | 559.10  | 558.66  | 558.91  | 558.71  | 558.55  | 558.46  | 558.95  | 559.26  |
| 24   | 558.07  | 558.43  | 559.45  | 558.63  | 559.02  | 559.26  | 558.89  | 558.48  | 558.54  | 558.49  | 558.72  | 559.06  |
| 25   | 558.14  | 558.55  | 559.17  | 559.04  | 558.90  | 559.38  | 558.61  | 558.49  | 558.52  | 558.44  | 558.71  | 559.55  |
| 26   | 558.54  | 558.58  | 559.22  | 558.73  | 558.95  | 559.19  | 558.75  | 558.51  | 558.71  | 558.49  | 558.56  | 559.28  |
| 27   | 558.41  | 558.28  | 559.20  | 558.63  | 558.91  | 559.36  | 558.54  | 558.60  | 558.48  | 558.38  | 558.32  | 558.47  |
| 28   | 558.95  | 557.87  | 558.82  | 558.67  | 558.64  | 559.37* | 558.68  | 558.60  | 558.54  | 558.58  | 558.90  | 558.84  |
| 29   | 558.77  | 558.53  | 558.54  | 558.61  | 559.03  | 559.02  | 558.65  | 558.72  | 558.56  | 558.35  | 558.84  | 559.21  |
| 30   | 558.48  |         | 559.24  | 559.00  | 559.24  | 558.89  | 558.59  | 558.68  | 558.48  | 558.32  | 558.87  | 558.96  |
| 31   | 558.73  |         | 559.51  |         | 559.19  |         | 558.56  | 558.76  |         | 558.06  |         | 558.87  |
| MEAN | 558.46  | 558.44  | 558.75  | 558.74  | 558.82  | 559.04  | 558.88  | 558.64  | 558.58  | 558.47  | 558.81  | 558.81  |
| MAX. | 559.40  | 559.04  | 560.18  | 560.12  | 559.76  | 559.86  | 559.68  | 559.58  | 559.46  | 559.67  | 560.22  | 560.18  |
| MIN. | 0900/28 | 0800/20 | 2300/22 | 1900/30 | 1200/01 | 0600/28 | 0700/07 | 0700/07 | 0700/03 | 0700/03 | 0700/16 | 1700/03 |
|      | 557.40  | 557.69  | 557.61  | 557.39  | 557.45  | 557.76  | 557.62  | 557.46  | 557.42  | 557.35  | 557.92  | 557.53  |
|      | 0900/13 | 1400/28 | 0500/18 | 2200/14 | 2100/03 | 2100/15 | 2100/27 | 2100/20 | 1900/28 | 1900/06 | 0700/20 | 0800/14 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 558.70

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3012: Niagara Intake, Niagara Falls, New York on Niagara River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 562.01 Jun  
Daily mean elevation: 563.23 23 Mar  
Instant/hourly Elevation: 563.60 0400/23 Mar

LOWEST  
Monthly mean elevation: 561.07 Feb  
Daily mean elevation: 560.13 14 Dec  
Instant/hourly Elevation: 559.43 2200/2 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 562.38 | 8 Jan  |
| 561.54 | 20 Feb |
| 563.23 | 23 Mar |
| 562.44 | 6 Apr  |
| 562.36 | 1 May  |
| 562.47 | 18 Jun |
| 562.49 | 2 Jul  |
| 562.06 | 16 Aug |
| 561.75 | 3 Sep  |
| 562.33 | 3 Oct  |
| 562.90 | 16 Nov |
| 562.53 | 22 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 560.53 | 27 Jan |
| 560.42 | 28 Feb |
| 560.79 | 9 Mar  |
| 561.23 | 22 Apr |
| 561.15 | 3 May  |
| 561.55 | 23 Jun |
| 561.23 | 29 Jul |
| 561.26 | 20 Aug |
| 561.26 | 22 Sep |
| 560.70 | 31 Oct |
| 560.70 | 19 Nov |
| 560.13 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 563.20 | | | 1 | | | | | | | | | | 563.20 | 1 |
| 563.00 | | | | | | | | | | | | | 563.00 | 1 |
| 562.80 | | | | | | | | | | | 1 | | 562.80 | 2 |
| 562.60 | | | 1 | | | | | | | | | | 562.60 | 3 |
| 562.40 | | | 1 | 1 | | 2 | 2 | | | | | 4 | 562.40 | 13 |
| 562.20 | 1 | | 1 | 1 | 2 | 4 | 2 | | | 1 | 1 | | 562.20 | 26 |
| 562.00 | 3 | | | 2 | 4 | 10 | 1 | 1 | | | 1 | 5 | 562.00 | 53 |
| 561.80 | 1 | | 6 | 3 | 5 | 7 | | 4 | | | 2 | 2 | 561.80 | 83 |
| 561.60 | 1 | | 2 | 4 | 6 | 6 | | 6 | 4 | | 2 | 2 | 561.60 | 116 |
| 561.40 | 9 | 4 | 4 | 13 | 12 | 1 | 3 | 12 | 16 | 3 | 8 | 5 | 561.40 | 206 |
| 561.20 | 6 | 4 | 6 | 6 | 1 | | 5 | 8 | 10 | 19 | 8 | 3 | 561.20 | 282 |
| 561.00 | 4 | 10 | 5 | | 1 | | | | | 7 | 2 | 1 | 561.00 | 312 |
| 560.80 | 3 | 7 | 3 | | | | | | | | 2 | 3 | 560.80 | 330 |
| 560.60 | 2 | 2 | 1 | | | | | | | 1 | 3 | 4 | 560.60 | 343 |
| 560.40 | 1 | 2 | | | | | | | | | | | 560.40 | 346 |
| 560.20 | | | | | | | | | | | | 1 | 560.20 | 347 |
| 560.00 | | | | | | | | | | | | 1 | 560.00 | 348 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3012: Niagara Intake, Niagara Falls, New York on Niagara River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 561.21 | 561.02 | 561.79 | 562.22 | 562.36 | 562.05 | 562.23 | 561.31 | 561.50 | 561.32 | 561.31 | 562.20 |
| 2 | 561.51 | 560.59 | 561.99 | 561.79 | 561.49 | 561.78 | 562.49* | 561.31 | 561.43 | 561.47 | 562.12 | 561.41 |
| 3 | 561.56 | 560.64 | 561.53 | 561.75 | 561.15 | 562.03 | / | 561.37 | 561.75 | 562.33 | 561.34 | 561.97 |
| 4 | 561.49 | 560.96 | 561.02 | 561.44 | 561.43 | 562.06 | / | 561.48 | 561.52 | 561.47 | 561.60 | 562.48 |
| 5 | 561.89 | 560.98 | 560.93 | 561.84 | 561.68 | 561.84 | / | 561.54 | 561.44 | 561.19 | 561.72 | 561.56 |
| 6 | 562.07 | 560.98 | 561.15 | 562.44 | 561.51 | 562.09 | / | 561.78 | 561.36 | 561.14 | 561.47 | 561.41 |
| 7 | 562.02 | 561.19 | 561.28 | 562.14 | 561.52 | 562.13 | 562.43* | 561.86 | 561.42 | 561.26 | 561.31 | 562.18 |
| 8 | 562.38 | 561.30 | 560.81 | 561.83 | 561.52 | 562.06 | 562.12 | 561.55 | 561.44 | 561.33 | 561.37 | 562.42 |
| 9 | 562.07 | 561.10 | 560.79 | 561.40 | 562.07 | 561.97 | 562.36* | 561.83 | 561.60 | 561.34 | 561.56 | 560.74 |
| 10 | 561.54 | 560.92 | 561.55 | 561.39 | 562.01 | 561.94 | / | 561.83 | 561.68 | 561.31 | 561.37 | 560.36 |
| 11 | 561.58 | 561.00 | 561.97 | 561.50 | 561.68 | 562.11 | / | 561.34 | 561.56 | 561.26 | 561.81 | 560.65 |
| 12 | 561.52 | 561.11 | 561.43 | 561.33 | 561.60 | 561.73 | / | 561.32 | 561.47 | 561.32 | 561.97 | 560.92 |
| 13 | 561.13 | 561.13 | 561.31 | 561.37 | 561.34 | 561.85 | / | 561.45 | 561.51 | 561.29 | 561.40 | 561.00 |
| 14 | 561.34 | 561.31 | 561.38 | 561.33 | 561.67 | 562.08 | / | 561.58 | 561.39 | 561.24 | 561.12 | 560.13 |
| 15 | 561.08 | 561.44 | 561.08 | 561.41 | 561.49 | 561.80 | / | 561.87 | 561.36 | 561.21 | 561.43 | 560.84 |
| 16 | 560.98 | 561.06 | 561.48 | 561.53 | 561.49 | 561.64 | / | 562.06 | 561.53 | 561.26 | 562.90 | 560.68 |
| 17 | 561.64 | 561.13 | 561.23 | 561.74 | 561.49 | 561.86 | / | 561.66 | 561.44 | 561.27 | 562.36 | 561.38 |
| 18 | 561.47 | 561.20 | 560.88 | 561.60 | 561.48 | 562.47 | / | 561.42 | 561.39 | 561.30 | 561.70 | 561.33 |
| 19 | 561.59 | 561.06 | 561.30 | 561.60 | 561.66 | 562.44 | / | 561.48 | 561.48 | 561.13 | 560.70 | 561.33 |
| 20 | 561.32 | 561.54 | 561.02 | 561.58 | 561.60 | 562.04 | / | 561.26 | 561.73 | 561.42 | 560.79 | 562.01 |
| 21 | 561.30 | 561.46 | 561.68 | 561.53 | 561.65 | 561.84 | / | 561.42 | 561.39 | 561.28 | 560.93 | 560.63 |
| 22 | 561.34 | 560.90 | 562.71 | 561.23 | 561.79 | 561.75 | / | 561.46 | 561.26 | 561.37 | 560.86 | 562.53 |
| 23 | 561.50 | 560.98 | 563.23 | 561.45 | 562.05 | 561.55 | / | 561.67 | 561.42 | 561.25 | 561.60 | 562.06 |
| 24 | 561.02 | 561.01 | 562.41 | 561.54 | 561.97 | 562.24 | 561.37* | 561.42 | 561.39 | 561.28 | 561.28 | 561.78 |
| 25 | 560.98 | 561.21 | 561.96 | 561.99 | 561.83 | 562.39 | 561.43 | 561.36 | 561.46 | 561.20 | 561.27 | 562.47 |
| 26 | 560.62 | 561.21 | 562.00 | 561.61 | 561.88 | 562.15 | 561.60 | 561.35 | 561.67 | 561.29 | 561.11 | 562.08 |
| 27 | 560.53 | 560.74 | 561.92 | 561.48 | 561.82 | 562.34 | 561.33 | 561.45 | 561.35 | 561.09 | 560.79 | 561.02 |
| 28 | 561.03 | 560.42 | 561.37 | 561.54 | 561.46 | 562.36 | 561.55* | 561.49 | 561.40 | 561.34 | 561.55 | 561.56 |
| 29 | 560.87 | 561.50 | 561.07 | 561.45 | 561.99 | 561.95 | 561.23* | 561.65 | 561.41 | 561.06 | 561.48 | 561.98 |
| 30 | 560.71 | | 562.00 | 562.07 | 562.25 | 561.78 | 561.40 | 561.61 | 561.28 | 561.04 | 561.52 | 561.61 |
| 31 | 561.21 | | 562.33 | | 562.18 | | 561.36 | 561.72 | | 560.70 | | 561.47 |
| MEAN | 561.37 | 561.07 | 561.57 | 561.64 | 561.71 | 562.01 | 561.76 | 561.55 | 561.47 | 561.28 | 561.46 | 561.49 |
| MAX. | 562.78 | 561.85 | 563.60 | 563.53 | 563.06 | 563.01 | 562.85 | 562.67 | 562.48 | 563.01 | 563.43 | 563.38 |
| | 0500/05 | 0800/20 | 0400/23 | 1900/30 | 0800/01 | 0800/28 | 0700/01 | 0700/07 | 0700/10 | 1400/03 | 0400/16 | 1600/03 |
| MIN. | 560.39 | 560.14 | 560.21 | 559.43 | 560.28 | 560.75 | 560.44 | 560.33 | 560.36 | 560.21 | 560.36 | 559.85 |
| | 1900/26 | 1400/28 | 1000/09 | 2200/02 | 2100/03 | 2100/23 | 2100/27 | 2100/11 | 1900/30 | 2200/31 | 0600/20 | 0700/14 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 561.53

ANNUAL SUMMARY OF LEVELS, 1984
 Station 3020: Buffalo Harbor, Buffalo, New York on Lake Erie

INTERNATIONAL
 GREAT LAKES
 DATUM (1955)

HIGHEST
 Monthly mean elevation: 572.48 Jul
 Daily mean elevation: 573.36 16 Nov
 Instant/hourly Elevation: 576.96 1632/30 Apr

LOWEST
 Monthly mean elevation: 571.33 Feb
 Daily mean elevation: 570.55 28 Feb
 Instant/hourly Elevation: 569.00 1100/14 Dec

HIGHEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.74 | 3 Jan |
| 572.29 | 29 Feb |
| 573.01 | 22 Mar |
| 572.86 | 30 Apr |
| 572.74 | 1 May |
| 572.87 | 27 Jun |
| 572.81 | 7 Jul |
| 572.51 | 15 Aug |
| 572.25 | 20 Sep |
| 572.70 | 3 Oct |
| 573.36 | 16 Nov |
| 573.31 | 22 Dec |

LOWEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 570.96 | 12 Jan |
| 570.55 | 28 Feb |
| 570.96 | 8 Mar |
| 571.58 | 22 Apr |
| 571.22 | 28 May |
| 572.18 | 15 Jun |
| 572.16 | 26 Jul |
| 571.84 | 20 Aug |
| 571.52 | 30 Sep |
| 571.07 | 31 Oct |
| 571.24 | 27 Nov |
| 570.57 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 573.20         |     |     |     |     |     |     |     |     |     |     | 1   | 1   | 573.20         | 2                          |
| 573.00         |     |     | 1   |     |     |     |     |     |     |     |     |     | 573.00         | 3                          |
| 572.80         |     |     |     | 2   |     | 2   | 1   |     |     |     |     |     | 572.80         | 8                          |
| 572.60         |     |     | 1   |     | 2   | 3   | 6   |     |     | 1   |     | 2   | 572.60         | 23                         |
| 572.40         |     |     | 1   | 1   | 4   | 14  | 15  | 5   |     |     |     | 1   | 572.40         | 64                         |
| 572.20         |     | 1   | 2   | 9   | 8   | 10  | 5   | 11  | 2   |     | 3   | 3   | 572.20         | 118                        |
| 572.00         |     |     | 5   | 9   | 10  | 1   | 4   | 14  | 11  |     | 2   | 1   | 572.00         | 175                        |
| 571.80         |     | 3   | 4   | 8   | 4   |     |     | 1   | 8   | 2   | 4   | 4   | 571.80         | 213                        |
| 571.60         | 5   | 3   | 7   |     | 1   |     |     |     | 8   | 13  | 9   | 2   | 571.60         | 261                        |
| 571.40         | 8   | 3   | 5   | 1   | 1   |     |     |     | 1   | 12  | 6   | 7   | 571.40         | 305                        |
| 571.20         | 11  | 5   | 1   |     | 1   |     |     |     |     | 2   | 5   | 7   | 571.20         | 337                        |
| 571.00         | 6   | 12  | 3   |     |     |     |     |     |     | 1   |     | 2   | 571.00         | 361                        |
| 570.80         | 1   |     | 1   |     |     |     |     |     |     |     |     |     | 570.80         | 363                        |
| 570.60         |     |     |     |     |     |     |     |     |     |     |     |     | 570.60         | 363                        |
| 570.40         |     | 2   |     |     |     |     |     |     |     |     |     | 1   | 570.40         | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3020: Buffalo Harbor, Buffalo, New York on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 571.50  | 571.09  | 572.29  | 572.36  | 572.74  | 572.44  | 572.45  | 572.29  | 572.09  | 571.55  | 571.97  | 572.32  |
| 2    | 571.69  | 571.03  | 571.95  | 572.36  | 571.87  | 572.32  | 572.48  | 572.24  | 572.10  | 571.94  | 572.01  | 571.28  |
| 3    | 571.74  | 571.25  | 571.76  | 572.02  | 571.52  | 572.62  | 572.52  | 572.24  | 572.12  | 572.70  | 571.31  | 572.67  |
| 4    | 571.71  | 571.09  | 571.54  | 571.84  | 571.99  | 572.53  | 572.56  | 572.26  | 572.08  | 571.88  | 571.68  | 572.48  |
| 5    | 571.55  | 571.18  | 572.04  | 572.31  | 572.06  | 572.36  | 572.58  | 572.34  | 571.94  | 571.27  | 571.87  | 571.29  |
| 6    | 571.71  | 571.25  | 572.01  | 572.84  | 571.89  | 572.43  | 572.65  | 572.41  | 571.95  | 571.29  | 571.73  | 571.89  |
| 7    | 571.49  | 571.19  | 571.76  | 572.56  | 571.87  | 572.44  | 572.81  | 572.47  | 571.92  | 571.64  | 571.48  | 572.40  |
| 8    | 571.71  | 571.19  | 570.96  | 572.28  | 572.30  | 572.48  | 572.59  | 572.27  | 572.06  | 571.68  | 571.56  | 572.24  |
| 9    | 571.27  | 571.07  | 571.78  | 571.88  | 572.40  | 572.48  | 572.46  | 572.50  | 572.19  | 571.63  | 571.67  | 571.22  |
| 10   | 571.48  | 571.04  | 572.08  | 572.07  | 572.16  | 572.46  | 572.52  | 572.36  | 572.13  | 571.62  | 571.70  | 571.24  |
| 11   | 571.41  | 571.12  | 572.18  | 572.20  | 572.07  | 572.51  | 572.74  | 572.05  | 571.89  | 571.50  | 572.29  | 571.33  |
| 12   | 570.96  | 571.03  | 571.34  | 571.94  | 572.27  | 572.31  | 572.68  | 572.11  | 571.77  | 571.54  | 571.89  | 571.45  |
| 13   | 571.23  | 571.07  | 571.46  | 572.18  | 571.76  | 572.53  | 572.52  | 572.18  | 572.16  | 571.62  | 571.65  | 571.26  |
| 14   | 571.60  | 571.34  | 571.70  | 571.98  | 572.33  | 572.51  | 572.53  | 572.34  | 571.80  | 571.56  | 571.54  | 570.57  |
| 15   | 571.32  | 571.36  | 571.57  | 572.11  | 572.25  | 572.18  | 572.58  | 572.51  | 571.80  | 571.42  | 572.36  | 571.42  |
| 16   | 571.30  | 571.11  | 571.99  | 572.22  | 572.11  | 572.27  | 572.70  | 572.46  | 572.02  | 571.55  | 573.36  | 571.45  |
| 17   | 571.41  | 571.39  | 571.03  | 572.28  | 572.06  | 572.36  | 572.62  | 572.16  | 571.87  | 571.66  | 572.30  | 571.58  |
| 18   | 571.29  | 571.54  | 571.18  | 572.14  | 572.10  | 572.68  | 572.67  | 572.13  | 571.98  | 571.54  | 571.69  | 571.59  |
| 19   | 571.51  | 571.64  | 571.52  | 572.15  | 572.39  | 572.59  | 572.58  | 572.06  | 572.22  | 571.73  | 571.30  | 571.76  |
| 20   | 571.33  | 571.92  | 571.41  | 572.25  | 572.16  | 572.34  | 572.54  | 571.84  | 572.25  | 571.74  | 571.49  | 572.16  |
| 21   | 571.27  | 571.83  | 572.00  | 572.03  | 572.06  | 572.37  | 572.40  | 572.05  | 571.78  | 571.77  | 571.36  | 571.03  |
| 22   | 571.19  | 571.58  | 573.01  | 571.58  | 572.18  | 572.25  | 572.34  | 572.34  | 571.74  | 571.57  | 571.63  | 573.31  |
| 23   | 571.14  | 571.57  | 572.63  | 571.94  | 572.45  | 572.34  | 572.50  | 572.09  | 571.98  | 571.61  | 571.96  | 571.98  |
| 24   | 571.19  | 571.61  | 572.05  | 572.40  | 572.31  | 572.85  | 572.46  | 572.02  | 571.83  | 571.62  | 571.67  | 571.69  |
| 25   | 571.37  | 571.82  | 571.78  | 572.37  | 572.36  | 572.67  | 572.34  | 572.07  | 572.06  | 571.42  | 571.42  | 572.67  |
| 26   | 571.12  | 571.69  | 571.95  | 571.97  | 572.53  | 572.50  | 572.16  | 572.03  | 572.10  | 571.76  | 571.34  | 571.50  |
| 27   | 571.26  | 570.59  | 571.77  | 571.95  | 572.11  | 572.87  | 572.17  | 572.05  | 571.74  | 571.58  | 571.24  | 571.35  |
| 28   | 571.09  | 570.55  | 571.01  | 572.06  | 571.22  | 572.60  | 572.17  | 572.03  | 571.76  | 571.70  | 572.02  | 571.88  |
| 29   | 571.24  | 572.29  | 571.66  | 571.89  | 572.66  | 572.43  | 572.20  | 572.15  | 571.77  | 571.41  | 571.64  | 571.87  |
| 30   | 571.09  |         | 572.35  | 572.86  | 572.50  | 572.32  | 572.24  | 572.30  | 571.52  | 571.58  | 571.57  | 571.53  |
| 31   | 571.22  |         | 572.44  |         | 572.46  |         | 572.26  | 572.24  |         | 571.07  |         | 571.13  |
| MEAN | 571.37  | 571.33  | 571.81  | 572.17  | 572.17  | 572.47  | 572.48  | 572.21  | 571.95  | 571.62  | 571.76  | 571.73  |
| MAX. | 572.33  | 572.75  | 574.76  | 576.96  | 574.30  | 573.27  | 573.46  | 573.35  | 573.56  | 573.74  | 575.55  | 575.32  |
|      | 1000/08 | 0500/20 | 1200/16 | 1632/30 | 0700/01 | 1000/24 | 1100/07 | 0200/09 | 0100/26 | 1300/03 | 0300/16 | 1100/03 |
| MIN. | 570.33  | 569.27  | 569.55  | 571.10  | 570.16  | 571.86  | 571.76  | 571.18  | 571.26  | 570.19  | 570.66  | 569.00  |
|      | 1900/12 | 2200/27 | 1500/08 | 1500/22 | 2200/28 | 2200/14 | 0300/27 | 0400/20 | 0100/30 | 0300/21 | 0100/29 | 1100/14 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 571.92

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3028: Sturgeon Point, New York on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 572.44 Jul  
Daily mean elevation: 573.14 16 Nov  
Instant/hourly Elevation: 575.90 1700/30 Apr

LOWEST  
Monthly mean elevation: 571.36 Feb  
Daily mean elevation: 570.63 27 Feb  
Instant/hourly Elevation: 569.22 1100/14 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.80 | 3 Jan  |
| 572.27 | 29 Feb |
| 572.90 | 22 Mar |
| 572.78 | 30 Apr |
| 572.61 | 29 May |
| 572.81 | 27 Jun |
| 572.73 | 7 Jul  |
| 572.43 | 15 Aug |
| 572.15 | 20 Sep |
| 572.51 | 3 Oct  |
| 573.14 | 16 Nov |
| 573.04 | 22 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.02 | 12 Jan |
| 570.63 | 27 Feb |
| 571.04 | 8 Mar  |
| 571.62 | 22 Apr |
| 571.36 | 28 May |
| 572.19 | 15 Jun |
| 572.12 | 26 Jul |
| 571.84 | 20 Aug |
| 571.53 | 30 Sep |
| 571.10 | 31 Oct |
| 571.23 | 27 Nov |
| 570.65 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 573.00 | | | | | | | | | | | 1 | 1 | 573.00 | 2 |
| 572.80 | | | 1 | | | 1 | | | | | | | 572.80 | 4 |
| 572.60 | | | | 2 | 1 | 2 | 4 | | | | | | 572.60 | 13 |
| 572.40 | | | 2 | 1 | 5 | 16 | 17 | 3 | | 1 | | 2 | 572.40 | 60 |
| 572.20 | | 1 | 2 | 11 | 8 | 10 | 5 | 13 | | | | 2 | 572.20 | 112 |
| 572.00 | | | 6 | 9 | 11 | 1 | 5 | 9 | 10 | | 3 | 2 | 572.00 | 168 |
| 571.80 | | 3 | 5 | 6 | 3 | | | 6 | 13 | 2 | 6 | 3 | 571.80 | 215 |
| 571.60 | 7 | 5 | 5 | 1 | 1 | | | | 6 | 13 | 8 | 4 | 571.60 | 265 |
| 571.40 | 6 | 2 | 5 | | 1 | | | | 1 | 12 | 6 | 5 | 571.40 | 303 |
| 571.20 | 12 | 7 | 2 | | 1 | | | | | 2 | 6 | 8 | 571.20 | 341 |
| 571.00 | 6 | 9 | 3 | | | | | | | 1 | | 3 | 571.00 | 363 |
| 570.80 | | | | | | | | | | | | | 570.80 | 363 |
| 570.60 | | 2 | | | | | | | | | | 1 | 570.60 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3028: Sturgeon Point, New York on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 571.56 | 571.11 | 572.27 | 572.35 | 572.57 | 572.44 | 572.42 | 572.25 | 572.06 | 571.57 | 571.87 | 572.23 |
| 2 | 571.76 | 571.06 | 571.94 | 572.36 | 571.85 | 572.31 | 572.44 | 572.22 | 572.07 | 571.90 | 571.93 | 571.26 |
| 3 | 571.80 | 571.29 | 571.76 | 572.09 | 571.57 | 572.60 | 572.47 | 572.22 | 572.15 | 572.51 | 571.33 | 572.48 |
| 4 | 571.78 | 571.13 | 571.55 | 571.93 | 572.02 | 572.47 | 572.52 | 572.22 | 572.08 | 571.85 | 571.60 | 572.39 |
| 5 | 571.61 | 571.22 | 572.05 | 572.35 | 572.03 | 572.37 | 572.55 | 572.29 | 571.93 | 571.32 | 571.84 | 571.27 |
| 6 | 571.78 | 571.27 | 572.01 | 572.77 | 571.91 | 572.42 | 572.61 | 572.34 | 571.92 | 571.32 | 571.74 | 571.88 |
| 7 | 571.55 | 571.21 | 571.77 | 572.57 | 571.85 | 572.41 | 572.73 | 572.42 | 571.90 | 571.64 | 571.48 | 572.20 |
| 8 | 571.74 | 571.21 | 571.04 | 572.30 | 572.26 | 572.46 | 572.54 | 572.23 | 571.99 | 571.67 | 571.52 | 571.98 |
| 9 | 571.32 | 571.10 | 571.80 | 571.94 | 572.31 | 572.46 | 572.40 | 572.43 | 572.10 | 571.63 | 571.62 | 571.19 |
| 10 | 571.53 | 571.08 | 572.06 | 572.11 | 572.11 | 572.44 | 572.45 | 572.32 | 572.05 | 571.63 | 571.67 | 571.25 |
| 11 | 571.44 | 571.15 | 572.19 | 572.21 | 572.05 | 572.47 | 572.67 | 572.04 | 571.89 | 571.52 | 572.20 | 571.31 |
| 12 | 571.02 | 571.07 | 571.39 | 571.98 | 572.23 | 572.29 | 572.60 | 572.09 | 571.75 | 571.56 | 571.89 | 571.37 |
| 13 | 571.27 | 571.09 | 571.50 | 572.21 | 571.78 | 572.48 | 572.46 | 572.15 | 572.12 | 571.61 | 571.67 | 571.25 |
| 14 | 571.64 | 571.35 | 571.73 | 572.01 | 572.28 | 572.48 | 572.48 | 572.28 | 571.81 | 571.58 | 571.50 | 570.65 |
| 15 | 571.36 | 571.40 | 571.59 | 572.12 | 572.23 | 572.19 | 572.53 | 572.43 | 571.82 | 571.42 | 572.20 | 571.41 |
| 16 | 571.35 | 571.17 | 572.01 | 572.22 | 572.12 | 572.26 | 572.61 | 572.40 | 571.98 | 571.55 | 573.14 | 571.40 |
| 17 | 571.44 | 571.41 | 571.11 | 572.26 | 572.05 | 572.32 | 572.60 | 572.15 | 571.85 | 571.65 | 572.18 | 571.51 |
| 18 | 571.32 | 571.57 | 571.28 | 572.14 | 572.09 | 572.62 | 572.60 | 572.09 | 571.94 | 571.57 | 571.64 | 571.55 |
| 19 | 571.52 | 571.67 | 571.58 | 572.15 | 572.31 | 572.55 | 572.53 | 572.07 | 572.12 | 571.71 | 571.34 | 571.71 |
| 20 | 571.34 | 571.93 | 571.46 | 572.24 | 572.17 | 572.34 | 572.48 | 571.84 | 572.15 | 571.71 | 571.50 | 572.02 |
| 21 | 571.29 | 571.86 | 571.98 | 572.05 | 572.05 | 572.36 | 572.37 | 571.99 | 571.77 | 571.77 | 571.37 | 571.03 |
| 22 | 571.20 | 571.62 | 572.90 | 571.62 | 572.20 | 572.25 | 572.30 | 572.28 | 571.74 | 571.58 | 571.61 | 573.04 |
| 23 | 571.15 | 571.61 | 572.60 | 571.97 | 572.42 | 572.32 | 572.43 | 572.04 | 571.92 | 571.61 | 571.87 | 571.81 |
| 24 | 571.21 | 571.67 | 572.09 | 572.38 | 572.26 | 572.79 | 572.43 | 571.99 | 571.83 | 571.60 | 571.61 | 571.63 |
| 25 | 571.38 | 571.86 | 571.84 | 572.32 | 572.32 | 572.60 | 572.29 | 572.03 | 571.99 | 571.42 | 571.40 | 572.48 |
| 26 | 571.14 | 571.69 | 572.00 | 572.01 | 572.48 | 572.48 | 572.12 | 571.98 | 572.10 | 571.77 | 571.35 | 571.46 |
| 27 | 571.27 | 570.63 | 571.88 | 571.99 | 572.11 | 572.81 | 572.18 | 572.00 | 571.75 | 571.58 | 571.23 | 571.36 |
| 28 | 571.11 | 570.77 | 571.17 | 572.06 | 571.36 | 572.54 | 572.14 | 572.00 | 571.75 | 571.69 | 571.89 | 571.78 |
| 29 | 571.26 | 572.27 | 571.79 | 571.87 | 572.61 | 572.41 | 572.16 | 572.07 | 571.77 | 571.43 | 571.63 | 571.80 |
| 30 | 571.11 | | 572.37 | 572.78 | 572.45 | 572.32 | 572.20 | 572.24 | 571.53 | 571.62 | 571.53 | 571.51 |
| 31 | 571.22 | | 572.43 | | 572.43 | | 572.22 | 572.21 | | 571.10 | | 571.15 |
| MEAN | 571.40 | 571.36 | 571.84 | 572.18 | 572.14 | 572.44 | 572.44 | 572.17 | 571.93 | 571.62 | 571.71 | 571.66 |
| MAX. | 572.28 | 572.59 | 574.60 | 575.90 | 573.97 | 573.12 | 573.28 | 573.31 | 573.48 | 573.38 | 575.05 | 574.50 |
| | 1000/08 | 0500/20 | 1200/16 | 1700/30 | 0700/01 | 2000/27 | 2300/06 | 0200/09 | 0100/26 | 1300/03 | 0200/16 | 1300/03 |
| MIN. | 570.41 | 569.53 | 569.77 | 570.98 | 570.73 | 571.94 | 571.78 | 571.19 | 571.31 | 570.42 | 570.80 | 569.22 |
| | 1900/12 | 2100/27 | 1600/08 | 2300/30 | 1900/13 | 2200/14 | 2000/26 | 0400/20 | 0100/30 | 0300/21 | 0100/29 | 1100/14 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 571.91

ANNUAL SUMMARY OF LEVELS, 1984
Station 3032: Barcelona, New York on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 572.49 Apr
Daily mean elevation: 572.74 24 Jun
Instant/hourly Elevation: 574.53 1600/30 Apr

LOWEST
Monthly mean elevation: 571.47 Jan
Daily mean elevation: 570.81 14 Dec
Instant/hourly Elevation: 569.61 1100/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.79 | 8 Jan |
| | Feb |
| | Mar |
| 572.49 | 30 Apr |
| 572.54 | 29 May |
| 572.74 | 24 Jun |
| 572.63 | 7 Jul |
| 572.39 | 9 Aug |
| 572.16 | 3 Sep |
| 572.30 | 3 Oct |
| 572.73 | 16 Nov |
| 572.58 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.21 | 28 Jan |
| | Feb |
| | Mar |
| 572.49 | 30 Apr |
| 571.55 | 28 May |
| 572.22 | 15 Jun |
| 572.13 | 26 Jul |
| 571.90 | 20 Aug |
| 571.59 | 30 Sep |
| 571.21 | 31 Oct |
| 571.24 | 27 Nov |
| 570.81 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 572.60         |     |     |     |     |     | 2   | 2   |     |     |     | 1   |     | 572.60         | 5                          |
| 572.40         |     |     |     | 1   | 4   | 17  | 18  |     |     |     |     | 1   | 572.40         | 46                         |
| 572.20         |     |     |     |     | 7   | 11  | 6   | 14  |     | 1   |     |     | 572.20         | 85                         |
| 572.00         |     |     |     |     | 13  |     | 5   | 11  | 8   |     | 1   | 4   | 572.00         | 127                        |
| 571.80         |     |     |     |     | 5   |     |     | 6   | 15  | 2   | 4   | 3   | 571.80         | 162                        |
| 571.60         | 9   |     |     |     | 1   |     |     |     | 6   | 13  | 7   | 5   | 571.60         | 203                        |
| 571.40         | 7   |     |     |     | 1   |     |     |     | 1   | 13  | 11  | 6   | 571.40         | 242                        |
| 571.20         | 15  |     |     |     |     |     |     |     |     | 2   | 6   | 9   | 571.20         | 274                        |
| 571.00         |     |     |     |     |     |     |     |     |     |     |     | 2   | 571.00         | 276                        |
| 570.80         |     |     |     |     |     |     |     |     |     |     |     | 1   | 570.80         | 277                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3032: Barcelona, New York on Lake Erie

| Day  | Jan     | Feb | Mar | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|-----|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 571.63  | /   | /   | /       | 572.38  | 572.41  | 572.42  | 572.23  | 572.03  | 571.62  | 571.75  | 572.01  |
| 2    | 571.72  | /   | /   | /       | 571.86  | 572.33  | 572.45  | 572.22  | 572.03  | 571.86  | 571.88  | 571.29  |
| 3    | 571.74  | /   | /   | /       | 571.64  | 572.54  | 572.48  | 572.23  | 572.16  | 572.30  | 571.34  | 572.13  |
| 4    | 571.78  | /   | /   | /       | 572.01  | 572.43  | 572.49  | 572.21  | 572.08  | 571.81  | 571.56  | 572.15  |
| 5    | 571.65  | /   | /   | /       | 571.99  | 572.39  | 572.53  | 572.27  | 571.97  | 571.43  | 571.77  | 571.29  |
| 6    | 571.73  | /   | /   | /       | 571.93  | 572.41  | 572.58  | 572.31  | 571.94  | 571.36  | 571.71  | 571.81  |
| 7    | 571.68  | /   | /   | /       | 571.90  | 572.42  | 572.63  | 572.38  | 571.88  | 571.65  | 571.51  | 571.97  |
| 8    | 571.79  | /   | /   | /       | 572.19  | 572.44  | 572.51  | 572.22  | 571.92  | 571.66  | 571.51  | 571.75  |
| 9    | 571.60  | /   | /   | /       | 572.20  | 572.44  | 572.42  | 572.39  | 572.01  | 571.64  | 571.55  | 571.21  |
| 10   | 571.54  | /   | /   | /       | 572.07  | 572.43  | 572.47  | 572.32  | 571.95  | 571.63  | 571.63  | 571.20  |
| 11   | 571.53  | /   | /   | /       | 572.05  | 572.44  | 572.62  | 572.07  | 571.91  | 571.55  | 572.05  | 571.31  |
| 12   | 571.31  | /   | /   | /       | 572.18  | 572.32  | 572.55  | 572.12  | 571.78  | 571.59  | 571.90  | 571.32  |
| 13   | 571.26  | /   | /   | /       | 571.84  | 572.45  | 572.46  | 572.17  | 572.05  | 571.66  | 571.70  | 571.27  |
| 14   | 571.66  | /   | /   | /       | 572.21  | 572.44  | 572.46  | 572.28  | 571.85  | 571.59  | 571.53  | 570.81  |
| 15   | 571.48  | /   | /   | /       | 572.21  | 572.22  | 572.51  | 572.37  | 571.91  | 571.48  | 571.95  | 571.41  |
| 16   | 571.40  | /   | /   | /       | 572.12  | 572.27  | 572.55  | 572.35  | 571.96  | 571.57  | 572.73  | 571.37  |
| 17   | 571.46  | /   | /   | /       | 572.05  | 572.34  | 572.55  | 572.16  | 571.88  | 571.65  | 571.99  | 571.46  |
| 18   | 571.38  | /   | /   | /       | 572.11  | 572.58  | 572.56  | 572.10  | 571.91  | 571.58  | 571.57  | 571.50  |
| 19   | 571.52  | /   | /   | /       | 572.24  | 572.55  | 572.47  | 572.13  | 571.99  | 571.70  | 571.38  | 571.67  |
| 20   | 571.51  | /   | /   | /       | 572.16  | 572.38  | 572.44  | 571.90  | 572.01  | 571.71  | 571.49  | 571.83  |
| 21   | 571.34  | /   | /   | /       | 572.07  | 572.36  | 572.35  | 571.99  | 571.75  | 571.72  | 571.39  | 571.09  |
| 22   | 571.27  | /   | /   | /       | 572.18  | 572.28  | 572.30  | 572.26  | 571.72  | 571.57  | 571.54  | 572.58  |
| 23   | 571.22  | /   | /   | /       | 572.39  | 572.35  | 572.39  | 572.08  | 571.85  | 571.61  | 571.72  | 571.64  |
| 24   | 571.23  | /   | /   | /       | 572.28  | 572.74  | 572.40  | 572.00  | 571.82  | 571.60  | 571.50  | 571.58  |
| 25   | 571.39  | /   | /   | /       | 572.31  | 572.60  | 572.29  | 572.03  | 571.97  | 571.48  | 571.39  | 572.14  |
| 26   | 571.29  | /   | /   | /       | 572.44  | 572.50  | 572.13  | 571.98  | 572.07  | 571.73  | 571.36  | 571.41  |
| 27   | 571.25  | /   | /   | /       | 572.14  | 572.73  | 572.18  | 572.00  | 571.77  | 571.58  | 571.24  | 571.40  |
| 28   | 571.21  | /   | /   | /       | 571.55  | 572.52  | 572.17  | 571.98  | 571.73  | 571.65  | 571.77  | 571.64  |
| 29   | 571.30  | /   | /   | /       | 572.54  | 572.43  | 572.20  | 572.06  | 571.77  | 571.46  | 571.57  | 571.68  |
| 30   | 571.26  | /   | /   | 572.49  | 572.44  | 572.35  | 572.20  | 572.18  | 571.59  | 571.57  | 571.48  | 571.49  |
| 31   | 571.34  | /   | /   |         | 572.43  |         | 572.22  | 572.17  |         | 571.21  |         | 571.23  |
| MEAN | 571.47  | /   | /   | 572.49  | 572.13  | 572.44  | 572.42  | 572.17  | 571.91  | 571.62  | 571.65  | 571.57  |
| MAX. | 571.98  |     |     | 574.53  | 573.46  | 572.99  | 573.16  | 573.30  | 573.20  | 573.07  | 574.23  | 573.75  |
|      | 1500/08 |     |     | 1600/30 | 0600/01 | 2200/27 | 2300/06 | 0200/09 | 0200/26 | 1300/03 | 0200/16 | 1200/03 |
| MIN. | 570.89  |     |     | 571.30  | 570.88  | 571.96  | 571.79  | 571.30  | 571.37  | 570.72  | 570.94  | 569.61  |
|      | 0100/13 |     |     | 2200/30 | 1900/13 | 0200/23 | 1900/26 | 0300/20 | 0200/30 | 0200/21 | 0100/29 | 1100/14 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 571.99

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3038: Erie, Pennsylvania on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 572.41 Apr  
Daily mean elevation: 572.53 16 Nov  
Instant/hourly Elevation: 573.70 0200/16 Nov

LOWEST  
Monthly mean elevation: 571.27 Feb  
Daily mean elevation: 571.17 10 Feb  
Instant/hourly Elevation: 570.79 1900/12 Jan

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.73 | 6 Jan  |
| 571.47 | 15 Feb |
| 572.44 | 31 Mar |
| 572.42 | 2 Apr  |
|        | May    |
|        | Jun    |
| 572.31 | 31 Jul |
| 572.40 | 15 Aug |
| 572.19 | 3 Sep  |
| 572.22 | 3 Oct  |
| 572.53 | 16 Nov |
| 572.32 | 22 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.23 | 12 Jan |
| 571.17 | 10 Feb |
| 571.66 | 28 Mar |
| 572.40 | 1 Apr  |
|        | May    |
|        | Jun    |
| 572.28 | 30 Jul |
| 572.05 | 28 Aug |
| 571.73 | 30 Sep |
| 571.37 | 31 Oct |
| 571.31 | 27 Nov |
| 571.19 | 21 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 572.40                                                  |     |     | 2   | 1   |     |     |     |     |     |     | 1   |     | 572.40         | 4                          |
| 572.20                                                  |     |     |     | 1   |     |     | 2   | 20  |     | 1   |     | 1   | 572.20         | 29                         |
| 572.00                                                  |     |     | 3   |     |     |     |     | 10  | 11  |     |     | 2   | 572.00         | 55                         |
| 571.80                                                  |     |     |     |     |     |     |     |     | 18  | 2   | 7   | 4   | 571.80         | 86                         |
| 571.60                                                  | 7   |     | 1   |     |     |     |     |     | 1   | 22  | 5   | 4   | 571.60         | 126                        |
| 571.40                                                  | 12  | 2   |     |     |     |     |     |     |     | 5   | 16  | 9   | 571.40         | 170                        |
| 571.20                                                  | 11  | 11  |     |     |     |     |     |     |     | 1   | 1   | 9   | 571.20         | 203                        |
| 571.00                                                  |     | 3   |     |     |     |     |     |     |     |     |     | 1   | 571.00         | 207                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3038: Erie, Pennsylvania on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May | Jun | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|-----|-----|---------|---------|---------|---------|---------|---------|
| 1    | 571.63  | 571.27  | /       | 572.40  | /   | /   | /       | 572.31  | 572.10  | 571.76  | 571.74  | 571.94  |
| 2    | 571.70  | 571.22  | /       | 572.42* | /   | /   | /       | 572.30  | 572.12  | 571.95  | 571.88  | 571.35  |
| 3    | 571.67  | 571.35  | /       | /       | /   | /   | /       | 572.29  | 572.19  | 572.22  | 571.42  | 572.00  |
| 4    | 571.67  | 571.22  | /       | /       | /   | /   | /       | 572.28  | 572.17  | 571.83  | 571.54  | 572.05  |
| 5    | 571.58  | 571.27  | /       | /       | /   | /   | /       | 572.32  | 572.07  | 571.52  | 571.81  | 571.38  |
| 6    | 571.73  | 571.30  | /       | /       | /   | /   | /       | 572.34  | 572.02  | 571.50  | 571.81  | 571.85  |
| 7    | 571.58  | 571.25  | /       | /       | /   | /   | /       | 572.38  | 571.96  | 571.73  | 571.60  | 571.88  |
| 8    | 571.69* | 571.25  | /       | /       | /   | /   | /       | 572.27  | 571.95  | 571.72  | 571.54  | 571.59  |
| 9    | 571.29* | 571.20  | /       | /       | /   | /   | /       | /       | 571.98  | 571.71  | 571.57  | 571.28  |
| 10   | 571.56  | 571.17  | /       | /       | /   | /   | /       | 572.38* | 571.95  | 571.73  | 571.62  | 571.33  |
| 11   | 571.50  | 571.22  | /       | /       | /   | /   | /       | 572.22  | 571.99  | 571.66  | 571.98  | 571.37  |
| 12   | 571.23  | 571.18  | /       | /       | /   | /   | /       | 572.26  | 571.88  | 571.69  | 572.00  | 571.35* |
| 13   | 571.40  | 571.21  | /       | /       | /   | /   | /       | 572.31  | 572.06  | 571.72  | 571.77  | 571.38  |
| 14   | 571.59  | 571.42  | /       | /       | /   | /   | /       | 572.35  | 571.94  | 571.68  | 571.59  | /       |
| 15   | 571.44  | 571.47  | /       | /       | /   | /   | /       | 572.40  | 572.01  | 571.57  | 571.82  | 571.47  |
| 16   | 571.42  | 571.39* | /       | /       | /   | /   | /       | 572.38  | 572.04  | 571.66  | 572.53  | 571.40  |
| 17   | 571.51  | /       | /       | /       | /   | /   | /       | 572.24  | 571.93  | 571.75  | 571.95  | 571.50  |
| 18   | 571.46  | /       | /       | /       | /   | /   | /       | 572.25  | 571.94  | 571.68  | 571.56  | 571.54  |
| 19   | 571.62  | /       | /       | /       | /   | /   | /       | 572.27  | 572.01  | 571.76  | 571.50  | 571.63  |
| 20   | 571.46  | /       | /       | /       | /   | /   | /       | 572.08  | 572.00  | 571.74  | 571.60  | 571.78  |
| 21   | 571.43* | /       | /       | /       | /   | /   | /       | 572.15  | 571.82  | 571.74  | 571.49  | 571.19  |
| 22   | /       | /       | /       | /       | /   | /   | /       | 572.28  | 571.82  | 571.66  | 571.58  | 572.32  |
| 23   | 571.36* | /       | /       | /       | /   | /   | /       | 572.16  | 571.91  | 571.70  | 571.66  | 571.58  |
| 24   | 571.37  | /       | /       | /       | /   | /   | /       | 572.10  | 571.88  | 571.69  | 571.52  | 571.59  |
| 25   | 571.46  | /       | /       | /       | /   | /   | /       | 572.14  | 571.95  | 571.58  | 571.44  | 572.05  |
| 26   | 571.32  | /       | 572.18* | /       | /   | /   | /       | 572.09  | 572.12  | 571.78  | 571.41  | 571.43  |
| 27   | 571.37  | /       | 572.10  | /       | /   | /   | /       | 572.08  | 571.83  | 571.64  | 571.31  | 571.41* |
| 28   | 571.30  | /       | 571.66  | /       | /   | /   | /       | 572.05  | 571.83  | 571.68  | 571.71  | 571.61  |
| 29   | 571.38  | /       | 572.13  | /       | /   | /   | /       | 572.07  | 571.86  | 571.56  | 571.59  | 571.66  |
| 30   | 571.29  |         | 572.41  | /       | /   | /   | 572.28* | 572.11  | 571.73  | 571.66  | 571.45  | 571.58* |
| 31   | 571.32  |         | 572.44  |         | /   |     | 572.31  | 572.21  |         | 571.37  |         | 571.40  |
| MEAN | 571.48  | 571.27  | 572.15  | 572.41  | /   | /   | 572.30  | 572.24  | 571.97  | 571.70  | 571.67  | 571.60  |
| MAX. | 571.99  | 571.62  | 572.59  | 572.49  |     |     | 572.39  | 572.78  | 573.24  | 572.64  | 573.70  | 573.38  |
|      | 1100/08 | 1100/15 | 1300/30 | 0300/02 |     |     | 1500/31 | 0500/07 | 0300/26 | 1200/03 | 0200/16 | 1300/03 |
| MIN. | 570.79  | 571.03  | 571.04  | 572.35  |     |     | 572.18  | 571.38  | 571.52  | 570.95  | 571.09  | 570.84  |
|      | 1900/12 | 0400/12 | 0100/29 | 0800/02 |     |     | 2300/30 | 1100/30 | 0200/30 | 0300/21 | 2400/28 | 0600/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 571.88

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3053: Fairport Harbor, Ohio on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 572.56 Jun  
Daily mean elevation: 572.66 29 Jun  
Instant/hourly Elevation: 573.34 2300/28 May

LOWEST  
Monthly mean elevation: 571.43 Dec  
Daily mean elevation: 571.21 8 Dec  
Instant/hourly Elevation: 570.78 1400/3 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.73 | 1 Jan  |
| 572.17 | 28 Feb |
| 572.53 | 29 Mar |
| 572.53 | 7 Apr  |
| 572.62 | 28 May |
| 572.66 | 29 Jun |
| 572.61 | 7 Jul  |
| 572.44 | 11 Aug |
| 572.21 | 3 Sep  |
| 572.00 | 1 Oct  |
| 571.90 | 12 Nov |
| 571.72 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.33 | 31 Jan |
| 571.30 | 10 Feb |
| 571.85 | 10 Mar |
| 572.02 | 30 Apr |
| 572.02 | 1 May  |
| 572.49 | 13 Jun |
| 572.32 | 31 Jul |
| 572.06 | 29 Aug |
| 571.88 | 9 Sep  |
| 571.68 | 30 Oct |
| 571.42 | 30 Nov |
| 571.21 | 8 Dec  |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 572.60 | | | | | 1 | 9 | 1 | | | | | | 572.60 | 11 |
| 572.40 | | | 2 | 12 | 7 | 21 | 25 | 3 | | | | | 572.40 | 81 |
| 572.20 | | | 7 | 12 | 7 | | 5 | 18 | 1 | | | | 572.20 | 131 |
| 572.00 | | 2 | 5 | 6 | 16 | | | 10 | 13 | | | | 572.00 | 183 |
| 571.80 | | 2 | 17 | | | | | | 16 | 11 | 1 | | 571.80 | 230 |
| 571.60 | 11 | 10 | | | | | | | | 20 | 10 | 3 | 571.60 | 284 |
| 571.40 | 9 | 2 | | | | | | | | | 19 | 18 | 571.40 | 332 |
| 571.20 | 11 | 13 | | | | | | | | | | 10 | 571.20 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3053: Fairport Harbor, Ohio on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 571.73 | 571.31 | 571.86 | 572.41 | 572.02 | 572.51 | 572.58 | 572.30 | 572.15 | 572.00 | 571.64 | 571.42 |
| 2 | 571.69 | 571.30 | 571.89 | 572.41 | 572.05 | 572.50 | 572.56 | 572.31 | 572.14 | 571.89 | 571.69 | 571.43 |
| 3 | 571.63 | 571.30 | 571.91 | 572.47 | 572.13 | 572.54 | 572.55 | 572.34 | 572.21 | 571.75 | 571.57 | 571.35 |
| 4 | 571.62 | 571.31 | 571.90 | 572.52 | 572.16 | 572.52 | 572.55 | 572.33 | 572.20 | 571.83 | 571.52 | 571.37 |
| 5 | 571.61 | 571.34 | 571.92 | 572.50 | 572.09 | 572.54 | 572.55 | 572.34 | 572.18 | 571.86 | 571.73 | 571.41 |
| 6 | 571.62 | 571.33 | 571.93 | 572.51 | 572.10 | 572.55 | 572.59 | 572.33 | 572.08 | 571.81 | 571.76 | 571.61 |
| 7 | 571.62 | 571.33 | 571.95 | 572.53 | 572.12 | 572.55 | 572.61 | 572.38 | 571.96 | 571.77 | 571.65 | 571.30 |
| 8 | 571.58 | 571.31 | 572.03 | 572.52 | 572.16 | 572.52 | 572.55 | 572.39 | 571.94 | 571.77 | 571.54 | 571.21 |
| 9 | 571.61 | 571.31 | 571.91 | 572.49 | 572.14 | 572.52 | 572.53 | 572.36 | 571.88 | 571.81 | 571.47 | 571.33 |
| 10 | 571.63 | 571.30 | 571.85 | 572.46 | 572.14 | 572.50 | 572.57 | 572.39 | 571.93 | 571.81 | 571.53 | 571.42 |
| 11 | 571.60 | 571.32 | 571.89 | 572.43 | 572.13 | 572.52 | 572.55 | 572.44 | 572.06 | 571.81 | 571.75 | 571.38 |
| 12 | 571.63 | 571.34 | 571.88 | 572.41 | 572.16 | 572.52 | 572.57 | 572.41 | 572.07 | 571.80 | 571.90 | 571.30 |
| 13 | 571.63 | 571.38 | 571.96 | 572.38 | 572.22 | 572.49 | 572.59 | 572.40 | 572.03 | 571.80 | 571.78 | 571.41 |
| 14 | 571.53 | 571.50 | 571.88 | 572.40 | 572.18 | 572.52 | 572.54 | 572.36 | 572.11 | 571.75 | 571.59 | 571.58 |
| 15 | 571.55 | 571.59 | 571.88 | 572.37 | 572.23 | 572.50 | 572.55 | 572.34 | 572.16 | 571.83 | 571.53 | 571.47 |
| 16 | 571.50 | 571.61 | 571.94 | 572.32 | 572.20 | 572.50 | 572.55 | 572.33 | 572.03 | 571.83 | 571.55 | 571.43 |
| 17 | 571.46 | 571.67 | 572.00 | 572.32 | 572.19 | 572.53 | 572.56 | 572.31 | 572.01 | 571.83 | 571.61 | 571.41 |
| 18 | 571.48 | 571.68 | 572.10 | 572.29 | 572.24 | 572.55 | 572.53 | 572.32 | 571.97 | 571.77 | 571.55 | 571.48 |
| 19 | 571.43 | 571.71 | 572.00 | 572.26 | 572.16 | 572.63 | 572.50 | 572.41 | 571.92 | 571.77 | 571.67 | 571.46 |
| 20 | 571.44 | 571.69 | 572.07 | 572.21 | 572.31 | 572.63 | 572.48 | 572.32 | 571.90 | 571.72 | 571.64 | 571.39 |
| 21 | 571.40 | 571.72 | 572.09 | 572.20 | 572.31 | 572.60 | 572.47 | 572.20 | 571.90 | 571.76 | 571.59 | 571.47 |
| 22 | 571.39 | 571.75 | 572.11 | 572.15 | 572.30 | 572.58 | 572.46 | 572.18 | 571.94 | 571.79 | 571.50 | 571.37 |
| 23 | 571.39 | 571.76 | 572.23 | 572.24 | 572.42 | 572.64 | 572.41 | 572.28 | 571.90 | 571.76 | 571.43 | 571.35 |
| 24 | 571.39 | 571.76 | 572.24 | 572.21 | 572.42 | 572.64 | 572.43 | 572.19 | 571.93 | 571.72 | 571.44 | 571.49 |
| 25 | 571.37 | 571.94 | 572.30 | 572.18 | 572.38 | 572.63 | 572.40 | 572.16 | 571.94 | 571.72 | 571.45 | 571.41 |
| 26 | 571.38 | 571.80 | 572.28 | 572.24 | 572.45 | 572.63 | 572.38 | 572.13 | 572.02 | 571.69 | 571.46 | 571.41 |
| 27 | 571.36 | 571.82 | 572.33 | 572.24 | 572.48 | 572.59 | 572.46 | 572.12 | 571.92 | 571.70 | 571.42 | 571.50 |
| 28 | 571.36 | 572.17 | 572.43 | 572.16 | 572.62 | 572.61 | 572.41 | 572.08 | 571.91 | 571.68 | 571.46 | 571.45 |
| 29 | 571.35 | 572.01 | 572.53 | 572.12 | 572.48 | 572.66 | 572.39 | 572.06 | 571.92 | 571.73 | 571.48 | 571.47 |
| 30 | 571.39 | | 572.40 | 572.02 | 572.52 | 572.65 | 572.33 | 572.12 | 571.98 | 571.68 | 571.42 | 571.61 |
| 31 | 571.33 | | 572.40 | | 572.52 | | 572.32 | 572.20 | | 571.76 | | 571.72 |
| MEAN | 571.51 | 571.56 | 572.07 | 572.33 | 572.26 | 572.56 | 572.50 | 572.28 | 572.01 | 571.78 | 571.58 | 571.43 |
| MAX. | 571.85 | 572.44 | 572.81 | 572.75 | 573.34 | 573.09 | 572.92 | 572.92 | 572.67 | 572.17 | 572.41 | 571.97 |
| | 0200/13 | 1400/28 | 0300/29 | 2300/04 | 2300/28 | 2200/24 | 2200/06 | 1500/30 | 2200/25 | 1900/21 | 2100/01 | 1300/19 |
| MIN. | 571.24 | 571.17 | 571.59 | 571.51 | 571.68 | 572.23 | 572.23 | 571.25 | 571.69 | 571.46 | 570.94 | 570.78 |
| | 0300/29 | 0600/03 | 1300/16 | 1700/30 | 0900/01 | 2100/13 | 0900/11 | 1600/30 | 1300/20 | 1100/21 | 2000/28 | 1400/03 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 571.99

ANNUAL SUMMARY OF LEVELS, 1984
Station 3063: Cleveland, Ohio on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 572.52 Jun
Daily mean elevation: 572.72 28 May
Instant/hourly Elevation: 573.17 0400/29 Mar

LOWEST
Monthly mean elevation: 571.34 Dec
Daily mean elevation: 571.00 8 Dec
Instant/hourly Elevation: 570.44 1300/3 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.69 | 12 Jan |
| 572.58 | 28 Feb |
| 572.68 | 29 Mar |
| 572.61 | 9 Apr |
| 572.72 | 28 May |
| 572.66 | 20 Jun |
| 572.54 | 7 Jul |
| 572.49 | 19 Aug |
| 572.24 | 3 Sep |
| 572.05 | 1 Oct |
| 571.82 | 12 Nov |
| 571.77 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.29 | 29 Jan |
| 571.20 | 3 Feb |
| 571.71 | 10 Mar |
| 571.76 | 30 Apr |
| 571.90 | 1 May |
| 572.41 | 13 Jun |
| 572.27 | 31 Jul |
| 572.06 | 29 Aug |
| 571.72 | 9 Sep |
| 571.56 | 3 Oct |
| 571.26 | 16 Nov |
| 571.00 | 8 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 572.60         |     |     | 2   | 1   | 1   | 7   |     |     |     |     |     |     | 572.60         | 11                         |
| 572.40         |     | 1   |     | 9   | 4   | 23  | 22  | 4   |     |     |     |     | 572.40         | 74                         |
| 572.20         |     |     | 9   | 10  | 8   |     | 9   | 19  | 2   |     |     |     | 572.20         | 131                        |
| 572.00         |     | 2   | 5   | 9   | 17  |     |     | 8   | 11  | 1   |     |     | 572.00         | 184                        |
| 571.80         |     | 1   | 14  |     | 1   |     |     |     | 15  | 6   | 1   |     | 571.80         | 222                        |
| 571.60         | 5   | 10  | 1   | 1   |     |     |     |     | 2   | 23  | 8   | 2   | 571.60         | 274                        |
| 571.40         | 13  | 2   |     |     |     |     |     |     |     | 1   | 12  | 9   | 571.40         | 311                        |
| 571.20         | 13  | 12  |     |     |     |     |     |     |     |     | 9   | 12  | 571.20         | 357                        |
| 571.00         |     | 1   |     |     |     |     |     |     |     |     |     | 6   | 571.00         | 364                        |
| 570.80         |     |     |     |     |     |     |     |     |     |     |     | 2   | 570.80         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3063: Cleveland, Ohio on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 571.68  | 571.29  | 571.87  | 572.40  | 571.90  | 572.46  | 572.53  | 572.27  | 572.11  | 572.05  | 571.47  | 571.24  |
| 2    | 571.62  | 571.25  | 571.88  | 572.39  | 572.04  | 572.50  | 572.49  | 572.28  | 572.03  | 571.84  | 571.70  | 571.42  |
| 3    | 571.48  | 571.20  | 571.90  | 572.49  | 572.15  | 572.45  | 572.47  | 572.29  | 572.24  | 571.56  | 571.57  | 571.18  |
| 4    | 571.47  | 571.27  | 571.90  | 572.57  | 572.13  | 572.47  | 572.45  | 572.32  | 572.22  | 571.79  | 571.40  | 571.16  |
| 5    | 571.49  | 571.31  | 571.83  | 572.54  | 572.05  | 572.50  | 572.47  | 572.29  | 572.19  | 571.88  | 571.69  | 571.42  |
| 6    | 571.54  | 571.32  | 571.86  | 572.45  | 572.09  | 572.45  | 572.47  | 572.24  | 572.08  | 571.88  | 571.73  | 571.50  |
| 7    | 571.58  | 571.31  | 571.97  | 572.51  | 572.10  | 572.47  | 572.54  | 572.28  | 571.89  | 571.73  | 571.62  | 571.00  |
| 8    | 571.51  | 571.24  | 572.24  | 572.54  | 572.05  | 572.44  | 572.51  | 572.36  | 571.84  | 571.72  | 571.42  | 571.00  |
| 9    | 571.59  | 571.25  | 571.86  | 572.61  | 572.02  | 572.47  | 572.43  | 572.31  | 571.72  | 571.79  | 571.35  | 571.31  |
| 10   | 571.62  | 571.23  | 571.71  | 572.55  | 572.09  | 572.46  | 572.49  | 572.35  | 571.88  | 571.80  | 571.40  | 571.37  |
| 11   | 571.58  | 571.27  | 571.82  | 572.44  | 572.08  | 572.47  | 572.48  | 572.48  | 572.02  | 571.83  | 571.62  | 571.31  |
| 12   | 571.69  | 571.31  | 571.93  | 572.47  | 572.11  | 572.46  | 572.52  | 572.44  | 572.05  | 571.80  | 571.82  | 571.20  |
| 13   | 571.63  | 571.32  | 572.02  | 572.37  | 572.24  | 572.41  | 572.53  | 572.43  | 571.92  | 571.76  | 571.74  | 571.43  |
| 14   | 571.48  | 571.46  | 571.87  | 572.39  | 572.12  | 572.49  | 572.50  | 572.36  | 572.10  | 571.75  | 571.53  | 571.66  |
| 15   | 571.52  | 571.54  | 571.84  | 572.32  | 572.19  | 572.51  | 572.43  | 572.31  | 572.18  | 571.84  | 571.27  | 571.44  |
| 16   | 571.48  | 571.66  | 571.87  | 572.30  | 572.19  | 572.45  | 572.48  | 572.31  | 572.02  | 571.82  | 571.26  | 571.36  |
| 17   | 571.38  | 571.64  | 572.18  | 572.26  | 572.16  | 572.46  | 572.42  | 572.33  | 571.99  | 571.77  | 571.47  | 571.38  |
| 18   | 571.45  | 571.62  | 572.23  | 572.27  | 572.14  | 572.46  | 572.48  | 572.31  | 571.93  | 571.77  | 571.53  | 571.43  |
| 19   | 571.32  | 571.65  | 572.06  | 572.21  | 572.09  | 572.61  | 572.44  | 572.49  | 571.85  | 571.70  | 571.70  | 571.35  |
| 20   | 571.34  | 571.62  | 572.18  | 572.17  | 572.23  | 572.66  | 572.40  | 572.37  | 571.80  | 571.70  | 571.66  | 571.22  |
| 21   | 571.33  | 571.66  | 572.04  | 572.18  | 572.30  | 572.61  | 572.43  | 572.21  | 571.91  | 571.68  | 571.60  | 571.47  |
| 22   | 571.36  | 571.70  | 571.84  | 572.19  | 572.26  | 572.61  | 572.43  | 572.11  | 571.91  | 571.78  | 571.42  | 571.09  |
| 23   | 571.36  | 571.73  | 572.22  | 572.20  | 572.34  | 572.62  | 572.34  | 572.32  | 571.82  | 571.72  | 571.29  | 571.19  |
| 24   | 571.36  | 571.75  | 572.25  | 572.17  | 572.40  | 572.54  | 572.38  | 572.21  | 571.89  | 571.70  | 571.40  | 571.38  |
| 25   | 571.30  | 571.94  | 572.40  | 572.13  | 572.30  | 572.61  | 572.37  | 572.16  | 571.86  | 571.70  | 571.43  | 571.14  |
| 26   | 571.35  | 571.79  | 572.34  | 572.22  | 572.37  | 572.60  | 572.39  | 572.15  | 572.02  | 571.61  | 571.42  | 571.33  |
| 27   | 571.34  | 572.05  | 572.39  | 572.15  | 572.49  | 572.47  | 572.44  | 572.07  | 571.92  | 571.66  | 571.41  | 571.41  |
| 28   | 571.31  | 572.58  | 572.67  | 572.08  | 572.72  | 572.56  | 572.40  | 572.08  | 571.90  | 571.64  | 571.35  | 571.30  |
| 29   | 571.29  | 572.11  | 572.68  | 572.13  | 572.45  | 572.60  | 572.37  | 572.06  | 571.92  | 571.74  | 571.41  | 571.37  |
| 30   | 571.42  |         | 572.37  | 571.76  | 572.48  | 572.62  | 572.31  | 572.08  | 572.01  | 571.61  | 571.32  | 571.60  |
| 31   | 571.30  |         | 572.36  |         | 572.47  |         | 572.27  | 572.18  |         | 571.80  |         | 571.77  |
| MEAN | 571.46  | 571.55  | 572.08  | 572.32  | 572.22  | 572.52  | 572.44  | 572.27  | 571.97  | 571.76  | 571.50  | 571.34  |
| MAX. | 571.94  | 572.85  | 573.17  | 572.79  | 573.15  | 572.98  | 572.85  | 573.03  | 572.74  | 572.28  | 572.20  | 572.14  |
| MIN. | 2300/12 | 1300/28 | 0400/29 | 0100/05 | 2200/28 | 2000/13 | 2000/06 | 2000/18 | 2100/02 | 2100/03 | 2200/01 | 1100/14 |
|      | 571.11  | 571.11  | 571.28  | 571.20  | 571.25  | 572.12  | 572.11  | 571.63  | 571.47  | 571.13  | 570.46  | 570.44  |
|      | 2000/19 | 0700/03 | 1500/16 | 1800/30 | 0800/01 | 2400/13 | 1900/05 | 0600/29 | 1000/02 | 1100/21 | 0200/16 | 1300/03 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 571.95

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3079: Marblehead, Ohio on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 572.58 Jun  
Daily mean elevation: 573.37 28 May  
Instant/hourly Elevation: 574.13 1500/28 May

LOWEST  
Monthly mean elevation: 571.24 Dec  
Daily mean elevation: 570.01 16 Nov  
Instant/hourly Elevation: 569.17 1400/3 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
|        | Jan    |
|        | Feb    |
| 572.61 | 25 Mar |
| 572.66 | 22 Apr |
| 573.37 | 28 May |
| 572.84 | 20 Jun |
| 572.64 | 1 Jul  |
| 572.58 | 11 Aug |
| 572.25 | 14 Sep |
| 572.26 | 1 Oct  |
| 571.78 | 19 Nov |
| 572.00 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
|        | Jan    |
|        | Feb    |
| 571.27 | 22 Mar |
| 571.27 | 30 Apr |
| 571.52 | 1 May  |
| 572.26 | 27 Jun |
| 572.34 | 31 Jul |
| 572.01 | 22 Aug |
| 571.70 | 9 Sep  |
| 571.22 | 3 Oct  |
| 570.01 | 16 Nov |
| 570.37 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 573.20 | | | | | 1 | | | | | | | | 573.20 | 1 |
| 573.00 | | | | | | | | | | | | | 573.00 | 1 |
| 572.80 | | | | | | 2 | | | | | | | 572.80 | 3 |
| 572.60 | | | 1 | 2 | 1 | 10 | 1 | | | | | | 572.60 | 18 |
| 572.40 | | | 2 | 4 | 5 | 15 | 24 | 6 | | | | | 572.40 | 74 |
| 572.20 | | | 3 | 10 | 8 | 3 | 6 | 17 | 2 | 1 | | | 572.20 | 124 |
| 572.00 | | | 3 | 4 | 12 | | | 8 | 13 | 3 | | | 572.00 | 167 |
| 571.80 | | | 5 | | 2 | | | | 11 | 11 | | 2 | 571.80 | 198 |
| 571.60 | | | 1 | | | | | | 4 | 13 | 3 | 2 | 571.60 | 221 |
| 571.40 | | | 2 | | 1 | | | | | 2 | 15 | 6 | 571.40 | 247 |
| 571.20 | | | 1 | 1 | | | | | | 1 | 7 | 9 | 571.20 | 266 |
| 571.00 | | | | | | | | | | | 2 | 4 | 571.00 | 272 |
| 570.80 | | | | | | | | | | | 2 | 2 | 570.80 | 276 |
| 570.60 | | | | | | | | | | | | 3 | 570.60 | 279 |
| 570.40 | | | | | | | | | | | | 2 | 570.40 | 281 |
| 570.20 | | | | | | | | | | | | 1 | 570.20 | 282 |
| 570.00 | | | | | | | | | | | 1 | | 570.00 | 283 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3079: Marblehead, Ohio on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | / | / | / | / | 571.52 | 572.48 | 572.64 | 572.34 | 572.13 | 572.26 | 571.33 | 570.84 |
| 2 | / | / | / | / | 572.16 | 572.62 | 572.58 | 572.34 | 572.02 | 571.76 | 571.46 | 571.60 |
| 3 | / | / | / | / | 572.44 | 572.44 | 572.54 | 572.37 | 572.16 | 571.22 | 571.75 | 570.59 |
| 4 | / | / | / | / | 572.09 | 572.52 | 572.51 | 572.40 | 572.12 | 571.77 | 571.44 | 570.66 |
| 5 | / | / | / | / | 572.08 | 572.53 | 572.49 | 572.32 | 572.23 | 572.12 | 571.46 | 571.48 |
| 6 | / | / | / | / | 572.18 | 572.53 | 572.46 | 572.25 | 572.12 | 572.14 | 571.59 | 571.05 |
| 7 | / | / | / | / | 572.20 | 572.51 | 572.50 | 572.25 | 571.93 | 571.79 | 571.63 | 570.56 |
| 8 | / | / | / | / | 571.95 | 572.40 | 572.53 | 572.38 | 571.85 | 571.77 | 571.43 | 570.75 |
| 9 | / | / | 571.77* | / | 571.88 | 572.48 | 572.51 | 572.27 | 571.70 | 571.84 | 571.35 | 571.39 |
| 10 | / | / | 571.44 | 572.48* | 572.11 | 572.46 | 572.52 | 572.37 | 571.88 | 571.87 | 571.41 | 571.42 |
| 11 | / | / | 571.41 | 572.49 | 572.11 | 572.49 | 572.43 | 572.58 | 572.06 | 571.94 | 571.40 | 571.35 |
| 12 | / | / | 572.19 | 572.61 | 572.08 | 572.54 | 572.51 | 572.52 | 572.15 | 571.89 | 571.45 | 571.28 |
| 13 | / | / | 572.08 | 572.38 | 572.48 | 572.40 | 572.58 | 572.47 | 571.84 | 571.81 | 571.58 | 571.53 |
| 14 | / | / | 571.90 | 572.54 | 572.13 | 572.59 | 572.54 | 572.37 | 572.25 | 571.86 | 571.57 | 572.00 |
| 15 | / | / | 571.97 | 572.41 | 572.19 | 572.75 | 572.42 | 572.25 | 572.17 | 571.97 | 570.94 | 571.49 |
| 16 | / | / | 571.90 | 572.35 | 572.23 | 572.59 | 572.44 | 572.30 | 572.02 | 571.86 | 570.01* | 571.39 |
| 17 | / | / | 572.53 | 572.25 | 572.25 | 572.54 | 572.34 | 572.42 | 572.03 | 571.81 | 571.17 | 571.37 |
| 18 | / | / | 572.32 | 572.30 | 572.12 | 572.46 | 572.40 | 572.34 | 571.94 | 571.93 | 571.51 | 571.37 |
| 19 | / | / | 572.17 | 572.25 | 572.11 | 572.70 | 572.44 | 572.56 | 571.79 | 571.65 | 571.78 | 571.15 |
| 20 | / | / | 572.33 | 572.17 | 572.26 | 572.84 | 572.36 | 572.56 | 571.80 | 571.70 | 571.58 | 570.99 |
| 21 | / | / | 571.91 | 572.29 | 572.39 | 572.76 | 572.43 | 572.29 | 572.07 | 571.60 | 571.59 | 571.68 |
| 22 | / | / | 571.27 | 572.66 | 572.27* | 572.83 | 572.46 | 572.01 | 571.99 | 571.79 | 571.32 | 570.37 |
| 23 | / | / | 571.97 | 572.32 | / | 572.71 | 572.35 | 572.37 | 571.82 | 571.74 | 571.14 | 571.10 |
| 24 | / | / | 572.28 | 572.02 | 572.42* | 572.46 | 572.38 | 572.27 | 571.90 | 571.73 | 571.39 | 571.29 |
| 25 | / | / | 572.61 | 572.14 | 572.32 | 572.66 | 572.43 | 572.18 | 571.73 | 571.78 | 571.47 | 570.70 |
| 26 | / | / | 572.44 | 572.28 | 572.34 | 572.68 | 572.59 | 572.19 | 571.86 | 571.55 | 571.49 | 571.31 |
| 27 | / | / | / | 572.28 | 572.68 | 572.26 | 572.50 | 572.07 | 572.01 | 571.70 | 571.58 | 571.51 |
| 28 | / | / | / | 572.15 | 573.37 | 572.62 | 572.52 | 572.04 | 571.97 | 571.66 | 571.00 | 571.20 |
| 29 | / | / | / | 572.25 | 572.39 | 572.75 | 572.47 | 572.06 | 571.95 | 571.89 | 571.36 | 571.32 |
| 30 | / | / | / | 571.27 | 572.49 | 572.72 | 572.43* | 572.05 | 572.16 | 571.66 | 571.31 | 571.69 |
| 31 | / | / | / | | 572.46 | | 572.34 | 572.06 | | 572.09 | | 571.98 |
| MEAN | / | / | 572.03 | 572.28 | 572.26 | 572.58 | 572.47 | 572.30 | 571.99 | 571.81 | 571.38 | 571.24 |
| MAX. | | | 573.19 | 573.00 | 574.13 | 573.08 | 573.25 | 573.14 | 572.66 | 572.54 | 572.17 | 572.84 |
| MIN. | | | 2300/17 | 1500/22 | 1500/28 | 0300/23 | 2300/26 | 0500/20 | 2200/14 | 0300/21 | 1700/02 | 0900/14 |
| | | | 570.74 | 569.69 | 570.37 | 571.99 | 572.05 | 571.48 | 571.07 | 570.53 | 569.18 | 569.17 |
| | | | 1500/16 | 1500/30 | 0600/01 | 1100/27 | 0900/25 | 1600/30 | 0100/26 | 0900/03 | 0400/16 | 1400/03 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 572.03

ANNUAL SUMMARY OF LEVELS, 1984
Station 3085: Toledo, Ohio on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 572.60 Jun
Daily mean elevation: 574.12 28 May
Instant/hourly Elevation: 575.79 2300/27 Feb

LOWEST
Monthly mean elevation: 571.16 Dec
Daily mean elevation: 569.51 16 Nov
Instant/hourly Elevation: 567.21 1800/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.96 | 12 Jan |
| 573.97 | 27 Feb |
| 573.63 | 28 Mar |
| 573.79 | 22 Apr |
| 574.12 | 28 May |
| 573.10 | 20 Jun |
| 572.73 | 26 Jul |
| 572.76 | 20 Aug |
| 572.38 | 14 Sep |
| 572.49 | 6 Oct |
| 571.97 | 3 Nov |
| 572.34 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.25 | 29 Jan |
| 571.21 | 3 Feb |
| 570.64 | 22 Mar |
| 569.81 | 30 Apr |
| 570.76 | 1 May |
| 571.87 | 27 Jun |
| 572.14 | 17 Jul |
| 571.88 | 22 Aug |
| 571.47 | 25 Sep |
| 570.87 | 3 Oct |
| 569.51 | 16 Nov |
| 569.53 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 574.00         |     |     |     |     | 1   |     |     |     |     |     |     |     | 574.00         | 1                          |
| 573.80         |     | 1   |     |     |     |     |     |     |     |     |     |     | 573.80         | 2                          |
| 573.60         |     |     | 1   | 2   |     |     |     |     |     |     |     |     | 573.60         | 5                          |
| 573.40         |     | 1   |     |     |     |     |     |     |     |     |     |     | 573.40         | 6                          |
| 573.20         |     |     |     |     |     |     |     |     |     |     |     |     | 573.20         | 6                          |
| 573.00         |     |     | 2   | 2   |     | 3   |     |     |     |     |     |     | 573.00         | 13                         |
| 572.80         |     |     | 3   | 3   | 1   | 2   |     |     |     |     |     |     | 572.80         | 22                         |
| 572.60         |     |     | 3   | 3   | 1   | 9   | 4   | 2   |     |     |     |     | 572.60         | 44                         |
| 572.40         |     |     | 1   | 8   | 5   | 10  | 15  | 5   |     | 2   |     |     | 572.40         | 90                         |
| 572.20         |     |     | 5   | 5   | 11  | 4   | 11  | 15  | 5   | 3   |     | 2   | 572.20         | 151                        |
| 572.00         |     |     | 3   | 4   | 6   | 1   | 1   | 6   | 9   | 2   |     |     | 572.00         | 183                        |
| 571.80         | 2   | 5   | 4   | 2   | 2   | 1   |     | 3   | 9   | 12  | 1   | 2   | 571.80         | 226                        |
| 571.60         | 5   | 6   | 2   |     | 2   |     |     |     | 6   | 8   | 5   | 3   | 571.60         | 263                        |
| 571.40         | 17  | 5   | 3   |     |     |     |     |     | 1   | 3   | 11  | 5   | 571.40         | 308                        |
| 571.20         | 7   | 11  | 2   |     |     |     |     |     |     |     | 3   | 6   | 571.20         | 337                        |
| 571.00         |     |     | 1   |     |     |     |     |     |     |     | 6   | 3   | 571.00         | 347                        |
| 570.80         |     |     |     |     |     |     |     |     |     | 1   | 1   | 1   | 570.80         | 350                        |
| 570.60         |     |     | 1   |     | 1   |     |     |     |     |     | 1   | 1   | 570.60         | 354                        |
| 570.40         |     |     |     |     |     |     |     |     |     |     | 1   | 3   | 570.40         | 358                        |
| 570.20         |     |     |     |     |     |     |     |     |     |     |     | 1   | 570.20         | 359                        |
| 570.00         |     |     |     |     |     |     |     |     |     |     |     | 2   | 570.00         | 361                        |
| 569.80         |     |     |     | 1   |     |     |     |     |     |     |     | 1   | 569.80         | 363                        |
| 569.60         |     |     |     |     |     |     |     |     |     |     |     |     | 569.60         | 363                        |
| 569.40         |     |     |     |     |     |     |     |     |     |     | 1   | 1   | 569.40         | 365                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3085: Toledo, Ohio on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 571.81  | 571.43  | 571.31  | 572.44  | 570.76  | 572.56  | 572.67  | 572.35  | 572.12  | 572.25  | 571.11  | 570.54  |
| 2    | 571.61  | 571.45  | 571.68  | 572.43  | 572.30  | 572.78  | 572.60  | 572.32  | 571.91  | 571.67  | 571.17  | 571.80  |
| 3    | 571.48  | 571.21  | 571.94  | 572.91  | 572.73  | 572.41  | 572.48  | 572.37  | 572.02  | 570.87  | 571.97  | 570.00  |
| 4    | 571.45  | 571.40  | 572.28  | 573.12  | 572.06  | 572.62  | 572.47  | 572.45  | 572.00  | 571.76  | 571.47  | 570.16  |
| 5    | 571.58  | 571.31  | 571.55  | 572.56  | 571.95  | 572.54  | 572.44  | 572.31  | 572.31  | 572.38  | 571.20  | 571.59  |
| 6    | 571.45  | 571.25  | 571.56  | 572.23  | 572.19  | 572.54  | 572.27  | 572.16  | 572.19  | 572.49  | 571.46  | 570.56  |
| 7    | 571.60  | 571.29  | 572.05  | 572.46  | 572.31  | 572.45  | 572.38  | 572.25  | 572.09  | 571.87  | 571.69  | 570.17  |
| 8    | 571.40  | 571.26  | 573.09  | 572.94  | 571.80* | 572.22  | 572.59  | 572.36  | 571.82  | 571.85  | 571.55  | 570.55  |
| 9    | 571.79  | 571.34  | 571.78  | 573.71  | 571.65  | 572.46  | 572.52  | 572.22  | 571.71  | 571.88  | 571.43  | 571.49  |
| 10   | 571.60  | 571.40  | 571.31  | 573.20  | 572.07  | 572.39  | 572.50  | 572.39  | 571.86  | 571.93  | 571.51  | 571.47  |
| 11   | 571.67  | 571.35  | 571.02  | 572.63  | 572.25* | 572.51  | 572.28  | 572.74  | 572.08  | 572.05  | 571.02  | 571.40  |
| 12   | 571.96  | 571.49  | 572.45  | 572.88  | /       | 572.64  | 572.48  | 572.55  | 572.26  | 571.96  | 571.14  | 571.34  |
| 13   | 571.68  | 571.57  | 572.20  | 572.46  | 572.42* | 572.35  | 572.62  | 572.45  | 571.70  | 571.86  | 571.49  | 571.67  |
| 14   | 571.46  | 571.64  | 571.97  | 572.66  | 571.94* | 572.64  | 572.54  | 572.36  | 572.38  | 571.99  | 571.71  | 572.30  |
| 15   | 571.62  | 571.75  | 572.10  | 572.54  | 572.25  | 573.01  | 572.32  | 572.16  | 572.03  | 572.17  | 570.51  | 571.60  |
| 16   | 571.57  | 571.95  | 571.85  | 572.48  | 572.26  | 572.70  | 572.30  | 572.26  | 571.99  | 571.98  | 569.51  | 571.42  |
| 17   | 571.41  | 571.83  | 573.01  | 572.24  | 572.33* | 572.52  | 572.14  | 572.52  | 572.05  | 571.81  | 571.00  | 571.38  |
| 18   | 571.54  | 571.68  | 572.72  | 572.41  | 572.04* | 572.35  | 572.28  | 572.30  | 571.93  | 572.23  | 571.58  | 571.34  |
| 19   | 571.25  | 571.68  | 572.36  | 572.34  | 572.09  | 572.73  | 572.39  | 572.54  | 571.72  | 571.51  | 571.77  | 570.98  |
| 20   | 571.36  | 571.34  | 572.63  | 572.22  | 572.29  | 573.10  | 572.26  | 572.76  | 571.76  | 571.79  | 571.50  | 570.79  |
| 21   | 571.44  | 571.52  | 571.91  | 572.65  | 572.56  | 572.94  | 572.46  | 572.34  | 572.29  | 571.52  | 571.65  | 572.00  |
| 22   | 571.48  | 571.79  | 570.64  | 573.79  | 572.26  | 573.09  | 572.53  | 571.88  | 572.05  | 571.82  | 571.24  | 569.53  |
| 23   | 571.50  | 571.82  | 571.46  | 572.40  | 572.18  | 572.75  | 572.30  | 572.33  | 571.80  | 571.72  | 571.01  | 571.08  |
| 24   | 571.47  | 571.82  | 572.33  | 571.87  | 572.45  | 572.20  | 572.37  | 572.31  | 571.88  | 571.76  | 571.41  | 571.20  |
| 25   | 571.26  | 571.67  | 572.94  | 571.84  | 572.30  | 572.59  | 572.52  | 572.18  | 571.47  | 571.92  | 571.55  | 570.23  |
| 26   | 571.49  | 571.91  | 572.63  | 572.02  | 572.22  | 572.70  | 572.73  | 572.21  | 571.61  | 571.50  | 571.58  | 571.37  |
| 27   | 571.36  | 573.97  | 572.86  | 572.16  | 572.88  | 571.87  | 572.52  | 572.02  | 572.05  | 571.73  | 571.71  | 571.64  |
| 28   | 571.49  | 573.57  | 573.63  | 572.12  | 574.12  | 572.58  | 572.61  | 572.02  | 572.00  | 571.63  | 570.70  | 571.06  |
| 29   | 571.25  | 571.36  | 572.98  | 572.16  | 572.28  | 572.85  | 572.53  | 572.03  | 571.94  | 571.97  | 571.36  | 571.21  |
| 30   | 571.52  |         | 572.29  | 569.81  | 572.44  | 572.80  | 572.48  | 571.92  | 572.25  | 571.70  | 571.35  | 571.83  |
| 31   | 571.33  |         | 572.32  |         | 572.49  |         | 572.35  | 571.93  |         | 572.47  |         | 572.34  |
| MEAN | 571.51  | 571.69  | 572.16  | 572.46  | 572.26  | 572.60  | 572.45  | 572.29  | 571.98  | 571.87  | 571.31  | 571.16  |
| MAX. | 572.59  | 575.79  | 574.82  | 574.49  | 575.53  | 573.42  | 573.71  | 573.76  | 573.15  | 573.16  | 572.64  | 573.50  |
| MIN. | 2100/12 | 2300/27 | 0300/29 | 1300/22 | 1700/28 | 1200/20 | 2000/26 | 0300/20 | 2200/14 | 1000/31 | 0900/03 | 1100/14 |
|      | 570.76  | 570.89  | 569.95  | 567.21  | 569.11  | 571.20  | 571.54  | 571.27  | 570.04  | 569.58  | 568.12  | 568.01  |
|      | 0200/31 | 1200/25 | 0800/11 | 1800/30 | 0800/01 | 1200/27 | 1200/07 | 1100/23 | 0300/26 | 0900/03 | 0600/16 | 1500/03 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 571.98

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3087: Monroe, Michigan on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 572.64 Jun  
Daily mean elevation: 573.59 27 Feb  
Instant/hourly Elevation: 574.95 2100/27 Feb

LOWEST  
Monthly mean elevation: 571.21 Dec  
Daily mean elevation: 569.80 22 Dec  
Instant/hourly Elevation: 568.22 1600/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.88 | 12 Jan |
| 573.59 | 27 Feb |
| 573.47 | 28 Mar |
| 573.40 | 9 Apr  |
| 573.56 | 28 May |
| 573.03 | 22 Jun |
| 572.68 | 26 Jul |
| 572.44 | 21 Aug |
| 572.32 | 14 Sep |
| 572.42 | 6 Oct  |
| 572.01 | 3 Nov  |
| 572.17 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.23 | 29 Jan |
| 571.17 | 3 Feb  |
| 570.96 | 22 Mar |
| 570.73 | 30 Apr |
| 571.45 | 1 May  |
| 572.10 | 27 Jun |
| 572.26 | 17 Jul |
| 571.93 | 30 Aug |
| 571.58 | 25 Sep |
| 571.02 | 3 Oct  |
| 569.81 | 16 Nov |
| 569.80 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 573.40 | | 1 | 1 | | 1 | | | | | | | | 573.40 | 3 |
| 573.20 | | | | 1 | | | | | | | | | 573.20 | 4 |
| 573.00 | | | | | | 2 | | | | | | | 573.00 | 6 |
| 572.80 | | | 1 | 5 | | 2 | | | | | | | 572.80 | 14 |
| 572.60 | | 1 | 4 | 2 | 3 | 8 | 6 | | | | | | 572.60 | 38 |
| 572.40 | | | 3 | 9 | 5 | 7 | 15 | 1 | | 1 | | | 572.40 | 79 |
| 572.20 | | | 6 | 6 | 10 | 1 | 10 | 5 | 5 | 2 | | | 572.20 | 124 |
| 572.00 | | | 4 | 2 | 8 | 1 | | 3 | 8 | 3 | 1 | 2 | 572.00 | 156 |
| 571.80 | 1 | 5 | 3 | 1 | 2 | | | 3 | 14 | 13 | | 1 | 571.80 | 199 |
| 571.60 | 3 | 6 | 4 | | 1 | | | | 2 | 9 | 4 | 3 | 571.60 | 231 |
| 571.40 | 13 | 4 | 1 | | 1 | | | | 1 | 2 | 12 | 8 | 571.40 | 273 |
| 571.20 | 10 | 11 | 2 | | | | | | | | 6 | 6 | 571.20 | 308 |
| 571.00 | | 1 | 1 | | | | | | | 1 | 3 | 2 | 571.00 | 316 |
| 570.80 | | | 1 | | | | | | | | 1 | 1 | 570.80 | 319 |
| 570.60 | | | | 1 | | | | | | | 2 | 2 | 570.60 | 324 |
| 570.40 | | | | | | | | | | | | 2 | 570.40 | 326 |
| 570.20 | | | | | | | | | | | | 3 | 570.20 | 329 |
| 570.00 | | | | | | | | | | | | | 570.00 | 329 |
| 569.80 | | | | | | | | | | | 1 | | 569.80 | 330 |
| 569.60 | | | | | | | | | | | | 1 | 569.60 | 331 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3087: Monroe, Michigan on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 571.74 | 571.37 | 571.36 | 572.43 | 571.45 | 572.54 | 572.67 | 572.22* | 572.17 | 572.14 | 571.23 | 570.62 |
| 2 | 571.55 | 571.38 | 571.72 | 572.47 | 572.34 | 572.74 | 572.64 | / | 571.99 | 571.74 | 571.21 | 571.78 |
| 3 | 571.43 | 571.17 | 571.94 | 572.81 | 572.74* | 572.45 | 572.56 | / | 572.04 | 571.02 | 572.01 | 570.24 |
| 4 | 571.41 | 571.39 | 572.31 | 572.84* | 572.06 | 572.60 | 572.53 | / | 571.98 | 571.76 | 571.54 | 570.33 |
| 5 | 571.52 | 571.30 | 571.59 | / | 572.12 | 572.65 | 572.49 | / | 572.22 | 572.29 | 571.22 | 571.56 |
| 6 | 571.39 | 571.22 | 571.63 | 572.26* | 572.26 | 572.60 | 572.32 | / | 572.24 | 572.42 | 571.42 | 570.55 |
| 7 | 571.53 | 571.28 | 572.02 | 572.42 | 572.33 | 572.61 | 572.40 | / | 572.24 | 571.92 | 571.70 | 570.47 |
| 8 | 571.35 | 571.24 | 572.82 | 572.82 | 571.84 | 572.52 | 572.63 | / | 572.00 | 571.89 | 571.67 | 570.66 |
| 9 | 571.72 | 571.34 | 571.82 | 573.40 | 571.74 | 572.55 | 572.65 | / | 571.84 | 571.86 | 571.52 | 571.48 |
| 10 | 571.54 | 571.39 | 571.35 | 573.00 | 572.08 | 572.50* | 572.59 | / | 571.92 | 571.90 | 571.51 | 571.45 |
| 11 | 571.61 | 571.34 | 571.08 | 572.56 | 572.20 | / | 572.38 | / | 572.10 | 571.97 | 570.84 | 571.44 |
| 12 | 571.88 | 571.50 | 572.40 | 572.83 | 572.04 | / | 572.48 | / | 572.29 | 571.92 | 571.05 | 571.42 |
| 13 | 571.60 | 571.56 | 572.14 | 572.50 | 572.67 | / | 572.65 | / | 571.82 | 571.86 | 571.44 | 571.55 |
| 14 | 571.40 | 571.55 | 571.93 | 572.61 | 571.99 | / | 572.60 | / | 572.32 | 571.97 | 571.74 | 572.17 |
| 15 | 571.54 | 571.66 | 572.06 | 572.54 | 572.22 | / | 572.43 | / | 571.96 | 572.14 | 570.76 | 571.56 |
| 16 | 571.51* | 571.96 | 571.80 | 572.36 | 572.22 | / | 572.35 | / | 572.00 | 571.99 | 569.81 | 571.50 |
| 17 | / | 571.75 | 572.79 | 572.23 | 572.34 | / | 572.26 | / | 572.08 | 571.82 | 571.05 | 571.39 |
| 18 | 571.43* | 571.75 | 572.54 | 572.37 | 572.14 | / | 572.32 | / | 571.98 | 572.12 | 571.51 | 571.32 |
| 19 | 571.36* | 571.64 | 572.32 | 572.29 | 572.16 | / | 572.44 | / | 571.77 | 571.66 | 571.59 | 571.06 |
| 20 | / | 571.51 | 572.58 | 572.64* | 572.33 | 573.03* | 572.35 | / | 571.82 | 571.74 | 571.43 | 570.87 |
| 21 | / | 571.62 | 572.02 | / | 572.55 | 572.90 | 572.50 | 572.44* | 572.20 | 571.58 | 571.59 | 571.99 |
| 22 | / | 571.85 | 570.96 | / | 572.35 | 573.03 | 572.55 | 571.95 | 572.08 | 571.82 | 571.33 | 569.80 |
| 23 | 571.31* | 571.86 | 571.79 | 572.33* | 572.17 | 572.84 | 572.36 | 572.24 | 571.89 | 571.70 | 571.07 | 571.21 |
| 24 | 571.32 | 571.82 | 572.36 | 571.90 | 572.54 | 572.29 | 572.37 | 572.31 | 571.96 | 571.71 | 571.41 | 571.12 |
| 25 | 571.24 | 571.65 | 572.70 | 572.17 | 572.42 | 572.63 | 572.52 | 572.21 | 571.58 | 571.91 | 571.55 | 570.38 |
| 26 | 571.46 | 571.92 | 572.51 | 572.41 | 572.34 | 572.74 | 572.68 | 572.23 | 571.64 | 571.56 | 571.58 | 571.38 |
| 27 | 571.32 | 573.59 | 572.71 | 572.42 | 572.77 | 572.10 | 572.44 | 572.12 | 572.04 | 571.79 | 571.75 | 571.62 |
| 28 | 571.45 | 572.71 | 573.47 | 572.17 | 573.56 | 572.65 | 572.57 | 572.13 | 572.00 | 571.66 | 570.80 | 571.29 |
| 29 | 571.23 | 571.29 | 572.67 | 572.44 | 572.28 | 572.77 | 572.52 | 572.06 | 571.91 | 571.89 | 571.38 | 571.36 |
| 30 | 571.42 | | 572.32 | 570.73 | 572.44 | 572.75 | 572.49 | 571.93 | 572.16 | 571.72 | 571.38 | 571.78 |
| 31 | 571.30 | | 572.33 | | 572.47 | | 572.40 | 571.96 | | 572.31 | | 572.15 |
| MEAN | 571.47 | 571.64 | 572.13 | 572.44 | 572.30 | 572.64 | 572.49 | 572.15 | 572.01 | 571.86 | 571.34 | 571.21 |
| MAX. | 572.48 | 574.95 | 574.41 | 574.01 | 574.68 | 573.42 | 573.34 | 572.84 | 572.90 | 572.96 | 572.68 | 573.30 |
| MIN. | 2100/12 | 2100/27 | 0100/29 | 0300/10 | 1800/28 | 0100/23 | 2200/26 | 1800/23 | 0700/14 | 0800/22 | 0900/03 | 1100/14 |
| | 570.72 | 570.73 | 569.74 | 568.22 | 569.56 | 571.63 | 571.68 | 571.32 | 569.88 | 569.94 | 568.49 | 568.26 |
| | 2400/30 | 1100/25 | 0700/11 | 1600/30 | 0800/01 | 1100/27 | 2400/06 | 1800/30 | 0300/26 | 0800/03 | 0500/16 | 1400/03 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 571.97

ANNUAL SUMMARY OF LEVELS, 1984
Station 3090: Fermi Power Plant, Stony Point, Michigan on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 572.56 Jun
Daily mean elevation: 573.42 28 May
Instant/hourly Elevation: 574.62 2100/27 Feb

LOWEST
Monthly mean elevation: 571.20 Dec
Daily mean elevation: 569.87 16 Nov
Instant/hourly Elevation: 568.51 1400/3 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.87 | 12 Jan |
| 573.31 | 27 Feb |
| 573.28 | 28 Mar |
| 573.24 | 9 Apr |
| 573.42 | 28 May |
| 572.91 | 22 Jun |
| 572.61 | 26 Jul |
| 572.57 | 20 Aug |
| 572.22 | 14 Sep |
| 572.33 | 6 Oct |
| 571.96 | 3 Nov |
| 572.08 | 14 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 571.20 | 19 Jan |
| 571.16 | 3 Feb |
| 571.04 | 22 Mar |
| 570.95 | 30 Apr |
| 571.23 | 1 May |
| 572.12 | 27 Jun |
| 572.26 | 18 Jul |
| 571.93 | 30 Aug |
| 571.53 | 26 Sep |
| 571.02 | 3 Oct |
| 569.87 | 16 Nov |
| 569.89 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 573.40         |     |     |     |     | 1   |     |     |     |     |     |     |     | 573.40         | 1                          |
| 573.20         |     | 1   | 1   | 2   |     |     |     |     |     |     |     |     | 573.20         | 5                          |
| 573.00         |     |     |     |     |     |     |     |     |     |     |     |     | 573.00         | 5                          |
| 572.80         |     |     |     | 2   |     | 2   |     |     |     |     |     |     | 572.80         | 9                          |
| 572.60         |     |     | 4   | 3   | 1   | 9   | 2   |     |     |     |     |     | 572.60         | 28                         |
| 572.40         |     | 1   | 4   | 6   | 6   | 15  | 18  | 4   |     |     |     |     | 572.40         | 82                         |
| 572.20         |     |     | 6   | 10  | 8   | 3   | 11  | 17  | 2   | 1   |     |     | 572.20         | 140                        |
| 572.00         |     |     | 2   | 5   | 10  | 1   |     | 7   | 10  | 5   |     | 2   | 572.00         | 182                        |
| 571.80         | 1   | 3   | 5   | 1   | 2   |     |     | 3   | 13  | 11  | 1   | 1   | 571.80         | 223                        |
| 571.60         | 4   | 6   | 3   |     | 2   |     |     |     | 4   | 12  | 4   | 2   | 571.60         | 260                        |
| 571.40         | 15  | 6   | 3   |     |     |     |     |     | 1   | 1   | 10  | 7   | 571.40         | 303                        |
| 571.20         | 10  | 10  | 1   |     | 1   |     |     |     |     |     | 7   | 8   | 571.20         | 340                        |
| 571.00         | 1   | 2   | 2   |     |     |     |     |     |     | 1   | 4   | 2   | 571.00         | 352                        |
| 570.80         |     |     |     | 1   |     |     |     |     |     |     | 3   | 1   | 570.80         | 357                        |
| 570.60         |     |     |     |     |     |     |     |     |     |     |     | 2   | 570.60         | 359                        |
| 570.40         |     |     |     |     |     |     |     |     |     |     |     | 3   | 570.40         | 362                        |
| 570.20         |     |     |     |     |     |     |     |     |     |     |     | 2   | 570.20         | 364                        |
| 570.00         |     |     |     |     |     |     |     |     |     |     |     |     | 570.00         | 364                        |
| 569.80         |     |     |     |     |     |     |     |     |     |     | 1   | 1   | 569.80         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3090: Fermi Power Plant, Stony Point, Michigan on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 571.73  | 571.36  | 571.34  | 572.40  | 571.23  | 572.49  | 572.58  | 572.32  | 572.11  | 572.08  | 571.30  | 570.65  |
| 2    | 571.55  | 571.38  | 571.67  | 572.43  | 572.24  | 572.66  | 572.57  | 572.30  | 571.97  | 571.76  | 571.13  | 571.75  |
| 3    | 571.43  | 571.16  | 571.88  | 572.72  | 572.51  | 572.37  | 572.53  | 572.34  | 571.96  | 571.02  | 571.96  | 570.30  |
| 4    | 571.40  | 571.36  | 572.23  | 572.91  | 571.94  | 572.54  | 572.48  | 572.40  | 571.97  | 571.73  | 571.54  | 570.36  |
| 5    | 571.52  | 571.25  | 571.60  | 572.42  | 572.11  | 572.57  | 572.47  | 572.31  | 572.20  | 572.20  | 571.21  | 571.54  |
| 6    | 571.40  | 571.20  | 571.59  | 572.19  | 572.24  | 572.56  | 572.33  | 572.24  | 572.17  | 572.33  | 571.41  | 570.59  |
| 7    | 571.54  | 571.25  | 571.94  | 572.37  | 572.24  | 572.53  | 572.35  | 572.22  | 572.22  | 571.88  | 571.69  | 570.56  |
| 8    | 571.36  | 571.21  | 572.71  | 572.70  | 571.77  | 572.47  | 572.57  | 572.39  | 571.97  | 571.84  | 571.68  | 570.68  |
| 9    | 571.71  | 571.30  | 571.82  | 573.24  | 571.77  | 572.49  | 572.61  | 572.26  | 571.85  | 571.82  | 571.52  | 571.44  |
| 10   | 571.54  | 571.34  | 571.42  | 572.88  | 572.12  | 572.46  | 572.51  | 572.32  | 571.90  | 571.83  | 571.53  | 571.41  |
| 11   | 571.61  | 571.29  | 571.09  | 572.52  | 572.16  | 572.44  | 572.35  | 572.52  | 572.05  | 571.92  | 570.84  | 571.40  |
| 12   | 571.87  | 571.43  | 572.33  | 572.75  | 571.99  | 572.60  | 572.47  | 572.44  | 572.19  | 571.86  | 571.08  | 571.39  |
| 13   | 571.61  | 571.48  | 572.10  | 572.46  | 572.59  | 572.37  | 572.59  | 572.38  | 571.77  | 571.81  | 571.43  | 571.47  |
| 14   | 571.41  | 571.48  | 571.90  | 572.60  | 572.02  | 572.50  | 572.55  | 572.34  | 572.22  | 571.92  | 571.72  | 572.08  |
| 15   | 571.55  | 571.60  | 572.04  | 572.48  | 572.12  | 572.79  | 572.41  | 572.16  | 571.92  | 572.06  | 570.86  | 571.51  |
| 16   | 571.51  | 571.89  | 571.73  | 572.33  | 572.20  | 572.64  | 572.31  | 572.24  | 571.94  | 571.91  | 569.87  | 571.51  |
| 17   | 571.36  | 571.69  | 572.65  | 572.20  | 572.32  | 572.56  | 572.27  | 572.44  | 572.04  | 571.79  | 571.07  | 571.35  |
| 18   | 571.47  | 571.67  | 572.44  | 572.33  | 572.10  | 572.42  | 572.26  | 572.28  | 571.92  | 572.03  | 571.48  | 571.28  |
| 19   | 571.20  | 571.62  | 572.26  | 572.27  | 572.12  | 572.64  | 572.42  | 572.32  | 571.75  | 571.69  | 571.54  | 571.07  |
| 20   | 571.31  | 571.49  | 572.54  | 572.17  | 572.26  | 572.86  | 572.35  | 572.57  | 571.76  | 571.67  | 571.40  | 570.88  |
| 21   | 571.38  | 571.58  | 571.99  | 572.29  | 572.46  | 572.79  | 572.43  | 572.34  | 572.10  | 571.61  | 571.55  | 571.94  |
| 22   | 571.42  | 571.81  | 571.04  | 573.23  | 572.33  | 572.91  | 572.50  | 571.94  | 572.03  | 571.74  | 571.34  | 569.89  |
| 23   | 571.42  | 571.80  | 571.78  | 572.34  | 572.20  | 572.74  | 572.34  | 572.18  | 571.85  | 571.67  | 571.05  | 571.25  |
| 24   | 571.41  | 571.76  | 572.30  | 571.89  | 572.45  | 572.25  | 572.33  | 572.23  | 571.91  | 571.67  | 571.39  | 571.13  |
| 25   | 571.22  | 571.62  | 572.61  | 572.13  | 572.41  | 572.52  | 572.45  | 572.15  | 571.61  | 571.89  | 571.51  | 570.44  |
| 26   | 571.43  | 571.84  | 572.44  | 572.35  | 572.23  | 572.71  | 572.61  | 572.18  | 571.53  | 571.52  | 571.55  | 571.35  |
| 27   | 571.31  | 573.31  | 572.63  | 572.34  | 572.71  | 572.12  | 572.38  | 572.07  | 572.01  | 571.78  | 571.72  | 571.58  |
| 28   | 571.42  | 572.49  | 573.28  | 572.16  | 573.42  | 572.57  | 572.50  | 572.05  | 571.95  | 571.63  | 570.85  | 571.29  |
| 29   | 571.22  | 571.23  | 572.60  | 572.35  | 572.16  | 572.68  | 572.46  | 572.08  | 571.84  | 571.84  | 571.40  | 571.33  |
| 30   | 571.42  |         | 572.29  | 570.95  | 572.39  | 572.65  | 572.43  | 571.93  | 572.10  | 571.69  | 571.36  | 571.71  |
| 31   | 571.29  |         | 572.30  |         | 572.46  |         | 572.35  | 571.96  |         | 572.20  |         | 572.02  |
| MEAN | 571.45  | 571.58  | 572.08  | 572.41  | 572.23  | 572.56  | 572.44  | 572.25  | 571.96  | 571.82  | 571.33  | 571.20  |
| MAX. | 572.47  | 574.62  | 574.20  | 573.81  | 574.35  | 573.28  | 573.18  | 573.30  | 572.85  | 572.78  | 572.62  | 573.13  |
| MIN. | 2100/12 | 2100/27 | 0100/29 | 1400/22 | 1500/28 | 0200/23 | 2200/26 | 0300/20 | 0800/14 | 1900/06 | 0900/03 | 1000/14 |
|      | 570.76  | 570.71  | 569.81  | 568.82  | 569.70  | 571.77  | 571.63  | 571.36  | 570.02  | 570.13  | 568.61  | 568.51  |
|      | 0100/31 | 1100/25 | 0700/11 | 1800/30 | 0800/01 | 0300/14 | 1200/07 | 1000/23 | 0300/26 | 0900/03 | 0500/16 | 1400/03 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 571.94

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4020: Gibraltar, Michigan on Detroit River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 572.76 Jun  
Daily mean elevation: 573.43 28 May  
Instant/hourly Elevation: 574.42 2000/27 Feb

LOWEST  
Monthly mean elevation: 571.45 Dec  
Daily mean elevation: 570.30 22 Dec  
Instant/hourly Elevation: 569.16 1600/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 572.12 | 12 Jan |
| 573.22 | 27 Feb |
| 573.25 | 28 Mar |
| 573.26 | 9 Apr  |
| 573.43 | 28 May |
| 573.08 | 22 Jun |
| 572.87 | 9 Jul  |
| 572.80 | 20 Aug |
| 572.61 | 7 Sep  |
| 572.52 | 6 Oct  |
| 572.28 | 3 Nov  |
| 572.23 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 571.49 | 29 Jan |
| 571.35 | 29 Feb |
| 571.29 | 11 Mar |
| 571.39 | 30 Apr |
| 571.41 | 1 May  |
| 572.44 | 27 Jun |
| 572.48 | 18 Jul |
| 572.21 | 31 Aug |
| 571.81 | 26 Sep |
| 571.44 | 3 Oct  |
| 570.39 | 16 Nov |
| 570.30 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 573.40 | | | | | 1 | | | | | | | | 573.40 | 1 |
| 573.20 | | 1 | 1 | 1 | | | | | | | | | 573.20 | 4 |
| 573.00 | | | | 1 | | 2 | | | | | | | 573.00 | 7 |
| 572.80 | | | | 4 | 1 | 9 | 1 | | | | | | 572.80 | 22 |
| 572.60 | | | 6 | 2 | 3 | 15 | 20 | 7 | 1 | | | | 572.60 | 76 |
| 572.40 | | | 7 | 11 | 7 | 4 | 10 | 18 | 5 | 2 | | | 572.40 | 140 |
| 572.20 | | 1 | 3 | 9 | 13 | | | 6 | 11 | 4 | 1 | 1 | 572.20 | 189 |
| 572.00 | 3 | 1 | 5 | | 3 | | | | 11 | 14 | 1 | 2 | 572.00 | 229 |
| 571.80 | 7 | 8 | 4 | 1 | 2 | | | | 2 | 9 | 5 | 2 | 571.80 | 269 |
| 571.60 | 16 | 9 | 2 | | | | | | | 1 | 14 | 8 | 571.60 | 319 |
| 571.40 | 5 | 8 | 1 | | 1 | | | | | 1 | 1 | 7 | 571.40 | 343 |
| 571.20 | | 1 | 2 | 1 | | | | | | | 5 | 2 | 571.20 | 354 |
| 571.00 | | | | | | | | | | | 2 | 3 | 571.00 | 359 |
| 570.80 | | | | | | | | | | | | 3 | 570.80 | 362 |
| 570.60 | | | | | | | | | | | | 2 | 570.60 | 364 |
| 570.40 | | | | | | | | | | | | | 570.40 | 364 |
| 570.20 | | | | | | | | | | | 1 | 1 | 570.20 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4020: Gibraltar, Michigan on Detroit River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 572.05 | 571.61 | 571.55 | 572.55 | 571.41 | 572.65 | 572.77 | 572.55 | 572.41 | 572.27 | 571.65 | 570.97 |
| 2 | 571.89 | 571.62 | 571.84 | 572.56 | 572.37 | 572.84 | 572.78 | 572.54 | 572.27 | 572.04 | 571.38 | 571.99 |
| 3 | 571.77 | 571.44 | 572.05 | 572.82 | 572.59 | 572.54 | 572.74 | 572.56 | 572.20 | 571.44 | 572.28 | 570.73 |
| 4 | 571.73 | 571.61 | 572.41 | 572.96 | 572.08 | 572.71 | 572.69 | 572.62 | 572.22 | 571.97 | 571.84 | 570.71 |
| 5 | 571.87 | 571.51 | 571.82 | 572.53 | 572.28 | 572.76 | 572.69 | 572.55 | 572.41 | 572.42 | 571.51 | 571.73 |
| 6 | 571.78 | 571.46 | 571.75 | 572.31 | 572.39 | 572.75 | 572.55 | 572.49 | 572.45 | 572.52 | 571.65 | 570.84 |
| 7 | 571.92 | 571.52 | 572.07 | 572.45 | 572.39 | 572.73 | 572.55 | 572.46 | 572.61 | 572.17 | 571.93 | 571.01 |
| 8 | 571.90 | 571.50 | 572.68 | 572.80 | 571.96 | 572.71 | 572.79 | 572.63 | 572.33 | 572.11 | 572.04 | 571.01 |
| 9 | 572.12 | 571.57 | 572.04 | 573.26 | 571.97 | 572.68 | 572.87 | 572.49 | 572.23 | 572.07 | 571.84 | 571.65 |
| 10 | 571.88 | 571.60 | 571.73 | 572.92 | 572.29 | 572.67 | 572.77 | 572.55 | 572.20 | 572.06 | 571.79 | 571.59 |
| 11 | 571.93 | 571.57 | 571.29 | 572.59 | 572.34 | 572.62 | 572.56 | 572.70 | 572.29 | 572.13 | 571.05 | 571.63 |
| 12 | 572.12 | 571.70 | 572.44 | 572.83 | 572.15 | 572.79 | 572.68 | 572.65 | 572.48 | 572.10 | 571.31 | 571.62 |
| 13 | 571.88 | 571.74 | 572.20 | 572.55 | 572.71 | 572.57 | 572.78 | 572.60 | 572.12 | 572.05 | 571.65 | 571.61 |
| 14 | 571.68 | 571.71 | 572.04 | 572.64 | 572.17 | 572.66 | 572.76 | 572.58 | 572.43 | 572.16 | 572.00 | 572.23 |
| 15 | 571.80 | 571.81 | 572.21 | 572.56 | 572.25 | 572.95 | 572.64 | 572.43 | 572.15 | 572.28 | 571.32 | 571.69 |
| 16 | 571.78 | 572.08 | 571.82 | 572.37 | 572.35 | 572.81 | 572.52 | 572.49 | 572.20 | 572.16 | 570.39 | 571.75 |
| 17 | 571.63 | 571.88 | 572.68 | 572.27 | 572.49 | 572.77 | 572.55 | 572.68 | 572.31 | 572.02 | 571.38 | 571.55 |
| 18 | 571.72 | 571.88 | 572.51 | 572.39 | 572.28 | 572.63 | 572.48 | 572.58 | 572.20 | 572.25 | 571.70 | 571.47 |
| 19 | 571.51 | 571.83 | 572.38 | 572.34 | 572.28 | 572.83 | 572.64 | 572.51 | 572.05 | 572.00 | 571.72 | 571.35 |
| 20 | 571.62 | 571.68 | 572.64 | 572.24 | 572.40 | 573.04 | 572.62 | 572.80 | 572.06 | 571.94 | 571.61 | 571.18 |
| 21 | 571.63 | 571.77 | 572.24 | 572.29 | 572.59 | 572.96 | 572.65 | 572.62 | 572.33 | 571.88 | 571.77 | 572.15 |
| 22 | 571.66 | 572.00 | 571.40 | 573.19 | 572.52 | 573.08 | 572.72 | 572.25 | 572.30 | 571.98 | 571.66 | 570.30 |
| 23 | 571.68 | 571.98 | 571.95 | 572.42 | 572.34 | 572.97 | 572.58 | 572.39 | 572.14 | 571.92 | 571.35 | 571.58 |
| 24 | 571.69 | 571.92 | 572.46 | 571.99 | 572.64 | 572.44 | 572.54 | 572.45 | 572.19 | 571.90 | 571.64 | 571.35 |
| 25 | 571.51 | 571.72 | 572.70 | 572.23 | 572.60 | 572.71 | 572.67 | 572.41 | 571.92 | 572.14 | 571.75 | 570.81 |
| 26 | 571.71 | 571.98 | 572.58 | 572.42 | 572.41 | 572.92 | 572.80 | 572.45 | 571.81 | 571.80 | 571.78 | 571.59 |
| 27 | 571.60 | 573.22 | 572.74 | 572.42 | 572.86 | 572.44 | 572.59 | 572.37 | 572.25 | 572.03 | 571.98 | 571.79 |
| 28 | 571.70 | 572.36 | 573.25 | 572.24 | 573.43 | 572.77 | 572.68 | 572.36 | 572.21 | 571.88 | 571.19 | 571.57 |
| 29 | 571.49 | 571.35 | 572.67 | 572.44 | 572.32 | 572.83 | 572.66 | 572.42 | 572.09 | 572.05 | 571.63 | 571.58 |
| 30 | 571.66 | | 572.43 | 571.39 | 572.54 | 572.82 | 572.65 | 572.23 | 572.31 | 571.94 | 571.63 | 571.89 |
| 31 | 571.55 | | 572.44 | | 572.61 | | 572.59 | 572.21 | | 572.38 | | 572.14 |
| MEAN | 571.76 | 571.78 | 572.23 | 572.50 | 572.39 | 572.76 | 572.66 | 572.50 | 572.24 | 572.07 | 571.61 | 571.45 |
| MAX. | 572.66 | 574.42 | 574.09 | 573.90 | 574.29 | 573.44 | 573.35 | 573.41 | 573.00 | 572.99 | 572.93 | 573.22 |
| MIN. | 2100/12 | 2000/27 | 0200/29 | 1400/22 | 1500/28 | 1700/23 | 2200/26 | 0300/20 | 1000/26 | 1900/06 | 0900/03 | 1100/14 |
| | 571.10 | 570.84 | 570.00 | 569.16 | 570.13 | 571.87 | 571.84 | 571.64 | 570.36 | 570.69 | 569.42 | 569.21 |
| | 0200/31 | 1100/25 | 0800/11 | 1600/30 | 0800/01 | 0300/14 | 2300/06 | 1000/23 | 0300/26 | 0900/03 | 0500/16 | 1400/03 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 572.16

ANNUAL SUMMARY OF LEVELS, 1984
Station 4030: Wyandotte, Michigan on Detroit River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 573.98 Jun
Daily mean elevation: 574.45 28 May
Instant/hourly Elevation: 574.99 1500/28 May

LOWEST
Monthly mean elevation: 572.96 Dec
Daily mean elevation: 572.14 30 Apr
Instant/hourly Elevation: 570.92 1500/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 573.88 | 7 Jan |
| 573.98 | 27 Feb |
| 574.25 | 28 Mar |
| 573.87 | 4 Apr |
| 574.45 | 28 May |
| 574.25 | 22 Jun |
| 574.08 | 9 Jul |
| 574.05 | 20 Aug |
| 573.82 | 7 Sep |
| 573.75 | 6 Oct |
| 573.50 | 3 Nov |
| 573.54 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 572.86 | 19 Jan |
| 572.87 | 3 Feb |
| 573.08 | 11 Mar |
| 572.14 | 30 Apr |
| 572.59 | 1 May |
| 573.76 | 27 Jun |
| 573.86 | 17 Jul |
| 573.65 | 31 Aug |
| 573.40 | 26 Sep |
| 573.08 | 3 Oct |
| 572.44 | 16 Nov |
| 572.27 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 574.40         |     |     |     |     | 1   |     |     |     |     |     |     |     | 574.40         | 1                          |
| 574.20         |     |     |     |     |     | 3   |     |     |     |     |     |     | 574.20         | 5                          |
| 574.00         |     |     | 1   |     | 1   | 9   | 8   | 2   |     |     |     |     | 574.00         | 25                         |
| 573.80         | 3   | 2   | 9   | 1   | 2   | 17  | 23  | 21  | 1   |     |     |     | 573.80         | 104                        |
| 573.60         | 2   |     | 4   | 4   | 11  | 1   |     | 8   | 19  | 4   |     |     | 573.60         | 157                        |
| 573.40         | 5   | 1   | 7   | 1   | 11  |     |     |     | 9   | 16  | 2   | 2   | 573.40         | 211                        |
| 573.20         | 3   | 11  | 9   | 5   | 4   |     |     |     | 1   | 10  | 9   | 4   | 573.20         | 267                        |
| 573.00         | 7   | 8   | 1   | 2   |     |     |     |     |     |     |     |     | 573.00         | 309                        |
| 572.80         | 11  | 7   |     | 4   |     |     |     |     |     | 1   | 12  | 11  | 572.80         | 342                        |
| 572.60         |     |     |     | 7   |     |     |     |     |     |     | 5   | 6   | 572.60         | 353                        |
| 572.40         |     |     |     |     |     |     |     |     |     |     | 1   | 3   | 572.40         | 364                        |
| 572.20         |     |     |     | 5   | 1   |     |     |     |     |     | 1   | 4   | 572.20         | 365                        |
| 572.00         |     |     |     |     |     | 1   |     |     |     |     |     | 1   | 572.00         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4030: Wyandotte, Michigan on Detroit River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 573.46  | 572.90  | 573.31  | 573.61  | 572.59  | 573.91  | 574.04  | 573.88  | 573.75  | 573.66  | 573.17  | 572.66  |
| 2    | 573.42  | 572.90  | 573.46  | 573.61  | 573.36  | 573.99  | 574.02  | 573.87  | 573.68  | 573.48  | 572.97  | 573.24  |
| 3    | 573.50  | 572.87  | 573.54  | 573.77  | 573.59  | 573.82  | 573.99  | 573.89  | 573.66  | 573.08  | 573.50  | 572.48  |
| 4    | 573.60  | 572.99  | 573.69  | 573.87  | 573.38  | 573.90  | 573.98  | 573.93  | 573.65  | 573.45  | 573.26  | 572.47  |
| 5    | 573.76  | 573.04  | 573.34  | 573.63  | 573.45  | 573.92  | 573.98  | 573.87  | 573.77  | 573.70  | 573.07  | 573.07  |
| 6    | 573.82  | 572.98  | 573.27  | 573.40  | 573.54  | 573.91  | 573.90  | 573.80  | 573.76  | 573.75  | 573.16  | 572.64  |
| 7    | 573.88  | 572.95  | 573.42  | 573.32  | 573.59  | 573.90  | 573.88  | 573.84  | 573.82  | 573.54  | 573.31  | 572.55  |
| 8    | 573.72  | 572.97  | 573.77  | 573.34  | 573.30  | 573.82  | 574.03  | 573.91  | 573.62  | 573.51  | 573.34  | 572.63  |
| 9    | 573.81  | 573.06  | 573.48  | 573.55  | 573.30  | 573.89  | 574.08  | 573.85  | 573.57  | 573.48  | 573.22  | 573.01  |
| 10   | 573.60  | 573.14  | 573.31  | 573.31  | 573.49  | 573.85  | 574.02  | 573.92  | 573.59  | 573.48  | 573.22  | 573.02  |
| 11   | 573.39  | 573.18  | 573.08  | 573.00  | 573.54  | 573.87  | 573.91  | 574.02  | 573.70  | 573.52  | 572.98  | 573.01  |
| 12   | 573.35  | 573.20  | 573.51  | 573.09  | 573.43  | 573.96  | 573.98  | 573.98  | 573.77  | 573.49  | 573.05  | 572.98  |
| 13   | 573.22  | 573.19  | 573.29  | 572.90  | 573.80  | 573.84  | 574.04  | 573.95  | 573.55  | 573.45  | 573.26  | 573.07  |
| 14   | 573.08  | 573.18  | 573.26  | 573.02  | 573.52  | 573.95  | 574.02  | 573.93  | 573.77  | 573.51  | 573.43  | 573.48  |
| 15   | 573.07  | 573.27  | 573.40  | 572.89  | 573.60  | 574.09  | 573.94  | 573.82  | 573.65  | 573.59  | 572.98  | 573.13  |
| 16   | 573.06  | 573.44  | 573.38  | 572.72  | 573.63  | 574.02  | 573.86  | 573.87  | 573.64  | 573.52  | 572.44  | 573.09  |
| 17   | 572.98  | 573.38  | 573.92  | 572.58  | 573.67  | 573.96  | 573.86  | 573.97  | 573.69  | 573.45  | 572.98  | 573.02  |
| 18   | 572.96  | 573.38  | 573.96  | 572.65  | 573.54  | 573.88  | 573.87  | 573.90  | 573.62  | 573.55  | 573.19  | 573.00  |
| 19   | 572.86  | 573.34  | 573.92  | 572.61  | 573.56  | 574.06  | 573.94  | 573.95  | 573.54  | 573.37  | 573.24  | 572.92  |
| 20   | 572.89  | 573.22  | 574.00  | 572.57  | 573.63  | 574.21  | 573.91  | 574.05  | 573.52  | 573.34  | 573.15  | 572.82  |
| 21   | 572.90  | 573.27  | 573.73  | 572.63  | 573.75  | 574.20  | 573.96  | 573.90  | 573.69  | 573.37  | 573.24  | 573.39  |
| 22   | 572.95  | 573.35  | 573.30  | 573.29  | 573.64  | 574.25  | 574.00  | 573.70  | 573.67  | 573.40  | 573.09  | 572.27  |
| 23   | 572.96  | 573.32  | 573.55  | 572.71  | 573.62  | 574.21  | 573.87  | 573.84  | 573.53  | 573.37  | 572.95  | 572.95  |
| 24   | 572.94  | 573.30  | 573.86  | 572.45  | 573.77  | 573.86  | 573.91  | 573.89  | 573.58  | 573.35  | 573.11  | 572.99  |
| 25   | 572.90  | 573.16  | 574.00  | 572.56  | 573.73  | 574.02  | 573.97  | 573.84  | 573.41  | 573.47  | 573.13  | 572.60  |
| 26   | 573.12  | 573.28  | 573.87  | 572.68  | 573.76  | 574.10  | 574.02  | 573.77  | 573.40  | 573.29  | 573.16  | 573.05  |
| 27   | 573.19  | 573.98  | 573.92  | 572.71  | 574.02  | 573.76  | 573.95  | 573.71  | 573.69  | 573.40  | 573.24  | 573.21  |
| 28   | 573.14  | 573.84  | 574.25  | 572.59  | 574.45  | 574.01  | 574.00  | 573.70  | 573.63  | 573.28  | 572.80  | 573.01  |
| 29   | 572.96  | 573.21  | 573.98  | 572.84  | 573.79  | 574.10  | 573.97  | 573.74  | 573.57  | 573.44  | 573.06  | 573.04  |
| 30   | 573.05  |         | 573.66  | 572.14  | 573.85  | 574.08  | 573.95  | 573.69  | 573.69  | 573.34  | 573.05  | 573.36  |
| 31   | 572.91  |         | 573.59  |         | 573.88  |         | 573.88  | 573.65  |         | 573.62  |         | 573.54  |
| MEAN | 573.24  | 573.22  | 573.61  | 573.00  | 573.61  | 573.98  | 573.96  | 573.86  | 573.64  | 573.46  | 573.12  | 572.96  |
| MAX. | 573.96  | 574.76  | 574.78  | 574.13  | 574.99  | 574.45  | 574.34  | 574.41  | 574.06  | 574.08  | 573.88  | 574.04  |
|      | 1500/07 | 2100/27 | 0100/29 | 1900/04 | 1500/28 | 0100/23 | 2200/26 | 0400/20 | 0900/14 | 0400/21 | 1000/03 | 1100/14 |
| MIN. | 572.69  | 572.78  | 572.55  | 570.92  | 572.05  | 573.48  | 573.58  | 573.45  | 572.79  | 572.60  | 572.07  | 571.84  |
|      | 2200/19 | 1200/25 | 0800/11 | 1500/30 | 0900/01 | 1400/27 | 1300/07 | 1500/29 | 0400/26 | 1000/03 | 0600/16 | 1500/03 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 573.47

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4036: Fort Wayne, Detroit, Michigan on Detroit River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 574.42 Jul  
Daily mean elevation: 574.79 28 May  
Instant/hourly Elevation: 575.25 1700/28 May

LOWEST  
Monthly mean elevation: 573.18 Apr  
Daily mean elevation: 572.46 30 Apr  
Instant/hourly Elevation: 571.44 1600/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 574.43 | 1 Jan  |
| 574.46 | 28 Feb |
| 574.59 | 28 Mar |
| 574.19 | 4 Apr  |
| 574.79 | 28 May |
| 574.67 | 22 Jun |
| 574.52 | 9 Jul  |
| 574.49 | 20 Aug |
| 574.27 | 7 Sep  |
| 574.21 | 6 Oct  |
| 573.96 | 3 Nov  |
| 574.03 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 573.73 | 31 Jan |
| 573.44 | 3 Feb  |
| 573.73 | 11 Mar |
| 572.46 | 30 Apr |
| 572.99 | 1 May  |
| 574.23 | 27 Jun |
| 574.33 | 31 Jul |
| 574.15 | 31 Aug |
| 573.95 | 25 Sep |
| 573.65 | 3 Oct  |
| 573.10 | 16 Nov |
| 572.91 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 574.60                                                  |     |     |     |     | 1   | 4   |     |     |     |     |     |     | 574.60         | 5                          |
| 574.40                                                  | 1   | 1   | 2   |     | 1   | 8   | 20  | 7   |     |     |     |     | 574.40         | 45                         |
| 574.20                                                  | 8   | 1   | 8   |     | 4   | 18  | 11  | 20  | 6   | 1   |     |     | 574.20         | 122                        |
| 574.00                                                  | 5   |     | 10  | 3   | 10  |     |     | 4   | 22  | 10  |     | 1   | 574.00         | 187                        |
| 573.80                                                  | 13  | 6   | 9   | 2   | 10  |     |     |     | 2   | 19  | 5   | 3   | 573.80         | 256                        |
| 573.60                                                  | 4   | 12  | 2   | 3   | 4   |     |     |     |     | 1   | 16  | 3   | 573.60         | 301                        |
| 573.40                                                  |     | 9   |     | 2   |     |     |     |     |     |     | 7   | 15  | 573.40         | 334                        |
| 573.20                                                  |     |     |     | 1   |     |     |     |     |     |     | 1   | 3   | 573.20         | 339                        |
| 573.00                                                  |     |     |     |     | 5   |     |     |     |     |     | 1   | 5   | 573.00         | 350                        |
| 572.80                                                  |     |     |     |     | 3   | 1   |     |     |     |     |     |     | 572.80         | 355                        |
| 572.60                                                  |     |     |     |     |     | 10  |     |     |     |     |     |     | 572.60         | 365                        |
| 572.40                                                  |     |     |     |     |     | 1   |     |     |     |     |     |     | 572.40         | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4036: Fort Wayne, Detroit, Michigan on Detroit River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 574.43  | 573.70  | 573.98  | 573.99  | 572.99  | 574.36  | 574.49  | 574.35  | 574.21  | 574.16  | 573.70  | 573.25  |
| 2    | 574.33  | 573.62  | 574.04  | 573.98  | 573.70  | 574.39  | 574.46  | 574.34  | 574.18  | 574.01  | 573.53  | 573.71  |
| 3    | 574.34  | 573.44  | 574.06  | 574.11  | 573.93  | 574.26  | 574.43  | 574.35  | 574.16  | 573.65  | 573.96  | 573.07  |
| 4    | 574.35  | 573.47  | 574.11  | 574.19  | 573.79  | 574.33  | 574.43  | 574.38  | 574.15  | 573.99  | 573.78  | 573.05  |
| 5    | 574.36  | 573.49  | 573.82  | 574.01  | 573.85  | 574.35  | 574.43  | 574.35  | 574.26  | 574.16  | 573.62  | 573.54  |
| 6    | 574.30  | 573.55  | 573.76  | 573.77  | 573.95  | 574.32  | 574.38  | 574.29  | 574.23  | 574.21  | 573.70  | 573.21  |
| 7    | 574.34  | 573.58  | 573.87  | 573.62  | 573.98  | 574.31  | 574.35  | 574.31  | 574.27  | 574.04  | 573.81  | 573.10  |
| 8    | 574.21  | 573.52  | 574.18  | 573.53  | 573.78  | 574.23  | 574.49  | 574.37  | 574.11  | 574.02  | 573.83  | 573.19  |
| 9    | 574.25  | 573.56  | 574.12  | 573.65  | 573.75  | 574.31  | 574.52  | 574.30  | 574.06  | 573.99  | 573.72  | 573.50  |
| 10   | 574.20  | 573.59  | 573.96  | 573.45  | 573.90  | 574.27  | 574.48  | 574.39  | 574.10  | 574.00  | 573.74  | 573.50  |
| 11   | 574.10  | 573.59  | 573.73  | 573.14  | 573.96  | 574.30  | 574.39  | 574.46  | 574.20  | 574.02  | 573.60  | 573.50  |
| 12   | 574.03  | 573.62  | 574.17  | 573.18  | 573.87  | 574.36  | 574.45  | 574.43  | 574.26  | 574.00  | 573.66  | 573.46  |
| 13   | 573.92  | 573.63  | 574.11  | 573.08  | 574.18  | 574.27  | 574.50  | 574.42  | 574.07  | 573.96  | 573.83  | 573.55  |
| 14   | 573.90  | 573.66  | 573.87  | 573.14  | 573.97  | 574.39  | 574.47  | 574.41  | 574.26  | 574.00  | 573.95  | 573.90  |
| 15   | 573.84  | 573.75  | 573.84  | 573.02  | 574.04  | 574.48  | 574.40  | 574.31  | 574.17  | 574.06  | 573.56  | 573.62  |
| 16   | 573.92  | 573.90  | 573.83  | 572.85  | 574.05  | 574.43  | 574.34  | 574.34  | 574.15  | 574.02  | 573.10  | 573.57  |
| 17   | 573.87  | 573.88  | 574.28  | 572.68  | 574.08  | 574.39  | 574.33  | 574.41  | 574.19  | 573.95  | 573.55  | 573.54  |
| 18   | 573.87  | 573.88  | 574.39  | 572.74  | 573.98  | 574.32  | 574.36  | 574.36  | 574.14  | 574.03  | 573.72  | 573.49  |
| 19   | 573.80  | 573.85  | 574.33  | 572.71  | 573.99  | 574.49  | 574.41  | 574.44  | 574.06  | 573.88  | 573.77  | 573.41  |
| 20   | 573.79  | 573.74  | 574.40  | 572.70  | 574.05  | 574.62  | 574.39  | 574.49  | 574.04  | 573.85  | 573.69  | 573.34  |
| 21   | 573.87  | 573.78  | 574.20  | 572.74  | 574.14  | 574.62  | 574.44  | 574.35  | 574.17  | 573.89  | 573.77  | 573.83  |
| 22   | 573.82  | 573.81  | 573.89  | 573.31  | 574.04  | 574.67  | 574.46  | 574.21  | 574.15  | 573.92  | 573.61  | 572.91  |
| 23   | 573.86  | 573.78  | 574.13  | 572.83  | 574.06  | 574.64  | 574.35  | 574.28  | 574.05  | 573.89  | 573.51  | 573.47  |
| 24   | 573.97  | 573.76  | 574.37  | 572.61  | 574.17  | 574.35  | 574.38  | 574.33  | 574.08  | 573.87  | 573.62  | 573.54  |
| 25   | 573.94  | 573.65  | 574.44  | 572.69  | 574.15  | 574.47  | 574.44  | 574.30  | 573.95  | 573.96  | 573.64  | 573.18  |
| 26   | 574.01  | 573.76  | 574.32  | 572.79  | 574.23  | 574.54  | 574.47  | 574.24  | 573.96  | 573.83  | 573.65  | 573.56  |
| 27   | 573.95  | 574.34  | 574.34  | 572.80  | 574.44  | 574.23  | 574.45  | 574.18  | 574.19  | 573.90  | 573.71  | 573.70  |
| 28   | 574.04  | 574.46  | 574.59  | 572.73  | 574.79  | 574.45  | 574.45  | 574.18  | 574.14  | 573.81  | 573.35  | 573.54  |
| 29   | 573.83  | 573.94  | 574.39  | 572.98  | 574.29  | 574.53  | 574.43  | 574.24  | 574.10  | 573.93  | 573.57  | 573.57  |
| 30   | 573.78  |         | 574.10  | 572.46  | 574.29  | 574.51  | 574.41  | 574.18  | 574.19  | 573.86  | 573.56  | 573.86  |
| 31   | 573.73  |         | 573.99  |         | 574.32  |         | 574.33  | 574.15  |         | 574.07  |         | 574.03  |
| MEAN | 574.03  | 573.73  | 574.12  | 573.18  | 574.02  | 574.41  | 574.42  | 574.33  | 574.14  | 573.97  | 573.66  | 573.47  |
| MAX. | 574.58  | 575.00  | 574.99  | 574.41  | 575.25  | 574.88  | 574.74  | 574.78  | 574.43  | 574.54  | 574.19  | 574.37  |
| MIN. | 0600/03 | 2100/27 | 0300/29 | 2000/04 | 1700/28 | 2100/23 | 2300/26 | 0400/20 | 1000/14 | 0400/21 | 1000/03 | 1100/14 |
|      | 573.50  | 573.34  | 573.41  | 571.44  | 572.52  | 574.01  | 574.12  | 573.97  | 573.50  | 573.34  | 572.86  | 572.63  |
|      | 1300/20 | 1200/25 | 0800/11 | 1600/30 | 1000/01 | 1600/27 | 2000/17 | 0700/30 | 0400/26 | 1000/03 | 0700/16 | 0500/04 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 573.96

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4049: Windmill Point, Detroit, Michigan on Detroit River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 575.29 Jul  
Daily mean elevation: 575.49 28 May  
Instant/hourly Elevation: 575.94 1700/28 May

LOWEST  
Monthly mean elevation: 573.54 Apr  
Daily mean elevation: 572.89 19 Apr  
Instant/hourly Elevation: 572.04 1100/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 575.15 | 1 Jan  |
| 575.38 | 28 Feb |
| 575.36 | 28 Mar |
| 574.85 | 4 Apr  |
| 575.49 | 28 May |
| 575.48 | 22 Jun |
| 575.35 | 13 Jul |
| 575.38 | 19 Aug |
| 575.15 | 14 Sep |
| 575.06 | 1 Oct  |
| 574.90 | 14 Nov |
| 574.97 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 574.28 | 31 Jan |
| 574.05 | 3 Feb  |
| 574.52 | 15 Mar |
| 572.89 | 19 Apr |
| 573.80 | 1 May  |
| 575.01 | 8 Jun  |
| 575.20 | 17 Jul |
| 575.03 | 28 Aug |
| 574.86 | 25 Sep |
| 574.70 | 3 Oct  |
| 574.34 | 16 Nov |
| 574.07 | 7 Dec  |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 575.40 | | | | | 1 | 4 | | | | | | | 575.40 | 5 |
| 575.20 | | 1 | 5 | | 2 | 10 | 30 | 17 | | | | | 575.20 | 70 |
| 575.00 | 2 | 1 | 6 | | 3 | 16 | 1 | 14 | 21 | 2 | | | 575.00 | 136 |
| 574.80 | 7 | 4 | 8 | 1 | 13 | | | | 9 | 21 | 2 | 1 | 574.80 | 202 |
| 574.60 | 7 | 9 | 10 | 4 | 10 | | | | | 8 | 14 | 4 | 574.60 | 268 |
| 574.40 | 13 | 2 | 2 | 1 | | | | | | | 12 | 13 | 574.40 | 311 |
| 574.20 | 2 | 8 | | 1 | 1 | | | | | | 2 | 9 | 574.20 | 334 |
| 574.00 | | 4 | | | | | | | | | | 4 | 574.00 | 342 |
| 573.80 | | | | 2 | | | | | | | | | 573.80 | 344 |
| 573.60 | | | | 1 | 1 | | | | | | | | 573.60 | 346 |
| 573.40 | | | | 2 | | | | | | | | | 573.40 | 348 |
| 573.20 | | | | 5 | | | | | | | | | 573.20 | 353 |
| 573.00 | | | | 3 | | | | | | | | | 573.00 | 356 |
| 572.80 | | | | 10 | | | | | | | | | 572.80 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4049: Windmill Point, Detroit, Michigan on Detroit River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 575.15 | 574.22 | 574.98 | 574.74 | 573.80 | 575.20 | 575.33 | 575.21 | 575.08 | 575.06 | 574.60 | 574.31 |
| 2 | 575.07 | 574.14 | 574.95 | 574.73 | 574.39 | 575.19 | 575.29 | 575.22 | 575.06 | 574.91 | 574.58 | 574.55 |
| 3 | 574.96 | 574.05 | 574.90 | 574.80 | 574.64 | 575.15 | 575.28 | 575.22 | 575.10 | 574.70 | 574.79 | 574.12 |
| 4 | 574.90 | 574.07 | 574.84 | 574.85 | 574.65 | 575.16 | 575.31 | 575.25 | 575.05 | 574.92 | 574.68 | 574.14 |
| 5 | 574.88 | 574.16 | 574.66 | 574.77 | 574.67 | 575.16 | 575.30 | 575.22 | 575.13 | 575.00 | 574.64 | 574.42 |
| 6 | 574.86 | 574.24 | 574.66 | 574.52 | 574.76 | 575.14 | 575.25 | 575.16 | 575.10 | 575.03 | 574.69 | 574.29 |
| 7 | 574.92 | 574.26 | 574.70 | 574.24 | 574.78 | 575.12 | 575.27 | 575.22 | 575.02 | 574.92 | 574.71 | 574.07 |
| 8 | 574.84 | 574.23 | 574.82 | 573.93 | 574.67 | 575.01 | 575.34 | 575.22 | 574.92 | 574.90 | 574.66 | 574.22 |
| 9 | 574.82 | 574.24 | 574.80 | 573.84 | 574.64 | 575.14 | 575.32 | 575.18 | 574.87 | 574.91 | 574.62 | 574.39 |
| 10 | 574.75 | 574.26 | 574.72 | 573.71 | 574.74 | 575.10 | 575.34 | 575.29 | 574.98 | 574.92 | 574.66 | 574.42 |
| 11 | 574.62 | 574.30 | 574.61 | 573.42 | 574.77 | 575.15 | 575.31 | 575.33 | 575.09 | 574.91 | 574.74 | 574.39 |
| 12 | 574.54 | 574.37 | 574.72 | 573.37 | 574.76 | 575.17 | 575.33 | 575.32 | 575.10 | 574.90 | 574.76 | 574.36 |
| 13 | 574.47 | 574.43 | 574.64 | 573.34 | 574.93 | 575.12 | 575.35 | 575.31 | 574.98 | 574.88 | 574.87 | 574.53 |
| 14 | 574.42 | 574.56 | 574.53 | 573.41 | 574.88 | 575.25 | 575.32 | 575.29 | 575.15 | 574.88 | 574.90 | 574.71 |
| 15 | 574.48 | 574.69 | 574.52 | 573.25 | 574.93 | 575.25 | 575.28 | 575.23 | 575.13 | 574.93 | 574.56 | 574.54 |
| 16 | 574.49 | 574.80 | 574.68 | 573.10 | 574.90 | 575.23 | 575.26 | 575.24 | 575.09 | 574.91 | 574.34 | 574.44 |
| 17 | 574.49 | 574.86 | 574.89 | 572.90 | 574.90 | 575.19 | 575.20 | 575.25 | 575.08 | 574.85 | 574.58 | 574.50 |
| 18 | 574.56 | 574.88 | 575.05 | 572.91 | 574.83 | 575.17 | 575.29 | 575.20 | 575.06 | 574.91 | 574.72 | 574.49 |
| 19 | 574.62 | 574.84 | 575.06 | 572.89 | 574.85 | 575.32 | 575.28 | 575.38 | 575.01 | 574.74 | 574.77 | 574.44 |
| 20 | 574.64 | 574.77 | 575.11 | 572.93 | 574.90 | 575.41 | 575.24 | 575.28 | 574.98 | 574.79 | 574.71 | 574.37 |
| 21 | 574.70 | 574.77 | 575.08 | 572.98 | 574.93 | 575.44 | 575.31 | 575.20 | 575.06 | 574.80 | 574.73 | 574.65 |
| 22 | 574.67 | 574.71 | 575.00 | 573.31 | 574.83 | 575.48 | 575.31 | 575.14 | 575.03 | 574.84 | 574.55 | 574.09 |
| 23 | 574.61 | 574.68 | 575.14 | 573.02 | 574.92 | 575.46 | 575.21 | 575.17 | 574.96 | 574.83 | 574.54 | 574.37 |
| 24 | 574.55 | 574.69 | 575.25 | 572.93 | 574.94 | 575.32 | 575.30 | 575.20 | 574.97 | 574.83 | 574.57 | 574.56 |
| 25 | 574.50 | 574.62 | 575.30 | 572.94 | 574.93 | 575.37 | 575.30 | 575.15 | 574.86 | 574.85 | 574.55 | 574.27 |
| 26 | 574.55 | 574.69 | 575.21 | 572.96 | 575.12 | 575.35 | 575.31 | 575.11 | 574.99 | 574.80 | 574.55 | 574.54 |
| 27 | 574.56 | 575.01 | 575.17 | 572.98 | 575.24 | 575.12 | 575.33 | 575.03 | 575.11 | 574.78 | 574.54 | 574.62 |
| 28 | 574.59 | 575.38 | 575.36 | 572.99 | 575.49 | 575.29 | 575.34 | 575.03 | 575.05 | 574.76 | 574.38 | 574.46 |
| 29 | 574.41 | 574.98 | 575.24 | 573.26 | 575.26 | 575.39 | 575.30 | 575.08 | 575.07 | 574.86 | 574.48 | 574.54 |
| 30 | 574.34 | | 574.97 | 573.05 | 575.19 | 575.36 | 575.26 | 575.10 | 575.09 | 574.77 | 574.48 | 574.79 |
| 31 | 574.28 | | 574.80 | | 575.19 | | 575.21 | 575.07 | | 574.92 | | 574.97 |
| MEAN | 574.65 | 574.55 | 574.91 | 573.54 | 574.85 | 575.24 | 575.29 | 575.20 | 575.04 | 574.87 | 574.63 | 574.44 |
| MAX. | 575.19 | 575.57 | 575.72 | 574.98 | 575.94 | 575.62 | 575.51 | 575.52 | 575.29 | 575.29 | 574.99 | 575.18 |
| | 0200/01 | 1300/28 | 2100/28 | 2000/04 | 1700/28 | 2100/23 | 1900/28 | 1500/19 | 2100/14 | 0400/21 | 0500/11 | 2300/31 |
| MIN. | 574.26 | 574.02 | 574.42 | 572.04 | 573.42 | 574.79 | 575.01 | 574.81 | 574.62 | 574.43 | 574.08 | 573.70 |
| | 2400/31 | 0400/04 | 0500/11 | 1100/30 | 0100/01 | 1200/08 | 0500/06 | 0700/30 | 2000/25 | 1300/03 | 2200/15 | 2000/07 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 574.77

ANNUAL SUMMARY OF LEVELS, 1984
Station 4052: St. Clair Shores, Michigan on Lake St. Clair

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 575.51 Jul
Daily mean elevation: 575.67 22 Jun
Instant/hourly Elevation: 575.79 1700/28 May

LOWEST
Monthly mean elevation: 573.64 Apr
Daily mean elevation: 572.96 19 Apr
Instant/hourly Elevation: 572.78 1048/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 575.27 | 1 Jan |
| 575.37 | 28 Feb |
| 575.51 | 21 Mar |
| 575.01 | 4 Apr |
| 575.54 | 28 May |
| 575.67 | 22 Jun |
| 575.56 | 13 Jul |
| 575.50 | 13 Aug |
| 575.33 | 6 Sep |
| 575.20 | 1 Oct |
| 575.11 | 14 Nov |
| 575.13 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 574.48 | 31 Jan |
| 574.27 | 3 Feb |
| 574.76 | 15 Mar |
| 572.96 | 19 Apr |
| 574.07 | 1 May |
| 575.29 | 8 Jun |
| 575.44 | 31 Jul |
| 575.28 | 28 Aug |
| 575.09 | 25 Sep |
| 574.95 | 28 Oct |
| 574.64 | 28 Nov |
| 574.41 | 4 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 575.60         |     |     |     |     |     | 3   |     |     |     |     |     |     | 575.60         | 3                          |
| 575.40         |     |     | 7   |     | 5   | 13  | 31  | 20  |     |     |     |     | 575.40         | 79                         |
| 575.20         | 1   | 3   | 9   |     | 1   | 14  |     | 11  | 23  |     |     |     | 575.20         | 141                        |
| 575.00         | 7   | 6   | 7   | 1   | 14  |     |     |     | 7   | 24  | 3   | 1   | 575.00         | 211                        |
| 574.80         | 5   | 6   | 7   | 4   | 8   |     |     |     |     | 7   | 17  | 4   | 574.80         | 269                        |
| 574.60         | 14  | 2   | 1   | 1   | 1   |     |     |     |     |     | 10  | 18  | 574.60         | 316                        |
| 574.40         | 4   | 7   |     |     | 1   |     |     |     |     |     |     | 8   | 574.40         | 336                        |
| 574.20         |     | 5   |     | 1   |     |     |     |     |     |     |     |     | 574.20         | 342                        |
| 574.00         |     |     |     | 1   | 1   |     |     |     |     |     |     |     | 574.00         | 344                        |
| 573.80         |     |     |     | 1   |     |     |     |     |     |     |     |     | 573.80         | 345                        |
| 573.60         |     |     |     | 1   |     |     |     |     |     |     |     |     | 573.60         | 346                        |
| 573.40         |     |     |     | 5   |     |     |     |     |     |     |     |     | 573.40         | 351                        |
| 573.20         |     |     |     | 3   |     |     |     |     |     |     |     |     | 573.20         | 354                        |
| 573.00         |     |     |     | 8   |     |     |     |     |     |     |     |     | 573.00         | 362                        |
| 572.80         |     |     |     | 4   |     |     |     |     |     |     |     |     | 572.80         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4052: St. Clair Shores, Michigan on Lake St. Clair

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 575.27  | 574.40  | 575.32  | 574.93  | 574.07  | 575.41  | 575.52  | 575.43  | 575.32  | 575.20  | 574.88  | 574.58  |
| 2    | 575.20  | 574.33  | 575.27  | 574.91  | 574.58  | 575.38  | 575.52  | 575.44  | 575.32  | 575.14  | 574.77  | 574.75  |
| 3    | 575.14  | 574.27  | 575.21  | 574.96  | 574.79  | 575.36  | 575.50  | 575.44  | 575.26  | 574.97  | 575.02  | 574.45  |
| 4    | 575.05  | 574.30  | 575.18  | 575.01  | 574.84  | 575.38  | 575.51  | 575.46  | 575.26  | 575.10  | 574.93  | 574.41  |
| 5    | 575.05  | 574.35  | 575.07  | 574.94  | 574.89  | 575.37  | 575.52  | 575.44  | 575.31  | 575.18  | 574.83  | 574.63  |
| 6    | 575.03  | 574.44  | 575.00  | 574.69  | 574.97  | 575.35  | 575.48  | 575.40  | 575.33  | 575.18  | 574.88  | 574.50  |
| 7    | 575.10  | 574.46  | 575.05  | 574.37  | 574.99  | 575.34  | 575.47  | 575.42  | 575.30  | 575.12  | 574.92  | 574.45  |
| 8    | 575.04  | 574.44  | 575.09  | 574.02  | 574.90  | 575.29  | 575.56  | 575.44  | 575.21  | 575.10  | 574.91  | 574.51  |
| 9    | 574.99  | 574.43  | 575.10  | 573.89  | 574.88  | 575.36  | 575.56  | 575.43  | 575.17  | 575.09  | 574.86  | 574.61  |
| 10   | 574.91  | 574.44  | 575.04  | 573.76  | 574.97  | 575.34  | 575.55  | 575.47  | 575.22  | 575.08  | 574.86  | 574.61  |
| 11   | 574.78  | 574.51  | 574.88  | 573.51  | 575.01  | 575.35  | 575.52  | 575.48  | 575.28  | 575.08  | 574.82  | 574.62  |
| 12   | 574.68  | 574.56  | 574.94  | 573.43  | 574.98  | 575.39  | 575.54  | 575.49  | 575.30  | 575.08  | 574.93  | 574.58  |
| 13   | 574.62  | 574.64  | 574.89  | 573.45  | 575.11  | 575.35  | 575.56  | 575.50  | 575.20  | 575.06  | 575.05  | 574.67  |
| 14   | 574.59  | 574.79  | 574.81  | 573.49  | 575.09  | 575.40  | 575.55  | 575.48  | 575.29  | 575.07  | 575.11  | 574.84  |
| 15   | 574.64  | 574.92  | 574.76  | 573.35  | 575.12  | 575.42  | 575.52  | 575.44  | 575.27  | 575.09  | 574.90  | 574.74  |
| 16   | 574.66  | 575.02  | 574.92  | 573.16  | 575.11  | 575.43  | 575.45  | 575.43  | 575.27  | 575.09  | 574.67  | 574.71  |
| 17   | 574.66  | 575.10  | 575.22  | 572.98  | 575.12  | 575.41  | 575.46  | 575.44  | 575.30  | 575.05  | 574.82  | 574.71  |
| 18   | 574.71  | 575.13  | 575.37  | 572.98  | 575.08  | 575.39  | 575.50  | 575.42  | 575.26  | 575.07  | 574.90  | 574.70  |
| 19   | 574.79  | 575.13  | 575.40  | 572.96  | 575.07  | 575.50  | 575.52  | 575.48  | 575.21  | 574.99  | 574.90  | 574.69  |
| 20   | 574.81  | 575.06  | 575.46  | 573.01  | 575.10  | 575.59  | 575.51  | 575.48  | 575.19  | 574.98  | 574.87  | 574.64  |
| 21   | 574.86  | 575.02  | 575.51  | 573.00  | 575.12  | 575.62  | 575.53  | 575.44  | 575.24  | 575.00  | 574.90  | 574.87  |
| 22   | 574.83  | 574.97  | 575.41  | 573.25  | 575.10  | 575.67  | 575.52  | 575.37  | 575.22  | 575.01  | 574.81  | 574.47  |
| 23   | 574.76  | 574.91  | 575.38  | 573.10  | 575.13  | 575.66  | 575.45  | 575.34  | 575.15  | 575.02  | 574.77  | 574.68  |
| 24   | 574.72  | 574.88  | 575.48  | 573.03  | 575.19  | 575.54  | 575.47  | 575.39  | 575.18  | 575.00  | 574.78  | 574.74  |
| 25   | 574.68  | 574.85  | 575.47  | 573.03  | 575.18  | 575.57  | 575.49  | 575.38  | 575.09  | 575.06  | 574.77  | 574.61  |
| 26   | 574.73  | 574.94  | 575.41  | 573.03  | 575.32  | 575.57  | 575.51  | 575.34  | 575.16  | 575.01  | 574.76  | 574.77  |
| 27   | 574.75  | 575.22  | 575.37  | 573.07  | 575.42  | 575.41  | 575.52  | 575.29  | 575.29  | 575.01  | 574.76  | 574.84  |
| 28   | 574.76  | 575.37  | 575.46  | 573.09  | 575.54  | 575.49  | 575.52  | 575.28  | 575.26  | 574.95  | 574.64  | 574.72  |
| 29   | 574.59  | 575.29  | 575.36  | 573.35  | 575.43  | 575.53  | 575.49  | 575.32  | 575.24  | 575.03  | 574.69  | 574.79  |
| 30   | 574.52  |         | 575.16  | 573.53  | 575.41  | 575.53  | 575.47  | 575.30  | 575.24  | 574.96  | 574.70  | 575.00  |
| 31   | 574.48  |         | 574.99  |         | 575.42  |         | 575.44  | 575.29  |         | 575.07  |         | 575.13  |
| MEAN | 574.82  | 574.76  | 575.19  | 573.64  | 575.06  | 575.45  | 575.51  | 575.41  | 575.24  | 575.06  | 574.85  | 574.68  |
| MAX. | 575.31  | 575.56  | 575.70  | 575.07  | 575.79  | 575.77  | 575.67  | 575.62  | 575.43  | 575.36  | 575.15  | 575.26  |
|      | 0200/01 | 0700/28 | 2100/28 | 2000/04 | 1700/28 | 2300/22 | 0900/06 | 2100/08 | 0500/02 | 0400/21 | 2000/14 | 2400/31 |
| MIN. | 574.44  | 574.26  | 574.67  | 572.78  | 573.66  | 575.20  | 575.29  | 575.02  | 574.76  | 574.81  | 574.50  | 574.10  |
|      | 2400/31 | 0100/04 | 0600/16 | 1048/30 | 0200/01 | 0600/11 | 2100/23 | 1000/30 | 2000/25 | 1700/21 | 0900/02 | 1300/22 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 574.97

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4070: Algonac, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 576.00 Jul  
Daily mean elevation: 576.45 6 Apr  
Instant/hourly Elevation: 576.72 0700/6 Apr

LOWEST  
Monthly mean elevation: 574.61 Apr  
Daily mean elevation: 573.43 22 Apr  
Instant/hourly Elevation: 573.22 1700/22 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 575.81 | 7 Jan  |
| 575.84 | 29 Feb |
| 576.10 | 9 Mar  |
| 576.45 | 6 Apr  |
| 575.88 | 29 May |
| 576.07 | 24 Jun |
| 576.08 | 17 Jul |
| 576.01 | 9 Aug  |
| 575.89 | 2 Sep  |
| 575.78 | 3 Oct  |
| 575.69 | 15 Nov |
| 575.53 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 575.16 | 13 Jan |
| 575.06 | 2 Feb  |
| 575.45 | 15 Mar |
| 573.43 | 22 Apr |
| 575.06 | 2 May  |
| 575.79 | 5 Jun  |
| 575.95 | 30 Jul |
| 575.81 | 28 Aug |
| 575.72 | 30 Sep |
| 575.51 | 31 Oct |
| 575.24 | 26 Nov |
| 575.16 | 9 Dec  |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 576.40 | | | | 1 | | | | | | | | | 576.40 | 1 |
| 576.20 | | | | | | | | | | | | | 576.20 | 1 |
| 576.00 | | | 3 | 1 | | 5 | 14 | 1 | | | | | 576.00 | 25 |
| 575.80 | 1 | 1 | 13 | | 4 | 20 | 17 | 30 | 21 | | | | 575.80 | 132 |
| 575.60 | 8 | | 7 | 3 | 5 | 5 | | | 9 | 12 | 5 | | 575.60 | 186 |
| 575.40 | 4 | 15 | 8 | 3 | 17 | | | | | 19 | 18 | 8 | 575.40 | 278 |
| 575.20 | 12 | 9 | | 1 | 2 | | | | | | 7 | 19 | 575.20 | 328 |
| 575.00 | 2 | 4 | | | 3 | | | | | | | 4 | 575.00 | 341 |
| 574.80 | | | | | | | | | | | | | 574.80 | 341 |
| 574.60 | | | | 2 | | | | | | | | | 574.60 | 343 |
| 574.40 | | | | 5 | | | | | | | | | 574.40 | 348 |
| 574.20 | | | | 2 | | | | | | | | | 574.20 | 350 |
| 574.00 | | | | 4 | | | | | | | | | 574.00 | 354 |
| 573.80 | | | | 3 | | | | | | | | | 573.80 | 357 |
| 573.60 | | | | 3 | | | | | | | | | 573.60 | 360 |
| 573.40 | | | | 2 | | | | | | | | | 573.40 | 362 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4070: Algonac, Michigan on St. Clair River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 575.66 | 575.11 | 575.91 | 575.66 | 575.06 | 575.82 | 575.95 | 575.94 | 575.89 | 575.70 | 575.56 | 575.39 |
| 2 | 575.64 | 575.06 | 575.88 | 575.58 | 575.06 | 575.79 | 575.97 | 575.93 | 575.89 | 575.76 | 575.52 | 575.28 |
| 3 | 575.55 | 575.12 | 575.89 | 575.63 | 575.20 | 575.80 | 575.97 | 575.93 | 575.81 | 575.78 | 575.50 | 575.44 |
| 4 | 575.68 | 575.27 | 575.85 | 575.59 | 575.33 | 575.80 | 575.97 | 575.93 | 575.84 | 575.65 | 575.49 | 575.34 |
| 5 | 575.64 | 575.46 | 575.72 | 576.04 | 575.41 | 575.79 | 576.00 | 575.94 | 575.84 | 575.62 | 575.49 | 575.25 |
| 6 | 575.78 | 575.60 | 575.59 | 576.45 | 575.40 | 575.80 | 576.03 | 575.95 | 575.85 | 575.60 | 575.49 | 575.28 |
| 7 | 575.81 | 575.55 | 575.59 | 575.67 | 575.41 | 575.84 | 576.01 | 575.92 | 575.86 | 575.62 | 575.47 | 575.45 |
| 8 | 575.74 | 575.50 | 575.88 | 574.80 | 575.47 | 575.90 | 575.99 | 575.93 | 575.85 | 575.63 | 575.48 | 575.30 |
| 9 | 575.69 | 575.50 | 576.10 | 574.50 | 575.49 | 575.87 | 576.04 | 576.01 | 575.79 | 575.62 | 575.45 | 575.16 |
| 10 | 575.50 | 575.43 | 575.86 | 574.57 | 575.46 | 575.89 | 576.01 | 575.98 | 575.81 | 575.60 | 575.43 | 575.17 |
| 11 | 575.29 | 575.37 | 575.94 | 574.41 | 575.48 | 575.86 | 576.04 | 575.96 | 575.81 | 575.62 | 575.55 | 575.24 |
| 12 | 575.19 | 575.27 | 575.51 | 574.39 | 575.50 | 575.84 | 576.03 | 575.98 | 575.84 | 575.62 | 575.64 | 575.19 |
| 13 | 575.16 | 575.18 | 575.45 | 574.49 | 575.49 | 575.86 | 576.02 | 576.00 | 575.85 | 575.60 | 575.61 | 575.17 |
| 14 | 575.25 | 575.31 | 575.54 | 574.69 | 575.55 | 575.82 | 576.02 | 576.00 | 575.83 | 575.59 | 575.61 | 575.22 |
| 15 | 575.26 | 575.44 | 575.45 | 574.16 | 575.55 | 575.84 | 576.04 | 575.99 | 575.83 | 575.59 | 575.69 | 575.28 |
| 16 | 575.24 | 575.50 | 575.64 | 573.83 | 575.55 | 575.84 | 576.01 | 575.96 | 575.87 | 575.60 | 575.65 | 575.32 |
| 17 | 575.28 | 575.56 | 575.58 | 573.64 | 575.55 | 575.83 | 576.08 | 575.95 | 575.88 | 575.58 | 575.59 | 575.35 |
| 18 | 575.37 | 575.57 | 575.77 | 573.55* | 575.54 | 575.88 | 576.03 | 575.97 | 575.85 | 575.59 | 575.50 | 575.33 |
| 19 | 575.42* | 575.57 | 575.80 | 573.76* | 575.53 | 575.92 | 576.03 | 575.92 | 575.82 | 575.62 | 575.44 | 575.36 |
| 20 | / | 575.55 | 575.82 | 573.84 | 575.52 | 575.96 | 576.05 | 575.95 | 575.79 | 575.57 | 575.45 | 575.39 |
| 21 | / | 575.51 | 575.96 | 573.71 | 575.50 | 576.01 | 575.99 | 575.97 | 575.78 | 575.65 | 575.43 | 575.30 |
| 22 | / | 575.41 | 576.04 | 573.43 | 575.57 | 576.01 | 575.97 | 575.93 | 575.74 | 575.58 | 575.52 | 575.50 |
| 23 | / | 575.35 | 575.89 | 573.89 | 575.63 | 576.01 | 575.99 | 575.86 | 575.78 | 575.60 | 575.41 | 575.53 |
| 24 | 575.23* | 575.32 | 575.94 | 574.16 | 575.66 | 576.07 | 575.96 | 575.87 | 575.74 | 575.58 | 575.35 | 575.39 |
| 25 | 575.35 | 575.36 | 575.86 | 574.32 | 575.74 | 575.98 | 575.96 | 575.89 | 575.82 | 575.59 | 575.30 | 575.52 |
| 26 | 575.52 | 575.35 | 575.78 | 574.11 | 575.82 | 575.96 | 575.98 | 575.85 | 575.82 | 575.58 | 575.24 | 575.39 |
| 27 | 575.64 | 575.32 | 575.72 | 574.16 | 575.80 | 576.02 | 575.98 | 575.84 | 575.81 | 575.56 | 575.25 | 575.35 |
| 28 | 575.36 | 575.51 | 575.60 | 574.51 | 575.78 | 575.92 | 575.97 | 575.81 | 575.80 | 575.59 | 575.35* | 575.40 |
| 29 | 575.23 | 575.84 | 575.66 | 575.42 | 575.88 | 575.89 | 575.97 | 575.87 | 575.77 | 575.54 | 575.38 | 575.48 |
| 30 | 575.31 | | 576.02 | 575.23 | 575.87 | 575.96 | 575.95 | 575.88 | 575.72 | 575.55 | 575.37 | 575.51 |
| 31 | 575.23 | | 575.94 | | 575.83 | | 575.96 | 575.90 | | 575.51 | | 575.53 |
| MEAN | 575.45 | 575.41 | 575.78 | 574.61 | 575.54 | 575.89 | 576.00 | 575.93 | 575.82 | 575.61 | 575.47 | 575.35 |
| MAX. | 575.87 | 575.90 | 576.28 | 576.72 | 576.16 | 576.16 | 576.23 | 576.25 | 576.17 | 575.96 | 575.87 | 575.82 |
| | 0700/08 | 0800/29 | 1500/30 | 0700/06 | 1500/25 | 2400/24 | 2000/17 | 1700/18 | 1800/02 | 0100/03 | 1900/01 | 2000/25 |
| MIN. | 575.11 | 574.94 | 575.28 | 573.22 | 574.93 | 575.68 | 575.84 | 575.66 | 575.65 | 575.34 | 575.18 | 575.00 |
| | 1400/13 | 2200/02 | 1200/15 | 1700/22 | 2200/01 | 0200/03 | 1900/04 | 0800/30 | 0500/02 | 0300/21 | 1800/27 | 0700/12 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 575.57

ANNUAL SUMMARY OF LEVELS, 1984
Station 4080: St. Clair S.P., St. Clair, Michigan on St. Clair River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 577.54 Jul
Daily mean elevation: 578.94 7 Apr
Instant/hourly Elevation: 579.38 1800/7 Apr

LOWEST
Monthly mean elevation: 576.88 Dec
Daily mean elevation: 576.45 13 Feb
Instant/hourly Elevation: 575.97 1800/22 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.05 | 11 Jan |
| 577.43 | 1 Feb |
| 577.65 | 13 Mar |
| 578.94 | 7 Apr |
| 577.44 | 29 May |
| 577.59 | 24 Jun |
| 577.61 | 18 Jul |
| 577.57 | 11 Aug |
| 577.50 | 26 Sep |
| 577.42 | 3 Oct |
| 577.52 | 11 Nov |
| 577.08 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 577.17 | 3 Jan |
| 576.45 | 13 Feb |
| 576.76 | 17 Mar |
| 576.53 | 30 Apr |
| 576.77 | 2 May |
| 577.19 | 2 Jun |
| 577.45 | 10 Jul |
| 577.30 | 28 Aug |
| 577.18 | 8 Sep |
| 577.00 | 19 Oct |
| 576.74 | 26 Nov |
| 576.68 | 12 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 578.80         |     |     |     | 1   |     |     |     |     |     |     |     |     | 578.80         | 1                          |
| 578.60         |     |     |     |     |     |     |     |     |     |     |     |     | 578.60         | 1                          |
| 578.40         |     |     |     |     |     |     |     |     |     |     |     |     | 578.40         | 1                          |
| 578.20         |     |     |     | 2   |     |     |     |     |     |     |     |     | 578.20         | 3                          |
| 578.00         | 2   |     |     | 5   |     |     |     |     |     |     |     |     | 578.00         | 10                         |
| 577.80         | 1   |     |     | 4   |     |     |     |     |     |     |     |     | 577.80         | 15                         |
| 577.60         | 7   |     | 2   | 2   |     |     | 2   |     |     |     |     |     | 577.60         | 28                         |
| 577.40         | 13  | 1   |     | 1   | 1   | 13  | 29  | 26  | 9   | 1   | 2   |     | 577.40         | 124                        |
| 577.20         | 6   | 3   | 3   | 4   | 5   | 16  |     | 5   | 19  | 7   | 4   |     | 577.20         | 196                        |
| 577.00         | 2   | 5   | 13  |     | 13  | 1   |     |     | 2   | 22  | 11  | 7   | 577.00         | 272                        |
| 576.80         |     | 8   | 10  | 9   | 10  |     |     |     |     | 1   | 11  | 13  | 576.80         | 334                        |
| 576.60         |     | 10  | 3   | 1   | 2   |     |     |     |     |     | 2   | 11  | 576.60         | 363                        |
| 576.40         |     | 2   |     | 1   |     |     |     |     |     |     |     |     | 576.40         | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4080: St. Clair S.P., St. Clair, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 577.43  | 577.43  | 577.20  | 576.85  | 576.80  | 577.28  | 577.48  | 577.50  | 577.43  | 577.28  | 576.98  | 576.96  |
| 2    | 577.49  | 577.17  | 577.10  | 576.82  | 576.77  | 577.19  | 577.48  | 577.49  | 577.36  | 577.27  | 577.27  | 576.83  |
| 3    | 577.17  | 576.96  | 577.07  | 576.85  | 576.82  | 577.26  | 577.48  | 577.49  | 577.43  | 577.42  | 577.00  | 576.79  |
| 4    | 577.47  | 577.03  | 576.91  | 576.84  | 576.93  | 577.29  | 577.48  | 577.49  | 577.44  | 577.31  | 576.95  | 576.96  |
| 5    | 577.53  | 577.01  | 576.77  | 577.40  | 576.95  | 577.22  | 577.50  | 577.46  | 577.42  | 577.22  | 577.17  | 576.84  |
| 6    | 577.68  | 577.08  | 576.88  | 578.27  | 576.93  | 577.24  | 577.55  | 577.46  | 577.38  | 577.07  | 577.17  | 576.95  |
| 7    | 577.43  | 577.31  | 576.84  | 578.94  | 576.90  | 577.23  | 577.61  | 577.50  | 577.19  | 577.07  | 577.02  | 576.91  |
| 8    | 577.58  | 577.09  | 576.96  | 577.93  | 576.98  | 577.23  | 577.54  | 577.47  | 577.18  | 577.13  | 576.86  | 576.93  |
| 9    | 577.64  | 576.91  | 577.29  | 577.55  | 577.01  | 577.31  | 577.48  | 577.50  | 577.29  | 577.19  | 576.99  | 576.68  |
| 10   | 578.02  | 576.67  | 577.02  | 577.93  | 576.99  | 577.28  | 577.45  | 577.56  | 577.32  | 577.16  | 577.05  | 576.75  |
| 11   | 578.05  | 576.65  | 577.27  | 577.70  | 576.94  | 577.37  | 577.57  | 577.57  | 577.35  | 577.16  | 577.52  | 576.70  |
| 12   | 577.85  | 576.53  | 577.62  | 578.04  | 577.02  | 577.27  | 577.57  | 577.56  | 577.28  | 577.14  | 577.42  | 576.68  |
| 13   | 577.66  | 576.45  | 577.65  | 578.03  | 577.01  | 577.34  | 577.53  | 577.55  | 577.31  | 577.13  | 577.25  | 576.88  |
| 14   | 577.79  | 576.65  | 577.24  | 578.16  | 577.07  | 577.39  | 577.53  | 577.52  | 577.45  | 577.13  | 577.07  | 576.74  |
| 15   | 577.58  | 576.79  | 576.77  | 577.28  | 577.12  | 577.37  | 577.56  | 577.51  | 577.41  | 577.06  | 577.05  | 576.77  |
| 16   | 577.46  | 576.81  | 577.03  | 576.94  | 577.05  | 577.32  | 577.57  | 577.52  | 577.44  | 577.07  | 577.26  | 576.71  |
| 17   | 577.47  | 576.83  | 576.76  | 576.88  | 577.01  | 577.29  | 577.59  | 577.46  | 577.42  | 577.07  | 577.26  | 576.96  |
| 18   | 577.49  | 576.83  | 576.83  | 576.78  | 576.98  | 577.41  | 577.61  | 577.48  | 577.36  | 577.16  | 577.14  | 576.90  |
| 19   | 577.46  | 576.78  | 576.88  | 577.22  | 577.05  | 577.47  | 577.57  | 577.56  | 577.37  | 577.00  | 577.08  | 576.87  |
| 20   | 577.57  | 576.87  | 576.90  | 578.10  | 577.03  | 577.48  | 577.60  | 577.47  | 577.39  | 577.16  | 577.13  | 576.97  |
| 21   | 577.43  | 576.84  | 577.01  | 578.12  | 576.99  | 577.52  | 577.55  | 577.42  | 577.35  | 577.23  | 577.04  | 576.73  |
| 22   | 577.40  | 576.67  | 577.12  | 576.95  | 577.03  | 577.50  | 577.50  | 577.40  | 577.21  | 577.18  | 576.94  | 576.88  |
| 23   | 577.28  | 576.65  | 577.17  | 576.95  | 577.12  | 577.50  | 577.53  | 577.51  | 577.32  | 577.21  | 577.03  | 577.07  |
| 24   | 577.24  | 576.76  | 577.14  | 577.83  | 577.08  | 577.59  | 577.58  | 577.44  | 577.24  | 577.14  | 576.93  | 577.01  |
| 25   | 577.33  | 576.90  | 577.09  | 577.65  | 577.13  | 577.56  | 577.55  | 577.43  | 577.35  | 577.16  | 576.84  | 577.01  |
| 26   | 577.34  | 576.78  | 577.03  | 576.97  | 577.31  | 577.47  | 577.53  | 577.36  | 577.50  | 577.10  | 576.74  | 577.05  |
| 27   | 577.18  | 576.76  | 576.95  | 577.30  | 577.29  | 577.48  | 577.57  | 577.32  | 577.37  | 577.03  | 576.76  | 576.76  |
| 28   | 577.27  | 577.31  | 576.92  | 578.31  | 577.30  | 577.53  | 577.55  | 577.30  | 577.35  | 577.21  | 576.91  | 576.79  |
| 29   | 577.63  | 577.22  | 576.93  | 577.95  | 577.44  | 577.47  | 577.52  | 577.33  | 577.35  | 577.12  | 576.95  | 577.02  |
| 30   | 577.77  |         | 577.17  | 576.53  | 577.35  | 577.51  | 577.49  | 577.45  | 577.28  | 577.10  | 576.86  | 577.08  |
| 31   | 577.67  |         | 577.06  |         | 577.31  |         | 577.49  | 577.47  |         | 577.11  |         | 577.08  |
| MEAN | 577.53  | 576.89  | 577.05  | 577.50  | 577.06  | 577.38  | 577.54  | 577.47  | 577.35  | 577.15  | 577.05  | 576.88  |
| MAX. | 578.24  | 577.66  | 577.86  | 579.38  | 577.63  | 577.87  | 577.80  | 578.05  | 578.01  | 577.67  | 577.78  | 577.33  |
| MIN. | 2100/10 | 2100/28 | 1000/13 | 1800/07 | 0500/29 | 2100/24 | 1300/11 | 0500/30 | 2200/25 | 1000/03 | 1100/11 | 2100/25 |
|      | 576.65  | 576.29  | 576.50  | 575.97  | 576.44  | 576.98  | 577.14  | 577.08  | 576.98  | 576.72  | 576.65  | 576.35  |
|      | 1900/03 | 1200/13 | 1100/15 | 1800/22 | 0100/01 | 2000/02 | 2300/10 | 0900/30 | 0400/13 | 2300/31 | 1800/26 | 2000/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 577.24

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4084: Marysville, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 578.48 Apr  
Daily mean elevation: 579.44 21 Apr  
Instant/hourly Elevation: 579.84 0200/21 Apr

LOWEST  
Monthly mean elevation: 577.58 Feb  
Daily mean elevation: 577.16 13 Feb  
Instant/hourly Elevation: 576.90 1100/15 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.59 | 10 Jan |
| 578.25 | 28 Feb |
| 578.13 | 12 Mar |
| 579.44 | 21 Apr |
| 578.29 | 29 May |
| 578.10 | 4 Jun  |
| 578.47 | 24 Jul |
| 578.50 | 19 Aug |
| 578.45 | 26 Sep |
| 578.26 | 3 Oct  |
| 578.51 | 11 Nov |
| 577.92 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 577.77 | 24 Jan |
| 577.16 | 13 Feb |
| 577.34 | 15 Mar |
| 577.28 | 30 Apr |
| 577.66 | 2 May  |
| 577.99 | 2 Jun  |
| 578.31 | 14 Jul |
| 578.13 | 28 Aug |
| 578.03 | 22 Sep |
| 577.74 | 19 Oct |
| 577.54 | 26 Nov |
| 577.48 | 11 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 579.40 | | | | 1 | | | | | | | | | 579.40 | 1 |
| 579.20 | | | | 1 | | | | | | | | | 579.20 | 2 |
| 579.00 | | | | 2 | | | | | | | | | 579.00 | 4 |
| 578.80 | | | | 7 | | | | | | | | | 578.80 | 11 |
| 578.60 | | | | 3 | | | | | | | | | 578.60 | 14 |
| 578.40 | 4 | | | 4 | | | 5 | 7 | 1 | | 1 | | 578.40 | 36 |
| 578.20 | 10 | 1 | | 6 | 1 | | 15 | 20 | 11 | 1 | 1 | | 578.20 | 102 |
| 578.00 | 9 | | 2 | 1 | 5 | 3 | | 4 | 7 | 15 | 8 | | 578.00 | 156 |
| 577.80 | 7 | 3 | 3 | | 15 | 1 | | | | 14 | 7 | 11 | 577.80 | 217 |
| 577.60 | 1 | 6 | 15 | | 10 | | | | | 1 | 11 | 7 | 577.60 | 268 |
| 577.40 | | 12 | 8 | 4 | | | | | | | 2 | 11 | 577.40 | 305 |
| 577.20 | | 6 | 3 | 1 | | | | | | | | | 577.20 | 315 |
| 577.00 | | 1 | | | | | | | | | | | 577.00 | 316 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4084: Marysville, Michigan on St. Clair River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 578.52 | 577.98 | 577.92 | 577.48 | 577.73 | 578.08 | / | 578.35 | 578.34* | 578.16 | 577.72 | 577.81 |
| 2 | 578.54 | 577.74 | 577.80 | 577.49 | 577.66 | 577.99 | / | 578.33 | / | 578.11 | 578.17 | 577.66 |
| 3 | 578.16 | 577.55 | 577.75 | 577.52 | 577.70 | 578.09 | / | 578.35 | / | 578.26 | 577.85 | 577.55 |
| 4 | 578.39 | 577.64 | 577.53 | 577.53 | 577.81 | 578.10* | / | 578.32 | / | 578.14 | 577.73 | 577.86 |
| 5 | 578.18 | 577.68 | 577.40 | 578.01 | 577.81 | / | / | 578.29 | / | 578.04 | 578.06 | 577.72 |
| 6 | 578.36 | 577.76 | 577.62 | 578.61 | 577.73 | / | / | 578.29 | / | 577.87 | 578.07 | 577.84 |
| 7 | 578.14 | 577.89 | 577.57 | 579.15 | 577.68 | / | / | 578.34 | / | 577.86 | 577.84 | 577.68 |
| 8 | 578.23 | 577.68 | 577.58 | 578.95 | 577.79 | / | / | 578.28 | / | 577.96 | 577.62 | 577.82 |
| 9 | 578.29 | 577.58 | 577.76 | 578.70 | 577.82 | / | / | 578.35 | / | 578.04 | 577.79 | 577.52 |
| 10 | 578.59 | 577.34 | 577.42 | 578.96 | 577.81 | / | / | 578.43 | / | 578.02 | 577.85 | 577.60* |
| 11 | 578.57 | 577.36 | 577.96 | 578.99 | 577.73 | / | / | 578.46 | / | 578.03 | 578.51 | 577.48 |
| 12 | 578.36 | 577.28 | 578.13 | 578.86 | 577.85 | / | 578.33* | 578.45 | / | 578.01 | 578.35 | 577.53 |
| 13 | 578.21 | 577.16 | 578.09 | 578.48 | 577.85 | / | 578.33 | 578.43 | 578.24* | 577.97 | 578.16 | 577.79 |
| 14 | 578.36 | 577.37 | 577.77 | 578.86 | 577.87 | / | 578.31 | 578.40 | 578.32 | 577.96 | 577.84 | 577.55 |
| 15 | 578.16 | 577.50 | 577.34 | 578.46 | 577.95 | / | 578.33 | 578.39 | 578.25 | 577.87 | 577.77 | 577.59 |
| 16 | 577.99 | 577.48 | 577.69 | 578.31 | 577.87 | / | 578.38 | 578.42 | 578.28 | 577.88 | 578.10 | 577.50 |
| 17 | 578.06 | 577.50 | 577.41 | 578.34 | 577.78 | / | 578.34 | 578.35 | 578.24 | 577.88 | 578.14 | 577.86 |
| 18 | 578.12 | 577.52 | 577.36 | 578.28 | 577.77 | / | 578.42 | 578.34 | 578.16 | 578.01 | 578.03 | 577.78 |
| 19 | 578.08 | 577.42 | 577.44 | 578.62 | 577.89 | / | 578.38 | 578.50 | 578.18 | 577.74 | 577.96 | 577.68 |
| 20 | 578.22 | 577.58 | 577.48 | 579.29 | 577.87 | / | 578.39 | 578.34 | 578.25 | 578.03 | 578.02 | 577.86 |
| 21 | 578.03 | 577.56 | 577.55 | 579.44 | 577.80 | / | 578.39 | 578.28 | 578.22 | 578.07 | 577.91 | 577.51 |
| 22 | 577.98 | 577.36 | 577.68 | 578.26 | 577.82 | / | 578.32 | 578.29 | 578.03 | 578.03 | 577.72 | 577.69 |
| 23 | 577.83 | 577.36 | 577.84 | 578.29 | 577.98 | / | 578.35 | 578.43 | 578.17 | 578.06 | 577.88 | 577.90 |
| 24 | 577.77 | 577.55 | 577.79 | 579.09 | 577.91 | / | 578.47 | 578.32 | 578.06 | 577.98 | 577.76 | 577.90 |
| 25 | 577.92 | 577.72 | 577.76 | 578.98 | 577.94 | / | 578.42 | 578.28 | 578.21 | 578.03 | 577.68 | 577.81 |
| 26 | 577.96 | 577.55 | 577.71 | 578.25 | 578.12 | / | 578.36 | 578.19 | 578.45 | 577.92 | 577.54 | 577.92 |
| 27 | 577.92 | 577.58 | 577.62 | 578.52 | 578.09 | / | 578.43 | 578.14 | 578.23 | 577.84 | 577.56 | 577.52 |
| 28 | 577.87 | 578.25 | 577.65 | 578.98 | 578.16 | / | 578.41 | 578.13 | 578.19 | 578.07 | 577.71 | 577.55 |
| 29 | 578.19 | 577.99 | 577.61 | 578.52 | 578.29 | / | 578.36 | 578.16 | 578.23 | 578.00 | 577.80 | 577.88 |
| 30 | 578.37 | | 577.71 | 577.28 | 578.16 | / | 578.33 | 578.26 | 578.15 | 577.92 | 577.68 | / |
| 31 | 578.25 | | 577.61 | | 578.12 | | 578.32 | 578.36 | | 577.97 | | / |
| MEAN | 578.18 | 577.58 | 577.66 | 578.48 | 577.88 | 578.06 | 578.37 | 578.33 | 578.22 | 577.99 | 577.89 | 577.70 |
| MAX. | 578.79 | 578.62 | 578.47 | 579.84 | 578.47 | 578.19 | 578.65 | 579.00 | 578.98 | 578.55 | 578.83 | 578.29 |
| | 1100/10 | 1800/28 | 0500/11 | 0200/21 | 0400/29 | 2400/03 | 2400/23 | 2000/22 | 2100/25 | 1200/03 | 1100/11 | 0700/26 |
| MIN. | 577.56 | 576.94 | 576.90 | 576.92 | 577.25 | 577.83 | 578.13 | 577.73 | 577.66 | 577.50 | 577.32 | 577.01 |
| | 0100/25 | 1200/13 | 1100/15 | 1000/30 | 0100/01 | 2400/02 | 1000/15 | 0900/30 | 2200/24 | 2400/31 | 2300/27 | 1900/21 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 578.03

ANNUAL SUMMARY OF LEVELS, 1984
Station 4087: Dry Dock, Port Huron, Michigan on St. Clair River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 578.82 Jul
Daily mean elevation: 579.54 21 Apr
Instant/hourly Elevation: 579.88 0300/21 Apr

LOWEST
Monthly mean elevation: 577.93 Feb
Daily mean elevation: 577.52 13 Feb
Instant/hourly Elevation: 577.23 1100/15 Mar

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.64 | 10 Jan |
| 578.77 | 28 Feb |
| 578.34 | 12 Mar |
| 579.54 | 21 Apr |
| 578.73 | 29 May |
| 578.85 | 25 Jun |
| 578.94 | 24 Jul |
| 578.96 | 19 Aug |
| 578.91 | 26 Sep |
| 578.72 | 3 Oct |
| 579.05 | 11 Nov |
| 578.42 | 26 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 577.91 | 24 Jan |
| 577.52 | 13 Feb |
| 577.66 | 15 Mar |
| 577.70 | 30 Apr |
| 578.13 | 7 May |
| 578.38 | 8 Jun |
| 578.71 | 9 Jul |
| 578.56 | 28 Aug |
| 578.26 | 7 Sep |
| 578.14 | 19 Oct |
| 577.98 | 26 Nov |
| 577.90 | 16 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 579.40         |     |     |     | 1   |     |     |     |     |     |     |     |     | 579.40         | 1                          |
| 579.20         |     |     |     | 4   |     |     |     |     |     |     |     |     | 579.20         | 5                          |
| 579.00         |     |     |     | 4   |     |     |     |     |     |     | 1   |     | 579.00         | 10                         |
| 578.80         |     |     |     | 7   |     | 3   | 16  | 11  | 1   |     | 1   |     | 578.80         | 49                         |
| 578.60         | 2   | 1   |     | 7   | 1   | 13  | 15  | 15  | 19  | 3   | 3   |     | 578.60         | 128                        |
| 578.40         | 6   | 1   |     | 1   | 7   | 12  |     | 3   | 8   | 17  | 6   | 1   | 578.40         | 190                        |
| 578.20         | 12  |     | 5   | 1   | 17  | 2   |     |     | 2   | 10  | 9   | 14  | 578.20         | 262                        |
| 578.00         | 9   | 5   | 14  |     | 6   |     |     |     |     | 1   | 8   | 8   | 578.00         | 313                        |
| 577.80         | 2   | 13  | 9   | 4   |     |     |     |     |     |     | 2   | 8   | 577.80         | 351                        |
| 577.60         |     | 8   | 3   | 1   |     |     |     |     |     |     |     |     | 577.60         | 363                        |
| 577.40         |     | 1   |     |     |     |     |     |     |     |     |     |     | 577.40         | 364                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4087: Dry Dock, Port Huron, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 578.54  | 577.98  | 578.31  | 577.82  | 578.26  | 578.49  | 578.79  | 578.81  | 578.77* | 578.61  | 578.15  | 578.28  |
| 2    | 578.54  | 577.83  | 578.19  | 577.87  | 578.18  | 578.42  | 578.75  | 578.77  | 578.56* | 578.52  | 578.65  | 578.13  |
| 3    | 578.15  | 577.80  | 578.13  | 577.89  | 578.19  | 578.51  | 578.73  | 578.81  | 578.78  | 578.72  | 578.30  | 577.97  |
| 4    | 578.49  | 577.92  | 577.86  | 577.90  | 578.29  | 578.53  | 578.76  | 578.79  | 578.77  | 578.63  | 578.15  | 578.36  |
| 5    | 578.25  | 578.01  | 577.71  | 578.32  | 578.28  | 578.40  | 578.76  | 578.74  | 578.75  | 578.49  | 578.54  | 578.20  |
| 6    | 578.49  | 578.09  | 578.03  | 578.78  | 578.18  | 578.41  | 578.83  | 578.76  | 578.64  | 578.29  | 578.55  | 578.35  |
| 7    | 578.27  | 578.17  | 578.03* | 579.22  | 578.13  | 578.44  | 578.94  | 578.80  | 578.26  | 578.29  | 578.30  | 578.10  |
| 8    | 578.36  | 577.97  | 578.01* | 579.14  | 578.24  | 578.38  | 578.80  | 578.73  | 578.31  | 578.38  | 578.03  | 578.30  |
| 9    | 578.39  | 577.89  | 578.08  | 578.95  | 578.28  | 578.60  | 578.71  | 578.81  | 578.47  | 578.49  | 578.22  | 578.06* |
| 10   | 578.64  | 577.65  | 577.85  | 579.01  | 578.26  | 578.46  | 578.74  | 578.91  | 578.61  | 578.47  | 578.29  | 578.16* |
| 11   | 578.63  | 577.70  | 578.34  | 579.18  | 578.17  | 578.66  | 578.84  | 578.93  | 578.65  | 578.48  | 579.05  | 577.91  |
| 12   | 578.38  | 577.64  | 578.34  | 578.96  | 578.32  | 578.46  | 578.86  | 578.93  | 578.58  | 578.45  | 578.85  | 577.97  |
| 13   | 578.26  | 577.52  | 578.26  | 578.57  | 578.32  | 578.59  | 578.79  | 578.90  | 578.55  | 578.41  | 578.62  | 578.28  |
| 14   | 578.45  | 577.75  | 578.01  | 578.96  | 578.33  | 578.70  | 578.79  | 578.82  | 578.80  | 578.39  | 578.27  | 577.98  |
| 15   | 578.26  | 577.89  | 577.66  | 578.90  | 578.43  | 578.63  | 578.81  | 578.82* | 578.73  | 578.29  | 578.16  | 578.02  |
| 16   | 578.11  | 577.85  | 578.14  | 578.74  | 578.35  | 578.53  | 578.88  | /       | 578.73  | 578.31  | 578.57  | 577.90  |
| 17   | 578.19  | 577.87  | 577.81  | 578.75  | 578.25  | 578.51  | 578.81  | /       | 578.68  | 578.33  | 578.62  | 578.32  |
| 18   | 578.26  | 577.91  | 577.73  | 578.77  | 578.18  | 578.71  | 578.91  | 578.79* | 578.63  | 578.50  | 578.53  | 578.24  |
| 19   | 578.24  | 577.76  | 577.82  | 579.00  | 578.34  | 578.76  | 578.87  | 578.96  | 578.62  | 578.14  | 578.46  | 578.11  |
| 20   | 578.37  | 577.97  | 577.83  | 579.40  | 578.30  | 578.75  | 578.84  | 578.76  | 578.71  | 578.50  | 578.51  | 578.32  |
| 21   | 578.16  | 577.95  | 577.87  | 579.54  | 578.23  | 578.76  | 578.85  | 578.68  | 578.66  | 578.55  | 578.38  | 577.94  |
| 22   | 578.08  | 577.74  | 577.99  | 578.93  | 578.21  | 578.73  | 578.76  | 578.71  | 578.45  | 578.49  | 578.13  | 578.04  |
| 23   | 577.96  | 577.75  | 578.23  | 578.78  | 578.42  | 578.70  | 578.80  | 578.90  | 578.60  | 578.53  | 578.35  | 578.35  |
| 24   | 577.91  | 577.99  | 578.16  | 579.30  | 578.30  | 578.80  | 578.94  | 578.76  | 578.48  | 578.46  | 578.23  | 578.37  |
| 25   | 578.09  | 578.18  | 578.14  | 579.32  | 578.32  | 578.85  | 578.88  | 578.70  | 578.62  | 578.52  | 578.15  | 578.23  |
| 26   | 578.14  | 577.98  | 578.09  | 578.72  | 578.54  | 578.65  | 578.81  | 578.61  | 578.91  | 578.34  | 577.98  | 578.42  |
| 27   | 578.16  | 578.03  | 578.00  | 578.90  | 578.51  | 578.68  | 578.91  | 578.56  | 578.67  | 578.29  | 578.00  | 577.95  |
| 28   | 578.03  | 578.77  | 578.06  | 579.07  | 578.56  | 578.84  | 578.88  | 578.56  | 578.63  | 578.55  | 578.14  | 577.95  |
| 29   | 578.30  | 578.42  | 578.02  | 578.80  | 578.73  | 578.78  | 578.80  | 578.57  | 578.68  | 578.47  | 578.28  | 578.31  |
| 30   | 578.45  |         | 578.03  | 577.70  | 578.58  | 578.82  | 578.77  | 578.71  | 578.60  | 578.38  | 578.14  | 578.36  |
| 31   | 578.27  |         | 577.92  |         | 578.51  |         | 578.77  | 578.79  |         | 578.44  |         | 578.39  |
| MEAN | 578.28  | 577.93  | 578.02  | 578.77  | 578.33  | 578.62  | 578.82  | 578.77  | 578.63  | 578.44  | 578.35  | 578.17  |
| MAX. | 578.85  | 579.17  | 579.00  | 579.88  | 578.91  | 579.05  | 579.14  | 579.49  | 579.33  | 579.07  | 579.40  | 578.79  |
| MIN. | 1100/10 | 1800/28 | 0500/11 | 0300/21 | 1100/29 | 2000/24 | 1000/11 | 2000/22 | 2100/25 | 1100/03 | 1000/11 | 0900/26 |
|      | 577.45  | 577.34  | 577.23  | 577.26  | 577.68  | 578.21  | 578.46  | 578.25  | 577.86  | 577.82  | 577.66  | 577.29  |
|      | 1900/03 | 1100/13 | 1100/15 | 1400/30 | 0100/01 | 1000/08 | 0300/10 | 0500/30 | 0300/13 | 0800/19 | 1200/01 | 2000/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 578.43

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4030: Mouth of Black River, Port Huron, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 579.24 Jul  
Daily mean elevation: 579.61 21 Apr  
Instant/hourly Elevation: 579.97 0200/21 Apr

LOWEST  
Monthly mean elevation: 578.25 Feb  
Daily mean elevation: 577.84 13 Feb  
Instant/hourly Elevation: 577.53 1400/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.92 | 11 Jan |
| 579.19 | 28 Feb |
| 578.65 | 11 Mar |
| 579.61 | 21 Apr |
| 579.13 | 29 May |
| 579.27 | 30 Jun |
| 579.38 | 24 Jul |
| 579.39 | 19 Aug |
| 579.39 | 26 Sep |
| 579.15 | 3 Oct  |
| 579.54 | 11 Nov |
| 578.83 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.08 | 24 Jan |
| 577.84 | 13 Feb |
| 577.94 | 15 Mar |
| 578.04 | 30 Apr |
| 578.47 | 7 May  |
| 578.78 | 8 Jun  |
| 579.08 | 9 Jul  |
| 578.95 | 29 Aug |
| 578.60 | 7 Sep  |
| 578.53 | 19 Oct |
| 578.36 | 26 Nov |
| 578.26 | 11 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 579.60                                                  |     |     |     | 1   |     |     |     |     |     |     |     |     | 579.60         | 1                          |
| 579.40                                                  |     |     |     | 2   |     |     |     |     |     |     | 1   |     | 579.40         | 4                          |
| 579.20                                                  |     |     |     | 8   |     | 5   | 18  | 16  | 3   |     | 1   |     | 579.20         | 55                         |
| 579.00                                                  |     | 1   |     | 11  | 1   | 11  | 13  | 11  | 18  | 4   | 3   |     | 579.00         | 128                        |
| 578.80                                                  | 2   |     |     | 1   | 6   | 11  |     | 4   | 7   | 16  | 6   | 3   | 578.80         | 184                        |
| 578.60                                                  | 7   | 1   | 2   | 2   | 15  | 3   |     |     | 1   | 10  | 9   | 12  | 578.60         | 246                        |
| 578.40                                                  | 12  | 1   | 10  |     | 9   |     |     |     | 1   | 1   | 7   | 7   | 578.40         | 294                        |
| 578.20                                                  | 5   | 9   | 8   | 2   |     |     |     |     |     |     | 3   | 9   | 578.20         | 330                        |
| 578.00                                                  | 1   | 10  | 9   | 3   |     |     |     |     |     |     |     |     | 578.00         | 353                        |
| 577.80                                                  |     | 3   | 2   |     |     |     |     |     |     |     |     |     | 577.80         | 358                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4090: Mouth of Black River, Port Huron, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 578.68  | /       | 578.63  | 578.11  | 578.69  | 578.86  | 579.22  | 579.24  | 579.10  | 579.04  | 578.54  | 578.69  |
| 2    | 578.69  | /       | 578.54  | 578.20  | 578.60  | 578.81  | 579.18  | 579.21  | 578.93  | 578.94  | 579.09  | 578.52  |
| 3    | 578.54* | 578.04  | 578.45  | 578.23  | 578.59  | 578.91  | 579.16  | 579.23  | 579.22  | 579.15  | 578.70  | 578.33  |
| 4    | 578.69* | 578.18  | 578.14  | 578.21  | 578.69  | 578.92  | 579.19  | 579.21  | 579.20  | 579.07  | 578.54  | 578.77  |
| 5    | 578.44  | 578.30  | 578.00  | 578.63  | 578.67  | 578.78  | 579.17  | 579.16  | 579.18  | 578.91  | 578.97  | 578.60  |
| 6    | 578.75  | /       | 578.36  | 578.98  | 578.57  | 578.80  | 579.26  | 579.17  | 579.03  | 578.70  | 578.97  | 578.76  |
| 7    | 578.53  | /       | 578.31  | 579.33  | 578.47  | 578.82  | 579.36  | 579.22  | 578.60  | 578.68  | 578.70  | 578.46  |
| 8    | 578.57  | 578.15* | 578.17  | 579.22  | 578.63  | 578.78  | 579.20  | 579.14  | 578.67  | 578.78  | 578.40  | 578.72  |
| 9    | 578.66  | 578.19  | 578.29  | 579.04  | 578.66  | 579.00  | 579.08  | 579.23  | 578.84  | 578.90  | 578.61  | 578.39  |
| 10   | 578.82  | 577.98  | 578.09  | 579.09  | 578.65  | 578.87  | 579.14  | 579.32  | 578.97  | 578.88  | 578.71  | 578.52  |
| 11   | 578.92* | 578.02  | 578.65  | 579.23  | 578.55  | 579.09  | 579.25  | 579.38  | 579.04  | 578.89  | 579.54  | 578.26  |
| 12   | 578.54  | 577.98  | 578.55  | 579.07  | 578.73  | 578.83  | 579.28  | 579.37  | 579.00  | 578.84  | 579.32  | 578.36  |
| 13   | 578.43  | 577.84  | 578.45  | 578.72  | 578.70  | 578.97  | 579.22  | 579.34  | 578.98  | 578.81  | 579.07  | 578.72  |
| 14   | 578.65  | 578.11  | 578.26  | 579.04  | 578.75  | 579.12  | 579.20  | 579.25  | 579.28  | 578.78  | 578.66  | 578.37  |
| 15   | 578.47  | 578.26  | 577.94  | 579.27  | 578.83  | 579.03  | 579.19  | 579.25  | 579.19  | 578.67  | 578.51  | 578.42  |
| 16   | 578.31  | 578.21  | 578.47  | 579.15  | 578.71  | 578.93  | 579.29  | 579.27  | 579.19  | 578.70  | 578.98  | 578.27  |
| 17   | 578.39  | 578.20  | 578.13  | 579.19  | 578.60  | 578.90  | 579.19  | 579.17  | 579.11  | 578.72  | 579.04  | 578.73  |
| 18   | 578.45  | 578.24  | 578.05  | 579.22  | 578.54  | 579.13  | 579.32  | 579.17  | 579.04  | 578.91  | 578.95  | 578.66  |
| 19   | 578.40  | 578.10  | 578.13  | 579.32  | 578.67  | 579.19  | 579.27  | 579.39  | 579.07  | 578.53  | 578.89  | 578.50  |
| 20   | 578.53  | 578.31  | 578.13  | 579.49  | 578.64  | 579.19  | 579.25  | 579.16  | 579.18  | 578.93  | 578.93  | 578.72  |
| 21   | 578.56* | 578.30  | 578.15  | 579.61  | 578.59  | 579.20  | 579.28  | 579.06  | 579.11  | 578.95  | 578.78  | 578.32  |
| 22   | /       | 578.06  | 578.27  | 579.36  | 578.57  | 579.16  | 579.18  | 579.08  | 578.86  | 578.90  | 578.51  | 578.41  |
| 23   | /       | 578.08  | 578.57  | 579.11  | 578.80  | 579.13  | 579.22  | 579.33  | 579.04  | 578.96  | 578.77  | 578.72  |
| 24   | 578.08* | 578.35  | 578.46  | 579.40  | 578.71  | 579.24  | 579.38  | 579.17  | 578.92  | 578.86  | 578.62  | 578.79  |
| 25   | 578.31  | 578.57  | 578.47  | 579.51  | 578.74  | 579.27  | 579.30  | 579.10  | 579.08  | 578.93  | 578.55  | 578.61  |
| 26   | 578.36  | 578.34  | 578.42  | 579.13  | 578.91  | 579.06  | 579.24  | 579.00  | 579.39  | 578.72  | 578.36  | 578.83  |
| 27   | 578.41  | 578.40  | 578.32  | 579.16  | 578.90  | 579.05  | 579.35  | 578.97  | 579.11  | 578.67  | 578.38  | 578.31  |
| 28   | /       | 579.19  | 578.42  | 579.19  | 578.99  | 579.27  | 579.32  | 578.96  | 579.06  | 579.01  | 578.53  | 578.30  |
| 29   | 578.51* | 578.79  | 578.35  | 579.06  | 579.13  | 579.23  | 579.24  | 578.95  | 579.11  | 578.90  | 578.68  | 578.75  |
| 30   | 578.69  |         | 578.29  | 578.04  | 578.96  | 579.27  | 579.20  | 579.06  | 579.02  | 578.80  | 578.53  | 578.82  |
| 31   | /       |         | 578.20  |         | 578.88  |         | 579.20  | 579.22  |         | 578.84  |         | 578.83  |
| MEAN | 578.53  | 578.25  | 578.31  | 579.01  | 578.71  | 579.03  | 579.24  | 579.19  | 579.05  | 578.85  | 578.76  | 578.56  |
| MAX. | 579.07  | 579.59  | 579.67  | 579.97  | 579.33  | 579.65  | 579.62  | 579.77  | 579.93  | 579.47  | 579.90  | 579.30  |
| MIN. | 1600/06 | 1800/28 | 0500/11 | 0200/21 | 1000/29 | 2100/24 | 0100/24 | 2000/22 | 2100/25 | 1200/03 | 0800/11 | 0800/26 |
|      | 0100/25 | 1100/13 | 1100/15 | 1400/30 | 0100/01 | 2400/05 | 0300/10 | 0200/29 | 0300/13 | 2200/31 | 1100/01 | 2000/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 578.79

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4096: Dunn Paper Co., Port Huron, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 579.67 Jul  
Daily mean elevation: 579.95 11 Nov  
Instant/hourly Elevation: 580.48 2000/22 Aug

LOWEST  
Monthly mean elevation: 578.62 Feb  
Daily mean elevation: 578.22 15 Mar  
Instant/hourly Elevation: 577.71 1400/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.04 | 10 Jan |
| 579.59 | 28 Feb |
| 579.02 | 1 Mar  |
| 579.69 | 21 Apr |
| 579.56 | 29 May |
| 579.64 | 28 Jun |
| 579.84 | 24 Jul |
| 579.82 | 19 Aug |
| 579.80 | 26 Sep |
| 579.59 | 3 Oct  |
| 579.95 | 11 Nov |
| 579.33 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.26 | 24 Jan |
| 578.22 | 13 Feb |
| 578.22 | 15 Mar |
| 578.39 | 30 Apr |
| 578.91 | 7 May  |
| 579.14 | 8 Jun  |
| 579.49 | 9 Jul  |
| 579.37 | 29 Aug |
| 579.00 | 7 Sep  |
| 578.92 | 19 Oct |
| 578.79 | 26 Nov |
| 578.69 | 16 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 579.80 | | | | | | | 2 | 1 | | | 1 | | 579.80 | 4 |
| 579.60 | | | | 1 | | 3 | 23 | 18 | 5 | | 1 | | 579.60 | 55 |
| 579.40 | | 1 | | 9 | 2 | 12 | 6 | 9 | 18 | 4 | 5 | | 579.40 | 121 |
| 579.20 | | | | 8 | 7 | 11 | | 3 | 5 | 18 | 5 | 8 | 579.20 | 186 |
| 579.00 | 2 | 2 | 1 | 5 | 20 | 4 | | | 1 | 8 | 8 | 8 | 579.00 | 245 |
| 578.80 | 8 | 1 | 7 | 2 | 2 | | | | 1 | 1 | 8 | 9 | 578.80 | 284 |
| 578.60 | 13 | 8 | 8 | | | | | | | | 2 | 6 | 578.60 | 321 |
| 578.40 | 6 | 11 | 11 | 4 | | | | | | | | | 578.40 | 353 |
| 578.20 | 2 | 6 | 4 | 1 | | | | | | | | | 578.20 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4096: Dunn Paper Co., Port Huron, Michigan on St. Clair River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 578.86 | 578.49 | 579.02 | 578.45 | 579.20 | 579.27 | 579.62 | 579.70 | 579.57 | 579.45 | 578.94 | 579.13 |
| 2 | 578.88 | 578.32 | 578.94 | 578.55 | 579.09 | 579.19 | 579.59 | 579.66 | 579.35 | 579.33 | 579.57 | 578.96 |
| 3 | 578.48 | 578.34 | 578.82 | 578.54 | 579.07 | 579.33 | 579.56 | 579.69 | 579.67 | 579.59 | 579.09 | 578.72 |
| 4 | 578.94 | 578.51 | 578.49 | 578.52 | 579.18 | 579.36 | 579.59 | 579.66 | 579.64 | 579.50 | 578.94 | 579.23 |
| 5 | 578.67 | 578.67 | 578.29* | 578.90 | 579.12 | 579.20 | 579.57 | 579.61 | 579.62 | 579.32 | 579.42 | 579.07 |
| 6 | 579.02 | 578.75 | 578.86* | 579.16 | 579.01 | 579.20 | 579.63 | 579.61 | 579.48 | 579.09 | 579.44 | 579.23 |
| 7 | 578.80 | 578.75 | 578.69 | 579.43 | 578.91 | 579.22 | 579.81 | 579.69 | 579.00 | 579.05 | 579.13 | 578.87 |
| 8 | 578.85 | 578.56 | 578.50 | 579.30 | 579.08 | 579.14 | 579.64 | 579.56 | 579.08 | 579.17 | 578.80 | 579.16 |
| 9 | 578.94 | 578.54 | 578.54 | 579.15 | 579.11 | 579.43 | 579.49 | 579.66 | 579.26 | 579.30 | 579.04 | 578.84 |
| 10 | 579.04 | 578.32 | 578.35 | 579.17 | 579.09 | 579.24 | 579.59 | 579.79 | 579.44 | 579.29 | 579.16 | 578.97 |
| 11 | 578.98 | 578.39 | 578.99 | 579.32 | 578.97 | 579.51 | 579.67 | 579.80 | 579.52 | 579.30 | 579.95 | 578.69 |
| 12 | 578.74 | 578.36 | 578.82 | 579.19 | 579.16 | 579.25 | 579.72 | 579.80 | 579.41 | 579.26 | 579.73 | 578.81 |
| 13 | 578.62 | 578.22 | 578.66 | 578.85 | 579.16 | 579.38 | 579.66 | 579.77 | 579.36 | 579.23 | 579.48 | 579.21 |
| 14 | 578.87 | 578.48 | 578.53 | 579.13 | 579.16 | 579.55 | 579.64 | 579.68 | 579.68 | 579.22 | 579.04 | 578.82 |
| 15 | 578.70 | 578.60 | 578.22 | 579.45 | 579.28 | 579.46 | 579.66 | 579.67 | 579.60 | 579.11 | 578.87 | 578.87 |
| 16 | 578.53 | 578.56 | 578.84 | 579.40 | 579.20 | 579.36 | 579.74 | 579.71 | 579.59 | 579.12 | 579.40 | 578.69 |
| 17 | 578.63 | 578.56 | 578.43 | 579.47 | 579.11 | 579.30 | 579.65 | 579.60 | 579.52 | 579.14 | 579.47 | 579.22 |
| 18 | 578.69 | 578.61 | 578.33 | 579.42 | 579.02 | 579.50 | 579.78 | 579.60 | 579.45 | 579.35 | 579.37 | 579.13 |
| 19 | 578.66 | 578.43 | 578.42 | 579.49 | 579.22 | 579.59 | 579.71 | 579.82 | 579.48 | 578.92 | 579.33 | 578.96 |
| 20 | 578.78 | 578.68 | 578.42 | 579.57 | 579.17 | 579.56 | 579.69 | 579.59 | 579.57 | 579.37 | 579.38 | 579.20 |
| 21 | 578.55 | 578.69 | 578.43 | 579.69 | 579.08 | 579.56 | 579.71 | 579.48 | 579.50 | 579.40 | 579.22 | 578.76 |
| 22 | 578.43 | 578.44 | 578.54 | 579.44 | 579.05 | 579.51 | 579.62 | 579.53 | 579.25 | 579.36 | 578.89 | 578.83 |
| 23 | 578.32 | 578.50 | 578.91 | 579.26 | 579.27 | 579.45 | 579.64 | 579.76 | 579.42 | 579.39 | 579.18 | 579.18 |
| 24 | 578.26 | 578.80 | 578.80 | 579.49 | 579.16 | 579.56 | 579.84 | 579.62 | 579.27 | 579.31 | 579.04 | 579.27 |
| 25 | 578.53 | 579.02 | 578.80 | 579.58 | 579.15 | 579.61 | 579.74 | 579.55 | 579.45 | 579.38 | 578.97 | 579.05 |
| 26 | 578.62 | 578.80 | 578.77 | 579.38 | 579.38 | 579.40 | 579.68 | 579.44 | 579.80 | 579.17 | 578.79 | 579.33 |
| 27 | 578.71 | 578.84 | 578.67 | 579.28 | 579.37 | 579.33 | 579.79 | 579.39 | 579.51 | 579.08 | 578.81 | 578.75 |
| 28 | 578.45 | 579.59 | 578.80 | 579.38 | 579.40 | 579.64 | 579.76 | 579.39 | 579.45 | 579.43 | 578.98 | 578.71 |
| 29 | 578.70 | 579.20 | 578.69 | 579.36 | 579.56 | 579.59 | 579.68 | 579.37 | 579.53 | 579.34 | 579.13 | 579.18 |
| 30 | 578.95 | | 578.57 | 578.39 | 579.45* | 579.61 | 579.64 | 579.57 | 579.45 | 579.23 | 578.95 | 579.24 |
| 31 | 578.76 | | 578.47 | | 579.28* | | 579.64 | 579.66 | | 579.29 | | 579.25 |
| MEAN | 578.71 | 578.62 | 578.63 | 579.19 | 579.18 | 579.41 | 579.67 | 579.63 | 579.46 | 579.27 | 579.18 | 579.01 |
| MAX. | 579.33 | 579.93 | 579.92 | 580.05 | 579.77 | 579.87 | 580.08 | 580.48 | 580.39 | 579.99 | 580.35 | 579.85 |
| | 1600/06 | 1800/28 | 0500/11 | 0200/21 | 0400/29 | 1400/14 | 1500/11 | 2000/22 | 2100/25 | 1100/03 | 0700/11 | 0800/26 |
| MIN. | 577.83 | 577.75 | 577.93 | 577.71 | 578.49 | 578.94 | 579.12 | 578.57 | 578.65 | 578.55 | 578.30 | 578.09 |
| | 1800/03 | 2000/02 | 1000/15 | 1400/30 | 0100/01 | 0100/27 | 0300/10 | 0200/29 | 2200/24 | 2200/31 | 1100/01 | 2000/21 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 579.16

ANNUAL SUMMARY OF LEVELS, 1984
Station 4098: Fort Gratiot, Port Huron, Michigan on St. Clair River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 580.13 Jul
Daily mean elevation: 580.65 11 Nov
Instant/hourly Elevation: 581.25 2000/22 Aug

LOWEST
Monthly mean elevation: 578.93 Jan
Daily mean elevation: 578.50 2 Feb
Instant/hourly Elevation: 577.81 1400/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 579.32 | 6 Jan |
| 580.31 | 28 Feb |
| 579.41 | 11 Mar |
| 579.75 | 21 Apr |
| 580.10 | 29 May |
| 580.20 | 30 Jun |
| 580.32 | 7 Jul |
| 580.37 | 19 Aug |
| 580.35 | 26 Sep |
| 580.07 | 3 Oct |
| 580.65 | 11 Nov |
| 579.82 | 26 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.56 | 24 Jan |
| 578.50 | 2 Feb |
| 578.51 | 15 Mar |
| 578.72 | 30 Apr |
| 579.35 | 7 May |
| 579.58 | 8 Jun |
| 579.98 | 9 Jul |
| 579.76 | 29 Aug |
| 579.36 | 7 Sep |
| 579.35 | 19 Oct |
| 579.21 | 8 Nov |
| 579.05 | 16 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.60         |     |     |     |     |     |     |     |     |     |     | 1   |     | 580.60         | 1                          |
| 580.40         |     |     |     |     |     |     | 6   | 6   | 1   |     | 1   |     | 580.40         | 1                          |
| 580.20         |     | 1   |     |     | 1   | 10  | 24  | 16  | 9   | 1   | 1   |     | 580.20         | 16                         |
| 580.00         |     |     |     |     | 3   | 10  | 1   | 7   | 13  | 10  | 8   | 1   | 580.00         | 78                         |
| 579.80         |     |     |     |     | 12  | 9   |     | 2   | 5   | 14  | 3   | 11  | 579.80         | 131                        |
| 579.60         |     | 1   |     | 4   | 13  | 1   |     |     | 1   | 5   | 9   | 6   | 579.60         | 192                        |
| 579.40         |     | 1   | 2   | 10  | 13  | 1   |     |     | 1   | 5   | 9   | 6   | 579.40         | 240                        |
| 579.20         | 2   | 2   | 3   | 10  | 2   |     |     |     | 1   | 1   | 7   | 7   | 579.20         | 275                        |
| 579.00         | 9   | 5   | 10  |     |     |     |     |     |     |     |     | 6   | 579.00         | 305                        |
| 578.80         | 12  | 9   | 5   | 5   |     |     |     |     |     |     |     |     | 578.80         | 336                        |
| 578.60         | 6   | 7   | 10  | 1   |     |     |     |     |     |     |     |     | 578.60         | 360                        |
| 578.40         | 2   | 3   | 1   |     |     |     |     |     |     |     |     |     | 578.40         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4098: Fort Gratiot, Port Huron, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 578.98  | 578.66  | 579.41  | 578.81  | 579.74  | 579.77  | 580.15  | 580.13  | 580.00  | 579.96  | 579.32  | 579.61  |
| 2    | 579.01  | 578.50  | 579.32  | 578.94  | 579.61  | 579.71  | 580.06  | 580.09  | 579.75  | 579.80  | 580.10  | 579.44  |
| 3    | 578.60  | 578.56  | 579.18  | 578.93  | 579.57  | 579.80  | 580.02  | 580.13  | 580.17  | 580.07  | 579.55  | 579.13  |
| 4    | 579.17  | 578.77  | 578.82  | 578.93  | 579.68  | 579.82  | 580.09  | 580.10  | 580.14  | 579.97  | 579.41  | 579.72  |
| 5    | 578.91  | 578.97  | 578.63  | 579.25  | 579.59  | 579.63  | 580.07* | 580.02  | 580.12  | 579.79  | 579.94  | 579.53  |
| 6    | 579.32  | 579.09  | 579.16  | 579.38  | 579.48  | 579.65  | 580.19  | 580.01  | 579.95  | 579.55  | 579.95  | 579.75  |
| 7    | 579.10  | 579.04  | 579.10  | 579.56  | 579.35  | 579.68  | 580.32  | 580.10  | 579.36  | 579.52  | 579.59  | 579.29  |
| 8    | 579.14  | 578.84  | 578.87  | 579.34  | 579.52  | 579.58  | 580.11  | 579.97  | 579.48  | 579.63  | 579.21  | 579.68  |
| 9    | 579.19  | 578.85  | 578.82  | 579.22  | 579.57  | 579.91  | 579.98  | 580.10  | 579.65  | 579.80  | 579.46  | 579.28  |
| 10   | 579.23  | 578.64  | 578.63  | 579.25  | 579.56  | 579.71  | 580.04  | 580.24  | 579.92  | 579.80  | 579.64  | 579.45  |
| 11   | 579.14  | 578.73  | 579.41  | 579.38  | 579.42  | 580.04  | 580.16  | 580.31  | 580.02  | 579.79  | 580.65  | 579.06  |
| 12   | 578.90  | 578.73  | 579.08  | 579.28  | 579.66  | 579.74  | 580.16  | 580.30  | 579.86  | 579.75  | 580.29  | 579.22  |
| 13   | 578.79  | 578.54  | 578.89  | 578.97  | 579.63  | 579.88  | 580.09  | 580.25  | 579.79  | 579.72  | 579.98  | 579.74  |
| 14   | 579.09  | 578.84  | 578.80  | 579.22  | 579.65  | 580.06  | 580.08  | 580.13  | 580.20  | 579.69  | 579.47  | 579.25  |
| 15   | 578.91  | 578.97  | 578.51  | 579.50  | 579.78  | 579.94  | 580.05  | 580.13  | 580.09  | 579.57  | 579.26  | 579.30  |
| 16   | 578.72  | 578.91  | 579.25  | 579.50  | 579.67  | 579.82  | 580.21  | 580.20  | 580.06  | 579.57  | 579.88  | 579.05  |
| 17   | 578.86  | 578.91  | 578.74  | 579.57  | 579.51  | 579.74  | 580.06  | 580.07  | 580.00  | 579.63  | 579.97  | 579.66  |
| 18   | 578.94  | 578.97  | 578.63  | 579.52  | 579.43  | 579.99  | 580.26  | 580.05  | 579.93  | 579.83  | 579.87  | 579.57  |
| 19   | 578.86  | 578.78  | 578.72  | 579.58  | 579.62  | 580.06  | 580.19  | 580.37  | 579.96  | 579.35  | 579.84  | 579.38  |
| 20   | 578.99  | 579.09  | 578.75  | 579.63  | 579.58  | 580.05  | 580.15  | 580.06  | 580.07  | 579.88  | 579.90  | 579.66  |
| 21   | 578.71  | 579.09  | 578.69  | 579.75  | 579.50  | 580.03  | 580.19  | 579.92  | 579.99  | 579.88  | 579.72  | 579.16  |
| 22   | 578.63  | 578.79  | 578.79  | 579.47  | 579.40  | 579.99  | 580.05  | 579.97  | 579.70  | 579.84  | 579.32  | 579.21  |
| 23   | 578.63  | 578.86  | 579.25  | 579.34  | 579.73  | 579.95  | 580.08  | 580.27  | 579.89  | 579.89  | 579.69  | 579.59  |
| 24   | 578.56  | 579.23  | 579.11  | 579.57  | 579.57  | 580.07  | 580.31  | 580.09  | 579.73  | 579.80  | 579.52  | 579.74  |
| 25   | 578.85  | 579.49  | 579.15  | 579.65  | 579.58  | 580.16  | 580.19  | 580.00  | 579.92  | 579.89  | 579.44  | 579.48  |
| 26   | 578.89  | 579.20  | 579.14  | 579.49  | 579.81  | 579.89  | 580.13  | 579.87  | 580.35  | 579.63  | 579.25  | 579.82  |
| 27   | 579.01  | 579.29  | 579.02  | 579.34  | 579.80  | 579.86  | 580.27  | 579.80  | 580.00  | 579.54  | 579.24  | 579.16  |
| 28   | 578.65  | 580.31  | 579.18  | 579.52  | 579.92  | 580.18  | 580.24  | 579.81  | 579.96  | 579.95  | 579.43  | 579.09  |
| 29   | 578.90  | 579.70  | 579.07  | 579.66  | 580.10  | 580.15  | 580.13  | 579.76  | 580.04  | 579.84  | 579.60  | 579.63  |
| 30   | 579.15  |         | 578.89  | 578.72  | 579.86  | 580.20  | 580.06  | 579.98  | 579.95  | 579.74  | 579.40  | 579.69  |
| 31   | 578.96  |         | 578.78  |         | 579.78  |         | 580.04  | 580.12  |         | 579.78  |         | 579.67  |
| MEAN | 578.93  | 578.98  | 578.96  | 579.34  | 579.63  | 579.90  | 580.13  | 580.08  | 579.94  | 579.76  | 579.66  | 579.45  |
| MAX. | 579.68  | 580.79  | 580.86  | 580.14  | 580.39  | 580.50  | 580.69  | 581.25  | 581.12  | 580.73  | 581.22  | 580.40  |
| MIN. | 1600/06 | 1800/28 | 0500/11 | 0200/21 | 1000/29 | 2000/24 | 1500/11 | 2000/22 | 2100/25 | 2300/30 | 0700/11 | 0800/26 |
|      | 577.86  | 577.82  | 578.17  | 577.81  | 578.98  | 579.32  | 579.43  | 578.79  | 578.95  | 578.84  | 578.58  | 578.33  |
|      | 1800/03 | 2000/02 | 1000/15 | 1400/30 | 1500/07 | 1000/08 | 0100/10 | 0200/29 | 2400/12 | 2200/31 | 1100/01 | 0200/22 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 579.56

ANNUAL SUMMARY OF LEVELS, 1984  
Station 5002: Lakeport, Michigan on Lake Huron

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.25 Jul  
Daily mean elevation: 580.56 11 Nov  
Instant/hourly Elevation: 581.21 2100/25 Sep

LOWEST  
Monthly mean elevation: 579.02 Jan  
Daily mean elevation: 578.65 2 Feb  
Instant/hourly Elevation: 578.06 2000/2 Feb

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.33 | 6 Jan  |
| 580.13 | 28 Feb |
| 579.70 | 16 Mar |
| 579.71 | 21 Apr |
| 580.15 | 29 May |
| 580.31 | 28 Jun |
| 580.42 | 24 Jul |
| 580.42 | 19 Aug |
| 580.44 | 26 Sep |
| 580.24 | 3 Oct  |
| 580.56 | 11 Nov |
| 579.99 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.67 | 24 Jan |
| 578.65 | 2 Feb  |
| 578.74 | 15 Mar |
| 578.85 | 30 Apr |
| 579.49 | 7 May  |
| 579.69 | 8 Jun  |
| 580.06 | 9 Jul  |
| 579.94 | 29 Aug |
| 579.52 | 7 Sep  |
| 579.45 | 19 Oct |
| 579.36 | 26 Nov |
| 579.25 | 16 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.40 | | | | | | | 2 | 1 | 1 | | 1 | | 580.40 | 5 |
| 580.20 | | | | | | 4 | 18 | 16 | 3 | 1 | 2 | | 580.20 | 49 |
| 580.00 | | 1 | | | 1 | 13 | 11 | 10 | 16 | 6 | 5 | | 580.00 | 112 |
| 579.80 | | | | | 9 | 8 | | 4 | 7 | 15 | 6 | 10 | 579.80 | 171 |
| 579.60 | | 1 | 1 | 5 | 15 | 5 | | | 2 | 8 | 6 | 6 | 579.60 | 220 |
| 579.40 | | 2 | 4 | 12 | 6 | | | | 1 | 1 | 7 | 7 | 579.40 | 260 |
| 579.20 | 5 | 2 | 10 | 11 | | | | | | | 3 | 8 | 579.20 | 299 |
| 579.00 | 11 | 8 | 7 | 1 | | | | | | | | | 579.00 | 326 |
| 578.80 | 10 | 11 | 7 | 1 | | | | | | | | | 578.80 | 355 |
| 578.60 | 5 | 4 | 2 | | | | | | | | | | 578.60 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5002: Lakeport, Michigan on Lake Huron

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 578.98 | 578.84 | 579.48 | 579.22 | 579.86 | 579.87 | 580.25 | 580.27 | 580.16 | 580.06 | 579.48 | 579.75 |
| 2 | 579.03 | 578.65 | 579.41 | 579.21 | 579.75 | 579.78 | 580.18 | 580.21 | 579.91 | 579.93 | 580.25 | 579.60 |
| 3 | 578.69 | 578.69 | 579.27 | 579.22 | 579.72 | 579.89 | 580.13 | 580.25 | 580.21 | 580.24 | 579.70 | 579.25 |
| 4 | 579.17 | 578.92 | 579.00 | 579.22 | 579.81 | 579.91 | 580.17 | 580.21 | 580.22 | 580.11 | 579.52 | 579.87 |
| 5 | 578.96 | 579.09 | 578.79 | 579.47 | 579.71 | 579.75 | 580.15 | 580.12 | 580.20 | 579.95 | 580.05 | 579.70 |
| 6 | 579.33 | 579.15 | 579.28 | 579.53 | 579.60 | 579.77 | 580.21 | 580.14 | 580.06 | 579.71 | 580.09 | 579.84 |
| 7 | 579.12 | 579.11 | 579.24 | 579.61 | 579.49 | 579.78 | 580.42 | 580.24 | 579.52 | 579.66 | 579.73 | 579.47 |
| 8 | 579.19 | 578.96 | 579.12 | 579.31 | 579.65 | 579.69 | 580.20 | 580.10 | 579.63 | 579.78 | 579.36 | 579.82 |
| 9 | 579.26 | 578.96 | 579.02 | 579.22 | 579.70 | 580.01 | 580.06 | 580.18 | 579.80 | 579.90 | 579.66 | 579.46 |
| 10 | 579.29 | 578.78 | 578.83 | 579.24 | 579.68 | 579.82 | 580.13 | 580.37 | 580.02 | 579.90 | 579.82 | 579.59 |
| 11 | 579.19 | 578.87 | 579.48 | 579.30 | 579.57 | 580.10 | 580.29 | 580.40 | 580.07 | 579.91 | 580.56 | 579.31 |
| 12 | 578.99 | 578.82 | 579.20 | 579.21 | 579.76 | 579.83 | 580.30 | 580.39 | 579.93 | 579.86 | 580.35 | 579.40 |
| 13 | 578.91 | 578.68 | 579.99 | 579.08 | 579.79 | 580.03 | 580.22 | 580.35 | 579.92 | 579.82 | 580.08 | 579.82 |
| 14 | 579.24 | 578.91 | 578.94 | 579.25 | 579.78 | 580.19 | 580.20 | 580.26 | 580.26 | 579.81 | 579.62 | 579.45 |
| 15 | 579.05 | 579.06 | 578.74 | 579.48 | 579.89 | 580.08 | 580.23 | 580.25 | 580.18 | 579.68 | 579.42 | 579.45 |
| 16 | 578.86 | 579.00 | 579.70 | 579.49 | 579.79 | 579.93 | 580.32 | 580.33 | 580.19 | 579.70 | 580.01 | 579.25 |
| 17 | 578.98 | 579.02 | 579.17 | 579.60 | 579.64 | 579.84 | 580.23 | 580.22 | 580.11 | 579.71 | 580.13 | 579.85 |
| 18 | 579.07 | 579.04 | 578.99 | 579.53 | 579.51 | 580.07 | 580.38 | 580.18 | 580.00 | 579.93 | 580.00 | 579.69 |
| 19 | 579.00 | 578.87 | 579.04 | 579.56 | 579.74 | 580.18 | 580.30 | 580.42 | 580.06 | 579.45 | 579.95 | 579.51 |
| 20 | 579.10 | 579.17 | 578.98 | 579.56 | 579.68 | 580.14 | 580.27 | 580.19 | 580.17 | 579.98 | 579.99 | 579.83 |
| 21 | 578.81 | 579.18 | 578.90 | 579.71 | 579.60 | 580.13 | 580.29 | 580.06 | 580.13 | 580.01 | 579.83 | 579.35 |
| 22 | 578.71 | 578.93 | 579.04 | 579.44 | 579.55 | 580.10 | 580.18 | 580.08 | 579.82 | 579.96 | 579.48 | 579.35 |
| 23 | 578.74 | 578.99 | 579.51 | 579.44 | 579.86 | 580.06 | 580.22 | 580.37 | 580.03 | 580.01 | 579.81 | 579.78 |
| 24 | 578.67 | 579.35 | 579.26 | 579.61 | 579.68 | 580.17 | 580.42 | 580.23 | 579.86 | 579.90 | 579.68 | 579.84 |
| 25 | 578.99 | 579.53 | 579.26 | 579.64 | 579.70 | 580.25 | 580.33 | 580.12 | 580.00 | 580.02 | 579.56 | 579.63 |
| 26 | 579.12 | 579.33 | 579.24 | 579.48 | 579.93 | 580.04 | 580.28 | 579.98 | 580.44 | 579.79 | 579.36 | 579.99 |
| 27 | 579.16 | 579.42 | 579.19 | 579.34 | 579.92 | 579.98 | 580.38 | 579.94 | 580.11 | 579.68 | 579.38 | 579.32 |
| 28 | 578.73 | 580.13 | 579.36 | 579.51 | 580.00 | 580.31 | 580.37 | 579.95 | 580.06 | 580.04 | 579.56 | 579.28 |
| 29 | 578.92 | 579.67 | 579.39 | 579.69 | 580.15 | 580.24 | 580.27 | 579.94 | 580.14 | 579.96 | 579.74 | 579.72 |
| 30 | 579.22 | | 579.34 | 578.85 | 579.97 | 580.28 | 580.20 | 580.14 | 580.06 | 579.86 | 579.55 | 579.82 |
| 31 | 579.15 | | 579.29 | | 579.88 | | 580.19 | 580.23 | | 579.94 | | 579.82 |
| MEAN | 579.02 | 579.07 | 579.18 | 579.40 | 579.75 | 580.01 | 580.25 | 580.20 | 580.04 | 579.88 | 579.79 | 579.61 |
| MAX. | 579.69 | 580.53 | 580.46 | 580.05 | 580.55 | 580.71 | 580.68 | 580.87 | 581.21 | 580.67 | 581.13 | 580.58 |
| MIN. | 1500/06 | 1800/28 | 0500/11 | 0200/21 | 0400/29 | 2000/24 | 2000/24 | 0400/30 | 2100/25 | 2300/30 | 0700/11 | 0800/26 |
| | 578.11 | 578.06 | 578.28 | 578.14 | 579.08 | 579.48 | 579.77 | 579.47 | 579.11 | 579.09 | 578.72 | 578.32 |
| | 1800/03 | 2000/02 | 1000/15 | 1300/30 | 2200/24 | 1500/08 | 0300/10 | 0600/30 | 0300/13 | 0800/19 | 1200/01 | 0300/22 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 579.68

ANNUAL SUMMARY OF LEVELS, 1984
Station 5014: Harbor Beach, Michigan on Lake Huron

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 580.23 Jul
Daily mean elevation: 580.42 7 Jul
Instant/hourly Elevation: 580.77 0200/10 Aug

LOWEST
Monthly mean elevation: 579.02 Feb
Daily mean elevation: 578.70 13 Feb
Instant/hourly Elevation: 578.43 2100/2 Feb

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 579.25 | 6 Jan |
| 579.56 | 28 Feb |
| 579.41 | 23 Mar |
| 579.66 | 29 Apr |
| 580.01 | 29 May |
| 580.32 | 28 Jun |
| 580.42 | 7 Jul |
| 580.30 | 10 Aug |
| 580.37 | 26 Sep |
| 580.18 | 3 Oct |
| 580.21 | 2 Nov |
| 579.95 | 26 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.72 | 24 Jan |
| 578.70 | 13 Feb |
| 578.78 | 15 Mar |
| 579.06 | 13 Apr |
| 579.52 | 7 May |
| 579.74 | 2 Jun |
| 580.06 | 9 Jul |
| 579.99 | 28 Aug |
| 579.65 | 7 Sep |
| 579.49 | 19 Oct |
| 579.43 | 27 Nov |
| 579.36 | 3 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.40         |     |     |     |     |     |     | 1   |     |     |     |     |     | 580.40         | 1                          |
| 580.20         |     |     |     |     |     | 3   | 17  | 12  | 1   |     | 1   |     | 580.20         | 35                         |
| 580.00         |     |     |     |     | 1   | 14  | 13  | 17  | 21  | 2   | 5   |     | 580.00         | 108                        |
| 579.80         |     |     |     |     | 6   | 9   |     | 2   | 6   | 17  | 7   | 5   | 579.80         | 160                        |
| 579.60         |     |     |     | 2   | 18  | 4   |     |     | 2   | 11  | 9   | 13  | 579.60         | 219                        |
| 579.40         |     | 1   | 1   | 10  | 6   |     |     |     |     | 1   | 8   | 10  | 579.40         | 256                        |
| 579.20         | 2   | 5   | 7   | 8   |     |     |     |     |     |     |     | 3   | 579.20         | 281                        |
| 579.00         | 16  | 8   | 12  | 10  |     |     |     |     |     |     |     |     | 579.00         | 327                        |
| 578.80         | 11  | 11  | 10  |     |     |     |     |     |     |     |     |     | 578.80         | 359                        |
| 578.60         | 2   | 4   | 1   |     |     |     |     |     |     |     |     |     | 578.60         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5014: Harbor Beach, Michigan on Lake Huron

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 579.00  | 578.82  | 579.36  | 579.19  | 579.88  | 579.83  | 580.18  | 580.24  | 580.17  | 579.98  | 579.53  | 579.75  |
| 2    | 579.02  | 578.72  | 579.32  | 579.19  | 579.75  | 579.74  | 580.14  | 580.18  | 579.91  | 579.94  | 580.21  | 579.63  |
| 3    | 578.94  | 578.75  | 579.20  | 579.17  | 579.62  | 579.89  | 580.14  | 580.18  | 580.09  | 580.18  | 579.81  | 579.36  |
| 4    | 579.18  | 578.97  | 578.97  | 579.14  | 579.68  | 579.90  | 580.18  | 580.17  | 580.15  | 580.11  | 579.61  | 579.89  |
| 5    | 579.02  | 579.06  | 578.83  | 579.36  | 579.68  | 579.77  | 580.17  | 580.14  | 580.14  | 579.87  | 580.00  | 579.71  |
| 6    | 579.25  | 579.08  | 579.20  | 579.40  | 579.57  | 579.78  | 580.19  | 580.15  | 580.04  | 579.66  | 580.03  | 579.75  |
| 7    | 579.09  | 579.06  | 579.17  | 579.45  | 579.52  | 579.83  | 580.42  | 580.26  | 579.65  | 579.63  | 579.74  | 579.61  |
| 8    | 579.13  | 578.97  | 579.00  | 579.24  | 579.67  | 579.78  | 580.19  | 580.15  | 579.72  | 579.74  | 579.48  | 579.77  |
| 9    | 579.22  | 578.94  | 579.01  | 579.14  | 579.71  | 580.01  | 580.06  | 580.19  | 579.92  | 579.86  | 579.67  | 579.48  |
| 10   | 579.18  | 578.80  | 578.90  | 579.17  | 579.68  | 579.85  | 580.12  | 580.30  | 580.03  | 579.83  | 579.73  | 579.56  |
| 11   | 579.12  | 578.87  | 579.38  | 579.25  | 579.57  | 580.10  | 580.29  | 580.27  | 580.03  | 579.83  | 580.19  | 579.46  |
| 12   | 578.97  | 578.82  | 579.15  | 579.18  | 579.75  | 579.89  | 580.29  | 580.24  | 579.95  | 579.80  | 580.14  | 579.48  |
| 13   | 578.86  | 578.70  | 578.91  | 579.06  | 579.69  | 580.00  | 580.22  | 580.24  | 579.95  | 579.79  | 579.99  | 579.69  |
| 14   | 579.12  | 578.92  | 578.91  | 579.17  | 579.74  | 580.13  | 580.19  | 580.22  | 580.14  | 579.77  | 579.67  | 579.42  |
| 15   | 579.04  | 579.01  | 578.78  | 579.43  | 579.80  | 580.05  | 580.26  | 580.24  | 580.08  | 579.65  | 579.55  | 579.42  |
| 16   | 578.88  | 578.93  | 579.34  | 579.38  | 579.73  | 579.91  | 580.33  | 580.28  | 580.17  | 579.66  | 580.02  | 579.38  |
| 17   | 578.99  | 578.96  | 579.08  | 579.55  | 579.65  | 579.89  | 580.25  | 580.17  | 580.14  | 579.68  | 580.17  | 579.82  |
| 18   | 579.06  | 579.02  | 578.92  | 579.46  | 579.53  | 580.06  | 580.34  | 580.13  | 580.06  | 579.90  | 579.94  | 579.68  |
| 19   | 578.99  | 578.91  | 579.00  | 579.51  | 579.72  | 580.14  | 580.30  | 580.24  | 580.08  | 579.49  | 579.84  | 579.53  |
| 20   | 579.09  | 579.16  | 578.93  | 579.51  | 579.68  | 580.07  | 580.28  | 580.14  | 580.14  | 579.95  | 579.86  | 579.83  |
| 21   | 578.90  | 579.15  | 578.97  | 579.55  | 579.56  | 580.05  | 580.27  | 580.10  | 580.10  | 580.00  | 579.75  | 579.46  |
| 22   | 578.84  | 579.00  | 579.07  | 579.37  | 579.60  | 580.03  | 580.19  | 580.11  | 579.83  | 579.91  | 579.58  | 579.42  |
| 23   | 578.78  | 579.02  | 579.41  | 579.40  | 579.77  | 580.03  | 580.21  | 580.27  | 580.03  | 579.94  | 579.82  | 579.88  |
| 24   | 578.72  | 579.22  | 579.20  | 579.57  | 579.71  | 580.16  | 580.35  | 580.12  | 579.88  | 579.88  | 579.69  | 579.70  |
| 25   | 579.05  | 579.36  | 579.13  | 579.63  | 579.73  | 580.23  | 580.30  | 580.07  | 580.04  | 579.98  | 579.61  | 579.68  |
| 26   | 579.13  | 579.24  | 579.12  | 579.44  | 579.90  | 580.05  | 580.24  | 580.02  | 580.37  | 579.76  | 579.43  | 579.95  |
| 27   | 579.10  | 579.24  | 579.10  | 579.34  | 579.86  | 580.02  | 580.26  | 580.01  | 580.06  | 579.76  | 579.43  | 579.38  |
| 28   | 578.83  | 579.56  | 579.20  | 579.49  | 579.82  | 580.32  | 580.28  | 579.99  | 580.03  | 579.99  | 579.59  | 579.43  |
| 29   | 578.89  | 579.38  | 579.23  | 579.66  | 580.01  | 580.21  | 580.23  | 580.00  | 580.08  | 579.90  | 579.78  | 579.70  |
| 30   | 579.14  |         | 579.27  | 579.08  | 579.94  | 580.19  | 580.19  | 580.18  | 580.03  | 579.83  | 579.60  | 579.73  |
| 31   | 579.03  |         | 579.25  |         | 579.87  |         | 580.20  | 580.25  |         | 579.90  |         | 579.71  |
| MEAN | 579.02  | 579.02  | 579.11  | 579.35  | 579.72  | 580.00  | 580.23  | 580.17  | 580.03  | 579.84  | 579.78  | 579.62  |
| MAX. | 579.39  | 579.72  | 579.67  | 579.83  | 580.14  | 580.48  | 580.56  | 580.77  | 580.76  | 580.50  | 580.45  | 580.22  |
|      | 0600/09 | 1200/28 | 1000/16 | 0800/29 | 2200/22 | 1400/28 | 1400/11 | 0200/10 | 2200/25 | 1800/03 | 1600/02 | 0700/26 |
| MIN. | 578.57  | 578.43  | 578.58  | 578.55  | 579.31  | 579.46  | 579.91  | 579.62  | 579.14  | 579.18  | 579.12  | 578.54  |
|      | 2100/23 | 2100/02 | 1000/15 | 1600/30 | 1700/07 | 1300/08 | 0100/10 | 0300/29 | 1900/12 | 1000/19 | 1100/01 | 0100/22 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 579.66

ANNUAL SUMMARY OF LEVELS, 1984  
Station 5035: Essexville, Michigan on Lake Huron (Saginaw Bay)

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.18 Jul  
Daily mean elevation: 580.81 11 Nov  
Instant/hourly Elevation: 581.43 0800/11 Nov

LOWEST  
Monthly mean elevation: 578.97 Jan  
Daily mean elevation: 576.87 30 Apr  
Instant/hourly Elevation: 573.61 1400/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.20 | 26 Jan |
| 580.24 | 28 Feb |
| 579.86 | 28 Mar |
| 580.08 | 21 Apr |
| 580.57 | 28 May |
| 580.32 | 30 Jun |
| 580.54 | 27 Jul |
| 580.57 | 11 Aug |
| 580.49 | 3 Sep  |
| 580.25 | 21 Oct |
| 580.81 | 11 Nov |
| 580.25 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.63 | 3 Jan  |
| 578.68 | 3 Feb  |
| 578.52 | 10 Mar |
| 576.87 | 30 Apr |
| 579.43 | 8 May  |
| 579.49 | 8 Jun  |
| 579.93 | 6 Jul  |
| 579.83 | 27 Aug |
| 579.37 | 7 Sep  |
| 579.09 | 19 Oct |
| 578.98 | 22 Nov |
| 578.48 | 3 Dec  |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.80 | | | | | | | | | | | 1 | | 580.80 | 1 |
| 580.60 | | | | | | | | | | | | | 580.60 | 1 |
| 580.40 | | | | | 2 | | 1 | 4 | 1 | | | | 580.40 | 9 |
| 580.20 | | 1 | | | | 5 | 11 | 9 | 7 | 1 | | 1 | 580.20 | 44 |
| 580.00 | | | | 1 | 1 | 10 | 17 | 13 | 7 | 5 | 4 | | 580.00 | 102 |
| 579.80 | | | 1 | 2 | 6 | 7 | 2 | 5 | 9 | 12 | 5 | 3 | 579.80 | 154 |
| 579.60 | | | 1 | 6 | 14 | 7 | | | 4 | 12 | 7 | 8 | 579.60 | 213 |
| 579.40 | | 1 | 2 | 11 | 8 | 1 | | | 1 | | 8 | 9 | 579.40 | 254 |
| 579.20 | | 3 | 10 | 6 | | | | | 1 | | 3 | 5 | 579.20 | 282 |
| 579.00 | 12 | 11 | 10 | 3 | | | | | | 1 | 1 | 1 | 579.00 | 321 |
| 578.80 | 15 | 11 | 5 | | | | | | | | 1 | | 578.80 | 353 |
| 578.60 | 4 | 2 | 1 | | | | | | | | | 2 | 578.60 | 362 |
| 578.40 | | | 1 | | | | | | | | | 2 | 578.40 | 365 |
| 578.20 | | | | | | | | | | | | | 578.20 | 365 |
| 578.00 | | | | | | | | | | | | | 578.00 | 365 |
| 577.80 | | | | | | | | | | | | | 577.80 | 365 |
| 577.60 | | | | | | | | | | | | | 577.60 | 365 |
| 577.40 | | | | | | | | | | | | | 577.40 | 365 |
| 577.20 | | | | | | | | | | | | | 577.20 | 365 |
| 577.00 | | | | | | | | | | | | | 577.00 | 365 |
| 576.80 | | | | | | | | | | | | | 576.80 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5035: Essexville, Michigan on Lake Huron (Saginaw Bay)

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 579.06 | 578.89 | 579.24 | 579.17 | 579.47 | 579.92 | 580.24 | 580.19 | 580.21 | 579.97 | 579.29 | 579.61 |
| 2 | 579.00 | 578.85 | 579.22 | 579.18 | 579.74 | 579.77 | 580.16 | 580.19 | 579.88 | 579.67 | 579.90 | 579.67 |
| 3 | 578.63 | 578.68 | 579.18 | 579.37 | 580.04 | 579.86 | 580.05 | 580.25 | 580.49 | 579.90 | 579.68 | 578.48 |
| 4 | 579.16 | 579.01 | 579.05 | 579.41 | 579.76 | 579.85 | 580.15 | 580.20 | 580.24 | 580.08 | 579.52 | 579.28 |
| 5 | 578.97 | 579.03 | 578.80 | 579.90 | 579.68 | 579.76 | 580.16 | 580.09 | 580.22 | 580.20 | 579.99 | 579.45 |
| 6 | 579.17 | 579.04 | 579.13 | 579.48 | 579.63 | 579.74 | 579.93 | 580.01 | 580.00 | 579.76 | 579.99 | 579.66 |
| 7 | 579.09 | 579.01 | 579.20 | 579.52 | 579.44 | 579.74 | 580.21 | 580.27 | 579.37 | 579.71 | 579.73 | 578.63 |
| 8 | 578.97 | 578.87 | 579.11 | 579.55 | 579.43 | 579.49 | 580.14 | 580.18 | 579.46 | 579.79 | 579.38 | 579.56 |
| 9 | 579.19 | 578.97 | 578.97 | 579.41 | 579.62 | 579.99 | 579.95 | 580.12 | 579.64 | 580.05 | 579.72 | 579.49 |
| 10 | 579.10 | 578.85 | 578.52 | 579.32 | 579.63 | 579.67 | 580.13 | 580.40 | 579.93 | 579.88 | 580.08 | 579.58 |
| 11 | 579.11 | 578.87 | 579.13 | 579.39 | 579.51 | 580.10 | 580.18 | 580.57 | 580.10 | 579.91 | 580.81 | 579.34 |
| 12 | 579.04 | 578.94 | 579.21 | 579.32 | 579.72 | 579.78 | 580.25 | 580.45 | 579.91 | 579.88 | 580.17 | 579.49 |
| 13 | 578.96 | 578.80 | 578.97 | 579.15 | 579.84 | 580.04 | 580.13 | 580.32 | 579.76 | 579.83 | 579.99 | 579.92 |
| 14 | 579.08 | 578.91 | 578.96 | 579.59 | 579.80 | 580.19 | 580.09 | 580.21 | 580.34 | 579.89 | 579.56 | 579.78 |
| 15 | 579.04 | 579.05 | 578.92 | 579.93 | 579.86 | 580.17 | 580.10 | 580.15 | 580.23 | 579.80 | 579.07 | 579.41 |
| 16 | 578.81 | 579.03 | 579.46 | 579.79 | 579.77 | 579.92 | 580.22 | 580.34 | 580.09 | 579.74 | 579.51 | 579.04 |
| 17 | 578.92 | 579.01 | 579.68 | 579.77 | 579.61 | 579.85 | 580.04 | 580.22 | 580.03 | 579.65 | 579.76 | 579.72 |
| 18 | 578.98 | 579.06 | 579.07 | 579.75 | 579.47 | 580.02 | 580.31 | 580.25 | 579.79 | 580.15 | 580.01 | 579.52 |
| 19 | 578.86 | 578.92 | 579.05 | 579.70 | 579.73 | 580.26 | 580.16 | 580.56 | 580.00 | 579.09 | 580.03 | 579.29 |
| 20 | 578.93 | 579.09 | 579.05 | 579.50 | 579.81 | 580.25 | 580.25 | 580.08 | 580.03 | 579.62 | 579.94 | 579.45 |
| 21 | 578.78 | 579.14 | 578.99 | 580.08 | 579.63 | 580.20 | 580.30 | 579.87 | 580.22 | 580.25 | 579.78 | 579.52 |
| 22 | 578.75 | 578.96 | 579.04 | 579.75 | 579.53 | 580.15 | 580.18 | 580.03 | 579.85 | 579.85 | 578.98 | 578.54 |
| 23 | 578.82 | 578.99 | 579.39 | 579.56 | 579.76 | 580.14 | 580.02 | 580.43 | 579.94 | 579.86 | 579.66 | 579.88 |
| 24 | 578.69 | 579.19 | 579.24 | 579.57 | 579.57 | 580.06 | 580.33 | 580.21 | 579.82 | 579.76 | 579.51 | 579.73 |
| 25 | 578.87 | 579.28 | 579.25 | 579.58 | 579.59 | 580.22 | 580.32 | 580.04 | 579.73 | 579.95 | 579.57 | 578.78 |
| 26 | 579.20 | 579.22 | 579.24 | 579.58 | 579.95 | 579.96 | 580.29 | 579.95 | 580.24 | 579.70 | 579.47 | 580.00 |
| 27 | 578.96 | 579.45 | 579.29 | 579.37 | 579.82 | 579.68 | 580.54 | 579.83 | 580.04 | 579.69 | 579.48 | 579.39 |
| 28 | 578.93 | 580.24 | 579.86 | 579.22 | 580.57 | 580.20 | 580.36 | 579.90 | 579.90 | 579.96 | 579.23 | 579.24 |
| 29 | 578.87 | 579.36 | 579.58 | 579.77 | 580.50 | 580.23 | 580.19 | 579.87 | 580.13 | 579.97 | 579.65 | 579.64 |
| 30 | 579.12 | | 579.25 | 576.87 | 579.98 | 580.32 | 580.09 | 580.04 | 580.02 | 579.67 | 579.52 | 579.76 |
| 31 | 579.00 | | 579.25 | | 579.79 | | 580.06 | 580.11 | | 580.16 | | 580.25 |
| MEAN | 578.97 | 579.06 | 579.17 | 579.45 | 579.75 | 579.98 | 580.18 | 580.17 | 579.99 | 579.85 | 579.70 | 579.45 |
| MAX. | 579.42 | 580.65 | 580.74 | 580.71 | 581.11 | 580.66 | 580.66 | 581.17 | 580.85 | 581.20 | 581.43 | 581.05 |
| MIN. | 1500/30 | 1200/28 | 1600/28 | 0500/21 | 0500/29 | 2100/19 | 1100/11 | 2100/18 | 0700/03 | 0900/21 | 0800/11 | 2400/31 |
| | 578.18 | 578.28 | 577.89 | 573.61 | 578.35 | 579.20 | 579.59 | 579.39 | 578.91 | 578.44 | 578.59 | 577.21 |
| | 1700/03 | 0200/03 | 2200/10 | 1400/30 | 0100/01 | 1200/08 | 0600/11 | 0600/29 | 1200/07 | 1600/19 | 2000/15 | 0300/22 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 579.64

ANNUAL SUMMARY OF LEVELS, 1984
Station 5059: Harrisville, Michigan on Lake Huron

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 580.05 Aug
Daily mean elevation: 580.24 28 Jun
Instant/hourly Elevation: 580.50 0800/30 Aug

LOWEST
Monthly mean elevation: 578.92 Feb
Daily mean elevation: 578.71 13 Feb
Instant/hourly Elevation: 578.53 0200/22 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 579.13 | 4 Jan |
| 579.10 | 25 Feb |
| 579.21 | 23 Mar |
| 579.60 | 29 Apr |
| 579.83 | 30 May |
| 580.24 | 28 Jun |
| | Jul |
| 580.23 | 9 Aug |
| 580.16 | 26 Sep |
| 580.01 | 3 Oct |
| 580.04 | 17 Nov |
| 579.85 | 26 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.75 | 24 Jan |
| 578.71 | 13 Feb |
| 578.80 | 15 Mar |
| 578.99 | 13 Apr |
| 579.44 | 7 May |
| 579.63 | 2 Jun |
| | Jul |
| 579.84 | 28 Aug |
| 579.72 | 7 Sep |
| 579.56 | 19 Oct |
| 579.46 | 26 Nov |
| 579.31 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.20         |     |     |     |     |     | 1   |     | 1   |     |     |     |     | 580.20         | 2                          |
| 580.00         |     |     |     |     |     | 3   |     | 13  | 8   | 1   | 2   |     | 580.00         | 29                         |
| 579.80         |     |     |     |     | 1   | 14  |     | 9   | 20  | 10  | 5   | 1   | 579.80         | 89                         |
| 579.60         |     |     |     |     | 17  | 7   |     |     | 2   | 17  | 14  | 11  | 579.60         | 157                        |
| 579.40         |     |     |     | 5   | 13  |     |     |     |     | 3   | 9   | 14  | 579.40         | 201                        |
| 579.20         |     |     | 1   | 11  |     |     |     |     |     |     |     | 5   | 579.20         | 218                        |
| 579.00         | 5   | 8   | 13  | 12  |     |     |     |     |     |     |     |     | 579.00         | 256                        |
| 578.80         | 23  | 16  | 15  | 2   |     |     |     |     |     |     |     |     | 578.80         | 312                        |
| 578.60         | 3   | 5   | 2   |     |     |     |     |     |     |     |     |     | 578.60         | 322                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5059: Harrisville, Michigan on Lake Huron

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|-----|---------|---------|---------|---------|---------|
| 1    | 578.98  | 578.80  | 579.13  | 579.10  | 579.71  | 579.70  | /   | /       | 580.06  | 579.86  | 579.56  | 579.62  |
| 2    | 578.95  | 578.77  | 579.09  | 579.07  | 579.63  | 579.63  | /   | /       | 579.92  | 579.89  | 580.04  | 579.61  |
| 3    | 579.00  | 578.80  | 579.05  | 579.03  | 579.44  | 579.81  | /   | /       | 579.96  | 580.01  | 579.81  | 579.35  |
| 4    | 579.13  | 578.91  | 578.93  | 579.00  | 579.55  | 579.83  | /   | /       | 580.00  | 579.98  | 579.66  | 579.72  |
| 5    | 578.98  | 578.90  | 578.80  | 579.15  | 579.61  | 579.70  | /   | /       | 579.96  | 579.74  | 579.80  | 579.62  |
| 6    | 579.03  | 578.90  | 579.00  | 579.20  | 579.49  | 579.75  | /   | /       | 579.95  | 579.61  | 579.87  | 579.47  |
| 7    | 579.02  | 578.94  | 579.02  | 579.24  | 579.44  | 579.77  | /   | /       | 579.72  | 579.62  | 579.69  | 579.61  |
| 8    | 578.93  | 578.90  | 578.87  | 579.12  | 579.60  | 579.76  | /   | /       | 579.79  | 579.69  | 579.58  | 579.72  |
| 9    | 579.06  | 578.89  | 578.94  | 579.02  | 579.62  | 579.90  | /   | 580.23* | 579.90  | 579.75  | 579.66  | 579.44  |
| 10   | 578.97  | 578.76  | 578.89  | 579.04  | 579.61  | 579.78  | /   | 580.15  | 579.90  | 579.71  | 579.63  | 579.41  |
| 11   | 579.01  | 578.82  | 579.05  | 579.12  | 579.50  | 580.01  | /   | 580.11  | 579.89  | 579.73  | 579.78  | 579.42  |
| 12   | 578.93  | 578.81  | 579.07  | 579.07  | 579.65  | 579.87  | /   | 580.13  | 579.87  | 579.67  | 579.81  | 579.44  |
| 13   | 578.83  | 578.71  | 578.81  | 578.99  | 579.58  | 579.87  | /   | 580.14  | 579.84  | 579.69  | 579.80  | 579.56  |
| 14   | 578.90  | 578.88  | 578.89  | 579.06  | 579.64  | 579.96  | /   | 580.12  | 580.02  | 579.63  | 579.62  | 579.38  |
| 15   | 578.94  | 578.89  | 578.80  | 579.29  | 579.68  | 579.86  | /   | 580.17  | 579.93  | 579.57  | 579.54  | 579.33  |
| 16   | 578.83  | 578.82  | 579.00  | 579.22  | 579.60  | 579.82  | /   | 580.15  | 580.06  | 579.58  | 579.90  | 579.42  |
| 17   | 578.90  | 578.86  | 578.99  | 579.39  | 579.58  | 579.86  | /   | 580.06  | 580.07  | 579.65  | 580.04  | 579.73  |
| 18   | 578.93  | 578.96  | 578.82  | 579.32  | 579.51  | 580.00  | /   | 580.08  | 580.06  | 579.77  | 579.76  | 579.59  |
| 19   | 578.89  | 578.88  | 578.91  | 579.38  | 579.64  | 580.05  | /   | 580.06  | 580.05  | 579.56  | 579.64  | 579.53  |
| 20   | 578.94  | 579.04  | 578.88  | 579.41  | 579.57  | 579.95  | /   | 580.05  | 580.03  | 579.95  | 579.66  | 579.68  |
| 21   | 578.88  | 579.04  | 578.99  | 579.40  | 579.48  | 579.95  | /   | 579.99  | 579.98  | 579.87  | 579.64  | 579.54  |
| 22   | 578.85  | 578.97  | 578.98  | 579.26  | 579.50  | 579.94  | /   | 579.95  | 579.82  | 579.80  | 579.60  | 579.31  |
| 23   | 578.80  | 579.01  | 579.21  | 579.28  | 579.67  | 579.92* | /   | 580.05  | 579.95  | 579.87  | 579.81  | 579.69  |
| 24   | 578.75  | 579.06  | 579.11  | 579.46  | 579.68  | /       | /   | 580.00  | 579.82  | 579.81  | 579.67  | 579.49  |
| 25   | 578.93  | 579.10  | 579.01  | 579.51  | 579.66  | /       | /   | 579.98  | 579.92  | 579.93  | 579.60  | 579.59  |
| 26   | 579.00  | 579.09  | 579.03  | 579.38  | 579.79  | /       | /   | 579.95  | 580.16  | 579.69  | 579.46  | 579.85  |
| 27   | 578.85  | 579.07  | 578.99  | 579.29  | 579.78  | /       | /   | 579.92  | 579.99  | 579.75  | 579.49  | 579.33  |
| 28   | 578.86  | 579.08  | 579.03  | 579.46  | 579.68  | 580.24* | /   | 579.84  | 579.96  | 579.89  | 579.60  | 579.44  |
| 29   | 578.78  | 578.96  | 579.06  | 579.60  | 579.80  | 580.13* | /   | 579.86  | 579.94  | 579.78  | 579.74  | 579.57  |
| 30   | 578.92  |         | 579.12  | 579.20  | 579.83  | /       | /   | 579.99  | 579.93  | 579.71  | 579.54  | 579.64  |
| 31   | 578.90  |         | 579.13  |         | 579.80  |         | /   | 580.12  |         | 579.82  |         | 579.62  |
| MEAN | 578.92  | 578.92  | 578.99  | 579.24  | 579.62  | 579.88  | /   | 580.05  | 579.95  | 579.76  | 579.70  | 579.54  |
| MAX. | 579.23  | 579.28  | 579.31  | 579.74  | 579.99  | 580.31  |     | 580.50  | 580.32  | 580.23  | 580.25  | 580.03  |
|      | 0100/04 | 0300/28 | 2000/23 | 0600/29 | 0600/25 | 1600/28 |     | 0800/30 | 0600/26 | 2400/25 | 1500/02 | 1000/26 |
| MIN. | 578.60  | 578.61  | 578.65  | 578.60  | 579.31  | 579.50  |     | 579.51  | 579.51  | 579.32  | 579.34  | 578.53  |
|      | 1100/27 | 1000/13 | 1100/05 | 1600/30 | 1500/07 | 0600/02 |     | 0600/29 | 2000/12 | 1400/19 | 1300/26 | 0200/22 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 579.51

ANNUAL SUMMARY OF LEVELS, 1984  
Station 5080: Mackinaw City, Michigan on Straits of Mackinac

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.16 Jul  
Daily mean elevation: 580.27 19 Jul  
Instant/hourly Elevation: 580.77 0600/17 Oct

LOWEST  
Monthly mean elevation: 578.92 Feb  
Daily mean elevation: 578.55 28 Feb  
Instant/hourly Elevation: 578.06 0500/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.29 | 3 Jan  |
| 579.16 | 22 Feb |
| 579.09 | 21 Mar |
| 579.77 | 30 Apr |
| 579.87 | 31 May |
| 580.20 | 26 Jun |
| 580.27 | 19 Jul |
| 580.25 | 9 Aug  |
| 580.22 | 18 Sep |
| 580.10 | 2 Oct  |
| 579.96 | 3 Nov  |
| 579.88 | 7 Dec  |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.74 | 27 Jan |
| 578.55 | 28 Feb |
| 578.59 | 11 Mar |
| 578.95 | 5 Apr  |
| 579.47 | 3 May  |
| 579.79 | 1 Jun  |
| 580.08 | 27 Jul |
| 579.90 | 23 Aug |
| 579.90 | 21 Sep |
| 579.70 | 18 Oct |
| 579.51 | 11 Nov |
| 579.35 | 6 Dec  |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 580.20                                                  |     |     |     |     |     |     | 8   | 1   | 1   |     |     |     | 580.20         | 10                         |
| 580.00                                                  |     |     |     |     |     | 12  | 23  | 27  | 16  | 3   |     |     | 580.00         | 91                         |
| 579.80                                                  |     |     |     |     | 2   | 17  |     | 3   | 13  | 11  | 8   | 1   | 579.80         | 146                        |
| 579.60                                                  |     |     |     | 3   | 15  | 1   |     |     |     | 17  | 15  | 10  | 579.60         | 207                        |
| 579.40                                                  |     |     |     | 5   | 14  |     |     |     |     |     | 7   | 18  | 579.40         | 251                        |
| 579.20                                                  | 1   |     |     | 6   |     |     |     |     |     |     |     | 2   | 579.20         | 260                        |
| 579.00                                                  | 11  | 7   | 8   | 13  |     |     |     |     |     |     |     |     | 579.00         | 299                        |
| 578.80                                                  | 16  | 19  | 21  | 3   |     |     |     |     |     |     |     |     | 578.80         | 358                        |
| 578.60                                                  | 3   | 1   | 1   |     |     |     |     |     |     |     |     |     | 578.60         | 363                        |
| 578.40                                                  |     | 2   | 1   |     |     |     |     |     |     |     |     |     | 578.40         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984  
Station 5080: Mackinaw City, Michigan on Straits of Mackinac

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 579.07  | 578.97  | 578.82  | 579.08  | 579.60  | 579.79  | 580.08  | 580.14  | 579.92  | 579.93  | 579.81  | 579.56  |
| 2    | 579.01  | 579.03  | 578.84  | 579.08  | 579.56  | 579.82  | 580.12  | 580.14  | 579.99  | 580.10  | 579.76  | 579.64  |
| 3    | 579.29  | 578.96  | 578.93  | 579.02  | 579.47  | 579.90  | 580.15  | 580.12  | 579.96  | 579.78  | 579.96  | 579.69  |
| 4    | 579.03  | 578.91  | 578.99  | 578.98  | 579.54  | 579.84  | 580.13  | 580.14  | 579.98  | 579.84  | 579.92  | 579.62  |
| 5    | 579.10  | 578.75  | 578.95  | 578.95  | 579.58  | 579.88  | 580.11  | 580.16  | 579.96  | 579.74  | 579.68  | 579.71  |
| 6    | 578.84  | 578.85  | 578.82  | 578.98  | 579.59  | 579.90  | 580.09  | 580.20  | 580.02  | 579.78  | 579.70  | 579.35  |
| 7    | 579.10  | 578.89  | 578.88  | 579.03  | 579.62  | 579.93  | 580.10  | 580.16  | 580.20  | 579.78  | 579.81  | 579.88  |
| 8    | 578.79  | 578.95  | 578.83  | 579.07  | 579.68  | 580.06  | 580.10  | 580.18  | 580.20  | 579.79  | 579.94  | 579.51  |
| 9    | 579.01  | 578.96  | 578.95  | 579.05  | 579.57  | 579.91  | 580.12  | 580.25  | 580.10  | 579.76  | 579.72  | 579.59  |
| 10   | 578.84  | 578.93  | 579.06  | 579.11  | 579.59  | 579.98  | 580.08  | 580.17  | 580.05  | 579.77  | 579.56  | 579.47  |
| 11   | 578.98  | 578.92  | 578.59  | 579.13  | 579.62  | 579.91  | 580.16  | 580.10  | 580.02  | 579.77  | 579.51  | 579.72  |
| 12   | 578.99  | 578.92  | 578.97  | 579.11  | 579.57  | 579.95  | 580.18  | 580.11  | 580.10  | 579.77  | 579.59  | 579.49  |
| 13   | 578.97  | 579.01  | 578.92  | 579.17  | 579.54  | 579.98  | 580.22  | 580.13  | 580.11  | 579.78  | 579.70  | 579.41  |
| 14   | 578.81  | 579.02  | 578.96  | 579.13  | 579.58  | 579.90  | 580.26  | 580.13  | 580.01  | 579.73  | 579.91  | 579.50  |
| 15   | 579.01  | 578.91  | 578.99  | 579.18  | 579.56  | 579.90  | 580.23  | 580.17  | 580.01  | 579.70  | 579.91  | 579.57  |
| 16   | 579.08  | 578.90  | 578.69  | 579.19  | 579.58  | 579.98  | 580.19  | 580.04  | 580.07  | 579.78  | 579.68  | 579.77  |
| 17   | 578.97  | 578.92  | 578.87  | 579.26  | 579.66  | 580.04  | 580.21  | 580.07  | 580.14  | 579.84  | 579.71  | 579.48  |
| 18   | 578.95  | 578.94  | 578.90  | 579.32  | 579.70  | 580.04  | 580.16  | 580.06  | 580.22  | 579.70  | 579.57  | 579.53  |
| 19   | 578.99  | 578.91  | 578.94  | 579.36  | 579.61  | 580.01  | 580.27  | 580.03  | 580.07  | 580.07  | 579.54  | 579.62  |
| 20   | 578.86  | 579.01  | 578.99  | 579.38  | 579.56  | 579.98  | 580.15  | 580.10  | 579.92  | 580.09  | 579.56  | 579.46  |
| 21   | 579.09  | 579.04  | 579.09  | 579.27  | 579.64  | 580.00  | 580.15  | 580.16  | 579.90  | 579.78  | 579.63  | 579.69  |
| 22   | 578.96  | 579.16  | 578.95  | 579.29  | 579.68  | 580.00  | 580.26  | 580.01  | 580.05  | 579.90  | 579.93  | 579.42  |
| 23   | 579.00  | 579.12  | 578.99  | 579.41  | 579.68  | 580.04  | 580.21  | 579.90  | 579.98  | 579.84  | 579.64  | 579.47  |
| 24   | 579.04  | 578.91  | 579.08  | 579.49  | 579.80  | 580.09  | 580.11  | 579.97  | 580.04  | 579.94  | 579.73  | 579.42  |
| 25   | 578.75  | 578.89  | 579.02  | 579.50  | 579.76  | 580.09  | 580.16  | 580.02  | 579.97  | 579.80  | 579.67  | 579.61  |
| 26   | 578.93  | 578.90  | 579.06  | 579.46  | 579.76  | 580.20  | 580.12  | 580.05  | 579.96  | 579.83  | 579.69  | 579.43  |
| 27   | 578.74  | 578.90  | 579.01  | 579.61  | 579.77  | 580.16  | 580.08  | 580.08  | 580.01  | 579.99  | 579.71  | 579.53  |
| 28   | 579.08  | 578.55  | 578.93  | 579.67  | 579.63  | 580.11  | 580.12  | 580.02  | 579.94  | 579.83  | 579.80  | 579.65  |
| 29   | 578.82  | 578.58  | 578.96  | 579.50  | 579.73  | 580.06  | 580.16  | 580.03  | 579.95  | 579.84  | 579.69  | 579.46  |
| 30   | 578.82  |         | 579.02  | 579.77  | 579.83  | 580.04  | 580.17  | 579.99  | 579.97  | 579.79  | 579.55  | 579.51  |
| 31   | 578.92  |         | 579.06  |         | 579.87  |         | 580.22  | 580.02  |         | 579.82  |         | 579.37  |
| MEAN | 578.96  | 578.92  | 578.94  | 579.25  | 579.64  | 579.98  | 580.16  | 580.09  | 580.03  | 579.83  | 579.72  | 579.55  |
| MAX. | 579.59  | 579.34  | 579.26  | 580.33  | 580.22  | 580.61  | 580.47  | 580.39  | 580.53  | 580.77  | 580.24  | 580.39  |
| MIN. | 1400/03 | 1200/23 | 1100/20 | 1000/30 | 0400/25 | 2300/26 | 2000/14 | 1400/09 | 2300/12 | 0600/17 | 1400/22 | 1500/25 |
|      | 578.29  | 578.29  | 578.06  | 578.77  | 579.26  | 579.54  | 579.80  | 579.63  | 579.48  | 579.38  | 579.31  | 578.98  |
|      | 0800/27 | 0100/29 | 0500/11 | 0600/05 | 1400/13 | 0300/02 | 0600/11 | 0200/30 | 2400/25 | 1700/30 | 0300/11 | 0600/22 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 579.59

ANNUAL SUMMARY OF LEVELS, 1984  
Station 5099: DeTour Village, Michigan on Lake Huron

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.09 Jul  
Daily mean elevation: 580.21 19 Jul  
Instant/hourly Elevation: 580.42 2200/12 Sep

LOWEST  
Monthly mean elevation: 578.85 Feb  
Daily mean elevation: 578.44 28 Feb  
Instant/hourly Elevation: 578.10 0700/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.23 | 3 Jan  |
| 579.05 | 23 Feb |
| 579.08 | 24 Mar |
| 579.59 | 29 Apr |
| 579.80 | 30 May |
| 580.13 | 28 Jun |
| 580.21 | 19 Jul |
| 580.18 | 9 Aug  |
| 580.13 | 18 Sep |
| 580.01 | 20 Oct |
| 580.03 | 3 Nov  |
| 579.83 | 21 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.64 | 27 Jan |
| 578.44 | 28 Feb |
| 578.60 | 11 Mar |
| 578.84 | 5 Apr  |
| 579.37 | 3 May  |
| 579.66 | 2 Jun  |
| 580.00 | 27 Jul |
| 579.88 | 23 Aug |
| 579.78 | 3 Sep  |
| 579.60 | 15 Oct |
| 579.28 | 11 Nov |
| 579.11 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 580.20                                                  |     |     |     |     |     |     | 1   |     |     |     |     |     | 580.20         | 1                          |
| 580.00                                                  |     |     |     |     |     | 5   | 28  | 21  | 9   | 1   | 1   |     | 580.00         | 66                         |
| 579.80                                                  |     |     |     |     |     | 21  | 2   | 10  | 20  | 10  | 3   | 1   | 579.80         | 133                        |
| 579.60                                                  |     |     |     |     | 9   | 4   |     |     | 1   | 19  | 16  | 9   | 579.60         | 191                        |
| 579.40                                                  |     |     |     | 5   | 21  |     |     |     |     | 1   | 9   | 12  | 579.40         | 239                        |
| 579.20                                                  | 1   |     |     | 7   | 1   |     |     |     |     |     | 1   | 8   | 579.20         | 257                        |
| 579.00                                                  | 7   | 2   | 3   | 10  |     |     |     |     |     |     |     | 1   | 579.00         | 280                        |
| 578.80                                                  | 15  | 21  | 21  | 8   |     |     |     |     |     |     |     |     | 578.80         | 345                        |
| 578.60                                                  | 8   | 4   | 6   |     |     |     |     |     |     |     |     |     | 578.60         | 363                        |
| 578.40                                                  |     | 2   | 1   |     |     |     |     |     |     |     |     |     | 578.40         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5099: DeTour Village, Michigan on Lake Huron

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 579.06  | 578.90  | 578.80  | 579.05  | 579.58  | 579.72  | 580.01  | 580.12  | 579.94  | 579.85  | 579.50  | 579.51  |
| 2    | 578.95  | 578.93  | 578.82  | 579.04  | 579.60  | 579.66  | 580.04  | 580.03  | 579.86  | 579.98  | 579.74  | 579.74  |
| 3    | 579.23  | 578.86  | 578.89  | 578.98  | 579.37  | 579.81  | 580.07  | 580.04  | 579.78  | 579.77  | 580.03  | 579.40  |
| 4    | 579.13  | 578.87  | 578.95  | 578.86  | 579.42  | 579.85  | 580.06  | 580.06  | 579.94  | 579.86  | 579.78  | 579.67  |
| 5    | 579.06  | 578.66  | 578.81  | 578.84  | 579.59  | 579.78  | 580.02  | 580.07  | 579.88  | 579.67  | 579.62  | 579.74  |
| 6    | 578.82  | 578.76  | 578.78  | 578.95  | 579.50  | 579.80  | 580.02  | 580.12  | 580.00  | 579.63  | 579.74  | 579.29  |
| 7    | 579.03  | 578.82  | 578.88  | 579.01  | 579.48  | 579.84  | 580.12  | 580.09  | 580.13  | 579.70  | 579.76  | 579.77  |
| 8    | 578.75  | 578.91  | 578.75  | 579.03  | 579.59  | 579.93  | 580.06  | 580.11  | 580.11  | 579.69  | 579.84  | 579.69  |
| 9    | 578.99  | 578.91  | 578.88  | 578.94  | 579.54  | 579.93  | 580.02  | 580.18  | 580.10  | 579.71  | 579.72  | 579.59  |
| 10   | 578.76  | 578.83  | 578.99  | 578.98  | 579.56  | 579.83  | 580.00  | 580.15  | 580.02  | 579.70  | 579.44  | 579.43  |
| 11   | 578.92  | 578.83  | 578.60  | 579.08  | 579.49  | 579.92  | 580.07  | 580.04  | 579.96  | 579.72  | 579.28  | 579.68  |
| 12   | 578.90  | 578.86  | 579.05  | 579.04  | 579.51  | 579.89  | 580.14  | 580.04  | 580.10  | 579.68  | 579.48  | 579.51  |
| 13   | 578.77  | 578.82  | 578.78  | 578.95  | 579.54  | 579.89  | 580.14  | 580.07  | 579.98  | 579.70  | 579.69  | 579.36  |
| 14   | 578.66  | 578.89  | 578.87  | 578.96  | 579.47  | 579.87  | 580.17  | 580.06  | 580.00  | 579.67  | 579.83  | 579.36  |
| 15   | 578.93  | 578.86  | 578.91  | 579.08  | 579.53  | 579.85  | 580.15  | 580.14  | 579.90  | 579.60  | 579.76  | 579.38  |
| 16   | 579.02  | 578.79  | 578.62  | 579.05  | 579.53  | 579.86  | 580.14  | 580.03  | 580.01  | 579.64  | 579.62  | 579.63  |
| 17   | 578.92  | 578.78  | 578.81  | 579.17  | 579.63  | 579.94  | 580.18  | 580.02  | 580.09  | 579.67  | 579.91  | 579.54  |
| 18   | 578.94  | 578.93  | 578.69  | 579.21  | 579.56  | 579.97  | 580.09  | 580.03  | 580.13  | 579.74  | 579.58  | 579.49  |
| 19   | 578.95  | 578.86  | 578.84  | 579.30  | 579.58  | 579.98  | 580.21  | 579.95  | 580.08  | 579.74  | 579.46  | 579.55  |
| 20   | 578.85  | 578.92  | 578.87  | 579.31  | 579.54  | 579.90  | 580.12  | 580.07  | 579.87  | 580.01  | 579.49  | 579.46  |
| 21   | 579.10  | 578.98  | 578.95  | 579.27  | 579.52  | 579.90  | 580.07  | 580.12  | 579.92  | 579.79  | 579.58  | 579.83  |
| 22   | 578.95  | 579.05  | 578.83  | 579.19  | 579.57  | 579.92  | 580.17  | 579.96  | 579.89  | 579.81  | 579.80  | 579.11  |
| 23   | 578.94  | 579.05  | 578.92  | 579.22  | 579.62  | 579.89  | 580.13  | 579.88  | 579.96  | 579.83  | 579.75  | 579.61  |
| 24   | 578.92  | 578.88  | 579.08  | 579.39  | 579.78  | 579.99  | 580.05  | 579.91  | 579.96  | 579.84  | 579.70  | 579.33  |
| 25   | 578.78  | 578.89  | 578.92  | 579.49  | 579.71  | 580.06  | 580.10  | 579.96  | 579.83  | 579.88  | 579.67  | 579.52  |
| 26   | 578.98  | 578.92  | 578.98  | 579.39  | 579.69  | 580.10  | 580.07  | 579.99  | 579.98  | 579.73  | 579.60  | 579.70  |
| 27   | 578.64  | 578.90  | 578.93  | 579.42  | 579.77  | 580.06  | 580.00  | 580.01  | 579.93  | 579.90  | 579.65  | 579.49  |
| 28   | 579.09  | 578.44  | 578.84  | 579.49  | 579.54  | 580.13  | 580.05  | 579.96  | 579.88  | 579.80  | 579.65  | 579.56  |
| 29   | 578.72  | 578.45  | 578.84  | 579.59  | 579.62  | 580.02  | 580.08  | 579.97  | 579.86  | 579.83  | 579.78  | 579.40  |
| 30   | 578.75  |         | 578.97  | 579.51  | 579.80  | 579.95  | 580.08  | 579.92  | 579.90  | 579.69  | 579.50  | 579.57  |
| 31   | 578.84  |         | 579.02  |         | 579.79  |         | 580.12  | 580.00  |         | 579.89  |         | 579.40  |
| MEAN | 578.91  | 578.85  | 578.87  | 579.16  | 579.58  | 579.91  | 580.09  | 580.04  | 579.97  | 579.77  | 579.66  | 579.53  |
| MAX. | 579.50  | 579.18  | 579.22  | 579.89  | 579.94  | 580.28  | 580.42  | 580.33  | 580.42  | 580.20  | 580.27  | 580.25  |
|      | 1600/03 | 1200/23 | 0400/12 | 1600/30 | 1700/30 | 2400/26 | 0800/17 | 1700/09 | 2200/12 | 1700/20 | 1400/17 | 2000/21 |
| MIN. | 578.27  | 578.17  | 578.10  | 578.72  | 579.19  | 579.53  | 579.82  | 579.69  | 579.33  | 579.27  | 578.86  | 578.37  |
|      | 1000/27 | 1900/28 | 0700/11 | 0600/05 | 0300/04 | 0400/02 | 1200/10 | 1200/30 | 2100/25 | 1900/30 | 2100/01 | 0500/22 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 579.53

ANNUAL SUMMARY OF LEVELS, 1984  
Station 6060: US Slip below locks, Sault St Marie, Michigan on St Marys River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 581.51 Aug  
Daily mean elevation: 581.71 7 Sep  
Instant/hourly Elevation: 582.24 0100/13 Sep

LOWEST  
Monthly mean elevation: 580.11 Apr  
Daily mean elevation: 579.44 11 Nov  
Instant/hourly Elevation: 579.31 1800/11 Nov

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 581.12 | 3 Jan  |
| 580.98 | 3 Feb  |
| 580.85 | 12 Mar |
| 580.68 | 30 Apr |
| 580.95 | 31 May |
| 581.28 | 27 Jun |
| 581.59 | 22 Jul |
| 581.64 | 8 Aug  |
| 581.71 | 7 Sep  |
| 581.22 | 2 Oct  |
| 580.97 | 3 Nov  |
| 581.03 | 27 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 580.19 | 29 Jan |
| 579.61 | 29 Feb |
| 579.78 | 3 Mar  |
| 579.71 | 6 Apr  |
| 580.41 | 1 May  |
| 580.87 | 2 Jun  |
| 581.15 | 1 Jul  |
| 581.29 | 23 Aug |
| 580.91 | 29 Sep |
| 580.22 | 28 Oct |
| 579.44 | 11 Nov |
| 579.95 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 581.60 | | | | | | | | 3 | 1 | | | | 581.60 | 4 |
| 581.40 | | | | | | | 16 | 27 | 8 | | | | 581.40 | 55 |
| 581.20 | | | | | | 4 | 13 | 1 | 14 | 1 | | | 581.20 | 88 |
| 581.00 | 4 | | | | | 20 | 2 | | 6 | 1 | | 1 | 581.00 | 122 |
| 580.80 | 13 | 5 | 1 | | 8 | 6 | | | 1 | 1 | 1 | 2 | 580.80 | 160 |
| 580.60 | 11 | 4 | | 2 | 17 | | | | | 7 | 1 | 3 | 580.60 | 205 |
| 580.40 | 2 | 4 | 6 | 4 | 6 | | | | | 18 | 3 | 8 | 580.40 | 256 |
| 580.20 | | 3 | 11 | 2 | | | | | | 3 | 7 | 8 | 580.20 | 290 |
| 580.00 | 1 | 5 | 8 | 8 | | | | | | | 10 | 6 | 580.00 | 328 |
| 579.80 | | 2 | 4 | 11 | | | | | | | 6 | 3 | 579.80 | 354 |
| 579.60 | | 6 | 1 | 3 | | | | | | | 1 | | 579.60 | 365 |
| 579.40 | | | | | | | | | | | 1 | | 579.40 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 6060: US Slip below locks, Sault St Marie, Michigan on St Marys River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 580.63 | 580.90 | 580.06 | 580.01 | 580.41 | 580.96 | 581.15 | 581.57 | 581.50 | 581.09 | 580.45 | 579.98 |
| 2 | 580.76 | 580.91 | 580.10 | 579.98 | 580.65 | 580.87 | 581.25 | 581.51 | 581.48 | 581.22 | 580.24 | 580.47 |
| 3 | 581.12 | 580.98 | 579.78 | 579.98 | 580.65 | 580.92 | 581.24 | 581.47 | 581.31 | 580.62 | 580.97 | 580.31 |
| 4 | 581.07 | 580.90 | 579.93 | 579.88 | 580.54 | 581.01 | 581.27 | 581.52 | 581.35 | 580.56 | 580.57 | 580.43 |
| 5 | 581.01 | 580.45 | 580.03 | 579.73 | 580.75 | 580.98 | 581.30 | 581.52 | 581.29 | 580.56 | 580.20 | 580.56 |
| 6 | 580.93 | 580.64 | 580.08 | 579.71 | 580.76 | 581.04 | 581.27 | 581.44 | 581.41 | 580.43 | 580.22 | 579.96 |
| 7 | 580.85 | 580.76 | 580.28 | 579.82 | 580.80 | 581.08 | 581.17 | 581.52 | 581.71 | 580.58 | 580.37 | 580.49 |
| 8 | 581.00 | 580.94 | 580.37 | 580.02 | 580.79 | 581.22 | 581.33 | 581.64 | 581.56 | 580.57 | 580.61 | 580.37 |
| 9 | 580.94 | 580.75 | 580.49 | 580.00 | 580.64 | 581.09 | 581.35 | 581.62 | 581.50 | 580.59 | 580.18 | 580.37 |
| 10 | 580.68 | 580.66 | 580.53 | 579.97 | 580.76 | 581.14 | 581.32 | 581.61 | 581.38 | 580.57 | 579.81 | 580.15 |
| 11 | 580.80 | 580.46 | 580.55 | 580.04 | 580.76 | 580.96 | 581.27 | 581.54 | 581.24 | 580.48 | 579.44 | 580.48 |
| 12 | 580.93 | 580.44 | 580.85 | 579.98 | 580.48 | 581.13 | 581.34 | 581.48 | 581.46 | 580.44 | 579.78 | 580.39 |
| 13 | 580.91 | 580.51 | 580.60 | 579.93 | 580.72 | 581.12 | 581.43 | 581.50 | 581.49 | 580.33 | 580.10 | 580.01 |
| 14 | 580.78 | 580.27 | 580.45 | 579.78 | 580.51 | 580.95 | 581.44 | 581.49 | 581.25 | 580.29 | 580.44 | 580.26 |
| 15 | 580.83 | 580.14 | 580.51 | 579.96 | 580.55 | 581.10 | 581.48 | 581.59 | 581.15 | 580.44 | 580.37 | 580.05 |
| 16 | 581.01 | 579.85 | 580.23 | 579.93 | 580.64 | 581.14 | 581.34 | 581.47 | 581.21 | 580.46 | 579.84 | 580.54 |
| 17 | 580.68 | 579.78 | 580.27 | 579.87 | 580.84 | 581.14 | 581.52 | 581.50 | 581.38 | 580.66 | 580.18 | 580.13 |
| 18 | 580.56 | 579.87 | 580.22 | 580.07 | 580.85 | 581.09 | 581.28 | 581.59 | 581.48 | 580.53 | 579.92 | 580.16 |
| 19 | 580.90 | 580.11 | 580.24 | 580.20 | 580.59 | 581.06 | 581.56 | 581.44 | 581.29 | 580.92 | 579.85 | 580.34 |
| 20 | 580.85 | 580.09 | 580.13 | 580.13 | 580.77 | 581.12 | 581.56 | 581.51 | 581.11 | 580.68 | 579.83 | 580.19 |
| 21 | 580.91 | 580.02 | 580.22 | 580.14 | 580.82 | 581.11 | 581.45 | 581.60 | 581.14 | 580.45 | 580.04 | 580.98 |
| 22 | 580.68 | 580.21 | 580.23 | 580.01 | 580.70 | 581.14 | 581.59 | 581.51 | 581.27 | 580.59 | 580.34 | 579.95 |
| 23 | 580.73 | 580.23 | 580.03 | 580.28 | 580.69 | 581.13 | 581.47 | 581.29 | 581.24 | 580.61 | 580.23 | 580.37 |
| 24 | 580.76 | 580.08 | 580.36 | 580.35 | 580.92 | 581.03 | 581.24 | 581.41 | 581.31 | 580.70 | 580.15 | 580.30 |
| 25 | 580.98 | 579.75 | 580.27 | 580.44 | 580.94 | 581.13 | 581.49 | 581.45 | 581.26 | 580.72 | 580.11 | 580.54 |
| 26 | 580.89 | 579.70 | 580.22 | 580.50 | 580.74 | 581.21 | 581.50 | 581.52 | 581.20 | 580.59 | 580.16 | 580.79 |
| 27 | 580.75 | 579.79 | 580.14 | 580.65 | 580.92 | 581.28 | 581.46 | 581.55 | 581.24 | 580.55 | 580.19 | 581.03 |
| 28 | 580.54 | 579.73 | 580.01 | 580.58 | 580.77 | 581.18 | 581.45 | 581.49 | 581.18 | 580.22 | 580.10 | 580.96 |
| 29 | 580.19 | 579.61 | 579.88 | 580.56 | 580.73 | 581.22 | 581.53 | 581.54 | 580.91 | 580.55 | 580.28 | 580.64 |
| 30 | 580.80 | | 579.92 | 580.68 | 580.86 | 581.12 | 581.50 | 581.41 | 581.02 | 580.56 | 579.99 | 580.66 |
| 31 | 580.86 | | 579.94 | | 580.95 | | 581.58 | 581.44 | | 580.76 | | 580.50 |
| MEAN | 580.82 | 580.29 | 580.22 | 580.11 | 580.73 | 581.09 | 581.39 | 581.51 | 581.31 | 580.59 | 580.17 | 580.40 |
| MAX. | 581.39 | 581.06 | 580.99 | 581.12 | 581.15 | 581.53 | 581.83 | 581.96 | 582.24 | 581.45 | 581.14 | 581.76 |
| | 2100/03 | 2100/08 | 1000/12 | 2000/27 | 2300/17 | 0300/27 | 0100/31 | 1600/08 | 0100/13 | 2100/02 | 0300/01 | 2000/21 |
| MIN. | 579.70 | 579.39 | 579.44 | 579.53 | 580.19 | 580.61 | 581.00 | 581.08 | 580.71 | 579.80 | 579.31 | 579.48 |
| | 1400/29 | 0500/29 | 1500/03 | 1500/05 | 1900/12 | 0800/03 | 1500/24 | 1600/06 | 1600/29 | 2100/03 | 1800/11 | 1600/06 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 580.72

ANNUAL SUMMARY OF LEVELS, 1984
 Station 6070: SW Pier above locks, Sault St Marie, Michigan on St Marys River

INTERNATIONAL
 GREAT LAKES
 DATUM (1955)

HIGHEST
 Monthly mean elevation: 601.07 Aug
 Daily mean elevation: 601.89 16 Nov
 Instant/hourly Elevation: 602.80 0700/2 Nov

LOWEST
 Monthly mean elevation: 600.25 Mar
 Daily mean elevation: 599.88 14 Mar
 Instant/hourly Elevation: 598.61 1700/27 Apr

HIGHEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 600.85 | 8 Jan |
| 600.63 | 24 Feb |
| 600.60 | 22 Mar |
| 600.77 | 30 Apr |
| 600.88 | 1 May |
| 601.23 | 28 Jun |
| 601.44 | 6 Jul |
| 601.23 | 31 Aug |
| 601.46 | 25 Sep |
| 601.57 | 3 Oct |
| 601.89 | 16 Nov |
| 601.79 | 22 Dec |

LOWEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 600.10 | 31 Jan |
| 599.95 | 2 Feb |
| 599.88 | 14 Mar |
| 599.89 | 27 Apr |
| 600.27 | 17 May |
| 600.34 | 1 Jun |
| 600.90 | 22 Jul |
| 600.88 | 26 Aug |
| 600.35 | 7 Sep |
| 600.58 | 31 Oct |
| 600.51 | 3 Nov |
| 599.91 | 27 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 601.80         |     |     |     |     |     |     |     |     |     |     | 1   |     | 601.80         | 1                          |
| 601.60         |     |     |     |     |     |     |     |     |     |     | 2   | 1   | 601.60         | 4                          |
| 601.40         |     |     |     |     |     |     | 1   |     | 1   | 2   | 2   | 1   | 601.40         | 11                         |
| 601.20         |     |     |     |     |     | 1   | 2   | 4   | 2   | 1   | 1   | 3   | 601.20         | 25                         |
| 601.00         |     |     |     |     |     | 6   | 17  | 18  | 11  | 6   | 10  | 7   | 601.00         | 100                        |
| 600.80         | 1   |     |     |     | 2   | 7   | 7   | 9   | 12  | 13  | 6   | 7   | 600.80         | 164                        |
| 600.60         | 2   | 1   |     | 1   | 12  | 10  |     |     | 2   | 7   | 5   | 5   | 600.60         | 209                        |
| 600.40         | 13  | 11  | 4   | 4   | 12  | 5   |     |     | 1   | 2   | 3   | 3   | 600.40         | 267                        |
| 600.20         | 11  | 9   | 15  | 17  | 5   | 1   |     |     | 1   |     |     |     | 600.20         | 329                        |
| 600.00         | 4   | 7   | 9   | 7   |     |     |     |     |     |     |     |     | 600.00         | 356                        |
| 599.80         |     | 1   | 3   | 1   |     |     |     |     |     |     |     | 1   | 599.80         | 362                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 6070: SW Pier above locks, Sault St Marie, Michigan on St Marys River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 600.36  | 600.10  | 600.48  | 600.26  | 600.88  | 600.34  | 601.01  | 601.04  | 601.00  | 600.94  | 601.69  | 601.14  |
| 2    | 600.46  | 599.95  | 600.48  | 600.30  | 600.54  | 600.51  | 600.95  | 601.05  | 600.93  | 600.89  | 601.64  | 600.66  |
| 3    | 600.29  | 600.34  | 600.32  | 600.24  | 600.47  | 600.65  | 600.99  | 601.09  | 601.07  | 601.57  | 600.51  | 601.45  |
| 4    | 600.56  | 600.32  | 600.17  | 600.28  | 600.57  | 600.63  | 601.01  | 601.07  | 601.09  | 601.14  | 601.04  | 601.32  |
| 5    | 600.33  | 600.48  | 600.34  | 600.37  | 600.41  | 600.41  | 600.99  | 601.00  | 601.05  | 600.71  | 601.44  | 600.87  |
| 6    | 600.66  | 600.29  | 600.39  | 600.53  | 600.38  | 600.55  | 601.44  | 601.10  | 600.84  | 600.76  | 601.16  | 601.17  |
| 7    | 600.17  | 600.30  | 600.20  | 600.21  | 600.30  | 600.55  | 601.22  | 601.06  | 600.35  | 600.82  | 600.80  | 600.81  |
| 8    | 600.85  | 600.19  | 600.19  | 600.08  | 600.54  | 600.60  | 600.97  | 600.95  | 600.77  | 601.02  | 600.77  | 600.98  |
| 9    | 600.41  | 600.07  | 600.11  | 600.03  | 600.76  | 600.80  | 600.92  | 601.01  | 600.94  | 600.96  | 601.08  | 600.62  |
| 10   | 600.60  | 600.10  | 600.21  | 600.14  | 600.45  | 600.79  | 601.06  | 601.22  | 600.99  | 600.95  | 601.16  | 600.91  |
| 11   | 600.40  | 600.20  | 600.31  | 600.16  | 600.52  | 600.83  | 601.17  | 601.16  | 601.02  | 600.93  | 601.12  | 600.42  |
| 12   | 600.25  | 600.09  | 599.98  | 600.04  | 600.81  | 600.79  | 601.06  | 601.14  | 600.62  | 600.85  | 601.06  | 601.00  |
| 13   | 600.30  | 600.09  | 599.96  | 600.04  | 600.61  | 600.93  | 601.01  | 601.12  | 601.13  | 600.87  | 600.90  | 600.77  |
| 14   | 600.42  | 600.31  | 599.88  | 600.29  | 600.75  | 601.03  | 600.94  | 601.05  | 601.12  | 600.87  | 600.54  | 600.59  |
| 15   | 600.27  | 600.31  | 600.11  | 600.35  | 600.74  | 600.80  | 601.08  | 601.11  | 601.12  | 600.68  | 601.08  | 600.54  |
| 16   | 600.43  | 600.28  | 600.34  | 600.54  | 600.56  | 600.76  | 601.17  | 601.18  | 601.07  | 600.65  | 601.89  | 600.70  |
| 17   | 600.55  | 600.41  | 600.02  | 600.53  | 600.27  | 600.86  | 601.09* | 600.99  | 600.93  | 600.77  | 601.41  | 601.02  |
| 18   | 600.53  | 600.43  | 600.14  | 600.40  | 600.45  | 600.93  | /       | 601.15  | 601.00  | 600.78  | 601.23  | 601.10  |
| 19   | 600.48  | 600.57  | 600.16  | 600.33  | 600.65  | 601.01  | 601.08* | 601.08  | 600.98  | 600.60  | 601.10  | 600.94  |
| 20   | 600.56  | 600.42  | 600.17  | 600.41  | 600.59  | 600.92  | 601.14  | 600.97  | 601.25  | 601.06  | 601.04  | 601.28  |
| 21   | 600.36  | 600.34  | 600.45  | 600.32  | 600.30  | 600.88  | 601.02  | 600.96  | 600.83  | 601.01  | 600.77  | 600.25  |
| 22   | 600.41  | 600.28  | 600.60  | 600.31  | 600.56  | 600.79  | 600.90  | 601.18  | 600.58  | 601.07  | 600.99  | 601.79  |
| 23   | 600.18  | 600.43  | 600.40  | 600.26  | 600.64  | 600.77  | 601.18  | 601.21  | 601.00  | 601.08  | 600.98  | 601.14  |
| 24   | 600.26  | 600.63  | 600.23  | 600.31  | 600.40  | 601.17  | 601.22  | 601.02  | 600.83  | 600.94  | 600.82  | 601.23  |
| 25   | 600.75  | 600.60  | 600.29  | 600.26  | 600.76  | 600.99  | 601.08  | 600.91  | 601.46  | 600.96  | 600.75  | 601.18  |
| 26   | 600.26  | 600.54  | 600.22  | 600.07  | 600.70  | 600.75  | 601.14  | 600.88  | 601.31  | 600.82  | 600.56  | 600.34  |
| 27   | 600.55  | 600.47  | 600.23  | 599.89  | 600.64  | 601.15  | 601.01* | 600.92  | 601.11  | 600.74  | 600.62  | 599.91  |
| 28   | 600.15  | 600.55  | 600.27  | 600.27  | 600.69  | 601.23  | /       | 600.98  | 601.17  | 601.49  | 600.94  | 600.36  |
| 29   | 600.55  | 600.60  | 600.38  | 600.29  | 600.63  | 601.17  | /       | 601.03  | 601.10  | 600.92  | 600.98  | 601.06  |
| 30   | 600.29  |         | 600.37  | 600.77  | 600.67  | 601.10  | /       | 601.21  | 600.98  | 601.31  | 601.06  | 600.82  |
| 31   | 600.10  |         | 600.30  |         | 600.44  |         | 601.06* | 601.23  |         | 600.58  |         | 600.76  |
| MEAN | 600.41  | 600.33  | 600.25  | 600.28  | 600.57  | 600.82  | 601.07  | 601.07  | 600.99  | 600.93  | 601.04  | 600.88  |
| MAX. | 601.42  | 600.89  | 601.70  | 602.29  | 601.46  | 601.94  | 602.04  | 601.63  | 602.25  | 602.47  | 602.80  | 602.52  |
| MIN. | 0500/27 | 2200/28 | 2300/10 | 2000/30 | 0100/01 | 1200/27 | 2400/14 | 0400/31 | 2100/25 | 0400/28 | 0700/02 | 0300/17 |
|      | 599.52  | 599.52  | 599.32  | 598.61  | 599.72  | 598.95  | 599.65  | 599.88  | 599.58  | 599.53  | 600.00  | 599.45  |
|      | 1100/03 | 1400/02 | 2400/14 | 1700/27 | 1300/24 | 0200/10 | 1300/13 | 1300/09 | 1800/07 | 2100/31 | 1200/03 | 0200/27 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 600.72

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7023: Ludington, Michigan on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.37 Jul  
Daily mean elevation: 580.56 2 Sep  
Instant/hourly Elevation: 580.99 1100/19 Oct

LOWEST  
Monthly mean elevation: 579.23 Jan  
Daily mean elevation: 578.93 11 Mar  
Instant/hourly Elevation: 578.79 1500/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.50 | 13 Jan |
| 579.41 | 19 Feb |
| 579.59 | 21 Mar |
| 580.26 | 30 Apr |
| 580.11 | 28 May |
| 580.46 | 27 Jun |
| 580.50 | 17 Jul |
| 580.56 | 8 Aug  |
| 580.56 | 2 Sep  |
| 580.39 | 19 Oct |
| 580.29 | 1 Nov  |
| 580.10 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.07 | 25 Jan |
| 579.13 | 8 Feb  |
| 578.93 | 11 Mar |
| 579.31 | 6 Apr  |
| 579.59 | 1 May  |
| 580.04 | 9 Jun  |
| 580.11 | 7 Jul  |
| 580.14 | 31 Aug |
| 579.98 | 26 Sep |
| 579.88 | 25 Oct |
| 579.60 | 17 Nov |
| 579.33 | 26 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.40 | | | | | | 4 | 13 | 6 | 4 | | | | 580.40 | 27 |
| 580.20 | | | | 1 | | 19 | 17 | 19 | 13 | 6 | 3 | | 580.20 | 105 |
| 580.00 | | | | 1 | 6 | 7 | 1 | 6 | 12 | 16 | 7 | 2 | 580.00 | 163 |
| 579.80 | | | | 5 | 20 | | | | 1 | 9 | 14 | 12 | 579.80 | 224 |
| 579.60 | | | | 12 | 4 | | | | | | 5 | 11 | 579.60 | 256 |
| 579.40 | 1 | 1 | 9 | 6 | 1 | | | | | | 1 | 5 | 579.40 | 280 |
| 579.20 | 16 | 23 | 14 | 5 | | | | | | | | 1 | 579.20 | 339 |
| 579.00 | 14 | 5 | 7 | | | | | | | | | | 579.00 | 365 |
| 578.80 | | | 1 | | | | | | | | | | 578.80 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7023: Ludington, Michigan on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 579.31 | 579.28 | 579.10 | 579.34 | 579.59 | 580.16 | 580.33 | 580.31 | 580.27 | 580.07 | 580.29 | 579.84 |
| 2 | 579.33 | 579.33 | 579.12 | 579.39 | 579.80 | 580.25 | 580.34 | 580.41 | 580.56 | 580.08 | 579.70 | 579.94 |
| 3 | 579.22 | 579.32 | 579.15 | 579.40 | 579.93 | 580.05 | 580.32 | 580.39 | 580.45 | 579.92 | 579.96 | 580.10 |
| 4 | 579.12 | 579.23 | 579.24 | 579.56 | 579.90 | 580.04 | 580.31 | 580.38 | 580.26 | 579.90 | 580.09 | 579.56 |
| 5 | 579.32 | 579.26 | 579.43 | 579.44 | 579.83 | 580.21 | 580.32 | 580.37 | 580.25 | 580.17 | 579.94 | 579.73 |
| 6 | 579.22 | 579.25 | 579.18 | 579.31 | 579.99 | 580.17 | 580.35 | 580.43 | 580.20 | 580.24 | 579.81 | 579.78 |
| 7 | 579.27 | 579.18 | 579.20 | 579.34 | 580.07 | 580.23 | 580.11 | 580.40 | 580.38 | 580.24 | 580.04 | 579.66 |
| 8 | 579.20 | 579.13 | 579.27 | 579.49 | 579.84 | 580.23 | 580.29 | 580.56 | 580.40 | 580.24 | 580.10 | 579.46 |
| 9 | 579.22 | 579.18 | 579.23 | 579.60 | 579.83 | 580.04 | 580.43 | 580.51 | 580.34 | 580.16 | 580.19 | 579.76 |
| 10 | 579.22 | 579.27 | 579.25 | 579.59 | 579.84 | 580.27 | 580.46 | 580.45 | 580.28 | 580.14 | 580.22 | 579.84 |
| 11 | 579.28 | 579.23 | 578.93 | 579.50 | 579.98 | 580.08 | 580.48 | 580.47 | 580.40 | 580.12 | 580.26 | 579.69 |
| 12 | 579.28 | 579.24 | 579.05 | 579.64 | 579.79 | 580.28 | 580.38 | 580.39 | 580.44 | 580.14 | 579.99 | 579.90 |
| 13 | 579.50 | 579.38 | 579.35 | 579.84 | 579.89 | 580.24 | 580.42 | 580.34 | 580.51 | 580.10 | 579.96 | 579.83 |
| 14 | 579.38 | 579.28 | 579.17 | 579.74 | 579.84 | 580.09 | 580.43 | 580.33 | 580.26 | 580.13 | 580.05 | 580.10 |
| 15 | 579.28 | 579.27 | 579.34 | 579.68 | 579.79 | 580.24 | 580.44 | 580.26 | 580.39 | 580.24 | 580.16 | 579.96 |
| 16 | 579.31 | 579.34 | 579.21 | 579.74 | 579.83 | 580.29 | 580.32 | 580.36 | 580.12 | 580.27 | 579.69 | 579.96 |
| 17 | 579.20 | 579.38 | 579.32 | 579.61 | 579.88 | 580.40 | 580.50 | 580.38 | 580.15 | 580.10 | 579.60 | 579.62 |
| 18 | 579.17 | 579.23 | 579.52 | 579.75 | 579.94 | 580.39 | 580.38 | 580.32 | 580.12 | 580.07 | 579.86 | 579.74 |
| 19 | 579.16 | 579.41 | 579.34 | 579.73 | 579.79 | 580.31 | 580.32 | 580.31 | 580.13 | 580.39 | 579.99 | 579.84 |
| 20 | 579.10 | 579.28 | 579.43 | 579.69 | 579.90 | 580.43 | 580.41 | 580.23 | 580.13 | 579.91 | 579.97 | 579.50 |
| 21 | 579.18 | 579.24 | 579.59 | 579.77 | 580.01 | 580.36 | 580.44 | 580.17 | 580.14 | 580.02 | 579.97 | 579.81 |
| 22 | 579.19 | 579.31 | 579.42 | 579.85 | 579.97 | 580.45 | 580.46 | 580.23 | 580.31 | 580.06 | 579.91 | 579.77 |
| 23 | 579.25 | 579.33 | 579.22 | 579.98 | 579.86 | 580.46 | 580.47 | 580.20 | 580.20 | 579.93 | 579.64 | 579.53 |
| 24 | 579.37 | 579.25 | 579.32 | 579.80 | 579.86 | 580.31 | 580.36 | 580.22 | 580.35 | 579.97 | 579.78 | 579.77 |
| 25 | 579.07 | 579.19 | 579.41 | 579.78 | 580.08 | 580.25 | 580.38 | 580.16 | 580.29 | 579.88 | 579.84 | 579.53 |
| 26 | 579.08 | 579.22 | 579.39 | 579.89 | 579.97 | 580.38 | 580.43 | 580.15 | 579.98 | 580.06 | 579.97 | 579.33 |
| 27 | 579.14 | 579.21 | 579.49 | 580.06 | 579.96 | 580.46 | 580.41 | 580.18 | 580.13 | 580.08 | 580.08 | 579.91 |
| 28 | 579.20 | 579.32 | 579.51 | 579.85 | 580.11 | 580.25 | 580.35 | 580.22 | 580.12 | 579.92 | 579.99 | 579.84 |
| 29 | 579.26 | 579.18 | 579.41 | 579.74 | 580.08 | 580.33 | 580.32 | 580.32 | 580.09 | 579.95 | 579.79 | 579.75 |
| 30 | 579.15 | | 579.33 | 580.26 | 579.99 | 580.39 | 580.30 | 580.35 | 580.06 | 580.01 | 580.00 | 579.68 |
| 31 | 579.19 | | 579.33 | | 580.05 | | 580.27 | 580.14 | | 579.89 | | 579.88 |
| MEAN | 579.23 | 579.27 | 579.30 | 579.68 | 579.91 | 580.27 | 580.37 | 580.32 | 580.26 | 580.08 | 579.96 | 579.76 |
| MAX. | 579.62 | 579.56 | 579.91 | 580.76 | 580.62 | 580.80 | 580.90 | 580.93 | 580.93 | 580.99 | 580.76 | 580.56 |
| MIN. | 2000/13 | 0400/13 | 2400/15 | 1100/30 | 1700/25 | 0700/27 | 1000/11 | 0700/08 | 0900/02 | 1100/19 | 1300/01 | 1800/14 |
| | 578.80 | 579.03 | 578.79 | 579.18 | 579.33 | 579.75 | 579.94 | 579.88 | 579.62 | 579.54 | 579.36 | 579.12 |
| | 0600/26 | 1900/29 | 1500/11 | 1500/29 | 1900/24 | 0900/09 | 0300/07 | 0900/27 | 0700/26 | 0800/31 | 0800/17 | 1100/26 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 579.87

ANNUAL SUMMARY OF LEVELS, 1984
Station 7031: Holland, Michigan on Lake Michigan

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 580.24 Jul
Daily mean elevation: 580.54 2 Sep
Instant/hourly Elevation: 580.82 2200/2 Sep

LOWEST
Monthly mean elevation: 579.11 Jan
Daily mean elevation: 578.86 3 Jan
Instant/hourly Elevation: 578.62 0600/28 Jan

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 579.36 | 13 Jan |
| 579.64 | 28 Feb |
| 579.55 | 22 Mar |
| 579.86 | 27 Apr |
| 580.12 | 28 May |
| 580.40 | 23 Jun |
| 580.40 | 21 Jul |
| 580.40 | 11 Aug |
| 580.54 | 2 Sep |
| 580.16 | 19 Oct |
| 580.38 | 10 Nov |
| 579.98 | 3 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.86 | 3 Jan |
| 579.01 | 8 Feb |
| 578.95 | 12 Mar |
| 579.24 | 2 Apr |
| 579.51 | 1 May |
| 579.92 | 4 Jun |
| 579.99 | 7 Jul |
| 579.98 | 26 Aug |
| 579.82 | 18 Sep |
| 579.71 | 31 Oct |
| 579.42 | 17 Nov |
| 579.25 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.40         |     |     |     |     |     |     |     |     | 2   |     |     |     | 580.40         | 2                          |
| 580.20         |     |     |     |     |     | 11  | 23  | 18  | 4   |     | 2   |     | 580.20         | 60                         |
| 580.00         |     |     |     |     | 2   | 15  | 7   | 11  | 16  | 11  | 1   |     | 580.00         | 123                        |
| 579.80         |     |     |     | 4   | 13  | 4   | 1   | 2   | 8   | 13  | 13  | 6   | 579.80         | 187                        |
| 579.60         |     | 1   |     | 11  | 15  |     |     |     |     | 7   | 8   | 8   | 579.60         | 237                        |
| 579.40         |     |     | 7   | 6   | 1   |     |     |     |     |     | 6   | 12  | 579.40         | 269                        |
| 579.20         | 6   | 9   | 12  | 6   |     |     |     |     |     |     |     | 5   | 579.20         | 307                        |
| 579.00         | 20  | 19  | 10  |     |     |     |     |     |     |     |     |     | 579.00         | 356                        |
| 578.80         | 5   |     | 2   |     |     |     |     |     |     |     |     |     | 578.80         | 363                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7031: Holland, Michigan on Lake Michigan

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 579.13  | 579.14  | 579.07  | 579.24  | 579.51  | 580.01  | 580.21  | 580.16  | 580.16  | 579.94  | 580.17  | 579.69  |
| 2    | 579.16  | 579.15  | 579.17  | 579.24  | 579.64  | 580.13  | 580.18* | 580.29  | 580.54  | 579.80* | 579.56  | 579.66  |
| 3    | 578.86  | 579.13  | 579.04  | 579.37  | 579.93  | 579.92  | 580.17* | 580.30  | 580.49  | 579.80  | 579.64  | 579.98  |
| 4    | 579.04  | 579.22  | 579.06  | 579.51  | 579.79  | 579.92  | 580.20  | 580.28  | 580.19  | 579.77  | 579.96  | 579.44  |
| 5    | 579.10  | 579.38  | 579.37  | 579.49  | 579.69  | 580.04  | 580.22  | 580.25  | 580.19  | 580.05  | 579.83  | 579.45  |
| 6    | 579.21  | 579.22  | 579.21  | 579.36  | 579.85  | 580.02  | 580.23  | 580.26  | 580.06  | 580.07  | 579.73  | 579.82  |
| 7    | 579.08  | 579.14  | 579.11  | 579.29  | 579.89  | 580.06  | 579.99  | 580.31  | 580.05  | 580.08  | 579.83  | 579.34  |
| 8    | 579.28  | 579.01  | 579.27  | 579.40  | 579.68  | 580.00  | 580.16  | 580.39  | 580.11  | 580.10  | 579.85  | 579.37  |
| 9    | 579.08  | 579.04  | 579.12  | 579.54  | 579.74  | 580.01  | 580.27  | 580.30  | 580.11  | 580.05  | 579.94  | 579.56  |
| 10   | 579.27  | 579.15  | 579.10  | 579.48  | 579.74  | 580.15  | 580.32  | 580.37  | 580.17  | 580.03  | 580.38  | 579.69  |
| 11   | 579.18  | 579.10  | 579.00  | 579.43  | 579.84  | 579.98  | 580.32  | 580.40  | 580.21  | 580.00  | 580.33  | 579.41  |
| 12   | 579.20  | 579.12  | 578.95  | 579.53  | 579.69  | 580.13  | 580.23  | 580.31  | 580.17  | 580.00  | 579.97  | 579.74  |
| 13   | 579.36  | 579.25  | 579.22  | 579.68  | 579.84  | 580.12  | 580.28  | 580.28  | 580.35  | 579.99  | 579.82  | 579.81  |
| 14   | 579.33  | 579.13  | 579.08  | 579.74  | 579.77  | 580.14  | 580.25  | 580.24  | 580.23  | 580.03  | 579.73  | 579.94  |
| 15   | 579.12  | 579.15  | 579.20  | 579.74  | 579.71  | 580.18  | 580.29  | 580.13  | 580.23  | 580.11  | 579.95  | 579.84  |
| 16   | 579.11  | 579.27  | 579.45  | 579.83  | 579.70  | 580.22  | 580.21  | 580.27  | 579.97  | 580.09  | 579.65  | 579.58  |
| 17   | 579.16  | 579.26  | 579.31  | 579.72* | 579.69  | 580.24  | 580.34  | 580.35  | 579.90  | 580.05  | 579.42  | 579.54  |
| 18   | 579.08  | 579.13  | 579.46  | 579.74* | 579.81  | 580.20  | 580.31  | 580.37  | 579.82  | 579.86  | 579.88  | 579.55  |
| 19   | 579.11  | 579.38  | 579.28  | 579.66  | 579.69  | 580.24  | 580.14  | 580.29  | 579.91  | 580.16  | 579.92  | 579.60  |
| 20   | 579.17  | 579.17  | 579.39  | 579.63  | 579.80  | 580.35  | 580.36  | 580.12  | 580.02  | 579.72  | 579.85  | 579.40  |
| 21   | 578.94  | 579.17  | 579.46  | /       | 579.89  | 580.32  | 580.40  | 580.02  | 580.02  | 579.94  | 579.79  | 579.60  |
| 22   | 579.00  | 579.13  | 579.55  | /       | 579.88  | 580.35  | 580.29  | 580.20  | 580.15  | 579.89  | 579.52  | 579.76  |
| 23   | 579.03  | 579.15  | 579.19  | /       | 579.79  | 580.40  | 580.29  | 580.19  | 580.04  | 579.83  | 579.50  | 579.49  |
| 24   | 579.04  | 579.19  | 579.24  | 579.66  | 579.70  | 580.18  | 580.31  | 580.13  | 580.10  | 579.74  | 579.54  | 579.77  |
| 25   | 578.96  | 579.11  | 579.39  | 579.62  | 579.90  | 580.14  | 580.23  | 580.09  | 580.17  | 579.72  | 579.63  | 579.25  |
| 26   | 579.03  | 579.15  | 579.33  | 579.82  | 579.94  | 580.22  | 580.27  | 579.98  | 579.83  | 579.97  | 579.74  | 579.26  |
| 27   | 579.11  | 579.21  | 579.42  | 579.86  | 579.88  | 580.32  | 580.35  | 580.00  | 579.95  | 579.81  | 579.81  | 579.69  |
| 28   | 578.96  | 579.64  | 579.53  | 579.66  | 580.12  | 580.16  | 580.25  | 580.14  | 580.03  | 579.82  | 579.74  | 579.50  |
| 29   | 579.24  | 579.32  | 579.46  | 579.67  | 580.01  | 580.28  | 580.21  | 580.19  | 579.97  | 579.82  | 579.56  | 579.67  |
| 30   | 579.16  |         | 579.31  | 579.82  | 579.92  | 580.29  | 580.20  | 580.23  | 579.92  | 579.87  | 579.91  | 579.56  |
| 31   | 579.04  |         | 579.28  |         | 579.92  |         | 580.10  | 580.02  |         | 579.71  |         | 579.83  |
| MEAN | 579.11  | 579.19  | 579.26  | 579.58  | 579.80  | 580.16  | 580.24  | 580.22  | 580.10  | 579.93  | 579.80  | 579.61  |
| MAX. | 579.61  | 579.83  | 579.97  | 580.15  | 580.23  | 580.52  | 580.58  | 580.58  | 580.82  | 580.41  | 580.72  | 580.35  |
|      | 0500/08 | 1300/28 | 0200/16 | 1800/30 | 2000/28 | 0700/23 | 0500/11 | 0300/30 | 2200/02 | 0900/19 | 1500/10 | 0300/22 |
| MIN. | 578.62  | 578.92  | 578.69  | 579.13  | 579.33  | 579.76  | 579.85  | 579.85  | 579.67  | 579.46  | 579.26  | 578.91  |
|      | 0600/28 | 2300/08 | 1800/11 | 1900/01 | 1000/01 | 2000/03 | 1600/07 | 2000/26 | 1700/18 | 0800/25 | 0500/17 | 1500/25 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 579.75

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7044: Calumet Harbor, Illinois on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.35 Aug  
Daily mean elevation: 581.00 10 Nov  
Instant/hourly Elevation: 581.65 2300/10 Nov

LOWEST  
Monthly mean elevation: 579.08 Jan  
Daily mean elevation: 578.55 3 Jan  
Instant/hourly Elevation: 578.04 1500/3 Jan

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.66 | 14 Jan |
| 580.82 | 28 Feb |
| 580.00 | 28 Mar |
| 580.23 | 22 Apr |
| 580.68 | 28 May |
| 580.58 | 20 Jun |
| 580.53 | 27 Jul |
| 580.71 | 11 Aug |
| 580.84 | 3 Sep  |
| 580.25 | 5 Oct  |
| 581.00 | 10 Nov |
| 580.34 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.55 | 3 Jan  |
| 578.95 | 8 Feb  |
| 578.90 | 10 Mar |
| 579.17 | 30 Apr |
| 579.48 | 1 May  |
| 579.83 | 8 Jun  |
| 580.16 | 23 Jul |
| 579.76 | 29 Aug |
| 579.80 | 8 Sep  |
| 579.61 | 2 Oct  |
| 579.26 | 22 Nov |
| 579.07 | 25 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 580.80                                                  |     | 1   |     |     |     |     |     |     | 1   |     | 2   |     | 580.80         | 4                          |
| 580.60                                                  |     |     |     |     | 1   |     |     | 2   |     |     |     |     | 580.60         | 7                          |
| 580.40                                                  |     |     |     |     |     | 7   | 6   | 8   | 4   |     |     |     | 580.40         | 32                         |
| 580.20                                                  |     |     |     | 1   | 1   | 11  | 21  | 15  | 3   | 2   | 1   | 2   | 580.20         | 89                         |
| 580.00                                                  |     | 1   |     | 3   | 5   | 9   | 4   | 2   | 17  | 13  | 4   | 2   | 580.00         | 149                        |
| 579.80                                                  |     | 1   | 3   | 6   | 11  | 3   |     |     | 4   | 10  | 7   | 4   | 579.80         | 198                        |
| 579.60                                                  | 1   | 1   | 6   | 14  | 12  |     |     | 1   | 1   | 6   | 8   | 8   | 579.60         | 256                        |
| 579.40                                                  | 2   | 1   | 5   | 3   | 1   |     |     |     |     |     | 6   | 8   | 579.40         | 282                        |
| 579.20                                                  | 9   | 12  | 12  | 2   |     |     |     |     |     |     | 2   | 5   | 579.20         | 324                        |
| 579.00                                                  | 5   | 10  | 4   | 1   |     |     |     |     |     |     |     | 2   | 579.00         | 346                        |
| 578.80                                                  | 9   | 2   | 1   |     |     |     |     |     |     |     |     |     | 578.80         | 358                        |
| 578.60                                                  | 4   |     |     |     |     |     |     |     |     |     |     |     | 578.60         | 362                        |
| 578.40                                                  | 1   |     |     |     |     |     |     |     |     |     |     |     | 578.40         | 363                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7044: Calumet Harbor, Illinois on Lake Michigan

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 579.07  | 579.05  | 579.22  | 579.30  | 579.48  | 580.01  | 580.40  | 580.23  | 580.13  | 580.01  | 580.08  | 579.75  |
| 2    | 579.21  | 578.99  | 579.23  | 579.40  | 579.93  | 580.24  | 580.30  | 580.39  | 580.60  | 579.61  | 579.71  | 579.65  |
| 3    | 578.55  | 579.03  | 579.18  | 579.70  | 580.31  | 579.97  | 580.23  | 580.35  | 580.84  | 579.70  | 579.55  | 579.59  |
| 4    | 578.96  | 579.26  | 579.24  | 579.75  | 580.05  | 579.98  | 580.29  | 580.37  | 580.41  | 579.87  | 579.82  | 579.38  |
| 5    | 578.92  | 579.67  | 579.24  | 579.71  | 579.84  | 580.03  | 580.32  | 580.28  | 580.36  | 580.25  | 579.93  | 579.43  |
| 6    | 579.35  | 579.32  | 579.39  | 579.53  | 580.02  | 580.05  | 580.29  | 580.25  | 580.11  | 580.18  | 579.84  | 579.95  |
| 7    | 579.10  | 579.15  | 579.30  | 579.41  | 579.96  | 580.04  | 580.17  | 580.36  | 579.83  | 580.08  | 579.76  | 579.14  |
| 8    | 579.35  | 578.95  | 579.63  | 579.64  | 579.68  | 579.83  | 580.26  | 580.39  | 579.80  | 580.16  | 579.67  | 579.39  |
| 9    | 579.28  | 579.09  | 579.22  | 579.79  | 579.66  | 580.09  | 580.28  | 580.26  | 580.02  | 580.18  | 580.00  | 579.73  |
| 10   | 579.56  | 579.26  | 578.90  | 579.73  | 579.67  | 580.04  | 580.35  | 580.48  | 580.16  | 580.17  | 581.00  | 579.84  |
| 11   | 579.31  | 579.18  | 579.18  | 579.62  | 579.82  | 580.07  | 580.32  | 580.71  | 580.22  | 580.12  | 580.82  | 579.39  |
| 12   | 579.34  | 579.20  | 579.12  | 579.66  | 579.67  | 580.16  | 580.28  | 580.56  | 580.17  | 580.13  | 580.19  | 579.78  |
| 13   | 579.52  | 579.22  | 579.32  | 579.72  | 579.92  | 580.20  | 580.31  | 580.50  | 580.26  | 580.08  | 579.88  | 580.22  |
| 14   | 579.66  | 579.14  | 579.12  | 579.86  | 579.81  | 580.28  | 580.23  | 580.38  | 580.50  | 580.18  | 579.63  | 580.19  |
| 15   | 579.28  | 579.27  | 579.30  | 580.03  | 579.77  | 580.42  | 580.25  | 580.25  | 580.55  | 580.21  | 579.65  | 579.91  |
| 16   | 579.00  | 579.44  | 579.84  | 580.20  | 579.75  | 580.27  | 580.23  | 580.43  | 580.11  | 580.15  | 579.57  | 579.42  |
| 17   | 579.08  | 579.30  | 579.72  | 579.97  | 579.65  | 580.25  | 580.33  | 580.42  | 579.94  | 580.10  | 579.34  | 579.54  |
| 18   | 578.89  | 579.25  | 579.74  | 579.94  | 579.77  | 580.23  | 580.46  | 580.44  | 579.82  | 579.96  | 580.07  | 579.72  |
| 19   | 578.74  | 579.28  | 579.52  | 579.76  | 579.74  | 580.34  | 580.17  | 580.47  | 579.93  | 579.92  | 580.26  | 579.50  |
| 20   | 578.92  | 579.15  | 579.52  | 579.76  | 579.81  | 580.58  | 580.37  | 580.32  | 580.06  | 579.66  | 580.06  | 579.45  |
| 21   | 578.64  | 579.25  | 579.43  | 580.01  | 579.86  | 580.54  | 580.44  | 580.04  | 580.13  | 580.14  | 579.93  | 579.50  |
| 22   | 578.75  | 579.12  | 579.65  | 580.23  | 579.82  | 580.48  | 580.34  | 580.39  | 580.16  | 579.94  | 579.26  | 579.62  |
| 23   | 578.96  | 579.20  | 579.31  | 579.99  | 579.73  | 580.52  | 580.16  | 580.67  | 580.05  | 579.91  | 579.52  | 579.43  |
| 24   | 578.87  | 579.33  | 579.35  | 579.72  | 579.66  | 580.29  | 580.39  | 580.46  | 580.10  | 579.78  | 579.57  | 580.01  |
| 25   | 578.87  | 579.27  | 579.64  | 579.70  | 579.92  | 580.29  | 580.43  | 580.26* | 580.20  | 579.72  | 579.72  | 579.07  |
| 26   | 578.97  | 579.38  | 579.54  | 579.88  | 580.01  | 580.23  | 580.47  | /       | 580.10  | 579.97  | 579.74  | 579.31  |
| 27   | 579.06  | 580.16  | 579.66  | 579.87  | 580.07  | 580.25  | 580.53  | /       | 580.04  | 579.68  | 579.74  | 579.74  |
| 28   | 578.67  | 580.82  | 580.00  | 579.59  | 580.68  | 580.22  | 580.50  | /       | 580.14  | 579.81  | 579.56  | 579.32  |
| 29   | 579.23  | 579.84  | 579.81  | 579.72  | 580.04  | 580.47  | 580.40  | 579.76  | 580.12  | 579.98  | 579.55  | 579.74  |
| 30   | 579.30  |         | 579.47  | 579.17  | 579.83  | 580.47  | 580.31  | 580.25* | 580.04  | 579.89  | 579.92  | 579.83  |
| 31   | 579.05  |         | 579.34  |         | 579.78  |         | 580.20  | 580.14  |         | 579.91  |         | 580.34  |
| MEAN | 579.08  | 579.33  | 579.42  | 579.75  | 579.86  | 580.23  | 580.32  | 580.35  | 580.16  | 579.98  | 579.84  | 579.64  |
| MAX. | 579.89  | 581.16  | 580.49  | 580.70  | 581.30  | 580.82  | 581.30  | 581.14  | 581.14  | 580.70  | 581.65  | 580.89  |
| MIN. | 1000/14 | 1000/28 | 0200/16 | 0500/22 | 1300/28 | 1600/20 | 2300/10 | 0500/30 | 0600/03 | 0700/17 | 2300/10 | 2400/31 |
|      | 578.04  | 578.73  | 578.33  | 578.08  | 578.54  | 579.28  | 579.40  | 579.59  | 579.21  | 579.21  | 578.90  | 578.38  |
|      | 1500/03 | 0900/01 | 2000/10 | 0800/30 | 0100/25 | 1100/08 | 0900/09 | 2100/29 | 0700/07 | 0100/03 | 1900/22 | 1200/25 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 579.83

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7057: Milwaukee, Wisconsin on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.34 Aug  
Daily mean elevation: 580.55 3 Sep  
Instant/hourly Elevation: 580.96 1900/2 Sep

LOWEST  
Monthly mean elevation: 579.16 Jan  
Daily mean elevation: 578.85 3 Jan  
Instant/hourly Elevation: 578.62 1300/3 Jan

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.54 | 13 Jan |
| 580.07 | 28 Feb |
| 579.73 | 28 Mar |
| 580.11 | 22 Apr |
| 580.33 | 28 May |
| 580.49 | 22 Jun |
| 580.47 | 27 Jul |
| 580.54 | 19 Aug |
| 580.55 | 3 Sep  |
| 580.32 | 15 Oct |
| 580.49 | 10 Nov |
| 580.18 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.85 | 3 Jan  |
| 579.08 | 8 Feb  |
| 578.96 | 11 Mar |
| 579.36 | 1 Apr  |
| 579.48 | 1 May  |
| 579.96 | 3 Jun  |
| 580.10 | 7 Jul  |
| 580.11 | 31 Aug |
| 579.91 | 26 Sep |
| 579.67 | 20 Oct |
| 579.40 | 16 Nov |
| 579.20 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.40 | | | | | | 3 | 2 | 8 | 2 | | 1 | | 580.40 | 16 |
| 580.20 | | | | | 1 | 14 | 28 | 19 | 12 | 5 | 1 | | 580.20 | 96 |
| 580.00 | | 1 | | 3 | 4 | 12 | 1 | 4 | 13 | 11 | 4 | 3 | 580.00 | 152 |
| 579.80 | | | | 7 | 18 | 1 | | | 3 | 12 | 12 | 4 | 579.80 | 209 |
| 579.60 | | 1 | 2 | 12 | 7 | | | | | 3 | 7 | 12 | 579.60 | 253 |
| 579.40 | 3 | 2 | 12 | 6 | 1 | | | | | | 4 | 9 | 579.40 | 290 |
| 579.20 | 8 | 19 | 12 | 2 | | | | | | | 1 | 2 | 579.20 | 334 |
| 579.00 | 15 | 6 | 4 | | | | | | | | | 1 | 579.00 | 360 |
| 578.80 | 5 | | 1 | | | | | | | | | | 578.80 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7057: Milwaukee, Wisconsin on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 579.22 | 579.21 | 579.16 | 579.36 | 579.48 | 580.17 | 580.33 | 580.30 | 580.29 | 580.04 | 580.02 | 579.69 |
| 2 | 579.17 | 579.29 | 579.22 | 579.37 | 579.76 | 580.22 | 580.33 | 580.38 | 580.55 | 579.83 | 579.56 | 579.87 |
| 3 | 578.85 | 579.11 | 579.23 | 579.51 | 580.04 | 579.96 | 580.30 | 580.37 | 580.55 | 579.73 | 579.80 | 579.66 |
| 4 | 579.02 | 579.22 | 579.33 | 579.62 | 579.88 | 580.02 | 580.31 | 580.37 | 580.36 | 579.89 | 579.97 | 579.39 |
| 5 | 579.11 | 579.37 | 579.33 | 579.52 | 579.84 | 580.16 | 580.31 | 580.34 | 580.37 | 580.23 | 579.79 | 579.55 |
| 6 | 579.25 | 579.22 | 579.24 | 579.42 | 579.97 | 580.11 | 580.25 | 580.34 | 580.29 | 580.22 | 579.81 | 579.74 |
| 7 | 579.19 | 579.16 | 579.33 | 579.43 | 579.98 | 580.17 | 580.10 | 580.38 | 580.23 | 580.21 | 579.98 | 579.29 |
| 8 | 579.18 | 579.08 | 579.47 | 579.60 | 579.69 | 580.09 | 580.31 | 580.39 | 580.13 | 580.17 | 579.96 | 579.41 |
| 9 | 579.26 | 579.17 | 579.21 | 579.74 | 579.78 | 580.06 | 580.35 | 580.34 | 580.13 | 580.14 | 580.04 | 579.73 |
| 10 | 579.33 | 579.27 | 579.05 | 579.64 | 579.87 | 580.17 | 580.39 | 580.38 | 580.14 | 580.12 | 580.49 | 579.79 |
| 11 | 579.29 | 579.18 | 578.96 | 579.56 | 579.95 | 580.04 | 580.40 | 580.53 | 580.21 | 580.12 | 580.40 | 579.57 |
| 12 | 579.52 | 579.30 | 579.18 | 579.74 | 579.73 | 580.24 | 580.32 | 580.48 | 580.28 | 580.15 | 580.07 | 579.82 |
| 13 | 579.54 | 579.33 | 579.32 | 579.85 | 579.91 | 580.19 | 580.34 | 580.45 | 580.30 | 580.13 | 579.98 | 580.02 |
| 14 | 579.51 | 579.21 | 579.19 | 579.84 | 579.84 | 580.16 | 580.35 | 580.41 | 580.27 | 580.18 | 579.98 | 580.18 |
| 15 | 579.30 | 579.27 | 579.43 | 579.82 | 579.79 | 580.27 | 580.32 | 580.29 | 580.32 | 580.32 | 579.79 | 579.98 |
| 16 | 579.10 | 579.42 | 579.48 | 579.92 | 579.81 | 580.34 | 580.24 | 580.41 | 580.07 | 580.24 | 579.40 | 579.64 |
| 17 | 579.11 | 579.35 | 579.63 | 579.80 | 579.84 | 580.35 | 580.31 | 580.47 | 580.05 | 579.96 | 579.41 | 579.56 |
| 18 | 579.06 | 579.33 | 579.60 | 579.83 | 579.88 | 580.31 | 580.32 | 580.42 | 579.97 | 580.07 | 579.90 | 579.66 |
| 19 | 578.98 | 579.39 | 579.49 | 579.74 | 579.77 | 580.27 | 580.24 | 580.54 | 579.99 | 580.02 | 580.05 | 579.56 |
| 20 | 578.98 | 579.19 | 579.60 | 579.68 | 579.92 | 580.40 | 580.38 | 580.38 | 580.06 | 579.67 | 579.94 | 579.42 |
| 21 | 578.93 | 579.26 | 579.44 | 579.88 | 579.99 | 580.44 | 580.41 | 580.25 | 580.17 | 579.96 | 579.92 | 579.75 |
| 22 | 579.05 | 579.28 | 579.51 | 580.11 | 579.89 | 580.49 | 580.38 | 580.28 | 580.24 | 579.92 | 579.56 | 579.54 |
| 23 | 579.12 | 579.27 | 579.27 | 580.08 | 579.79 | 580.48 | 580.28 | 580.40 | 580.10 | 579.86 | 579.56 | 579.52 |
| 24 | 579.07 | 579.25 | 579.38 | 579.76 | 579.82 | 580.21 | 580.33 | 580.36 | 580.21 | 579.82 | 579.66 | 579.73 |
| 25 | 578.96 | 579.21 | 579.53 | 579.72 | 580.00 | 580.28 | 580.34 | 580.30 | 580.04 | 579.82 | 579.77 | 579.20 |
| 26 | 579.15 | 579.30 | 579.48 | 580.00 | 579.99 | 580.34 | 580.38 | 580.16 | 579.91 | 580.02 | 579.90 | 579.48 |
| 27 | 579.09 | 579.68 | 579.55 | 580.01 | 580.00 | 580.34 | 580.47 | 580.13 | 580.08 | 579.88 | 579.92 | 579.81 |
| 28 | 579.04 | 580.07 | 579.73 | 579.69 | 580.33 | 580.18 | 580.39 | 580.19 | 580.07 | 579.78 | 579.70 | 579.65 |
| 29 | 579.23 | 579.45 | 579.55 | 579.79 | 580.10 | 580.33 | 580.39 | 580.29 | 580.05 | 579.96 | 579.71 | 579.64 |
| 30 | 579.23 | | 579.37 | 579.62 | 580.02 | 580.39 | 580.33 | 580.24 | 580.03 | 579.90 | 579.94 | 579.71 |
| 31 | 579.15 | | 579.36 | | 580.04 | | 580.23 | 580.11 | | 579.98 | | 580.12 |
| MEAN | 579.16 | 579.30 | 579.37 | 579.72 | 579.89 | 580.24 | 580.33 | 580.34 | 580.18 | 580.01 | 579.87 | 579.67 |
| MAX. | 579.95 | 580.35 | 580.13 | 580.43 | 580.70 | 580.68 | 580.85 | 580.66 | 580.96 | 580.52 | 580.83 | 580.44 |
| MIN. | 2100/12 | 2400/27 | 2400/15 | 0300/22 | 1400/25 | 0200/23 | 0600/10 | 0800/19 | 1900/02 | 2000/18 | 2300/10 | 2100/31 |
| | 578.62 | 578.93 | 578.74 | 579.15 | 579.31 | 579.72 | 579.77 | 579.80 | 579.63 | 579.46 | 579.19 | 578.84 |
| | 1300/03 | 2100/08 | 1600/11 | 1000/30 | 0800/01 | 1700/09 | 0300/10 | 2200/30 | 0100/26 | 1200/20 | 0200/17 | 1300/25 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 579.84

ANNUAL SUMMARY OF LEVELS, 1984
 Station 7068: Kewaunee, Wisconsin on Lake Michigan

INTERNATIONAL
 GREAT LAKES
 DATUM (1955)

HIGHEST
 Monthly mean elevation: 580.26 Aug
 Daily mean elevation: 580.49 2 Sep
 Instant/hourly Elevation: 580.88 1000/9 Jul

LOWEST
 Monthly mean elevation: 579.09 Jan
 Daily mean elevation: 578.78 11 Mar
 Instant/hourly Elevation: 578.58 1000/11 Mar

HIGHEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 579.20 | 9 Jan |
| 579.33 | 13 Feb |
| 579.46 | 18 Mar |
| 579.97 | 30 Apr |
| 580.06 | 28 May |
| 580.38 | 23 Jun |
| 580.38 | 22 Jul |
| 580.48 | 11 Aug |
| 580.49 | 2 Sep |
| 580.34 | 16 Oct |
| 580.18 | 11 Nov |
| 580.11 | 14 Dec |

LOWEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.88 | 4 Jan |
| 579.06 | 8 Feb |
| 578.78 | 11 Mar |
| 579.27 | 6 Apr |
| 579.46 | 1 May |
| 579.95 | 9 Jun |
| 580.06 | 7 Jul |
| 579.99 | 31 Aug |
| 579.84 | 26 Sep |
| 579.66 | 3 Oct |
| 579.41 | 16 Nov |
| 579.33 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.40         |     |     |     |     |     |     |     | 3   | 2   |     |     |     | 580.40         | 5                          |
| 580.20         |     |     |     |     |     | 14  | 25  | 18  | 10  | 4   |     |     | 580.20         | 76                         |
| 580.00         |     |     |     |     | 3   | 11  | 6   | 9   | 10  | 13  | 6   | 1   | 580.00         | 135                        |
| 579.80         |     |     |     | 4   | 15  | 5   |     | 1   | 8   | 11  | 12  | 5   | 579.80         | 196                        |
| 579.60         |     |     |     | 12  | 12  |     |     |     |     | 3   | 7   | 13  | 579.60         | 243                        |
| 579.40         |     |     | 4   | 8   | 1   |     |     |     |     |     | 5   | 8   | 579.40         | 269                        |
| 579.20         |     | 10  | 17  | 6   |     |     |     |     |     |     |     | 4   | 579.20         | 306                        |
| 579.00         | 11  | 19  | 9   |     |     |     |     |     |     |     |     |     | 579.00         | 345                        |
| 578.80         | 2   |     |     |     |     |     |     |     |     |     |     |     | 578.80         | 347                        |
| 578.60         |     |     | 1   |     |     |     |     |     |     |     |     |     | 578.60         | 348                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7068: Kewaunee, Wisconsin on Lake Michigan

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | /       | 579.16  | 579.04  | 579.30  | 579.46  | 580.07  | 580.25  | 580.22  | 580.24  | 579.99  | 580.04  | 579.69  |
| 2    | /       | 579.29  | 579.05  | 579.29  | 579.66  | 580.15  | 580.28  | 580.31  | 580.49  | 579.92  | 579.57  | 579.91  |
| 3    | 578.94* | 579.13  | 579.11  | 579.35  | 579.86  | 579.98  | 580.23  | 580.27  | 580.41  | 579.66  | 579.96  | 579.72  |
| 4    | 578.88* | 579.10  | 579.26  | 579.46  | 579.77  | 579.98  | 580.18  | 580.32  | 580.28* | 579.81  | 579.95  | 579.34  |
| 5    | /       | 579.10  | 579.32  | 579.35  | 579.78  | 580.16  | 580.27  | 580.35  | 580.23* | 580.11  | 579.77  | 579.59  |
| 6    | /       | 579.15  | 579.09  | 579.27  | 579.87  | 580.12  | 580.17  | 580.32  | 580.23  | 580.14  | 579.78  | 579.65  |
| 7    | /       | 579.11  | 579.17  | 579.30  | 579.95  | 580.14  | 580.06  | 580.31  | 580.31  | 580.15  | 580.07  | 579.57  |
| 8    | /       | 579.06  | 579.25  | 579.42  | 579.75  | 580.08  | 580.29  | 580.47  | 580.17  | 580.12  | 580.06  | 579.41  |
| 9    | 579.20* | 579.11  | 579.14  | 579.56  | 579.72  | 579.95  | 580.30  | 580.35  | 580.06  | 580.10  | 579.99  | 579.75  |
| 10   | 579.14  | 579.19  | 579.08  | 579.49  | 579.79  | 580.21  | 580.19  | 580.28  | 580.09  | 580.06  | 580.18  | 579.73  |
| 11   | 579.14* | 579.19  | 578.78  | 579.44  | 579.89  | 579.98  | 580.30  | 580.48  | 580.19  | 580.06  | 580.18  | 579.76  |
| 12   | /       | 579.23  | 579.06  | 579.67  | 579.68  | 580.23  | 580.29  | 580.43  | 580.29  | 580.08  | 579.98  | 579.67  |
| 13   | /       | 579.33  | 579.24  | 579.76  | 579.84  | 580.15  | 580.34  | 580.38  | 580.27  | 580.07  | 579.91  | 579.80  |
| 14   | /       | 579.18  | 579.21  | 579.69  | 579.79  | 580.00  | 580.32  | 580.34  | 580.11  | 580.08  | 580.04  | 580.11  |
| 15   | /       | 579.18  | 579.21  | 579.54  | 579.72  | 580.23  | 580.30  | 580.26  | 580.24  | 580.28  | 579.86  | 579.96  |
| 16   | /       | 579.28  | 579.17  | 579.61  | 579.76  | 580.21  | 580.21  | 580.28  | 580.05  | 580.34  | 579.41  | 579.78  |
| 17   | /       | 579.30  | 579.43  | 579.55  | 579.84  | 580.29  | 580.29  | 580.38  | 580.04  | 580.21  | 579.45  | 579.48  |
| 18   | /       | 579.18  | 579.46  | 579.66  | 579.90  | 580.22  | 580.27  | 580.38  | 579.95  | 580.08  | 579.76  | 579.56  |
| 19   | /       | 579.32  | 579.29  | 579.62  | 579.71  | 580.19  | 580.24  | 580.39  | 579.97  | 580.23  | 579.90  | 579.69  |
| 20   | /       | 579.21  | 579.43  | 579.57  | 579.80  | 580.28  | 580.26  | 580.30  | 579.94  | 579.68  | 579.84  | 579.36  |
| 21   | /       | 579.20  | 579.33  | 579.67  | 579.93  | 580.31  | 580.31  | 580.18  | 580.07  | 579.86  | 579.85  | 579.84  |
| 22   | /       | 579.26  | 579.38  | 579.80  | 579.91  | 580.37  | 580.38  | 580.13  | 580.28  | 579.89  | 579.70  | 579.51  |
| 23   | 579.19* | 579.23  | 579.25  | 579.91  | 579.81  | 580.38  | 580.22  | 580.17* | 580.04  | 579.84  | 579.49  | 579.43  |
| 24   | 579.19* | 579.16  | 579.29  | 579.69  | 579.91  | 580.18  | 580.19  | 580.25* | 580.26  | 579.84  | 579.70  | 579.61  |
| 25   | /       | 579.14  | 579.34  | 579.66  | 579.92  | 580.19  | 580.28  | 580.18  | 579.92  | 579.81  | 579.77  | 579.33  |
| 26   | 579.09* | 579.18  | 579.36  | 579.86  | 579.89  | 580.32  | 580.34  | 580.11  | 579.84  | 580.06  | 579.98  | 579.37  |
| 27   | 579.03  | 579.18  | 579.41  | 579.96  | 579.89  | 580.23  | 580.31  | 580.08  | 580.06  | 580.03  | 579.92  | 579.89  |
| 28   | 579.11  | 579.29  | 579.38  | 579.71  | 580.06  | 580.11  | 580.32  | 580.13  | 579.99  | 579.71  | 579.72  | 579.79  |
| 29   | 579.10  | 579.16  | 579.33  | 579.65  | 580.03  | 580.22  | 580.29  | 580.10  | 580.00  | 579.91  | 579.59  | 579.60  |
| 30   | 579.06  |         | 579.26  | 579.97  | 579.98  | 580.30  | 580.25  | 580.01  | 579.99  | 579.89  | 579.86  | 579.66  |
| 31   | 579.11  |         | 579.27  |         | 580.03  |         | 580.19  | 579.99  |         | 579.99  |         | 579.90  |
| MEAN | 579.09  | 579.19  | 579.24  | 579.59  | 579.84  | 580.17  | 580.26  | 580.26  | 580.13  | 580.00  | 579.84  | 579.66  |
| MAX. | 579.40  | 579.79  | 579.71  | 580.60  | 580.58  | 580.67  | 580.88  | 580.75  | 580.84  | 580.85  | 580.62  | 580.48  |
| MIN. | 1800/26 | 1200/13 | 1600/17 | 2400/29 | 0100/26 | 0700/18 | 1000/09 | 1000/08 | 1200/02 | 0100/19 | 0600/01 | 2000/14 |
|      | 578.70  | 578.83  | 578.58  | 579.03  | 579.29  | 579.64  | 579.81  | 579.10  | 579.35  | 579.44  | 579.21  | 578.93  |
|      | 0400/04 | 1900/18 | 1000/11 | 1700/07 | 1100/25 | 1500/09 | 0800/07 | 0300/30 | 1200/25 | 2000/28 | 0700/17 | 1100/26 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 579.77

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7072: Sturgeon Bay Canal, Wisconsin on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.27 Jul  
Daily mean elevation: 580.49 2 Sep  
Instant/hourly Elevation: 580.80 1900/10 Jul

LOWEST  
Monthly mean elevation: 579.08 Jan  
Daily mean elevation: 578.74 11 Mar  
Instant/hourly Elevation: 578.53 0300/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.39 | 13 Jan |
| 579.33 | 13 Feb |
| 579.44 | 18 Mar |
| 579.94 | 30 Apr |
| 579.98 | 29 May |
| 580.38 | 23 Jun |
| 580.37 | 22 Jul |
| 580.44 | 11 Aug |
| 580.49 | 2 Sep  |
| 580.26 | 16 Oct |
| 580.13 | 11 Nov |
| 580.08 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.83 | 20 Jan |
| 579.03 | 8 Feb  |
| 578.74 | 11 Mar |
| 579.24 | 7 Apr  |
| 579.39 | 1 May  |
| 579.92 | 11 Jun |
| 580.05 | 7 Jul  |
| 580.03 | 31 Aug |
| 579.86 | 26 Sep |
| 579.63 | 20 Oct |
| 579.40 | 16 Nov |
| 579.19 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.40 | | | | | | | | 1 | 2 | | | | 580.40 | 3 |
| 580.20 | | | | | | 12 | 26 | 20 | 8 | 2 | | | 580.20 | 71 |
| 580.00 | | | | | | 14 | 5 | 10 | 14 | 14 | 4 | 1 | 580.00 | 133 |
| 579.80 | | | | 4 | 12 | 4 | | | 6 | 10 | 14 | 5 | 579.80 | 188 |
| 579.60 | | | | 8 | 18 | | | | | 5 | 6 | 10 | 579.60 | 235 |
| 579.40 | | | 2 | 11 | | | | | | | 5 | 9 | 579.40 | 262 |
| 579.20 | 4 | 7 | 13 | 7 | 1 | | | | | | 1 | 5 | 579.20 | 300 |
| 579.00 | 18 | 22 | 13 | | | | | | | | | 1 | 579.00 | 354 |
| 578.80 | 9 | | 2 | | | | | | | | | | 578.80 | 365 |
| 578.60 | | | 1 | | | | | | | | | | 578.60 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984
Station 7072: Sturgeon Bay Canal, Wisconsin on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 579.17 | 579.14 | 578.96 | 579.28 | 579.39 | 580.03 | 580.25 | 580.22 | 580.17 | 579.97 | 580.07 | 579.69 |
| 2 | 579.18 | 579.26 | 579.00 | 579.24 | 579.61 | 580.12 | 580.26 | 580.32 | 580.49 | 579.89 | 579.51 | 579.83 |
| 3 | 579.08 | 579.11 | 579.09 | 579.30 | 579.77 | 579.95 | 580.22 | 580.29 | 580.45 | 579.67 | 579.84 | 579.71 |
| 4 | 578.96 | 579.06 | 579.19 | 579.38 | 579.75 | 579.94 | 580.23 | 580.34 | 580.28 | 579.82 | 579.95 | 579.31 |
| 5 | 579.18 | 579.05 | 579.28 | 579.27 | 579.74 | 580.10 | 580.25 | 580.34 | 580.23 | 580.11 | 579.75 | 579.54 |
| 6 | 579.01 | 579.11 | 579.01 | 579.25 | 579.85 | 580.04 | 580.18 | 580.32 | 580.18 | 580.14 | 579.78 | 579.57 |
| 7 | 579.21 | 579.06 | 579.13 | 579.24 | 579.93 | 580.06 | 580.05 | 580.35 | 580.22 | 580.19 | 579.97 | 579.48 |
| 8 | 579.03 | 579.03 | 579.19 | 579.43 | 579.70 | 580.06 | 580.23 | 580.40 | 580.16 | 580.12 | 580.01 | 579.39 |
| 9 | 579.05 | 579.08 | 579.14 | 579.54 | 579.71 | 579.92 | 580.37 | 580.31 | 580.06 | 580.06 | 579.96 | 579.72 |
| 10 | 579.08 | 579.16 | 579.09 | 579.48 | 579.74 | 580.14 | 580.37 | 580.30 | 580.13 | 580.05 | 580.07 | 579.66 |
| 11 | 579.13 | 579.12 | 578.74 | 579.42 | 579.83 | 579.92 | 580.26 | 580.44 | 580.11 | 580.04 | 580.13 | 579.62 |
| 12 | 579.35 | 579.21 | 579.03 | 579.54 | 579.64 | 580.18 | 580.29 | 580.39 | 580.28 | 580.07 | 579.93 | 579.62 |
| 13 | 579.39 | 579.33 | 579.24 | 579.75 | 579.78 | 580.11 | 580.33 | 580.34 | 580.22 | 580.07 | 579.90 | 579.79 |
| 14 | 579.24 | 579.12 | 579.13 | 579.65 | 579.74 | 580.01 | 580.33 | 580.30 | 580.17 | 580.08 | 579.95 | 580.08 |
| 15 | 579.20 | 579.13 | 579.19 | 579.49 | 579.67 | 580.14 | 580.20 | 580.21 | 580.25 | 580.25 | 579.85 | 579.94 |
| 16 | 579.07 | 579.26 | 579.08 | 579.55 | 579.70 | 580.20 | 580.22 | 580.25 | 580.06 | 580.26 | 579.40 | 579.66 |
| 17 | 579.00 | 579.27 | 579.42 | 579.52 | 579.80 | 580.28 | 580.31 | 580.36 | 580.01 | 580.08 | 579.42 | 579.43 |
| 18 | 578.96 | 579.13 | 579.44 | 579.61 | 579.85 | 580.26 | 580.31 | 580.33 | 579.94 | 580.03 | 579.75 | 579.55 |
| 19 | 578.96 | 579.26 | 579.26 | 579.57 | 579.68 | 580.19 | 580.24 | 580.34 | 580.01 | 580.18 | 579.85 | 579.62 |
| 20 | 578.83 | 579.18 | 579.35 | 579.53 | 579.78 | 580.26 | 580.31 | 580.23 | 579.95 | 579.63 | 579.82 | 579.30 |
| 21 | 579.00 | 579.18 | 579.30 | 579.61 | 579.89 | 580.30 | 580.33 | 580.12 | 580.09 | 579.85 | 579.82 | 579.82 |
| 22 | 579.03 | 579.24 | 579.31 | 579.76 | 579.88 | 580.34 | 580.37 | 580.11 | 580.24 | 579.86 | 579.58 | 579.47 |
| 23 | 579.15 | 579.20 | 579.17 | 579.86 | 579.77 | 580.38 | 580.28 | 580.17 | 580.07 | 579.81 | 579.46 | 579.36 |
| 24 | 579.14 | 579.13 | 579.23 | 579.67 | 579.78 | 580.22 | 580.17 | 580.22 | 580.26 | 579.78 | 579.62 | 579.59 |
| 25 | 578.84 | 579.13 | 579.31 | 579.61 | 579.73 | 580.23 | 580.25 | 580.17 | 580.10 | 579.69 | 579.74 | 579.19 |
| 26 | 578.94 | 579.13 | 579.30 | 579.81 | 579.83 | 580.31 | 580.30 | 580.07 | 579.86 | 580.03 | 579.94 | 579.34 |
| 27 | 579.00 | 579.12 | 579.36 | 579.91 | 579.89 | 580.21 | 580.36 | 580.06 | 580.03 | 579.97 | 579.97 | 579.82 |
| 28 | 579.12 | 579.13 | 579.32 | 579.65 | 579.98 | 580.09 | 580.33 | 580.12 | 579.99 | 579.67 | 579.69 | 579.82 |
| 29 | 579.11 | 579.09 | 579.28 | 579.54 | 579.98 | 580.24 | 580.31 | 580.12 | 580.00 | 579.89 | 579.59 | 579.60 |
| 30 | 579.04 | | 579.19 | 579.94 | 579.91 | 580.27 | 580.26 | 580.10 | 579.97 | 579.81 | 579.86 | 579.59 |
| 31 | 579.11 | | 579.22 | | 579.96 | | 580.14 | 580.03 | | 580.00 | | 579.79 |
| MEAN | 579.08 | 579.15 | 579.19 | 579.55 | 579.78 | 580.15 | 580.27 | 580.25 | 580.13 | 579.97 | 579.81 | 579.61 |
| MAX. | 579.52 | 579.55 | 579.57 | 580.69 | 580.23 | 580.50 | 580.80 | 580.57 | 580.71 | 580.73 | 580.49 | 580.24 |
| | 1600/13 | 1000/13 | 2000/17 | 1000/30 | 1400/07 | 0100/23 | 1900/10 | 0800/08 | 1800/02 | 0600/19 | 0700/01 | 2200/14 |
| MIN. | 578.62 | 578.89 | 578.53 | 579.08 | 579.13 | 579.67 | 579.89 | 579.72 | 579.58 | 579.37 | 579.16 | 578.85 |
| | 0100/26 | 1400/05 | 0300/11 | 0200/03 | 1100/25 | 1300/11 | 0800/07 | 2200/29 | 0600/26 | 0200/25 | 0400/17 | 2200/25 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 579.74

ANNUAL SUMMARY OF LEVELS, 1984
Station 7079: Green Bay, Wisconsin on Lake Michigan

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 580.20 Aug
Daily mean elevation: 581.11 10 Nov
Instant/hourly Elevation: 581.92 2100/10 Nov

LOWEST
Monthly mean elevation: 579.04 Jan
Daily mean elevation: 578.61 11 Mar
Instant/hourly Elevation: 577.19 1700/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 579.37 | 13 Jan |
| 579.36 | 13 Feb |
| 579.56 | 17 Mar |
| 580.27 | 22 Apr |
| 580.55 | 28 May |
| 580.41 | 29 Jun |
| 580.41 | 10 Jul |
| 580.53 | 11 Aug |
| 580.87 | 2 Sep |
| 580.27 | 8 Oct |
| 581.11 | 10 Nov |
| 580.29 | 14 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 578.76 | 20 Jan |
| 578.89 | 29 Feb |
| 578.61 | 11 Mar |
| 579.05 | 28 Apr |
| 579.26 | 1 May |
| 579.65 | 8 Jun |
| 579.91 | 31 Jul |
| 579.87 | 27 Aug |
| 579.62 | 18 Sep |
| 579.28 | 20 Oct |
| 578.96 | 16 Nov |
| 578.86 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 581.00         |     |     |     |     |     |     |     |     |     |     | 1   |     | 581.00         | 1                          |
| 580.80         |     |     |     |     |     |     |     |     | 1   |     |     |     | 580.80         | 2                          |
| 580.60         |     |     |     |     |     |     |     |     |     |     |     |     | 580.60         | 2                          |
| 580.40         |     |     |     |     | 1   | 1   | 1   | 3   | 1   |     | 2   |     | 580.40         | 11                         |
| 580.20         |     |     |     | 1   |     | 7   | 11  | 14  | 6   | 4   |     | 1   | 580.20         | 55                         |
| 580.00         |     |     |     | 2   | 2   | 15  | 16  | 9   | 6   | 9   |     | 1   | 580.00         | 115                        |
| 579.80         |     |     |     | 6   | 9   | 6   | 3   | 5   | 12  | 3   | 9   | 3   | 579.80         | 171                        |
| 579.60         |     |     |     | 6   | 15  | 1   |     |     | 4   | 10  | 8   | 7   | 579.60         | 222                        |
| 579.40         |     |     | 2   | 7   | 3   |     |     |     |     | 3   | 3   | 7   | 579.40         | 247                        |
| 579.20         | 2   | 6   | 11  | 7   | 1   |     |     |     |     | 2   | 4   | 5   | 579.20         | 285                        |
| 579.00         | 16  | 20  | 11  | 1   |     |     |     |     |     |     | 2   | 4   | 579.00         | 339                        |
| 578.80         | 12  | 3   | 6   |     |     |     |     |     |     |     | 1   | 3   | 578.80         | 364                        |
| 578.60         | 1   |     | 1   |     |     |     |     |     |     |     |     |     | 578.60         | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7079: Green Bay, Wisconsin on Lake Michigan

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 579.19  | 579.15  | 578.90  | 579.26  | 579.26  | 580.05  | 580.15  | 580.14  | 580.25  | 579.84  | 579.83  | 579.57  |
| 2    | 579.15  | 579.29  | 578.89  | 579.22  | 579.61  | 580.14  | 580.14  | 580.35  | 580.87  | 579.49  | 579.15  | 579.80  |
| 3    | 579.02  | 579.09  | 579.02  | 579.34  | 579.88  | 579.87  | 580.10  | 580.31  | 580.55  | 579.62  | 579.47  | 579.10  |
| 4    | 578.99  | 579.02  | 579.20  | 579.47  | 579.77  | 579.83  | 580.14  | 580.30  | 580.27  | 579.80  | 579.79  | 578.99  |
| 5    | 579.12  | 578.91  | 579.30  | 579.29  | 579.70  | 580.01  | 580.10  | 580.23  | 580.17  | 580.23  | 579.68  | 579.23  |
| 6    | 579.00  | 579.03  | 578.89  | 579.25  | 579.83  | 579.96  | 580.16  | 580.23  | 580.00  | 580.17  | 579.69  | 579.66  |
| 7    | 579.19  | 578.97  | 579.08  | 579.25  | 579.70  | 580.05  | 579.97  | 580.31  | 579.96  | 580.22  | 579.79  | 578.90  |
| 8    | 578.91  | 579.03  | 579.13  | 579.47  | 579.41  | 579.65  | 580.00  | 580.34  | 579.92  | 580.27  | 579.87  | 579.32  |
| 9    | 579.05  | 579.06  | 579.10  | 579.71  | 579.75  | 579.90  | 580.32  | 580.15  | 579.93  | 580.14  | 580.56  | 579.67  |
| 10   | 578.98  | 579.13  | 579.00  | 579.52  | 579.70  | 579.91  | 580.41  | 580.38  | 580.07  | 580.06  | 581.11  | 579.64  |
| 11   | 579.08  | 579.08  | 578.61  | 579.42  | 579.79  | 579.92  | 580.29  | 580.53  | 580.17  | 580.05  | 580.46  | 579.53  |
| 12   | 579.30  | 579.26  | 578.99  | 579.65  | 579.60  | 580.16  | 580.16  | 580.45  | 580.24  | 580.04  | 579.92  | 579.74  |
| 13   | 579.37  | 579.36  | 579.18  | 579.89  | 579.91  | 580.09  | 580.23  | 580.28  | 580.35  | 580.03  | 579.77  | 580.05  |
| 14   | 579.12  | 579.11  | 579.16  | 579.96  | 579.77  | 580.14  | 580.11  | 580.20  | 580.28  | 580.08  | 579.66  | 580.29  |
| 15   | 579.14  | 579.13  | 579.24  | 579.71  | 579.67  | 580.14  | 580.07  | 580.07  | 580.19  | 580.25  | 579.41  | 579.82  |
| 16   | 579.04  | 579.26  | 578.99  | 580.03  | 579.66  | 580.15  | 580.09  | 580.34  | 579.87  | 580.16  | 578.96  | 579.04  |
| 17   | 578.96  | 579.24  | 579.56  | 579.89  | 579.69  | 580.29  | 580.24  | 580.33  | 579.73  | 579.77  | 579.28  | 579.53  |
| 18   | 578.92  | 579.11  | 579.43  | 579.72  | 579.75  | 580.18  | 580.22  | 580.47  | 579.62  | 580.17  | 579.88  | 579.31  |
| 19   | 578.92  | 579.17  | 579.21  | 579.58  | 579.66  | 580.25  | 580.03  | 580.29  | 579.90  | 579.29  | 580.00  | 579.26  |
| 20   | 578.76  | 579.12  | 579.35  | 579.50  | 579.89  | 580.32  | 580.26  | 580.05  | 579.98  | 579.28  | 579.81  | 579.18  |
| 21   | 578.97  | 579.15  | 579.27  | 579.98  | 579.84  | 580.34  | 580.29  | 579.93  | 580.11  | 579.72  | 579.65  | 579.77  |
| 22   | 579.04  | 579.24  | 579.15  | 580.27  | 579.79  | 580.32  | 580.18  | 580.19  | 579.96  | 579.68  | 579.10  | 579.08  |
| 23   | 579.14  | 579.18  | 579.05  | 580.11  | 579.68  | 580.35  | 580.14  | 580.26  | 580.06  | 579.66  | 579.37  | 579.32  |
| 24   | 579.15  | 579.07  | 579.25  | 579.62  | 579.54  | 580.08  | 580.24  | 580.16  | 580.26  | 579.43  | 579.36  | 579.41  |
| 25   | 578.83  | 579.08  | 579.31  | 579.52  | 580.03  | 580.11  | 580.20  | 580.01  | 579.87  | 579.66  | 579.64  | 578.86  |
| 26   | 578.88  | 579.05  | 579.30  | 579.87  | 579.83  | 580.14  | 580.38  | 579.87  | 579.73  | 579.91  | 579.82  | 579.50  |
| 27   | 578.89  | 579.09  | 579.39  | 579.78  | 579.91  | 580.16  | 580.38  | 579.87  | 579.88  | 579.66  | 579.81  | 579.81  |
| 28   | 579.19  | 579.03  | 579.36  | 579.05  | 580.55  | 580.07  | 580.29  | 580.10  | 579.99  | 579.49  | 579.24  | 579.75  |
| 29   | 579.05  | 578.89  | 579.25  | 579.84  | 580.06  | 580.41  | 580.19  | 580.26  | 579.86  | 579.79  | 579.51  | 579.59  |
| 30   | 578.96  |         | 579.13  | 579.36  | 579.85  | 580.32  | 580.12  | 579.96  | 579.76  | 579.75  | 579.81  | 579.50  |
| 31   | 579.07  |         | 579.17  |         | 579.82  |         | 579.91  | 579.90  |         | 579.96  |         | 579.90  |
| MEAN | 579.04  | 579.11  | 579.16  | 579.62  | 579.77  | 580.11  | 580.18  | 580.20  | 580.06  | 579.86  | 579.71  | 579.49  |
| MAX. | 579.78  | 579.76  | 580.12  | 581.19  | 581.03  | 581.08  | 581.66  | 581.18  | 581.44  | 581.25  | 581.92  | 580.88  |
| MIN. | 1200/23 | 2100/17 | 2100/17 | 2400/29 | 1000/28 | 1700/28 | 1900/10 | 2200/18 | 1800/02 | 0400/19 | 2100/10 | 0200/06 |
|      | 0600/06 | 2300/29 | 0100/12 | 1700/30 | 0500/01 | 1500/08 | 0600/19 | 0300/27 | 0200/26 | 1000/19 | 0200/02 | 2100/16 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 579.69

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7096: Port Inland, Michigan on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 580.18 Jul  
Daily mean elevation: 580.67 19 Oct  
Instant/hourly Elevation: 581.33 1200/19 Oct

LOWEST  
Monthly mean elevation: 578.99 Feb  
Daily mean elevation: 578.57 11 Mar  
Instant/hourly Elevation: 578.20 0500/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 579.33 | 3 Jan  |
| 579.21 | 22 Feb |
| 579.16 | 10 Mar |
| 580.13 | 30 Apr |
| 579.95 | 31 May |
| 580.30 | 26 Jun |
| 580.38 | 22 Jul |
| 580.39 | 8 Aug  |
| 580.50 | 7 Sep  |
| 580.67 | 19 Oct |
| 580.22 | 8 Nov  |
| 580.04 | 16 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 578.82 | 26 Jan |
| 578.61 | 28 Feb |
| 578.57 | 11 Mar |
| 578.94 | 6 Apr  |
| 579.38 | 1 May  |
| 579.86 | 4 Jun  |
| 579.92 | 7 Jul  |
| 579.88 | 23 Aug |
| 579.74 | 26 Sep |
| 579.60 | 3 Oct  |
| 579.36 | 17 Nov |
| 579.20 | 26 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 580.60 | | | | | | | | | | 1 | | | 580.60 | 1 |
| 580.40 | | | | | | | | | 2 | | | | 580.40 | 3 |
| 580.20 | | | | | | 3 | 11 | 8 | 5 | | 1 | | 580.20 | 31 |
| 580.00 | | | | 1 | | 18 | 19 | 20 | 14 | 7 | 5 | 1 | 580.00 | 116 |
| 579.80 | | | | 1 | 10 | 9 | 1 | 3 | 8 | 16 | 5 | 3 | 579.80 | 172 |
| 579.60 | | | | 3 | 14 | | | | 1 | 6 | 12 | 8 | 579.60 | 216 |
| 579.40 | | | | 7 | 6 | | | | | 1 | 6 | 10 | 579.40 | 246 |
| 579.20 | 4 | 2 | | 9 | 1 | | | | | | 1 | 6 | 579.20 | 269 |
| 579.00 | 13 | 11 | 20 | 8 | | | | | | | | 1 | 579.00 | 322 |
| 578.80 | 14 | 13 | 8 | 1 | | | | | | | | | 578.80 | 358 |
| 578.60 | | 3 | 2 | | | | | | | | | | 578.60 | 363 |
| 578.40 | | | 1 | | | | | | | | | | 578.40 | 364 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7096: Port Inland, Michigan on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 579.18 | 579.09 | 578.79 | 579.15 | 579.38 | 579.96 | 580.13 | 580.16 | 580.01 | 579.98 | 580.04 | 579.53 |
| 2 | 579.11 | 579.13 | 578.81 | 579.14 | 579.53 | 580.01 | 580.17* | 580.23 | 580.32 | 580.14 | 579.52 | 579.65* |
| 3 | 579.33 | 579.12 | 578.97 | 579.07 | 579.61 | 579.91 | 580.06* | 580.20 | 580.15 | 579.60 | 580.14 | 579.66* |
| 4 | 578.93 | 578.88 | 579.06 | 579.11 | 579.62 | 579.86 | 580.09 | 580.20 | 580.00 | 579.78 | 580.08 | 579.34 |
| 5 | 579.22 | 578.78 | 579.15 | 579.02 | 579.61 | 580.02 | 580.11 | 580.25 | 580.02 | 580.05 | 579.64 | 579.75 |
| 6 | 578.83 | 578.90 | 578.83 | 578.94 | 579.73 | 579.98 | 580.01 | 580.25 | 580.07 | 580.03 | 579.66 | 579.32 |
| 7 | 579.22 | 578.93 | 578.89 | 579.06 | 579.87 | 579.93 | 579.92 | 580.23 | 580.50 | 579.99 | 580.00 | 579.76 |
| 8 | 578.90 | 579.00 | 578.96 | 579.20 | 579.70 | 580.19 | 580.13 | 580.39 | 580.42 | 579.91 | 580.22 | 579.36 |
| 9 | 579.00 | 578.98 | 579.00 | 579.31 | 579.56 | 579.88 | 580.19 | 580.32 | 580.13 | 579.88 | 579.75 | 579.69* |
| 10 | 578.93 | 579.03 | 579.16 | 579.25 | 579.61 | 580.14 | 580.12 | 580.16 | 580.08 | 579.88 | 579.67 | / |
| 11 | 579.03 | 578.99 | 578.57 | 579.22 | 579.79 | 579.88 | 580.17 | 580.26 | 580.11 | 579.86 | 579.63 | 579.98* |
| 12 | 579.11 | 578.97 | 578.89 | 579.34 | 579.52 | 580.13 | 580.18 | 580.21 | 580.30 | 579.91 | 579.64 | 579.49 |
| 13 | 579.14 | 579.21 | 579.08 | 579.54 | 579.59 | 580.04 | 580.29 | 580.17 | 580.24 | 579.90 | 579.76 | 579.45 |
| 14 | 578.97 | 579.06 | 579.04 | 579.37 | 579.59 | 579.90 | 580.31 | 580.19 | 579.96 | 579.89 | 580.13 | 579.79 |
| 15 | 579.13 | 578.94 | 579.09 | 579.22 | 579.55 | 580.04 | 580.22 | 580.16 | 580.09 | 580.03 | 580.06 | 579.81 |
| 16 | 579.18 | 579.02 | 578.65 | 579.23 | 579.64 | 580.11 | 580.16 | 580.05 | 580.01 | 580.05 | 579.44 | 580.04* |
| 17 | 579.02 | 579.06 | 578.93 | 579.18 | 579.75 | 580.19 | 580.26 | 580.18 | 580.12 | 580.09 | 579.36 | 579.37* |
| 18 | 578.99 | 578.97 | 579.11 | 579.40 | 579.84 | 580.17 | 580.17 | 580.07 | 580.18 | 579.79 | 579.54 | 579.51 |
| 19 | 579.05 | 579.04 | 579.04 | 579.43 | 579.63 | 580.04 | 580.25 | 580.08 | 580.09 | 580.67 | 579.63 | 579.64* |
| 20 | 578.88 | 579.06 | 579.14 | 579.41 | 579.67 | 580.15 | 580.21 | 580.08 | 579.90 | 579.83 | 579.57 | 579.25 |
| 21 | 579.15 | 579.07 | 579.14 | 579.35 | 579.81 | 580.14 | 580.24 | 580.15 | 580.02 | 579.86 | 579.73 | / |
| 22 | 579.03 | 579.21 | 579.05 | 579.49 | 579.82 | 580.19 | 580.38 | 580.03 | 580.30 | 579.86 | 579.96 | 579.46* |
| 23 | 579.12 | 579.18 | 579.01 | 579.63 | 579.69 | 580.27 | 580.20 | 579.88 | 579.97 | 579.75 | 579.48 | 579.31* |
| 24 | 579.22 | 578.91 | 579.12 | 579.53 | 579.85 | 580.10 | 580.09 | 579.99 | 580.25 | 579.92 | 579.71 | 579.48 |
| 25 | 578.85 | 578.93 | 579.13 | 579.52 | 579.87 | 580.03 | 580.20 | 580.03 | 579.95 | 579.65 | 579.70 | 579.44* |
| 26 | 578.82 | 578.97 | 579.14 | 579.65 | 579.80 | 580.30 | 580.20 | 580.09 | 579.74 | 579.98 | 579.89 | 579.20 |
| 27 | 578.92 | 578.86 | 579.15 | 579.86 | 579.78 | 580.27 | 580.20 | 580.11 | 580.02 | 580.13 | 579.93 | 579.86 |
| 28 | 579.14 | 578.61 | 579.04 | 579.79 | 579.82 | 579.96 | 580.19 | 580.10 | 579.92 | 579.73 | 579.87 | 579.79 |
| 29 | 578.99 | 578.74 | 579.04 | 579.50 | 579.81 | 580.10 | 580.22 | 580.14 | 579.93 | 579.96 | 579.56 | 579.45 |
| 30 | 578.86 | | 579.02 | 580.13 | 579.84 | 580.10 | 580.24 | 580.10 | 579.98 | 579.78 | 579.69 | 579.46* |
| 31 | 578.98 | | 579.12 | | 579.95 | | 580.23 | 579.90 | | 579.88 | | 579.45* |
| MEAN | 579.04 | 578.99 | 579.00 | 579.37 | 579.70 | 580.07 | 580.18 | 580.14 | 580.09 | 579.93 | 579.77 | 579.56 |
| MAX. | 579.79 | 579.65 | 579.55 | 580.99 | 580.29 | 580.85 | 580.57 | 580.51 | 580.87 | 581.33 | 580.58 | 580.70 |
| | 1200/03 | 0800/13 | 1800/10 | 1100/30 | 1600/25 | 0300/27 | 1800/22 | 0800/09 | 2400/12 | 1200/19 | 2400/14 | 1400/16 |
| MIN. | 578.49 | 578.42 | 578.20 | 578.72 | 579.12 | 579.63 | 579.48 | 579.69 | 579.55 | 579.25 | 579.06 | 578.61 |
| | 2200/25 | 0100/28 | 0500/11 | 1600/06 | 1500/01 | 0100/11 | 0300/15 | 0900/23 | 0500/26 | 1700/30 | 0800/17 | 0500/26 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 579.65

ANNUAL SUMMARY OF LEVELS, 1984
Station 9004: Pt. Iroquois, Brimley, Michigan on Lake Superior (Whitefish Bay

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 601.32 Aug
Daily mean elevation: 601.69 16 Nov
Instant/hourly Elevation: 602.50 0600/2 Nov

LOWEST
Monthly mean elevation: 600.47 Apr
Daily mean elevation: 600.21 14 Mar
Instant/hourly Elevation: 599.63 1600/27 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 601.24 | 8 Jan |
| 600.84 | 29 Feb |
| 600.79 | 22 Mar |
| 600.92 | 30 Apr |
| 600.96 | 25 May |
| 601.41 | 27 Jun |
| 601.56 | 6 Jul |
| 601.45 | 31 Aug |
| 601.59 | 25 Sep |
| 601.57 | 3 Oct |
| 601.69 | 16 Nov |
| 601.59 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 600.47 | 28 Jan |
| 600.38 | 12 Feb |
| 600.21 | 14 Mar |
| 600.25 | 27 Apr |
| 600.54 | 17 May |
| 600.64 | 1 Jun |
| 601.17 | 22 Jul |
| 601.15 | 26 Aug |
| 600.74 | 7 Sep |
| 600.84 | 31 Oct |
| 600.69 | 26 Nov |
| 600.55 | 27 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(ft.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 601.60 | | | | | | | | | | | 2 | | 601.60 | 2 |
| 601.40 | | | | | | 1 | 4 | 7 | 2 | 2 | 2 | 2 | 601.40 | 22 |
| 601.20 | 1 | | | | | 5 | 23 | 22 | 15 | 2 | 5 | 6 | 601.20 | 101 |
| 601.00 | 2 | | | | | 15 | 4 | 2 | 10 | 15 | 11 | 10 | 601.00 | 170 |
| 600.80 | 13 | 1 | | 1 | 13 | 5 | | | 2 | 12 | 6 | 7 | 600.80 | 230 |
| 600.60 | 12 | 14 | 7 | 3 | 15 | 4 | | | 1 | | 4 | 5 | 600.60 | 295 |
| 600.40 | 3 | 11 | 18 | 18 | 3 | | | | | | | 1 | 600.40 | 349 |
| 600.20 | | 3 | 6 | 8 | | | | | | | | | 600.20 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9004: Pt. Iroquois, Brimley, Michigan on Lake Superior (Whitefish Bay)

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 600.76 | 600.52 | 600.72 | 600.42 | 600.94 | 600.64 | 601.22 | 601.31 | 601.32 | 601.18 | 601.66 | 601.17 |
| 2 | 600.90 | 600.39 | 600.71 | 600.45 | 600.74 | 600.75 | 601.17 | 601.32 | 601.27 | 601.08 | 601.59 | 600.84 |
| 3 | 600.82 | 600.72 | 600.50 | 600.41 | 600.69 | 600.86 | 601.23 | 601.31 | 601.34 | 601.57 | 600.74 | 601.44 |
| 4 | 600.98 | 600.68 | 600.38 | 600.46 | 600.75 | 600.82 | 601.26 | 601.28 | 601.32 | 601.26 | 601.18 | 601.33 |
| 5 | 600.82 | 600.77 | 600.58 | 600.58 | 600.64 | 600.69 | 601.24 | 601.21 | 601.31 | 600.96 | 601.47 | 601.02 |
| 6 | 601.06 | 600.64 | 600.65 | 600.66 | 600.63 | 600.81 | 601.56 | 601.29 | 601.13 | 600.95 | 601.24 | 601.27 |
| 7 | 600.64 | 600.66 | 600.47 | 600.44 | 600.60 | 600.81 | 601.40 | 601.28 | 600.74 | 601.04 | 600.95 | 600.97 |
| 8 | 601.24 | 600.58 | 600.50 | 600.31 | 600.76 | 600.79 | 601.19 | 601.24 | 601.04 | 601.19 | 600.92 | 601.07 |
| 9 | 600.87 | 600.41 | 600.46 | 600.30 | 600.95 | 601.01 | 601.19 | 601.31 | 601.16 | 601.13 | 601.20 | 600.80 |
| 10 | 600.95 | 600.44 | 600.56 | 600.33 | 600.69 | 601.07 | 601.27 | 601.45 | 601.23 | 601.11 | 601.26 | 601.03 |
| 11 | 600.80 | 600.50 | 600.69 | 600.34 | 600.75 | 601.05 | 601.31 | 601.41 | 601.24 | 601.09 | 601.21 | 600.64 |
| 12 | 600.67 | 600.38 | 600.37 | 600.25 | 600.93 | 601.02 | 601.26 | 601.38 | 600.97 | 601.01 | 601.14 | 601.13 |
| 13 | 600.73 | 600.39 | 600.32 | 600.27 | 600.80 | 601.13 | 601.25 | 601.35 | 601.33 | 600.99 | 600.98 | 600.95 |
| 14 | 600.81 | 600.55 | 600.21 | 600.45 | 600.92 | 601.23 | 601.21 | 601.30 | 601.34 | 601.00 | 600.73 | 600.82 |
| 15 | 600.68 | 600.52 | 600.42 | 600.56 | 600.89 | 601.06 | 601.30 | 601.35 | 601.32 | 600.88 | 601.16 | 600.71 |
| 16 | 600.83 | 600.46 | 600.61 | 600.68 | 600.77 | 601.02 | 601.37 | 601.40 | 601.29 | 600.90 | 601.69 | 600.80 |
| 17 | 600.89 | 600.59 | 600.32 | 600.70 | 600.54 | 601.11 | 601.42 | 601.29 | 601.14 | 600.98 | 601.35 | 601.12 |
| 18 | 600.85 | 600.62 | 600.41 | 600.57 | 600.73 | 601.17 | 601.43 | 601.42 | 601.19 | 600.98 | 601.28 | 601.18 |
| 19 | 600.90 | 600.75 | 600.40 | 600.49 | 600.85 | 601.20 | 601.34 | 601.33 | 601.17 | 600.84 | 601.20 | 601.07 |
| 20 | 600.94 | 600.64 | 600.41 | 600.56 | 600.79 | 601.15 | 601.35 | 601.24 | 601.39 | 601.15 | 601.13 | 601.28 |
| 21 | 600.74 | 600.53 | 600.65 | 600.48 | 600.59 | 601.11 | 601.27 | 601.21 | 601.08 | 601.16 | 600.92 | 600.65 |
| 22 | 600.74 | 600.51 | 600.79 | 600.46 | 600.78 | 601.03 | 601.17 | 601.44 | 600.89 | 601.19 | 601.04 | 601.59 |
| 23 | 600.57 | 600.62 | 600.58 | 600.49 | 600.84 | 601.05 | 601.40 | 601.45 | 601.20 | 601.20 | 601.03 | 601.20 |
| 24 | 600.68 | 600.76 | 600.44 | 600.47 | 600.66 | 601.30 | 601.41 | 601.29 | 601.11 | 601.10 | 600.91 | 601.26 |
| 25 | 601.17 | 600.73 | 600.48 | 600.44 | 600.96 | 601.19 | 601.32 | 601.19 | 601.59 | 601.09 | 600.87 | 601.29 |
| 26 | 600.68 | 600.69 | 600.41 | 600.32 | 600.88 | 601.00 | 601.36 | 601.15 | 601.50 | 600.98 | 600.69 | 600.86 |
| 27 | 600.92 | 600.63 | 600.44 | 600.25 | 600.86 | 601.41 | 601.36 | 601.21 | 601.35 | 600.86 | 600.77 | 600.55 |
| 28 | 600.47 | 600.75 | 600.49 | 600.46 | 600.90 | 601.38 | 601.32 | 601.25 | 601.39 | 601.44 | 601.02 | 600.84 |
| 29 | 600.80 | 600.84 | 600.57 | 600.52 | 600.90 | 601.36 | 601.26 | 601.29 | 601.29 | 601.08 | 601.06 | 601.22 |
| 30 | 600.71 | | 600.58 | 600.92 | 600.88 | 601.28 | 601.23 | 601.45 | 601.19 | 601.36 | 601.13 | 601.05 |
| 31 | 600.51 | | 600.49 | | 600.74 | | 601.26 | 601.45 | | 600.84 | | 600.99 |
| MEAN | 600.81 | 600.60 | 600.50 | 600.47 | 600.79 | 601.05 | 601.30 | 601.32 | 601.23 | 601.08 | 601.12 | 601.04 |
| MAX. | 601.77 | 601.03 | 601.87 | 601.83 | 601.30 | 601.73 | 601.82 | 601.77 | 602.09 | 602.03 | 602.50 | 601.98 |
| | 0500/25 | 2100/29 | 2300/10 | 1900/30 | 0100/01 | 0800/27 | 1900/06 | 0300/31 | 2200/25 | 0400/28 | 0600/02 | 1300/03 |
| MIN. | 600.07 | 600.00 | 599.90 | 599.63 | 600.21 | 600.24 | 600.54 | 600.90 | 600.49 | 600.26 | 600.19 | 600.23 |
| | 0600/28 | 1400/02 | 2300/14 | 1600/27 | 1200/24 | 1000/08 | 1200/13 | 1600/26 | 1800/12 | 2100/31 | 1100/03 | 0100/27 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 600.94

ANNUAL SUMMARY OF LEVELS, 1984
 Station 9018: Marquette Coast Guard, Marquette, Michigan on Lake Superior

INTERNATIONAL
 GREAT LAKES
 DATUM (1955)

HIGHEST
 Monthly mean elevation: 601.42 Aug
 Daily mean elevation: 601.53 11 Aug
 Instant/hourly Elevation: 601.97 2000/25 Sep

LOWEST
 Monthly mean elevation: 600.56 Apr
 Daily mean elevation: 600.44 14 Mar
 Instant/hourly Elevation: 599.91 1500/27 Apr

HIGHEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 601.09 | 6 Jan |
| 600.96 | 5 Feb |
| 600.90 | 22 Mar |
| 600.92 | 30 Apr |
| 600.98 | 25 May |
| 601.37 | 29 Jun |
| 601.47 | 17 Jul |
| 601.53 | 11 Aug |
| 601.50 | 25 Sep |
| 601.36 | 3 Oct |
| 601.41 | 10 Nov |
| 601.29 | 3 Dec |

LOWEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 600.70 | 31 Jan |
| 600.62 | 12 Feb |
| 600.44 | 14 Mar |
| 600.46 | 11 Apr |
| 600.76 | 4 May |
| 600.88 | 1 Jun |
| 601.32 | 2 Jul |
| 601.30 | 26 Aug |
| 601.16 | 22 Sep |
| 601.13 | 19 Oct |
| 601.01 | 26 Nov |
| 600.90 | 11 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(ft.) | No. of days<br>above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 601.40         |     |     |     |     |     |     | 13  | 20  | 5   |     | 1   |     | 601.40         | 39                         |
| 601.20         |     |     |     |     |     | 18  | 18  | 11  | 23  | 21  | 14  | 2   | 601.20         | 146                        |
| 601.00         | 3   |     |     |     |     | 6   |     |     | 2   | 10  | 15  | 23  | 601.00         | 205                        |
| 600.80         | 21  | 5   | 1   | 1   | 26  | 6   |     |     |     |     |     | 6   | 600.80         | 271                        |
| 600.60         | 7   | 24  | 11  | 4   | 5   |     |     |     |     |     |     |     | 600.60         | 322                        |
| 600.40         |     |     | 19  | 25  |     |     |     |     |     |     |     |     | 600.40         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9018: Marquette Coast Guard, Marquette, Michigan on Lake Superior

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 601.00  | 600.71  | 600.73  | 600.49  | 600.84  | 600.88  | 601.32  | 601.43  | 601.45  | 601.30  | 601.38  | 601.17  |
| 2    | 600.97  | 600.66  | 600.68  | 600.50  | 600.79  | 600.95  | 601.32  | 601.44  | 601.45  | 601.25  | 601.35  | 601.18  |
| 3    | 600.94  | 600.74  | 600.58  | 600.49  | 600.77  | 600.97  | 601.33  | 601.39  | 601.40  | 601.36  | 601.12  | 601.29  |
| 4    | 601.02  | 600.82  | 600.56  | 600.52  | 600.76  | 600.97  | 601.37  | 601.39  | 601.39  | 601.33  | 601.27  | 601.18  |
| 5    | 600.96  | 600.96  | 600.68  | 600.56  | 600.79  | 600.96  | 601.38  | 601.39  | 601.34  | 601.24  | 601.36  | 601.06  |
| 6    | 601.09  | 600.80  | 600.74  | 600.57  | 600.79  | 601.01  | 601.45  | 601.38  | 601.30  | 601.19  | 601.29  | 601.24  |
| 7    | 600.95  | 600.70  | 600.63  | 600.47  | 600.83  | 601.00  | 601.41  | 601.38  | 601.20  | 601.26  | 601.18  | 601.09  |
| 8    | 601.06  | 600.63  | 600.58  | 600.47  | 600.87  | 601.03  | 601.37  | 601.42  | 601.29  | 601.28  | 601.21  | 601.05  |
| 9    | 600.97  | 600.62  | 600.53  | 600.48  | 600.95  | 601.11  | 601.37  | 601.45  | 601.32  | 601.26  | 601.30  | 601.03  |
| 10   | 600.99  | 600.62  | 600.55  | 600.47  | 600.88  | 601.20  | 601.36  | 601.52  | 601.34  | 601.23  | 601.41  | 601.08  |
| 11   | 600.95  | 600.65  | 600.71  | 600.46  | 600.89  | 601.17  | 601.37  | 601.53  | 601.38  | 601.23  | 601.33  | 600.90  |
| 12   | 600.89  | 600.62  | 600.53  | 600.50  | 600.91  | 601.21  | 601.36  | 601.45  | 601.31  | 601.21  | 601.22  | 601.14  |
| 13   | 600.93  | 600.67  | 600.48  | 600.55  | 600.90  | 601.27  | 601.36  | 601.43  | 601.34  | 601.20  | 601.12  | 601.11  |
| 14   | 600.98  | 600.67  | 600.44  | 600.55  | 600.89  | 601.24  | 601.37  | 601.41  | 601.44  | 601.22  | 601.07  | 601.01  |
| 15   | 600.81  | 600.67  | 600.57  | 600.62  | 600.87  | 601.21  | 601.40  | 601.42  | 601.38  | 601.18  | 601.18  | 600.93  |
| 16   | 600.79  | 600.66  | 600.71  | 600.67  | 600.84  | 601.20  | 601.41  | 601.48  | 601.33  | 601.19  | 601.29  | 600.96  |
| 17   | 600.87  | 600.71  | 600.54  | 600.69  | 600.84  | 601.24  | 601.47  | 601.43  | 601.25  | 601.22  | 601.28  | 601.18  |
| 18   | 600.85  | 600.71  | 600.49  | 600.59  | 600.87  | 601.26  | 601.46  | 601.47  | 601.25  | 601.19  | 601.27  | 601.12  |
| 19   | 600.87  | 600.81  | 600.49  | 600.56  | 600.86  | 601.25  | 601.43  | 601.43  | 601.32  | 601.13  | 601.28  | 601.08  |
| 20   | 600.92  | 600.73  | 600.55  | 600.58  | 600.86  | 601.26  | 601.45  | 601.36  | 601.35  | 601.20  | 601.21  | 601.11  |
| 21   | 600.76  | 600.69  | 600.77  | 600.58  | 600.87  | 601.25  | 601.41  | 601.33  | 601.26  | 601.24  | 601.07  | 601.05  |
| 22   | 600.77  | 600.67  | 600.90  | 600.59  | 600.91  | 601.23  | 601.35  | 601.52  | 601.16  | 601.21  | 601.05  | 601.15  |
| 23   | 600.78  | 600.71  | 600.63  | 600.58  | 600.94  | 601.25  | 601.44  | 601.49  | 601.24  | 601.22  | 601.07  | 601.11  |
| 24   | 600.78  | 600.76  | 600.56  | 600.55  | 600.88  | 601.26  | 601.42  | 601.38  | 601.40  | 601.18  | 601.04  | 601.09  |
| 25   | 600.89  | 600.73  | 600.54  | 600.56  | 600.98  | 601.23  | 601.41  | 601.33  | 601.50  | 601.22  | 601.04  | 601.00  |
| 26   | 600.82  | 600.69  | 600.55  | 600.60  | 600.93  | 601.25  | 601.45  | 601.30  | 601.45  | 601.16  | 601.01  | 601.06  |
| 27   | 600.84  | 600.69  | 600.56  | 600.51  | 600.91  | 601.37  | 601.45  | 601.40  | 601.39  | 601.15  | 601.14  | 600.95  |
| 28   | 600.74  | 600.82  | 600.61  | 600.58  | 600.94  | 601.36  | 601.40  | 601.41  | 601.38  | 601.27  | 601.05  | 601.00  |
| 29   | 600.84  | 600.81  | 600.62  | 600.63  | 600.95  | 601.37  | 601.37  | 601.42  | 601.35  | 601.23  | 601.09  | 601.13  |
| 30   | 600.82  |         | 600.59  | 600.92  | 600.91  | 601.34  | 601.34  | 601.47  | 601.33  | 601.32  | 601.18  | 601.04  |
| 31   | 600.70  |         | 600.53  |         | 600.89  |         | 601.39  | 601.46  |         | 601.23  |         | 601.08  |
| MEAN | 600.89  | 600.71  | 600.60  | 600.56  | 600.87  | 601.18  | 601.39  | 601.42  | 601.34  | 601.23  | 601.20  | 601.08  |
| MAX. | 601.32  | 601.13  | 601.10  | 601.18  | 601.25  | 601.62  | 601.73  | 601.70  | 601.97  | 601.64  | 601.58  | 601.54  |
|      | 0200/06 | 0900/05 | 2400/21 | 1100/30 | 1500/25 | 1100/27 | 0300/15 | 0200/30 | 2000/25 | 0100/28 | 1300/01 | 0100/06 |
| MIN. | 600.53  | 600.38  | 600.21  | 599.91  | 600.46  | 600.74  | 601.01  | 601.14  | 601.02  | 600.83  | 600.73  | 600.56  |
|      | 0100/28 | 1100/02 | 1700/14 | 1500/27 | 1300/24 | 1400/05 | 1700/14 | 0700/26 | 1000/07 | 1900/19 | 0400/03 | 1500/16 |

\* Indicates Less than 90% of the Hourly Data Available.

ANNUAL MEAN: 601.04

/ Indicates No Data.

ANNUAL SUMMARY OF LEVELS, 1984  
Station 9044: Ontonagon, Michigan on Lake Superior

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 601.46 Aug  
Daily mean elevation: 601.59 1 Sep  
Instant/hourly Elevation: 602.01 0400/19 Oct

LOWEST  
Monthly mean elevation: 600.65 Mar  
Daily mean elevation: 600.53 11 Mar  
Instant/hourly Elevation: 600.20 1200/27 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 601.05 | 5 Jan  |
| 600.91 | 2 Feb  |
| 600.76 | 28 Mar |
| 600.83 | 30 Apr |
| 601.07 | 24 May |
| 601.44 | 30 Jun |
| 601.53 | 21 Jul |
| 601.55 | 27 Aug |
| 601.59 | 1 Sep  |
| 601.43 | 31 Oct |
| 601.45 | 3 Nov  |
| 601.29 | 2 Dec  |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 600.77 | 15 Jan |
| 600.65 | 29 Feb |
| 600.53 | 11 Mar |
| 600.58 | 6 Apr  |
| 600.83 | 1 May  |
| 601.03 | 3 Jun  |
| 601.40 | 29 Jul |
| 601.38 | 18 Aug |
| 601.29 | 20 Sep |
| 601.22 | 28 Oct |
| 601.07 | 23 Nov |
| 601.00 | 7 Dec  |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.  | No. of days |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|-------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | (ft.)  | above elev. |
| 601.40                                                  |     |     |     |     |     | 4   | 29  | 27  | 9   | 1   | 1   |     | 601.40 | 71          |
| 601.20                                                  |     |     |     |     |     | 18  | 2   | 4   | 21  | 30  | 13  | 2   | 601.20 | 161         |
| 601.00                                                  | 10  |     |     |     | 5   | 8   |     |     |     |     | 16  | 28  | 601.00 | 228         |
| 600.80                                                  | 19  | 13  |     | 2   | 26  |     |     |     |     |     |     | 1   | 600.80 | 289         |
| 600.60                                                  | 2   | 16  | 26  | 25  |     |     |     |     |     |     |     |     | 600.60 | 358         |
| 600.40                                                  |     |     | 5   | 3   |     |     |     |     |     |     |     |     | 600.40 | 366         |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9044: Ontonagon, Michigan on Lake Superior

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 601.04  | 600.82  | 600.63  | 600.66  | 600.83  | 601.09  | 601.40  | 601.50  | 601.59  | 601.35  | 601.18  | 601.15  |
| 2    | 601.04  | 600.91  | 600.61  | 600.65  | 600.90  | 601.06  | 601.43  | 601.45  | 601.42  | 601.31  | 601.26  | 601.29  |
| 3    | 600.94  | 600.81  | 600.65  | 600.67  | 600.89  | 601.03  | 601.46  | 601.40  | 601.35  | 601.24  | 601.45  | 601.14  |
| 4    | 601.02  | 600.83  | 600.70  | 600.65  | 600.88  | 601.09  | 601.43  | 601.42  | 601.37  | 601.35  | 601.34  | 601.11  |
| 5    | 601.05  | 600.84  | 600.69  | 600.60  | 600.90  | 601.14  | 601.46  | 601.44  | 601.36  | 601.38  | 601.29  | 601.19  |
| 6    | 601.01  | 600.75  | 600.62  | 600.58  | 600.91  | 601.20  | 601.41  | 601.40  | 601.41  | 601.36  | 601.29  | 601.09  |
| 7    | 601.02  | 600.70  | 600.67  | 600.64  | 600.95  | 601.16  | 601.45  | 601.48  | 601.50  | 601.35  | 601.38  | 601.00  |
| 8    | 601.01  | 600.68  | 600.63  | 600.72  | 600.95  | 601.13  | 601.52  | 601.50  | 601.44  | 601.28  | 601.33  | 601.09  |
| 9    | 600.99  | 600.75  | 600.60  | 600.71  | 600.96  | 601.21  | 601.48  | 601.47  | 601.38  | 601.27  | 601.29  | 601.12  |
| 10   | 600.99  | 600.74  | 600.56  | 600.68  | 601.04  | 601.23  | 601.46  | 601.52  | 601.42  | 601.28  | 601.23  | 601.07  |
| 11   | 601.02  | 600.70  | 600.53  | 600.71  | 600.95  | 601.23  | 601.43  | 601.52  | 601.42  | 601.31  | 601.19  | 601.15  |
| 12   | 601.04  | 600.87  | 600.61  | 600.76  | 600.93  | 601.34  | 601.44  | 601.49  | 601.47  | 601.31  | 601.20  | 601.10  |
| 13   | 601.01  | 600.82  | 600.64  | 600.78  | 600.98  | 601.31  | 601.45  | 601.49  | 601.38  | 601.32  | 601.25  | 601.10  |
| 14   | 600.92  | 600.76  | 600.67  | 600.69  | 600.92  | 601.34  | 601.53  | 601.44  | 601.40  | 601.33  | 601.32  | 601.09  |
| 15   | 600.77  | 600.86  | 600.65  | 600.65  | 600.95  | 601.38  | 601.43  | 601.46  | 601.32  | 601.39  | 601.20  | 601.06  |
| 16   | 600.88  | 600.90  | 600.58  | 600.63  | 600.99  | 601.39  | 601.47  | 601.45  | 601.34  | 601.33  | 601.17  | 601.11  |
| 17   | 600.90  | 600.82  | 600.71  | 600.59  | 601.04  | 601.37  | 601.49  | 601.47  | 601.37  | 601.29  | 601.25  | 601.20  |
| 18   | 600.87  | 600.80  | 600.66  | 600.62  | 600.94  | 601.30  | 601.47  | 601.38  | 601.36  | 601.38  | 601.20  | 601.11  |
| 19   | 600.93  | 600.79  | 600.64  | 600.65  | 600.94  | 601.35  | 601.48  | 601.40  | 601.37  | 601.40  | 601.20  | 601.11  |
| 20   | 600.88  | 600.80  | 600.66  | 600.62  | 600.99  | 601.36  | 601.49  | 601.42  | 601.29  | 601.27  | 601.15  | 601.17  |
| 21   | 600.81  | 600.82  | 600.65  | 600.70  | 601.00  | 601.38  | 601.53  | 601.45  | 601.38  | 601.30  | 601.17  | 601.22  |
| 22   | 600.88  | 600.82  | 600.58  | 600.68  | 601.01  | 601.41  | 601.50  | 601.48  | 601.36  | 601.25  | 601.07  | 601.02  |
| 23   | 600.88  | 600.82  | 600.61  | 600.63  | 600.97  | 601.33  | 601.44  | 601.41  | 601.30  | 601.26  | 601.07  | 601.16  |
| 24   | 600.81  | 600.78  | 600.70  | 600.67  | 601.07  | 601.29  | 601.44  | 601.44  | 601.43  | 601.29  | 601.13  | 601.07  |
| 25   | 600.81  | 600.74  | 600.74  | 600.67  | 601.00  | 601.34  | 601.44  | 601.43  | 601.39  | 601.33  | 601.16  | 601.04  |
| 26   | 600.86  | 600.71  | 600.75  | 600.82  | 600.97  | 601.42  | 601.44  | 601.49  | 601.33  | 601.30  | 601.23  | 601.17  |
| 27   | 600.82  | 600.75  | 600.75  | 600.79  | 601.00  | 601.38  | 601.45  | 601.55  | 601.39  | 601.34  | 601.23  | 601.16  |
| 28   | 600.87  | 600.76  | 600.76  | 600.66  | 600.99  | 601.38  | 601.42  | 601.54  | 601.35  | 601.22  | 601.11  | 601.10  |
| 29   | 600.82  | 600.65  | 600.70  | 600.73  | 600.96  | 601.41  | 601.40  | 601.50  | 601.33  | 601.33  | 601.17  | 601.08  |
| 30   | 600.80  |         | 600.65  | 600.83  | 600.96  | 601.44  | 601.42  | 601.44  | 601.36  | 601.32  | 601.20  | 601.05  |
| 31   | 600.83  |         | 600.65  |         | 601.03  |         | 601.46  | 601.52  |         | 601.43  |         | 601.09  |
| MEAN | 600.92  | 600.79  | 600.65  | 600.68  | 600.96  | 601.28  | 601.46  | 601.46  | 601.39  | 601.32  | 601.22  | 601.12  |
| MAX. | 601.33  | 601.06  | 600.80  | 601.72  | 601.28  | 601.66  | 601.92  | 601.76  | 601.79  | 602.01  | 601.67  | 601.52  |
|      | 1800/05 | 1200/02 | 0300/28 | 1600/27 | 1300/24 | 2000/26 | 1900/14 | 1300/29 | 0200/24 | 0400/19 | 0300/03 | 2300/02 |
| MIN. | 600.54  | 600.59  | 600.45  | 600.20  | 600.62  | 600.83  | 601.10  | 601.00  | 601.05  | 600.61  | 600.79  | 600.63  |
|      | 2100/15 | 2000/29 | 0800/11 | 1200/27 | 0900/01 | 0700/08 | 1600/13 | 0300/30 | 2000/23 | 0200/28 | 0400/28 | 1200/07 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 601.10

ANNUAL SUMMARY OF LEVELS, 1984  
Station 9064: Duluth, Minnesota on Lake Superior

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 601.62 Aug  
Daily mean elevation: 601.80 18 Oct  
Instant/hourly Elevation: 602.88 0300/19 Oct

LOWEST  
Monthly mean elevation: 600.73 Mar  
Daily mean elevation: 600.39 10 Mar  
Instant/hourly Elevation: 600.06 2200/10 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 601.28 | 12 Jan |
| 601.14 | 12 Feb |
| 600.93 | 17 Mar |
| 601.08 | 26 Apr |
| 601.18 | 21 May |
| 601.58 | 22 Jun |
| 601.69 | 21 Jul |
| 601.77 | 13 Aug |
| 601.80 | 24 Sep |
| 601.80 | 18 Oct |
| 601.65 | 7 Nov  |
| 601.46 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 600.68 | 25 Jan |
| 600.66 | 29 Feb |
| 600.39 | 10 Mar |
| 600.61 | 30 Apr |
| 600.78 | 8 May  |
| 601.10 | 2 Jun  |
| 601.38 | 15 Jul |
| 601.38 | 30 Aug |
| 601.31 | 20 Sep |
| 601.20 | 28 Oct |
| 600.87 | 1 Nov  |
| 600.84 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 601.60                                                  |     |     |     |     |     |     | 3   | 21  | 7   | 6   | 2   |     | 601.60         | 39                         |
| 601.40                                                  |     |     |     |     |     | 15  | 26  | 9   | 13  | 16  | 7   | 2   | 601.40         | 127                        |
| 601.20                                                  | 1   |     |     |     |     | 11  | 2   | 1   | 10  | 8   | 15  | 11  | 601.20         | 186                        |
| 601.00                                                  | 10  | 4   |     | 3   | 25  | 4   |     |     |     | 1   | 3   | 11  | 601.00         | 247                        |
| 600.80                                                  | 12  | 19  | 9   | 8   | 5   |     |     |     |     |     | 3   | 7   | 600.80         | 310                        |
| 600.60                                                  | 8   | 6   | 19  | 19  | 1   |     |     |     |     |     |     |     | 600.60         | 363                        |
| 600.40                                                  |     |     | 2   |     |     |     |     |     |     |     |     |     | 600.40         | 365                        |
| 600.20                                                  |     |     | 1   |     |     |     |     |     |     |     |     |     | 600.20         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9064: Duluth, Minnesota on Lake Superior

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 601.17  | 600.92  | 600.68  | 600.66  | 600.84  | 601.20  | 601.55  | 601.67  | 601.78  | 601.47  | 600.87  | 601.20  |
| 2    | 601.01  | 601.04  | 600.68  | 600.71  | 601.01  | 601.10  | 601.59  | 601.65  | 601.65  | 601.36  | 601.26  | 601.41  |
| 3    | 600.88  | 600.82  | 600.80  | 600.73  | 601.03  | 601.11  | 601.51  | 601.59  | 601.52  | 601.28  | 601.64  | 600.93  |
| 4    | 601.06  | 600.91  | 600.85  | 600.69  | 601.02  | 601.27  | 601.47  | 601.61  | 601.52  | 601.57  | 601.27  | 601.01  |
| 5    | 601.05  | 600.85  | 600.72  | 600.62  | 601.03  | 601.31  | 601.51  | 601.63  | 601.52  | 601.64  | 601.24  | 601.17  |
| 6    | 601.16  | 600.79  | 600.70  | 600.61  | 601.10  | 601.39  | 601.39  | 601.58  | 601.66  | 601.57  | 601.41  | 601.07  |
| 7    | 600.97  | 600.77  | 600.82  | 600.78  | 600.94  | 601.40  | 601.51  | 601.68  | 601.71  | 601.59  | 601.65  | 600.96  |
| 8    | 600.97  | 600.71  | 600.72  | 600.82  | 600.78  | 601.18  | 601.66  | 601.65  | 601.55  | 601.51  | 601.45  | 601.16  |
| 9    | 600.95  | 600.87  | 600.65  | 600.88  | 600.98  | 601.40  | 601.60  | 601.55  | 601.45  | 601.46  | 601.48  | 601.23  |
| 10   | 600.98  | 600.86  | 600.39  | 600.84  | 601.17  | 601.33  | 601.54  | 601.64  | 601.49  | 601.49  | 601.41  | 601.18  |
| 11   | 601.15  | 600.82  | 600.53  | 600.90  | 600.96  | 601.42  | 601.48  | 601.73  | 601.46  | 601.54  | 601.37  | 601.30  |
| 12   | 601.28  | 601.14  | 600.80  | 601.04  | 601.05  | 601.53  | 601.54  | 601.74  | 601.69  | 601.52  | 601.40  | 601.12  |
| 13   | 601.19  | 600.94  | 600.76  | 600.96  | 601.09  | 601.39  | 601.58  | 601.77  | 601.36  | 601.50  | 601.51  | 601.30  |
| 14   | 601.06  | 600.82  | 600.85  | 600.74  | 601.03  | 601.48  | 601.60  | 601.71  | 601.43  | 601.57  | 601.60  | 601.28  |
| 15   | 600.71  | 601.12  | 600.70  | 600.68  | 601.08  | 601.55  | 601.38  | 601.62  | 601.35  | 601.78  | 601.02  | 601.26  |
| 16   | 600.80  | 601.09  | 600.80  | 600.69  | 601.12  | 601.52  | 601.47  | 601.71  | 601.40  | 601.69  | 600.96  | 601.12  |
| 17   | 600.79  | 600.91  | 600.93  | 600.62  | 601.14  | 601.47  | 601.45  | 601.70  | 601.45  | 601.38  | 601.30  | 601.28  |
| 18   | 600.78  | 600.91  | 600.74  | 600.72  | 601.00  | 601.34  | 601.54  | 601.61  | 601.32  | 601.80  | 601.24  | 601.06  |
| 19   | 600.83  | 600.84  | 600.73  | 600.77  | 601.04  | 601.47  | 601.55  | 601.63  | 601.40  | 601.67  | 601.23  | 600.99  |
| 20   | 600.75  | 600.80  | 600.69  | 600.75  | 601.17  | 601.52  | 601.58  | 601.65  | 601.31  | 601.31  | 601.30  | 601.23  |
| 21   | 600.77  | 600.94  | 600.61  | 600.90  | 601.18  | 601.57  | 601.69  | 601.58  | 601.64  | 601.37  | 601.32  | 601.24  |
| 22   | 601.02  | 600.88  | 600.57  | 600.84  | 601.04  | 601.58  | 601.65  | 601.47  | 601.49  | 601.30  | 601.13  | 600.84  |
| 23   | 601.03  | 600.83  | 600.74  | 600.75  | 601.03  | 601.40  | 601.48  | 601.56  | 601.37  | 601.29  | 601.17  | 601.08  |
| 24   | 600.77  | 600.83  | 600.81  | 600.79  | 601.16  | 601.30  | 601.56  | 601.61  | 601.80  | 601.42  | 601.30  | 600.87  |
| 25   | 600.68  | 600.82  | 600.86  | 600.78  | 601.10  | 601.46  | 601.57  | 601.60  | 601.33  | 601.56  | 601.39  | 600.93  |
| 26   | 600.86  | 600.78  | 600.88  | 601.08  | 601.05  | 601.50  | 601.57  | 601.63  | 601.36  | 601.56  | 601.47  | 601.46  |
| 27   | 600.84  | 600.84  | 600.83  | 601.04  | 601.17  | 601.35  | 601.60  | 601.65  | 601.49  | 601.44  | 601.34  | 601.30  |
| 28   | 600.90  | 600.81  | 600.81  | 600.64  | 601.10  | 601.47  | 601.60  | 601.64  | 601.35  | 601.20  | 600.99  | 601.30  |
| 29   | 600.87  | 600.66  | 600.66  | 600.91  | 601.05  | 601.49  | 601.57  | 601.52  | 601.43  | 601.49  | 601.25  | 600.94  |
| 30   | 600.81  |         | 600.63  | 600.61  | 601.06  | 601.55  | 601.59  | 601.38  | 601.45  | 601.29  | 601.25  | 601.05  |
| 31   | 600.95  |         | 600.69  |         | 601.15  |         | 601.59  | 601.47  |         | 601.68  |         | 601.23  |
| MEAN | 600.94  | 600.87  | 600.73  | 600.78  | 601.05  | 601.40  | 601.55  | 601.62  | 601.49  | 601.49  | 601.31  | 601.15  |
| MAX. | 601.50  | 601.46  | 601.25  | 601.45  | 601.46  | 602.02  | 602.16  | 602.01  | 602.25  | 602.88  | 602.03  | 601.93  |
|      | 0900/12 | 0900/12 | 1300/17 | 0800/27 | 1500/31 | 1200/26 | 1900/13 | 2000/08 | 0400/24 | 0300/19 | 0100/03 | 1700/26 |
| MIN. | 600.18  | 600.43  | 600.06  | 600.13  | 600.29  | 600.76  | 601.14  | 601.00  | 601.05  | 600.29  | 600.54  | 600.17  |
|      | 0300/25 | 2300/02 | 2200/10 | 1000/28 | 0900/01 | 2200/08 | 2300/16 | 1100/30 | 2200/25 | 0200/28 | 0500/02 | 1900/16 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 601.20

ANNUAL SUMMARY OF LEVELS, 1984  
Station 9070: Two Harbors, Minnesota on Lake Superior

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 601.54 Aug  
Daily mean elevation: 601.66 13 Aug  
Instant/hourly Elevation: 602.30 0300/19 Oct

LOWEST  
Monthly mean elevation: 600.67 Mar  
Daily mean elevation: 600.38 10 Mar  
Instant/hourly Elevation: 600.09 2100/10 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 601.20 | 12 Jan |
| 600.99 | 16 Feb |
| 600.84 | 17 Mar |
| 600.98 | 27 Apr |
| 601.13 | 24 May |
| 601.48 | 22 Jun |
| 601.61 | 21 Jul |
| 601.66 | 13 Aug |
| 601.64 | 7 Sep  |
| 601.62 | 18 Oct |
| 601.58 | 3 Nov  |
| 601.35 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 600.63 | 25 Jan |
| 600.60 | 29 Feb |
| 600.38 | 10 Mar |
| 600.54 | 6 Apr  |
| 600.78 | 1 May  |
| 601.16 | 1 Jun  |
| 601.33 | 6 Jul  |
| 601.35 | 30 Aug |
| 601.27 | 23 Sep |
| 601.15 | 28 Oct |
| 600.90 | 1 Nov  |
| 600.82 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(ft.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| Elev.<br>(ft.)                                          | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |                |                            |
| 601.60                                                  |     |     |     |     |     |     | 1   | 6   | 4   | 2   |     |     | 601.60         | 13                         |
| 601.40                                                  |     |     |     |     |     | 9   | 28  | 23  | 11  | 14  | 4   |     | 601.40         | 102                        |
| 601.20                                                  |     |     |     |     |     | 17  | 2   | 2   | 15  | 14  | 15  | 10  | 601.20         | 177                        |
| 601.00                                                  | 7   |     |     |     | 16  | 1   |     |     |     | 1   | 8   | 12  | 601.00         | 222                        |
| 600.80                                                  | 13  | 12  | 1   | 5   | 13  |     |     |     |     |     | 3   | 9   | 600.80         | 278                        |
| 600.60                                                  | 11  | 16  | 23  | 22  | 2   |     |     |     |     |     |     |     | 600.60         | 352                        |
| 600.40                                                  |     | 1   | 6   | 3   |     |     |     |     |     |     |     |     | 600.40         | 362                        |
| 600.20                                                  |     |     | 1   |     |     |     |     |     |     |     |     |     | 600.20         | 363                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9070: Two Harbors, Minnesota on Lake Superior

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 601.13  | 600.85  | 600.63  | 600.61  | 600.78  | 601.16* | 601.46  | 601.56  | 601.61  | 601.40  | 600.90  | 601.15  |
| 2    | 600.98  | 600.98  | 600.62  | 600.64  | 600.93  | /       | 601.51  | 601.52  | 601.51  | 601.31  | 601.20  | 601.34  |
| 3    | 600.87  | 600.77  | 600.73  | 600.66  | 600.96  | /       | 601.43  | 601.50  | 601.45  | 601.24  | 601.58  | 600.92  |
| 4    | 601.01  | 600.86  | 600.78  | 600.62  | 600.96  | /       | 601.41  | 601.51  | 601.44  | 601.45  | 601.24  | 601.00  |
| 5    | 601.01  | 600.78  | 600.66  | 600.56  | 600.97  | 601.21* | 601.45  | 601.53  | 601.45  | 601.52  | 601.21  | 601.13  |
| 6    | 601.08  | 600.75  | 600.64  | 600.54  | 601.02  | 601.29  | 601.33  | 601.51  | 601.58  | 601.48  | 601.34  | 601.05  |
| 7    | 600.94  | 600.72  | 600.75  | 600.69  | 600.92  | 601.28  | 601.44  | 601.58  | 601.64  | 601.47  | 601.54  | 600.97  |
| 8    | 600.92  | 600.68  | 600.67  | 600.74  | 600.79  | 601.23  | 601.57  | 601.58  | 601.48  | 601.38  | 601.40  | 601.12  |
| 9    | 600.91  | 600.81  | 600.60  | 600.79  | 600.92  | 601.27  | 601.52  | 601.50  | 601.41  | 601.36  | 601.38  | 601.18  |
| 10   | 600.94  | 600.80  | 600.38  | 600.76  | 601.10  | 601.24  | 601.48  | 601.56  | 601.43  | 601.40  | 601.33  | 601.15  |
| 11   | 601.08  | 600.75  | 600.47  | 600.79  | 600.95  | 601.30  | 601.42  | 601.63  | 601.42  | 601.44  | 601.28  | 601.25  |
| 12   | 601.20  | 600.98  | 600.71  | 600.91  | 600.98  | 601.41  | 601.46  | 601.63  | 601.61  | 601.44  | 601.33  | 601.09  |
| 13   | 601.13  | 600.90  | 600.70  | 600.84  | 601.03  | 601.32  | 601.51  | 601.66  | 601.33  | 601.42  | 601.43  | 601.23  |
| 14   | 600.99  | 600.77  | 600.79  | 600.66  | 600.97  | 601.37  | 601.53  | 601.64  | 601.38  | 601.47  | 601.51  | 601.24  |
| 15   | 600.72  | 600.98  | 600.65  | 600.61  | 601.01  | 601.44  | 601.35  | 601.55  | 601.30  | 601.62  | 601.04  | 601.22  |
| 16   | 600.76  | 600.99  | 600.70  | 600.62  | 601.06  | 601.46  | 601.43  | 601.62  | 601.34  | 601.55  | 600.94  | 601.10  |
| 17   | 600.76  | 600.84  | 600.84  | 600.56  | 601.08  | 601.38* | 601.41  | 601.61  | 601.39  | 601.36  | 601.24  | 601.24  |
| 18   | 600.77  | 600.84  | 600.67  | 600.65  | 600.97  | 601.32* | 601.47  | 601.53  | 601.27  | 601.62  | 601.19  | 601.04  |
| 19   | 600.79  | 600.78  | 600.66  | 600.69  | 600.98  | 601.38  | 601.49  | 601.55  | 601.35  | 601.56  | 601.17  | 600.98  |
| 20   | 600.73  | 600.76  | 600.63  | 600.69  | 601.06  | 601.41  | 601.52  | 601.56  | 601.27  | 601.29  | 601.23  | 601.17  |
| 21   | 600.73  | 600.87  | 600.55  | 600.80  | 601.11  | 601.46  | 601.61  | 601.50* | 601.54  | 601.32  | 601.27  | 601.21  |
| 22   | 600.95  | 600.83  | 600.53  | 600.77  | 601.01  | 601.48  | 601.57  | 601.42  | 601.43  | 601.25  | 601.09  | 600.82  |
| 23   | 600.97  | 600.78  | 600.68  | 600.69  | 600.99  | 601.36  | 601.43  | 601.48  | 601.27  | 601.25  | 601.12  | 601.02  |
| 24   | 600.73  | 600.77  | 600.74  | 600.74  | 601.13  | 601.24  | 601.47  | 601.53  | 601.62  | 601.35  | 601.23  | 600.87  |
| 25   | 600.63  | 600.77  | 600.79  | 600.71  | 601.04  | 601.37  | 601.48  | 601.51  | 601.29  | 601.46  | 601.32  | 600.88  |
| 26   | 600.84  | 600.72  | 600.80  | 600.96  | 601.02  | 601.43  | 601.48  | 601.54  | 601.31  | 601.45  | 601.38  | 601.35  |
| 27   | 600.78  | 600.76* | 600.75  | 600.98  | 601.08  | 601.34  | 601.50  | 601.57  | 601.40  | 601.39  | 601.29  | 601.23  |
| 28   | 600.83  | 600.64* | 600.74  | 600.68  | 601.04  | 601.38  | 601.51  | 601.57  | 601.31  | 601.15  | 600.99  | 601.23  |
| 29   | 600.81  | 600.60  | 600.60  | 600.81  | 600.99  | 601.41  | 601.48  | 601.46  | 601.37  | 601.42  | 601.19  | 600.91  |
| 30   | 600.77  |         | 600.57  | 600.62  | 601.01  | 601.46  | 601.51  | 601.35  | 601.38  | 601.24  | 601.18  | 601.00  |
| 31   | 600.89  |         | 600.63  |         | 601.10  |         | 601.52  | 601.40  |         | 601.56  |         | 601.15  |
| MEAN | 600.89  | 600.80  | 600.67  | 600.71  | 601.00  | 601.35  | 601.48  | 601.54  | 601.42  | 601.41  | 601.25  | 601.10  |
| MAX. | 601.41  | 601.29  | 601.06  | 601.22  | 601.29  | 601.67  | 601.86  | 601.85  | 601.90  | 602.30  | 601.91  | 601.74  |
|      | 0800/12 | 0500/02 | 1300/17 | 1500/27 | 1100/24 | 0200/08 | 0300/14 | 1400/27 | 1000/12 | 0300/19 | 0100/03 | 1700/26 |
| MIN. | 600.21  | 600.46  | 600.09  | 600.34  | 600.54  | 600.88  | 601.17  | 601.11  | 601.04  | 600.31  | 600.58  | 600.30  |
|      | 0200/25 | 2000/29 | 2100/10 | 1700/30 | 0900/01 | 2200/08 | 0300/23 | 1000/30 | 0700/23 | 0200/28 | 0500/02 | 1900/16 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 601.14

ANNUAL SUMMARY OF LEVELS, 1984  
Station 9090: Grand Marais, Minnesota on Lake Superior

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 601.39 Aug  
Daily mean elevation: 601.49 7 Sep  
Instant/hourly Elevation: 602.25 2400/16 Oct

LOWEST  
Monthly mean elevation: 600.53 Mar  
Daily mean elevation: 600.39 10 Mar  
Instant/hourly Elevation: 600.09 2100/10 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 601.01 | 1 Jan  |
| 600.80 | 2 Feb  |
| 600.61 | 26 Mar |
| 600.85 | 27 Apr |
| 600.98 | 24 May |
| 601.31 | 30 Jun |
| 601.44 | 22 Jul |
| 601.46 | 14 Aug |
| 601.49 | 7 Sep  |
| 601.43 | 31 Oct |
| 601.46 | 3 Nov  |
| 601.16 | 2 Dec  |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 600.59 | 25 Jan |
| 600.48 | 29 Feb |
| 600.39 | 10 Mar |
| 600.42 | 6 Apr  |
| 600.71 | 1 May  |
| 600.98 | 2 Jun  |
| 601.25 | 6 Jul  |
| 601.27 | 30 Aug |
| 601.18 | 20 Sep |
| 601.10 | 28 Oct |
| 600.96 | 16 Nov |
| 600.77 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(ft.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(ft.) | No. of days
above elev. |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------------|----------------------------|
| 601.40 | | | | | | | 2 | 11 | 2 | 2 | 1 | | 601.40 | 18 |
| 601.20 | | | | | | 16 | 29 | 20 | 27 | 23 | 6 | | 601.20 | 139 |
| 601.00 | 1 | | | | | 10 | | | 1 | 6 | 19 | 16 | 601.00 | 192 |
| 600.80 | 14 | | | 1 | 26 | 4 | | | | | 4 | 14 | 600.80 | 255 |
| 600.60 | 15 | 26 | 3 | 3 | 5 | | | | | | | 1 | 600.60 | 308 |
| 600.40 | 1 | 3 | 27 | 26 | | | | | | | | | 600.40 | 365 |
| 600.20 | | | 1 | | | | | | | | | | 600.20 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9090: Grand Marais, Minnesota on Lake Superior

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 601.01 | 600.72 | 600.52 | 600.51 | 600.71 | 601.00 | 601.32 | 601.39 | 601.40 | 601.27 | 600.98 | 601.03 |
| 2 | 600.94 | 600.80 | 600.50 | 600.49 | 600.78 | 600.98 | 601.35 | 601.37 | 601.33 | 601.25 | 601.17 | 601.16 |
| 3 | 600.86 | 600.66 | 600.59 | 600.50 | 600.80 | 600.99 | 601.34 | 601.35 | 601.30 | 601.15 | 601.46 | 600.94 |
| 4 | 600.92 | 600.69 | 600.61 | 600.47 | 600.80 | 601.00 | 601.34 | 601.36 | 601.30 | 601.29 | 601.20 | 600.98 |
| 5 | 600.94 | 600.62 | 600.54 | 600.43 | 600.81 | 601.06 | 601.36 | 601.37 | 601.30 | 601.34 | 601.15 | 601.05 |
| 6 | 600.91 | 600.63 | 600.51 | 600.42 | 600.83 | 601.09 | 601.25 | 601.36 | 601.40 | 601.30 | 601.21 | 601.00 |
| 7 | 600.88 | 600.61 | 600.58 | 600.50 | 600.82 | 601.12 | 601.34 | 601.38 | 601.49 | 601.28 | 601.32 | 600.93 |
| 8 | 600.81 | 600.61 | 600.53 | 600.54 | 600.78 | 601.12 | 601.39 | 601.45 | 601.39 | 601.22 | 601.26 | 600.99 |
| 9 | 600.84 | 600.70 | 600.52 | 600.55 | 600.82 | 601.12 | 601.39 | 601.43 | 601.36 | 601.22 | 601.20 | 601.06 |
| 10 | 600.85 | 600.67 | 600.39 | 600.54 | 600.94 | 601.10 | 601.36 | 601.40 | 601.31 | 601.24 | 601.16 | 601.02 |
| 11 | 600.87 | 600.63 | 600.42 | 600.55 | 600.86 | 601.17 | 601.32 | 601.43 | 601.31 | 601.26 | 601.14 | 601.15 |
| 12 | 600.97 | 600.74 | 600.55 | 600.60 | 600.86 | 601.21 | 601.35 | 601.44 | 601.42 | 601.27 | 601.19 | 600.97 |
| 13 | 600.92 | 600.76 | 600.55 | 600.56 | 600.89 | 601.18 | 601.36 | 601.46 | 601.25 | 601.27 | 601.24 | 601.03 |
| 14 | 600.83 | 600.70 | 600.61 | 600.50 | 600.83 | 601.20 | 601.35 | 601.46 | 601.26 | 601.28 | 601.33 | 601.08 |
| 15 | 600.75 | 600.75 | 600.52 | 600.48 | 600.85 | 601.27 | 601.29 | 601.41 | 601.22 | 601.34 | 601.11 | 601.07 |
| 16 | 600.73 | 600.79 | 600.51 | 600.48 | 600.88 | 601.28 | 601.36 | 601.40 | 601.28 | 601.37 | 600.96 | 601.02 |
| 17 | 600.72 | 600.68 | 600.60 | 600.46 | 600.95 | 601.25 | 601.33 | 601.42 | 601.31 | 601.31 | 601.11 | 601.06 |
| 18 | 600.73 | 600.68 | 600.51 | 600.51 | 600.88 | 601.22 | 601.37 | 601.38 | 601.22 | 601.35 | 601.06 | 600.98 |
| 19 | 600.72 | 600.65 | 600.52 | 600.55 | 600.85 | 601.22 | 601.38 | 601.40 | 601.24 | 601.43 | 601.05 | 600.95 |
| 20 | 600.70 | 600.67 | 600.49 | 600.54 | 600.89 | 601.25 | 601.38 | 601.41 | 601.18 | 601.22 | 601.10 | 601.07 |
| 21 | 600.72 | 600.72 | 600.44 | 600.59 | 600.96 | 601.27 | 601.43 | 601.40 | 601.34 | 601.21 | 601.18 | 601.13 |
| 22 | 600.80 | 600.71 | 600.45 | 600.58 | 600.94 | 601.30 | 601.44 | 601.32 | 601.33 | 601.17 | 601.00 | 600.77 |
| 23 | 600.83 | 600.68 | 600.55 | 600.56 | 600.90 | 601.25 | 601.32 | 601.33 | 601.21 | 601.15 | 601.05 | 600.93 |
| 24 | 600.69 | 600.64 | 600.60 | 600.60 | 600.98 | 601.16 | 601.33 | 601.37 | 601.26 | 601.20 | 601.10 | 600.89 |
| 25 | 600.59 | 600.61 | 600.60 | 600.58 | 600.87 | 601.24 | 601.36 | 601.38 | 601.23 | 601.26 | 601.15 | 600.82 |
| 26 | 600.70 | 600.60 | 600.61 | 600.72 | 600.92 | 601.31 | 601.35 | 601.38 | 601.25 | 601.27 | 601.23 | 601.08 |
| 27 | 600.67 | 600.63 | 600.58 | 600.85 | 600.92 | 601.22 | 601.36 | 601.42 | 601.29 | 601.38 | 601.17 | 601.12 |
| 28 | 600.73 | 600.58 | 600.57 | 600.66 | 600.89 | 601.26 | 601.37 | 601.44 | 601.25 | 601.10 | 600.98 | 601.02 |
| 29 | 600.68 | 600.48 | 600.47 | 600.65 | 600.86 | 601.28 | 601.34 | 601.35 | 601.27 | 601.27 | 601.08 | 600.90 |
| 30 | 600.67 | | 600.45 | 600.57 | 600.89 | 601.31 | 601.37 | 601.27 | 601.27 | 601.16 | 601.07 | 600.87 |
| 31 | 600.75 | | 600.49 | | 600.94 | | 601.38 | 601.33 | | 601.43 | | 600.95 |
| MEAN | 600.80 | 600.67 | 600.53 | 600.55 | 600.87 | 601.18 | 601.35 | 601.39 | 601.30 | 601.27 | 601.15 | 601.00 |
| MAX. | 601.29 | 601.17 | 600.78 | 601.47 | 601.21 | 601.53 | 601.77 | 601.73 | 601.74 | 602.25 | 601.85 | 601.55 |
| | 0100/05 | 0900/02 | 0500/17 | 1200/27 | 2400/12 | 0100/08 | 1200/22 | 1400/29 | 0600/25 | 2400/16 | 0900/03 | 0800/27 |
| MIN. | 600.24 | 600.38 | 600.09 | 600.24 | 600.51 | 600.87 | 601.10 | 601.04 | 600.76 | 600.52 | 600.68 | 600.42 |
| | 0400/25 | 2000/29 | 2100/10 | 0800/30 | 0900/01 | 0400/06 | 0100/23 | 0200/30 | 0200/24 | 0100/28 | 2100/01 | 0300/30 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 601.00

Water Level Stages for Lake Ontario at Oswego

1900 thru Dec 1984

NOAA/NOS
WSC-1 N/OMA12
Great Lakes Water Levels
Rockville, Maryland 20852

Levels in Feet above
IGLD (1955)
~~~~~  
Chart Datum 242.80

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1946	1952	1952	1973	1952	1952	1947	1947	1947	1945	1945	1945
HIGH	246.10	246.46	246.77	247.69	247.95	248.06	247.74	247.45	246.91	246.33	246.18	246.19
MEAN	244.04	244.13	244.39	245.07	245.48	245.60	245.51	245.16	244.73	244.34	244.08	244.01
	1935	1936	1935	1935	1935	1935	1934	1934	1934	1934	1934	1934
LOW	241.67	241.59	242.08	242.38	242.67	242.91	242.75	242.26	241.94	241.72	241.45	241.48

1900 thru 1984 mean 244.71



# Water Level Stages for Lake Erie at Cleveland

1900 thru Dec 1984

NOAA/NOS  
WSC-1 N/OMA12  
Great Lakes Water Levels  
Rockville, Maryland 20852

Levels in Feet above  
IGLD (1955)  
~~~~~  
Chart Datum 568.60

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1972 | 1972 |
| HIGH | 572.39 | 572.53 | 572.88 | 573.30 | 573.25 | 573.51 | 573.34 | 573.03 | 572.51 | 572.14 | 572.17 | 572.35 |
| MEAN | 569.89 | 569.87 | 570.13 | 570.68 | 570.98 | 571.11 | 571.07 | 570.88 | 570.58 | 570.26 | 569.99 | 569.92 |
| | 1935 | 1936 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 |
| LOW | 567.62 | 567.49 | 567.65 | 568.20 | 568.43 | 568.46 | 568.46 | 568.36 | 568.23 | 567.95 | 567.60 | 567.53 |

1900 thru 1984 mean 570.44

Water Level Stages for Lake St. Clair at St. Clair Shores

1900 thru Dec 1984

NOAA/NOS
WSC-1 N/DMA12
Great Lakes Water Levels
Rockville, Maryland 20852

Levels in Feet above
IGLD (1955)
~~~~~  
Chart Datum 571.70

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1974	1974	1973	1973	1974	1973	1973	1973	1973	1973	1972	1972
HIGH	575.37	575.39	575.75	575.91	576.06	576.23	576.20	576.03	575.70	575.35	575.18	575.21
MEAN	572.70	572.44	572.88	573.43	573.73	573.90	573.98	573.86	573.65	573.37	573.07	573.08
	1936	1926	1934	1901	1934	1934	1934	1934	1934	1934	1934	1925
LOW	569.86	569.88	570.41	571.09	571.64	571.74	571.88	571.60	571.36	571.13	570.83	571.05

1900 thru 1984 mean 573.34

# Water Level Stages for Lake Huron-Michigan at Harbor Beach

1900 thru Dec 1984

NOAA/NOS  
WSC-1 N/DMA12  
Great Lakes Water Levels  
Rockville, Maryland 20852

Levels in Feet above  
IGLD (1955)  
~~~~~  
Chart Datum 576.80

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1973 | 1952 | 1973 | 1973 | 1973 | 1973 | 1974 | 1973 | 1952 | 1973 | 1973 | 1973 |
| HIGH | 579.92 | 579.91 | 579.98 | 580.32 | 580.60 | 580.89 | 581.04 | 580.99 | 580.76 | 580.45 | 580.20 | 579.97 |
| MEAN | 577.83 | 577.79 | 577.84 | 578.10 | 578.42 | 578.65 | 578.78 | 578.74 | 578.58 | 578.36 | 578.15 | 577.99 |
| | 1965 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 |
| LOW | 575.39 | 575.44 | 575.35 | 575.36 | 575.79 | 575.90 | 575.96 | 575.97 | 575.94 | 575.77 | 575.57 | 575.40 |

1900 thru 1984 mean 578.27

Water Level Stages for Lake Superior at Marquette

1900 thru Dec 1984

NOAA/NOS
WSC-1 N/DMA12
Great Lakes Water Levels
Rockville, Maryland 20852

Levels in Feet above
IGLD (1955)
~~~~~  
Chart Datum 600.00

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1975	1975	1975	1951	1951	1951	1950	1950	1916	1951	1974	1974
HIGH	601.33	601.18	600.97	601.14	601.53	601.64	601.89	602.02	601.93	601.93	601.81	601.53
MEAN	600.36	600.15	600.02	600.06	600.41	600.69	600.91	601.01	601.04	600.98	600.84	600.61
	1926	1926	1926	1926	1926	1926	1926	1926	1926	1925	1925	1925
LOW	598.58	598.37	598.32	598.23	598.30	598.63	598.99	599.15	599.46	599.49	599.17	598.94

1900 thru 1984 mean 600.59

W A T E R            L E V E L S

I N

M E T E R S

ANNUAL SUMMARY OF LEVELS, 1984  
Station 1030: Ogdensburg, New York on St. Lawrence River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 74.84 Jun  
Daily mean elevation: 74.97 1 May  
Instant/hourly elevation: 75.15 2200/30 Apr

LOWEST  
Monthly mean elevation: 74.07 Dec  
Daily mean elevation: 73.87 14 Dec  
Instant/hourly elevation: 73.78 2000/14 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

Elev.	Date
74.34	11 Jan
74.46	26 Feb
74.49	31 Mar
74.87	30 Apr
74.97	1 May
74.90	9 Jun
74.83	7 Jul
74.61	1 Aug
74.42	1 Sep
74.30	3 Oct
74.29	16 Nov
74.22	8 Dec

LOWEST DAILY MEAN  
FOR EACH MONTH

Elev.	Date
74.19	1 Jan
74.12	13 Feb
74.25	18 Mar
74.44	5 Apr
74.69	4 May
74.75	23 Jun
74.61	27 Jul
74.42	29 Aug
74.23	30 Sep
74.06	31 Oct
74.01	27 Nov
73.87	14 Dec

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 74.95 | | | | | 1 | | | | | | | | 74.95 | 1 |
| 74.90 | | | | | 2 | | | | | | | | 74.90 | 3 |
| 74.85 | | | | 1 | 11 | 12 | | | | | | | 74.85 | 27 |
| 74.80 | | | | 2 | 11 | 13 | 1 | | | | | | 74.80 | 54 |
| 74.75 | | | | 5 | 4 | 4 | 17 | | | | | | 74.75 | 84 |
| 74.70 | | | | 6 | 1 | 1 | 5 | | | | | | 74.70 | 97 |
| 74.65 | | | | | 1 | | 3 | | | | | | 74.65 | 101 |
| 74.60 | | | | 6 | | | 5 | 1 | | | | | 74.60 | 113 |
| 74.55 | | | | 5 | | | | 6 | | | | | 74.55 | 124 |
| 74.50 | | | | 3 | | | | 5 | | | | | 74.50 | 132 |
| 74.45 | | 3 | 4 | 1 | | | | 8 | | | | | 74.45 | 148 |
| 74.40 | | 5 | 6 | 1 | | | | 11 | 1 | | | | 74.40 | 172 |
| 74.35 | | 1 | 11 | | | | | | 5 | | | | 74.35 | 189 |
| 74.30 | 12 | 2 | 2 | | | | | | 11 | | | | 74.30 | 216 |
| 74.25 | 10 | 1 | 7 | | | | | | 11 | 1 | 1 | | 74.25 | 247 |
| 74.20 | 6 | 3 | 1 | | | | | | 2 | 2 | 1 | 1 | 74.20 | 263 |
| 74.15 | 3 | 11 | | | | | | | | 15 | 2 | 4 | 74.15 | 298 |
| 74.10 | | 3 | | | | | | | | 9 | 7 | 5 | 74.10 | 322 |
| 74.05 | | | | | | | | | | 4 | 12 | 9 | 74.05 | 347 |
| 74.00 | | | | | | | | | | | 7 | 9 | 74.00 | 363 |
| 73.95 | | | | | | | | | | | | 1 | 73.95 | 364 |
| 73.90 | | | | | | | | | | | | 1 | 73.90 | 365 |
| 73.85 | | | | | | | | | | | | 1 | 73.85 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 1030: Ogdensburg, New York on St. Lawrence River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 74.19 | 74.19 | 74.42 | 74.52 | 74.97 | 74.86 | 74.77 | 74.61 | 74.42 | 74.21* | 74.16 | 74.13 |
| 2 | 74.26 | 74.16 | 74.40 | 74.53 | 74.87 | 74.85 | 74.79 | 74.59 | 74.36 | 74.20 | 74.22 | 74.08 |
| 3 | 74.30 | 74.18 | 74.41 | 74.51 | 74.78 | 74.89 | 74.79 | 74.59 | 74.30 | 74.30 | 74.09 | 74.09 |
| 4 | 74.33 | 74.18 | 74.37 | 74.47 | 74.69 | 74.90 | 74.79 | 74.58 | 74.36 | 74.25 | 74.13 | 74.20 |
| 5 | 74.29 | 74.17 | 74.36 | 74.44 | 74.80 | 74.88 | 74.76 | 74.58 | 74.35 | 74.17 | 74.15 | 74.07 |
| 6 | 74.31 | 74.19 | 74.42 | 74.62 | 74.81 | 74.87 | 74.76 | 74.57 | 74.34 | 74.18 | 74.12 | 74.04 |
| 7 | 74.29 | 74.20 | 74.40 | 74.62 | 74.78 | 74.87 | 74.83 | 74.57 | 74.33 | 74.19 | 74.08 | 74.07 |
| 8 | 74.32 | 74.21 | 74.36 | 74.62 | 74.82 | 74.86 | 74.79 | 74.52 | 74.34 | 74.20 | 74.07 | 74.22 |
| 9 | 74.34 | 74.17 | 74.37 | 74.58 | 74.92 | 74.90 | 74.77 | 74.54 | 74.36 | 74.17 | 74.10 | 74.06 |
| 10 | 74.33 | 74.17 | 74.38 | 74.62 | 74.90 | 74.86 | 74.74 | 74.54 | 74.37 | 74.18 | 74.12 | 74.04 |
| 11 | 74.34 | 74.17 | 74.46 | 74.62 | 74.84 | 74.88 | 74.76 | 74.48 | 74.32 | 74.18 | 74.08 | 74.02 |
| 12 | 74.31 | 74.15 | 74.37 | 74.62 | 74.89 | 74.86 | 74.79 | 74.48 | 74.30 | 74.17 | 74.09 | 74.05 |
| 13 | 74.30 | 74.12 | 74.31 | 74.56 | 74.87 | 74.85 | 74.77 | 74.49 | 74.34 | 74.16 | 74.08 | 74.04 |
| 14 | 74.33 | 74.18 | 74.34 | 74.58 | 74.86 | 74.85 | 74.78 | 74.50 | 74.32 | 74.16 | 74.07 | 73.87 |
| 15 | 74.31 | 74.23 | 74.30 | 74.57 | 74.84 | 74.82 | 74.76 | 74.55 | 74.26 | 74.15 | 74.13 | 74.01 |
| 16 | 74.30 | 74.23 | 74.30 | 74.60 | 74.83 | 74.82 | 74.78 | 74.53 | 74.33 | 74.11 | 74.29 | 74.07 |
| 17 | 74.32 | 74.26 | 74.29 | 74.71 | 74.85 | 74.81 | 74.74 | 74.47 | 74.32 | 74.08 | 74.19 | 74.13 |
| 18 | 74.30 | 74.33 | 74.25 | 74.72 | 74.84 | 74.83 | 74.74 | 74.47 | 74.32 | 74.12 | 74.12 | 74.06 |
| 19 | 74.32 | 74.35 | 74.29 | 74.74 | 74.84 | 74.85 | 74.76 | 74.45 | 74.33 | 74.12 | 74.05 | 74.04 |
| 20 | 74.33 | 74.45 | 74.28 | 74.83 | 74.84 | 74.80 | 74.76 | 74.44 | 74.36 | 74.20 | 74.07 | 74.16 |
| 21 | 74.27 | 74.40 | 74.29 | 74.78 | 74.83 | 74.82 | 74.72 | 74.46 | 74.29 | 74.15 | 74.05 | 73.97 |
| 22 | 74.28 | 74.46 | 74.40 | 74.77 | 74.82 | 74.78 | 74.70 | 74.45 | 74.25 | 74.15 | 74.07 | 74.19 |
| 23 | 74.24 | 74.44 | 74.49 | 74.75 | 74.88 | 74.75 | 74.76 | 74.46 | 74.30 | 74.16 | 74.13 | 74.16 |
| 24 | 74.24 | 74.46 | 74.47 | 74.75 | 74.89 | 74.82 | 74.71 | 74.43 | 74.26 | 74.14 | 74.10 | 74.12 |
| 25 | 74.28 | 74.43 | 74.45 | 74.78 | 74.88 | 74.84 | 74.67 | 74.42 | 74.27 | 74.16 | 74.05 | 74.13 |
| 26 | 74.22 | 74.46 | 74.45 | 74.78 | 74.92 | 74.82 | 74.66 | 74.44 | 74.30 | 74.07 | 74.03 | 74.10 |
| 27 | 74.25 | 74.42 | 74.45 | 74.75 | 74.89 | 74.81 | 74.61 | 74.43 | 74.26 | 74.10 | 74.01 | 73.92 |
| 28 | 74.21 | 74.15 | 74.36 | 74.76 | 74.77 | 74.86 | 74.62 | 74.42 | 74.26 | 74.18 | 74.04 | 74.02 |
| 29 | 74.20 | 74.41 | 74.29 | 74.81 | 74.72 | 74.80 | 74.63 | 74.42 | 74.27 | 74.12 | 74.07 | 74.15 |
| 30 | 74.20 | | 74.40 | 74.87 | 74.86 | 74.76 | 74.63 | 74.43 | 74.23 | 74.12 | 74.05 | 74.06 |
| 31 | 74.21 | | 74.49 | | 74.88 | | 74.64 | 74.44 | | 74.06 | | 74.05 |
| MEAN | 74.28 | 74.27 | 74.37 | 74.66 | 74.84 | 74.84 | 74.73 | 74.50 | 74.31 | 74.16 | 74.10 | 74.07 |
| MAX. | 74.38 | 74.51 | 74.58 | 75.15 | 75.11 | 74.95 | 74.90 | 74.64 | 74.44 | 74.37 | 74.35 | 74.35 |
| MIN. | 0300/09 | 1400/22 | 1800/11 | 2200/30 | 1300/01 | 1700/04 | 1300/07 | 0200/01 | 1100/20 | 1800/03 | 2100/16 | 0500/08 |
| | 74.16 | 73.96 | 74.20 | 74.36 | 74.58 | 74.71 | 74.58 | 74.37 | 74.18 | 73.97 | 73.97 | 73.78 |
| | 0200/29 | 1800/28 | 0500/18 | 0300/05 | 0600/29 | 2400/23 | 1700/27 | 2000/29 | 0900/03 | 2300/31 | 1300/28 | 2000/14 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 74.43

ANNUAL SUMMARY OF LEVELS, 1984
 Station 1062: Alexandria Bay C.G., New York on St. Lawrence River

INTERNATIONAL
 GREAT LAKES
 DATUM (1955)

HIGHEST
 Monthly mean elevation: 75.01 Jun
 Daily mean elevation: 75.06 26 May
 Instant/hourly elevation: 75.17 2000/30 Apr

LOWEST
 Monthly mean elevation: 74.22 Dec
 Daily mean elevation: 74.07 14 Dec
 Instant/hourly elevation: 74.02 1900/14 Dec

HIGHEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.51 | 20 Jan |
| 74.62 | 29 Feb |
| 74.66 | 23 Mar |
| 74.98 | 30 Apr |
| 75.06 | 26 May |
| 75.05 | 4 Jun |
| 74.98 | 7 Jul |
| 74.79 | 2 Aug |
| 74.62 | 1 Sep |
| 74.47 | 3 Oct |
| 74.39 | 16 Nov |
| 74.32 | 22 Dec |

LOWEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.42 | 30 Jan |
| 74.37 | 13 Feb |
| 74.51 | 18 Mar |
| 74.63 | 4 Apr |
| 74.91 | 4 May |
| 74.94 | 23 Jun |
| 74.81 | 31 Jul |
| 74.62 | 29 Aug |
| 74.41 | 30 Sep |
| 74.23 | 31 Oct |
| 74.17 | 27 Nov |
| 74.07 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 75.05 | | | | | 1 | | | | | | | | 75.05 | 1 |
| 75.00 | | | | | 14 | 18 | | | | | | | 75.00 | 33 |
| 74.95 | | | | 1 | 12 | 11 | 6 | | | | | | 74.95 | 63 |
| 74.90 | | | | 7 | 4 | 1 | 15 | | | | | | 74.90 | 90 |
| 74.85 | | | | 5 | | | 5 | | | | | | 74.85 | 100 |
| 74.80 | | | | 1 | | | 5 | | | | | | 74.80 | 106 |
| 74.75 | | | | 9 | | | | 7 | | | | | 74.75 | 122 |
| 74.70 | | | | 2 | | | | 6 | | | | | 74.70 | 130 |
| 74.65 | | | 1 | 3 | | | | 7 | | | | | 74.65 | 141 |
| 74.60 | | 1 | 12 | 2 | | | | 11 | 1 | | | | 74.60 | 168 |
| 74.55 | | 7 | 10 | | | | | | 3 | | | | 74.55 | 188 |
| 74.50 | 1 | 1 | 8 | | | | | | 14 | | | | 74.50 | 212 |
| 74.45 | 20 | 2 | | | | | | | 7 | 1 | | | 74.45 | 242 |
| 74.40 | 10 | 12 | | | | | | | 5 | | | | 74.40 | 270 |
| 74.35 | | 6 | | | | | | | | | | | 74.35 | 281 |
| 74.30 | | | | | | | | | | 4 | 1 | | 74.30 | 298 |
| 74.25 | | | | | | | | | | 13 | 2 | 2 | 74.25 | 323 |
| 74.20 | | | | | | | | | | 11 | 9 | 5 | 74.20 | 345 |
| 74.15 | | | | | | | | | | 1 | 12 | 9 | 74.15 | 363 |
| 74.10 | | | | | | | | | | | 6 | 12 | 74.10 | 365 |
| 74.05 | | | | | | | | | | | | 2 | 74.05 | 366 |
| | | | | | | | | | | | | 1 | | |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 1062: Alexandria Bay C.G., New York on St. Lawrence River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 74.42 | 74.41 | 74.62 | 74.67 | 75.04 | 75.02 | 74.96 | 74.79 | 74.62 | 74.40 | 74.32 | 74.25 |
| 2 | 74.47 | 74.39 | 74.62 | 74.67 | 74.98 | 75.02 | 74.96 | 74.79 | 74.57 | 74.39 | 74.34 | 74.20 |
| 3 | 74.48 | 74.41 | 74.62 | 74.66 | 74.93 | 75.03 | 74.96 | 74.78 | 74.54 | 74.47 | 74.24 | 74.24 |
| 4 | 74.49 | 74.41 | 74.59 | 74.63 | 74.91 | 75.05 | 74.95 | 74.77 | 74.57 | 74.41 | 74.29 | 74.30 |
| 5 | 74.47 | 74.41 | 74.58 | 74.65 | 74.97 | 75.03 | 74.94 | 74.76 | 74.56 | 74.35 | 74.29 | 74.20 |
| 6 | 74.49 | 74.43 | 74.63 | 74.76 | 74.96 | 75.03 | 74.95 | 74.76 | 74.54 | 74.35 | 74.27 | 74.19 |
| 7 | 74.46 | 74.43 | 74.62 | 74.76 | 74.94 | 75.03 | 74.98 | 74.76 | 74.53 | 74.36 | 74.24 | 74.22 |
| 8 | 74.47 | 74.43 | 74.58 | 74.76 | 74.98 | 75.02 | 74.96 | 74.73 | 74.54 | 74.36 | 74.23 | 74.32 |
| 9 | 74.48 | 74.39 | 74.58 | 74.73 | 75.03 | 75.04 | 74.94 | 74.74 | 74.55 | 74.34 | 74.26 | 74.19 |
| 10 | 74.47 | 74.39 | 74.60 | 74.76 | 75.01 | 75.02 | 74.93 | 74.74 | 74.55 | 74.35 | 74.27 | 74.19 |
| 11 | 74.48 | 74.40 | 74.65 | 74.77 | 74.99 | 75.04 | 74.94 | 74.70 | 74.52 | 74.34 | 74.24 | 74.17 |
| 12 | 74.45 | 74.39 | 74.56 | 74.77 | 75.02 | 75.01 | 74.96 | 74.70 | 74.51 | 74.34 | 74.25 | 74.20 |
| 13 | 74.44 | 74.37 | 74.53 | 74.74 | 75.01 | 75.01 | 74.94 | 74.70 | 74.54 | 74.33 | 74.24 | 74.19 |
| 14 | 74.48 | 74.42 | 74.58 | 74.76 | 75.02 | 75.03 | 74.94 | 74.71 | 74.52 | 74.33 | 74.23 | 74.07 |
| 15 | 74.47 | 74.45 | 74.55 | 74.76 | 75.00 | 75.00 | 74.93 | 74.74 | 74.47 | 74.32 | 74.27 | 74.18 |
| 16 | 74.47 | 74.44 | 74.55 | 74.79 | 75.00 | 74.99 | 74.94 | 74.72 | 74.52 | 74.30 | 74.39 | 74.21 |
| 17 | 74.49 | 74.45 | 74.53 | 74.85 | 75.01 | 74.99 | 74.91 | 74.69 | 74.50 | 74.28 | 74.30 | 74.24 |
| 18 | 74.47 | 74.50 | 74.51 | 74.86 | 74.99 | 75.01 | 74.92 | 74.68 | 74.51 | 74.30 | 74.27 | 74.21 |
| 19 | 74.50 | 74.50 | 74.55 | 74.87 | 75.01 | 75.02 | 74.93 | 74.66 | 74.51 | 74.29 | 74.21 | 74.19 |
| 20 | 74.51 | 74.57 | 74.54 | 74.93 | 74.99 | 74.99 | 74.92 | 74.65 | 74.53 | 74.33 | 74.22 | 74.28 |
| 21 | 74.47 | 74.55 | 74.54 | 74.90 | 74.99 | 74.99 | 74.90 | 74.65 | 74.49 | 74.30 | 74.20 | 74.14 |
| 22 | 74.47 | 74.57 | 74.60 | 74.89 | 74.98 | 74.97 | 74.88 | 74.65 | 74.46 | 74.31 | 74.21 | 74.32 |
| 23 | 74.44 | 74.57 | 74.66 | 74.88 | 75.03 | 74.94 | 74.91 | 74.66 | 74.49 | 74.31 | 74.26 | 74.27 |
| 24 | 74.44 | 74.58 | 74.63 | 74.92 | 75.03 | 75.00 | 74.90 | 74.63 | 74.45 | 74.30 | 74.23 | 74.25 |
| 25 | 74.48 | 74.58 | 74.62 | 74.94 | 75.02 | 75.01 | 74.86 | 74.62 | 74.46 | 74.30 | 74.20 | 74.28 |
| 26 | 74.43 | 74.59 | 74.62 | 74.92 | 75.06 | 74.99 | 74.86 | 74.63 | 74.49 | 74.26 | 74.18 | 74.23 |
| 27 | 74.46 | 74.56 | 74.62 | 74.91 | 75.03 | 74.98 | 74.82 | 74.62 | 74.45 | 74.27 | 74.17 | 74.11 |
| 28 | 74.42 | 74.44 | 74.57 | 74.92 | 74.96 | 75.01 | 74.82 | 74.62 | 74.44 | 74.32 | 74.19 | 74.20 |
| 29 | 74.43 | 74.62 | 74.56 | 74.94 | 74.95 | 74.98 | 74.82 | 74.62 | 74.44 | 74.28 | 74.22 | 74.27 |
| 30 | 74.42 | | 74.61 | 74.98 | 75.02 | 74.96 | 74.81 | 74.63 | 74.41 | 74.27 | 74.19 | 74.21 |
| 31 | 74.44 | | 74.65 | | 75.03 | | 74.81 | 74.63 | | 74.23 | | 74.20 |
| MEAN | 74.46 | 74.47 | 74.59 | 74.81 | 75.00 | 75.01 | 74.91 | 74.69 | 74.51 | 74.33 | 74.25 | 74.22 |
| MAX. | 74.55 | 74.66 | 74.75 | 75.17 | 75.15 | 75.09 | 75.02 | 74.82 | 74.64 | 74.53 | 74.44 | 74.41 |
| | 1800/20 | 1800/29 | 1700/11 | 2000/30 | 1100/01 | 1300/14 | 1600/07 | 0300/01 | 0500/01 | 1700/03 | 2200/16 | 0600/08 |
| MIN. | 74.38 | 74.32 | 74.44 | 74.56 | 74.84 | 74.92 | 74.79 | 74.58 | 74.40 | 74.18 | 74.12 | 74.02 |
| | 0200/27 | 1700/28 | 0400/18 | 0200/05 | 0500/29 | 1400/23 | 2000/30 | 1800/29 | 1000/30 | 2300/31 | 1200/28 | 1900/14 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 74.60

ANNUAL SUMMARY OF LEVELS, 1984
Station 2000: Cape Vincent, New York on Lake Ontario

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 75.15 Jun
Daily mean elevation: 75.18 14 Jun
Instant/hourly elevation: 75.25 1900/30 Apr

LOWEST
Monthly mean elevation: 74.31 Dec
Daily mean elevation: 74.21 14 Dec
Instant/hourly elevation: 74.12 1700/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.54 | 6 Jan |
| 74.76 | 29 Feb |
| 74.77 | 23 Mar |
| 75.09 | 30 Apr |
| 75.18 | 26 May |
| 75.18 | 14 Jun |
| 75.12 | 7 Jul |
| 74.95 | 1 Aug |
| 74.76 | 1 Sep |
| 74.57 | 3 Oct |
| 74.44 | 16 Nov |
| 74.41 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.48 | 1 Jan |
| 74.48 | 13 Feb |
| 74.63 | 18 Mar |
| 74.74 | 4 Apr |
| 75.05 | 3 May |
| 75.10 | 23 Jun |
| 74.96 | 31 Jul |
| 74.76 | 29 Aug |
| 74.54 | 30 Sep |
| 74.36 | 31 Oct |
| 74.28 | 27 Nov |
| 74.21 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 75.15 | | | | | 6 | 13 | | | | | | | 75.15 | 19 |
| 75.10 | | | | | 19 | 16 | 3 | | | | | | 75.10 | 57 |
| 75.05 | | | | 2 | 5 | 1 | 18 | | | | | | 75.05 | 83 |
| 75.00 | | | | 6 | 1 | | 5 | | | | | | 75.00 | 95 |
| 74.95 | | | | 5 | | | 5 | | | | | | 74.95 | 105 |
| 74.90 | | | | 2 | | | | 8 | | | | | 74.90 | 115 |
| 74.85 | | | | 9 | | | | 8 | | | | | 74.85 | 132 |
| 74.80 | | | | 1 | | | | 5 | | | | | 74.80 | 138 |
| 74.75 | | 1 | 3 | 4 | | | | 10 | 1 | | | | 74.75 | 157 |
| 74.70 | | | 13 | 1 | | | | | 3 | | | | 74.70 | 174 |
| 74.65 | | 3 | 12 | | | | | | 9 | | | | 74.65 | 198 |
| 74.60 | | 5 | 3 | | | | | | 10 | | | | 74.60 | 216 |
| 74.55 | | 4 | | | | | | | 6 | 1 | | | 74.55 | 227 |
| 74.50 | 6 | 7 | | | | | | | 1 | 3 | | | 74.50 | 244 |
| 74.45 | 1 | 1 | | | | | | | | 8 | | | 74.45 | 254 |
| 74.40 | | | | | | | | | | 13 | 3 | 1 | 74.40 | 271 |
| 74.35 | | | | | | | | | | 6 | 11 | 3 | 74.35 | 291 |
| 74.30 | | | | | | | | | | | 11 | 6 | 74.30 | 308 |
| 74.25 | | | | | | | | | | | 5 | 12 | 74.25 | 325 |
| 74.20 | | | | | | | | | | | | 2 | 74.20 | 327 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2000: Cape Vincent, New York on Lake Ontario

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 74.48 | / | 74.71 | 74.77 | 75.11 | 75.16 | 75.11 | 74.95 | 74.76 | 74.52 | 74.43 | 74.33 |
| 2 | 74.53 | / | 74.72 | 74.77 | 75.08 | 75.17 | 75.11 | 74.94 | 74.72 | 74.52 | 74.42 | 74.29 |
| 3 | 74.54 | / | 74.73 | 74.76 | 75.05 | 75.17 | 75.10 | 74.93 | 74.71 | 74.57 | 74.35 | 74.36 |
| 4 | 74.54 | / | 74.70 | 74.74 | 75.07 | 75.18 | 75.10 | 74.93 | 74.72 | 74.52 | 74.40 | 74.37 |
| 5 | 74.52 | / | 74.71 | 74.79 | 75.10 | 75.16 | 75.09 | 74.92 | 74.70 | 74.47 | 74.40 | 74.29 |
| 6 | 74.54 | / | 74.74 | 74.86 | 75.09 | 75.17 | 75.10 | 74.92 | 74.68 | 74.47 | 74.38 | 74.30 |
| 7 | 74.52 | / | 74.72 | 74.86 | 75.07 | 75.16 | 75.12 | 74.92 | 74.67 | 74.48 | 74.36 | 74.34 |
| 8 | / | / | 74.69 | 74.86 | 75.11 | 75.16 | 75.10 | 74.90 | 74.68 | 74.47 | 74.35 | 74.37 |
| 9 | / | 74.59* | 74.70 | 74.85 | 75.14 | 75.17 | 75.09 | 74.91 | 74.67 | 74.46 | 74.37 | 74.29 |
| 10 | / | 74.55 | 74.71 | 74.87 | 75.13 | 75.16 | 75.08 | 74.90 | 74.68 | 74.46 | 74.37 | 74.29 |
| 11 | / | 74.56* | 74.77 | 74.88 | 75.11 | 75.18 | 75.10 | 74.87 | 74.66 | 74.47 | 74.35 | 74.28 |
| 12 | / | 74.55* | 74.67 | 74.88 | 75.14 | 75.15 | 75.10 | 74.87 | 74.65 | 74.46 | 74.37 | 74.30 |
| 13 | / | 74.48 | 74.65 | 74.87 | 75.13 | 75.16 | 75.09 | 74.87 | 74.68 | 74.45 | 74.36 | 74.29 |
| 14 | / | 74.52 | 74.69 | 74.88 | 75.14 | 75.18 | 75.08 | 74.88 | 74.66 | 74.45 | 74.34 | 74.21 |
| 15 | / | 74.54 | 74.67 | 74.89 | 75.14 | 75.15 | 75.07 | 74.88 | 74.63 | 74.44 | 74.38 | 74.29 |
| 16 | / | 74.54 | 74.68 | 74.94 | 75.13 | 75.13 | 75.08 | 74.86 | 74.65 | 74.43 | 74.44 | 74.30 |
| 17 | / | 74.55 | 74.65 | 74.95 | 75.14 | 75.13 | 75.06 | 74.84 | 74.63 | 74.41* | 74.37 | 74.31 |
| 18 | / | 74.59 | 74.63 | 74.96 | 75.12 | 75.15 | 75.07 | 74.83 | 74.64 | 74.43* | 74.37 | 74.30 |
| 19 | / | 74.60 | 74.68 | 74.97 | 75.14 | 75.15 | 75.07 | 74.82 | 74.64 | 74.42 | 74.32 | 74.30 |
| 20 | / | 74.65 | 74.66 | 75.01 | 75.12 | 75.14 | 75.06 | 74.81 | 74.65 | 74.44 | 74.33 | 74.35 |
| 21 | / | 74.63 | 74.67 | 74.99 | 75.12 | 75.13 | 75.05 | 74.80 | 74.62 | 74.42 | 74.31 | 74.25 |
| 22 | / | 74.64 | 74.72 | 74.99 | 75.12 | 75.11 | 75.04 | 74.80 | 74.60 | 74.43 | 74.32 | 74.41 |
| 23 | / | 74.65 | 74.77 | 74.99 | 75.16 | 75.10 | 75.06 | 74.81 | 74.62 | 74.43 | 74.35 | 74.34 |
| 24 | / | 74.66 | 74.74 | 75.03 | 75.16 | 75.14 | 75.05 | 74.78 | 74.59 | 74.42 | 74.32 | 74.33* |
| 25 | / | 74.67 | 74.73 | 75.05 | 75.15 | 75.15 | 75.03 | 74.77 | 74.59 | 74.40 | 74.30 | / |
| 26 | / | 74.67 | 74.73 | 75.04 | 75.18 | 75.14 | 75.01 | 74.78 | 74.61 | 74.39 | 74.29 | / |
| 27 | / | 74.65 | 74.72 | 75.03 | 75.16 | 75.13 | 74.99 | 74.77 | 74.58 | 74.40 | 74.28 | / |
| 28 | / | 74.55 | 74.69 | 75.05 | 75.11 | 75.14 | 74.98 | 74.77 | 74.58 | 74.42 | 74.30 | / |
| 29 | / | 74.76 | 74.70 | 75.06 | 75.14 | 75.12 | 74.97 | 74.76 | 74.57 | 74.40 | 74.31 | / |
| 30 | / | | 74.74 | 75.09 | 75.16 | 75.11 | 74.96 | 74.77 | 74.54 | 74.39 | 74.30 | / |
| 31 | / | | 74.76 | | 75.16 | | 74.96 | 74.77 | | 74.36 | | / |
| MEAN | 74.52 | 74.60 | 74.70 | 74.92 | 75.13 | 75.15 | 75.06 | 74.85 | 74.65 | 74.45 | 74.35 | 74.31 |
| MAX. | 74.58 | 74.79 | 74.89 | 75.25 | 75.23 | 75.23 | 75.15 | 74.97 | 74.79 | 74.63 | 74.54 | 74.51 |
| MIN. | 0100/04 | 1500/29 | 1500/11 | 1900/30 | 1500/26 | 1400/14 | 1800/11 | 0100/01 | 0300/03 | 1400/03 | 0100/02 | 1500/03 |
| | 1100/01 | 0900/13 | 0200/18 | 2400/04 | 2000/07 | 1100/23 | 1800/31 | 1400/30 | 0800/30 | 2100/31 | 1100/28 | 1700/14 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 74.72

ANNUAL SUMMARY OF LEVELS, 1984
Station 2030: Oswego, New York on Lake Ontario

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 75.15 Jun
Daily mean elevation: 75.19 2 Jun
Instant/hourly elevation: 75.22 2400/13 Jun

LOWEST
Monthly mean elevation: 74.34 Dec
Daily mean elevation: 74.28 21 Dec
Instant/hourly elevation: 74.03 2400/21 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.62 | 20 Jan |
| 74.80 | 29 Feb |
| 74.82 | 11 Mar |
| 75.08 | 30 Apr |
| 75.18 | 31 May |
| 75.19 | 2 Jun |
| 75.12 | 7 Jul |
| 74.94 | 1 Aug |
| 74.79 | 1 Sep |
| 74.58 | 3 Oct |
| 74.45 | 2 Nov |
| 74.39 | 25 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.54 | 29 Jan |
| 74.50 | 13 Feb |
| 74.69 | 21 Mar |
| 74.78 | 4 Apr |
| 75.08 | 3 May |
| 75.11 | 27 Jun |
| 74.94 | 31 Jul |
| 74.78 | 30 Aug |
| 74.58 | 30 Sep |
| 74.41 | 31 Oct |
| 74.30 | 28 Nov |
| 74.28 | 21 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 75.15 | | | | | 11 | 15 | | | | | | | 75.15 | 26 |
| 75.10 | | | | | 16 | 15 | 3 | | | | | | 75.10 | 60 |
| 75.05 | | | | 6 | 4 | | 18 | | | | | | 75.05 | 88 |
| 75.00 | | | | 6 | | | 5 | | | | | | 75.00 | 99 |
| 74.95 | | | | 3 | | | 3 | | | | | | 74.95 | 105 |
| 74.90 | | | | 6 | | | 2 | 8 | | | | | 74.90 | 121 |
| 74.85 | | | | 4 | | | | 12 | | | | | 74.85 | 137 |
| 74.80 | | | 1 | 1 | | | | 6 | | | | | 74.80 | 145 |
| 74.75 | | 1 | 14 | 4 | | | | 5 | 2 | | | | 74.75 | 171 |
| 74.70 | | 3 | 12 | | | | | | 4 | | | | 74.70 | 190 |
| 74.65 | | 6 | 4 | | | | | | 13 | | | | 74.65 | 213 |
| 74.60 | 2 | 2 | | | | | | | 7 | | | | 74.60 | 224 |
| 74.55 | 22 | 6 | | | | | | | 4 | 3 | | | 74.55 | 259 |
| 74.50 | 7 | 10 | | | | | | | | 3 | | | 74.50 | 279 |
| 74.45 | | 1 | | | | | | | | 12 | | | 74.45 | 292 |
| 74.40 | | | | | | | | | | 13 | 6 | | 74.40 | 311 |
| 74.35 | | | | | | | | | | | 14 | 9 | 74.35 | 334 |
| 74.30 | | | | | | | | | | | 9 | 18 | 74.30 | 361 |
| 74.25 | | | | | | | | | | | 1 | 4 | 74.25 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2030: Oswego, New York on Lake Ontario

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 74.54 | 74.55 | 74.78 | 74.79 | 75.10 | 75.19 | 75.12 | 74.94 | 74.79 | 74.58 | 74.35 | 74.35 |
| 2 | 74.56 | 74.52 | 74.77 | 74.79 | 75.09 | 75.19 | 75.10 | 74.93 | 74.76 | 74.55 | 74.45 | 74.33 |
| 3 | 74.57 | 74.52 | 74.77 | 74.79 | 75.08 | 75.18 | 75.09 | 74.93 | 74.75 | 74.58 | 74.37 | 74.33 |
| 4 | 74.56 | 74.53 | 74.73 | 74.78 | 75.12 | 75.18 | 75.09 | 74.92 | 74.73 | 74.57 | 74.35 | 74.39 |
| 5 | 74.54 | 74.54 | 74.72 | 74.83 | 75.11 | 75.17 | 75.10 | 74.91 | 74.73 | 74.54 | 74.40 | 74.32 |
| 6 | 74.57 | 74.57 | 74.76 | 74.86 | 75.11 | 75.18 | 75.09 | 74.91 | 74.72 | 74.51 | 74.43 | 74.35 |
| 7 | 74.59 | 74.58 | 74.77 | 74.90 | 75.10 | 75.17 | 75.12 | 74.93 | 74.69 | 74.49 | 74.39 | 74.37 |
| 8 | 74.57 | 74.56 | 74.74 | 74.90 | 75.12 | 75.17 | 75.11 | 74.91 | 74.66 | 74.49 | 74.36 | 74.35 |
| 9 | 74.58 | 74.53 | 74.74 | 74.90 | 75.13 | 75.17 | 75.09 | 74.90 | 74.66 | 74.50 | 74.34 | 74.31 |
| 10 | 74.58 | 74.51 | 74.73 | 74.91 | 75.13 | 75.16 | 75.08 | 74.89 | 74.67 | 74.48 | 74.36 | 74.31 |
| 11 | 74.59 | 74.52 | 74.82 | 74.92 | 75.12 | 75.18 | 75.09 | 74.88 | 74.69 | 74.48 | 74.38 | 74.32 |
| 12 | 74.56 | 74.52 | 74.72 | 74.92 | 75.14 | 75.16 | 75.09 | 74.87 | 74.68 | 74.47 | 74.41 | 74.30 |
| 13 | 74.54 | 74.50 | 74.69 | 74.91 | 75.14 | 75.16 | 75.08 | 74.86 | 74.67 | 74.47 | 74.44 | 74.33 |
| 14 | 74.59 | 74.53 | 74.73 | 74.92 | 75.15 | 75.18 | 75.07 | 74.87 | 74.70 | 74.47 | 74.40 | 74.29 |
| 15 | 74.59 | 74.59 | 74.70 | 74.93 | 75.16 | 75.17 | 75.06 | 74.89 | 74.67 | 74.46 | 74.36 | 74.32 |
| 16 | 74.58 | 74.59 | 74.74 | 74.97 | 75.16 | 75.14 | 75.08 | 74.90 | 74.67 | 74.46 | 74.44 | 74.29 |
| 17 | 74.59 | 74.59 | 74.72 | 74.98 | 75.15 | 75.12 | 75.07 | 74.88 | 74.66 | 74.44 | 74.43 | 74.33 |
| 18 | 74.58 | 74.62 | 74.71 | 74.99 | 75.14 | 75.14 | 75.08 | 74.87 | 74.65 | 74.46 | 74.38 | 74.34 |
| 19 | 74.62 | 74.61 | 74.72 | 75.01 | 75.15 | 75.15 | 75.08 | 74.87 | 74.65 | 74.45 | 74.37 | 74.33 |
| 20 | 74.62 | 74.66 | 74.69 | 75.02 | 75.14 | 75.14 | 75.06 | 74.83 | 74.66 | 74.46 | 74.39 | 74.37 |
| 21 | 74.59 | 74.67 | 74.69 | 75.04 | 75.14 | 75.14 | 75.05 | 74.82 | 74.64 | 74.43 | 74.37 | 74.28 |
| 22 | 74.57 | 74.66 | 74.72 | 75.02 | 75.13 | 75.13 | 75.04 | 74.81 | 74.62 | 74.45 | 74.34 | 74.38 |
| 23 | 74.55 | 74.67 | 74.80 | 75.02 | 75.17 | 75.12 | 75.03 | 74.86 | 74.62 | 74.45 | 74.36 | 74.35 |
| 24 | 74.55 | 74.68 | 74.76 | 75.05 | 75.17 | 75.12 | 75.06 | 74.83 | 74.61 | 74.44 | 74.35 | 74.34 |
| 25 | 74.60 | 74.73 | 74.76 | 75.08 | 75.16 | 75.14 | 75.03 | 74.83 | 74.60 | 74.44 | 74.33 | 74.39 |
| 26 | 74.57 | 74.73 | 74.76 | 75.07 | 75.17 | 75.13 | 75.01 | 74.80 | 74.67 | 74.44 | 74.31 | 74.37 |
| 27 | 74.59 | 74.69 | 74.76 | 75.08 | 75.16 | 75.11 | 74.99 | 74.78 | 74.61 | 74.42 | 74.31 | 74.32 |
| 28 | 74.55 | 74.71 | 74.76 | 75.07 | 75.16 | 75.12 | 74.97 | 74.78 | 74.59 | 74.42 | 74.30 | 74.34 |
| 29 | 74.54 | 74.80 | 74.79 | 75.08 | 75.17 | 75.13 | 74.96 | 74.78 | 74.59 | 74.43 | 74.37 | 74.37 |
| 30 | 74.57 | | 74.79 | 75.08 | 75.17 | 75.13 | 74.95 | 74.78 | 74.58 | 74.41 | 74.32 | 74.38 |
| 31 | 74.58 | | 74.79 | | 75.18 | | 74.94 | 74.81 | | 74.41 | | 74.37 |
| MEAN | 74.57 | 74.60 | 74.75 | 74.95 | 75.14 | 75.15 | 75.06 | 74.86 | 74.67 | 74.47 | 74.37 | 74.34 |
| MAX. | 74.68 | 74.86 | 74.93 | 75.16 | 75.22 | 75.22 | 75.18 | 74.97 | 74.83 | 74.66 | 74.52 | 74.50 |
| MIN. | 1900/25 | 2000/29 | 1500/11 | 1900/30 | 2000/08 | 2400/13 | 1900/06 | 1200/01 | 0400/01 | 1800/03 | 0900/17 | 1900/22 |
| | 0400/24 | 0300/14 | 0700/21 | 1800/04 | 2100/08 | 1100/24 | 2000/31 | 0600/29 | 0600/25 | 2400/28 | 0700/28 | 2400/21 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 74.74

ANNUAL SUMMARY OF LEVELS, 1984
Station 2058: Rochester, New York on Lake Ontario

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 75.16 Jun
Daily mean elevation: 75.20 4 Jun
Instant/hourly elevation: 75.27 1700/25 May

LOWEST
Monthly mean elevation: 74.34 Dec
Daily mean elevation: 74.30 12 Dec
Instant/hourly elevation: 74.22 1400/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.61 | 11 Jan |
| 74.81 | 28 Feb |
| 74.79 | 31 Mar |
| 75.10 | 29 Apr |
| 75.20 | 28 May |
| 75.20 | 4 Jun |
| 75.12 | 1 Jul |
| 74.96 | 1 Aug |
| 74.79 | 1 Sep |
| 74.57 | 1 Oct |
| 74.42 | 13 Nov |
| 74.39 | 30 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.53 | 2 Jan |
| 74.53 | 13 Feb |
| 74.73 | 22 Mar |
| 74.80 | 2 Apr |
| 75.10 | 1 May |
| 75.12 | 24 Jun |
| 74.95 | 31 Jul |
| 74.79 | 30 Aug |
| 74.58 | 30 Sep |
| 74.42 | 31 Oct |
| 74.31 | 28 Nov |
| 74.30 | 12 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 75.15 | | | | | 18 | 15 | | | | | | | 75.15 | 33 |
| 75.10 | | | | | 12 | 15 | 8 | | | | | | 75.10 | 68 |
| 75.05 | | | | 7 | 1 | | 12 | | | | | | 75.05 | 88 |
| 75.00 | | | | 6 | | | 6 | | | | | | 75.00 | 100 |
| 74.95 | | | | 3 | | | 4 | 1 | | | | | 74.95 | 108 |
| 74.90 | | | | 7 | | | 1 | 9 | | | | | 74.90 | 125 |
| 74.85 | | | | 2 | | | | 9 | | | | | 74.85 | 136 |
| 74.80 | | 1 | | 3 | | | | 7 | | | | | 74.80 | 147 |
| 74.75 | | | 18 | 2 | | | | 5 | 2 | | | | 74.75 | 175 |
| 74.70 | | 3 | 13 | | | | | | 4 | | | | 74.70 | 195 |
| 74.65 | | 4 | | | | | | | 15 | | | | 74.65 | 214 |
| 74.60 | 2 | 5 | | | | | | | 6 | | | | 74.60 | 227 |
| 74.55 | 26 | 6 | | | | | | | 3 | 2 | | | 74.55 | 264 |
| 74.50 | 3 | 9 | | | | | | | | 4 | | | 74.50 | 280 |
| 74.45 | | | | | | | | | | 11 | | | 74.45 | 291 |
| 74.40 | | | | | | | | | | 14 | 3 | | 74.40 | 308 |
| 74.35 | | | | | | | | | | | 18 | 4 | 74.35 | 330 |
| 74.30 | | | | | | | | | | | 9 | 26 | 74.30 | 365 |
| 74.25 | | | | | | | | | | | | 1 | 74.25 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2058: Rochester, New York on Lake Ontario

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 74.53 | 74.57 | 74.77 | 74.80 | 75.10 | 75.19 | 75.12 | 74.96 | 74.79 | 74.57 | 74.37 | 74.33 |
| 2 | 74.53 | 74.56 | 74.77 | 74.80 | 75.11 | 75.20 | 75.11 | 74.95 | 74.76 | 74.54 | 74.41 | 74.33 |
| 3 | 74.54 | 74.54 | 74.77 | 74.81 | 75.11 | 75.19 | 75.11 | 74.94 | 74.75 | 74.54 | 74.40 | 74.32 |
| 4 | 74.57 | 74.56 | 74.75 | 74.82 | 75.13 | 75.20 | 75.11 | 74.93 | 74.74 | 74.56 | 74.38 | 74.33 |
| 5 | 74.57 | 74.55 | 74.75 | 74.85 | 75.12 | 75.19 | 75.11 | 74.93 | 74.73 | 74.54 | 74.40 | 74.32 |
| 6 | 74.57 | 74.56 | 74.76 | 74.87 | 75.13 | 75.18 | 75.11 | 74.92 | 74.72 | 74.51 | 74.41 | 74.34 |
| 7 | 74.58 | 74.57 | 74.77 | 74.90 | 75.13 | 75.19 | 75.11 | 74.93 | 74.70 | 74.49 | 74.40 | 74.34 |
| 8 | 74.57 | 74.55 | 74.76 | 74.91 | 75.14 | 75.18 | 75.11 | 74.92 | 74.68 | 74.49 | 74.37 | 74.33 |
| 9 | 74.58 | 74.55 | 74.75 | 74.91 | 75.14 | 75.18 | 75.10 | 74.90 | 74.67 | 74.50 | 74.36 | 74.33 |
| 10 | 74.61 | 74.54 | 74.73 | 74.92 | 75.15 | 75.18 | 75.08 | 74.89 | 74.67 | 74.49 | 74.37 | 74.33 |
| 11 | 74.61 | 74.53 | 74.75 | 74.93 | 75.15 | 75.18 | 75.08 | 74.89 | 74.70 | 74.49 | 74.39 | 74.32 |
| 12 | 74.59 | 74.53 | 74.76 | 74.93 | 75.16 | 75.16 | 75.08 | 74.89 | 74.69 | 74.48 | 74.40 | 74.30 |
| 13 | 74.57 | 74.53 | 74.73 | 74.94 | 75.15 | 75.16 | 75.08 | 74.87 | 74.67 | 74.48 | 74.42 | 74.33 |
| 14 | 74.59 | 74.55 | 74.74 | 74.95 | 75.16 | 75.17 | 75.07 | 74.88 | 74.70 | 74.47 | 74.40 | 74.31 |
| 15 | 74.60 | 74.59 | 74.73 | 74.97 | 75.17 | 75.17 | 75.06 | 74.88 | 74.69 | 74.47 | 74.37 | 74.33 |
| 16 | 74.59 | 74.61 | 74.76 | 74.98 | 75.17 | 75.15 | 75.08 | 74.91 | 74.68 | 74.46 | 74.38 | 74.31 |
| 17 | 74.58 | 74.62 | 74.76 | 74.99 | 75.16 | 75.13 | 75.08 | 74.91 | 74.67 | 74.45 | 74.39 | 74.33 |
| 18 | 74.58 | 74.63 | 74.73 | 75.01 | 75.16 | 75.14 | 75.08 | 74.89 | 74.66 | 74.45 | 74.38 | 74.34 |
| 19 | 74.58 | 74.64 | 74.73 | 75.02 | 75.16 | 75.15 | 75.07 | 74.87 | 74.66 | 74.45 | 74.38 | 74.34 |
| 20 | 74.58 | 74.65 | 74.73 | 75.03 | 75.16 | 75.15 | 75.06 | 74.85 | 74.66 | 74.44 | 74.38 | 74.33 |
| 21 | 74.59 | 74.68 | 74.73 | 75.05 | 75.16 | 75.15 | 75.05 | 74.83 | 74.66 | 74.44 | 74.36 | 74.33 |
| 22 | 74.56 | 74.68 | 74.73 | 75.05 | 75.15 | 75.14 | 75.04 | 74.81 | 74.64 | 74.46 | 74.34 | 74.34 |
| 23 | 74.57 | 74.69 | 74.76 | 75.05 | 75.17 | 75.13 | 75.02 | 74.84 | 74.62 | 74.45 | 74.33 | 74.34 |
| 24 | 74.57 | 74.69 | 74.77 | 75.06 | 75.19 | 75.12 | 75.05 | 74.85 | 74.62 | 74.45 | 74.34 | 74.35 |
| 25 | 74.58 | 74.72 | 74.78 | 75.08 | 75.18 | 75.14 | 75.03 | 74.83 | 74.62 | 74.43 | 74.33 | 74.35 |
| 26 | 74.58 | 74.72 | 74.78 | 75.09 | 75.19 | 75.14 | 75.01 | 74.81 | 74.65 | 74.43 | 74.33 | 74.35 |
| 27 | 74.58 | 74.72 | 74.78 | 75.10 | 75.19 | 75.13 | 74.99 | 74.79 | 74.63 | 74.44 | 74.32 | 74.36 |
| 28 | 74.58 | 74.81 | 74.78 | 75.10 | 75.20 | 75.15 | 74.98 | 74.79 | 74.60 | 74.43 | 74.31 | 74.34 |
| 29 | 74.56 | 74.76 | 74.79 | 75.10 | 75.18 | 75.15 | 74.97 | 74.79 | 74.58 | 74.44 | 74.35 | 74.37 |
| 30 | 74.58 | | 74.79 | 75.09 | 75.19 | 75.14 | 74.96 | 74.79 | 74.58 | 74.42 | 74.33 | 74.39 |
| 31 | 74.58 | | 74.79 | | 75.19 | | 74.95 | 74.80 | | 74.42 | | 74.38 |
| MEAN | 74.58 | 74.62 | 74.76 | 74.97 | 75.16 | 75.16 | 75.06 | 74.87 | 74.67 | 74.47 | 74.37 | 74.34 |
| MAX. | 74.64 | 74.95 | 74.88 | 75.15 | 75.27 | 75.24 | 75.20 | 74.98 | 74.83 | 74.62 | 74.47 | 74.44 |
| MIN. | 1800/26 | 1900/28 | 2000/21 | 1400/29 | 1700/25 | 1600/08 | 1900/06 | 1500/01 | 2300/01 | 1600/01 | 0900/05 | 0100/22 |
| | 74.51 | 74.49 | 74.66 | 74.78 | 75.07 | 75.04 | 74.93 | 74.74 | 74.51 | 74.31 | 74.28 | 74.22 |
| | 2400/02 | 0700/03 | 1800/21 | 1600/04 | 1100/03 | 1400/27 | 0400/31 | 1900/30 | 1200/13 | 0700/26 | 1200/28 | 1400/14 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 74.75

ANNUAL SUMMARY OF LEVELS, 1984
Station 2076: Olcott, New York on Lake Ontario

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 75.18 Jun
Daily mean elevation: 75.21 6 Jun
Instant/hourly elevation: 75.28 2200/28 May

LOWEST
Monthly mean elevation: 74.36 Dec
Daily mean elevation: 74.32 25 Dec
Instant/hourly elevation: 74.24 2300/7 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.63 | 13 Jan |
| 74.78 | 28 Feb |
| 74.81 | 28 Mar |
| 75.12 | 30 Apr |
| 75.21 | 31 May |
| 75.21 | 6 Jun |
| 75.14 | 4 Jul |
| 74.97 | 1 Aug |
| 74.79 | 1 Sep |
| 74.57 | 1 Oct |
| 74.43 | 3 Nov |
| 74.41 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|-------|--------|
| 74.55 | 25 Jan |
| 74.54 | 8 Feb |
| 74.71 | 11 Mar |
| 74.81 | 1 Apr |
| 75.11 | 2 May |
| 75.14 | 30 Jun |
| 74.97 | 31 Jul |
| 74.79 | 31 Aug |
| 74.58 | 30 Sep |
| 74.44 | 30 Oct |
| 74.33 | 29 Nov |
| 74.32 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 75.20         |     |     |     |     | 5   | 3   |     |     |     |     |     |     | 75.20         | 8                          |
| 75.15         |     |     |     |     | 18  | 21  |     |     |     |     |     |     | 75.15         | 47                         |
| 75.10         |     |     |     | 5   | 8   | 6   | 9   |     |     |     |     |     | 75.10         | 75                         |
| 75.05         |     |     |     | 4   |     |     | 12  |     |     |     |     |     | 75.05         | 91                         |
| 75.00         |     |     |     | 5   |     |     | 5   |     |     |     |     |     | 75.00         | 101                        |
| 74.95         |     |     |     | 4   |     |     | 5   | 2   |     |     |     |     | 74.95         | 112                        |
| 74.90         |     |     |     | 5   |     |     |     | 11  |     |     |     |     | 74.90         | 128                        |
| 74.85         |     |     |     | 4   |     |     |     | 8   |     |     |     |     | 74.85         | 140                        |
| 74.80         |     |     | 1   | 3   |     |     |     | 7   |     |     |     |     | 74.80         | 151                        |
| 74.75         |     | 1   | 26  |     |     |     |     | 3   | 3   |     |     |     | 74.75         | 184                        |
| 74.70         |     | 3   | 4   |     |     |     |     |     | 9   |     |     |     | 74.70         | 200                        |
| 74.65         |     | 6   |     |     |     |     |     |     | 8   |     |     |     | 74.65         | 214                        |
| 74.60         | 7   | 4   |     |     |     |     |     |     | 7   |     |     |     | 74.60         | 232                        |
| 74.55         | 23  | 12  |     |     |     |     |     |     | 3   | 2   |     |     | 74.55         | 272                        |
| 74.50         | 1   | 3   |     |     |     |     |     |     |     | 8   |     |     | 74.50         | 284                        |
| 74.45         |     |     |     |     |     |     |     |     |     | 15  |     |     | 74.45         | 299                        |
| 74.40         |     |     |     |     |     |     |     |     |     | 6   | 6   | 1   | 74.40         | 312                        |
| 74.35         |     |     |     |     |     |     |     |     |     |     | 15  | 15  | 74.35         | 342                        |
| 74.30         |     |     |     |     |     |     |     |     |     |     | 9   | 15  | 74.30         | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 2076: Olcott, New York on Lake Ontario

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 74.59   | 74.58   | 74.76   | 74.81   | 75.11*  | 75.21   | 75.13   | 74.97   | 74.79   | 74.57   | 74.43   | 74.34   |
| 2    | 74.57   | 74.59   | 74.76   | 74.82   | 75.11   | 75.20   | 75.12   | 74.96   | 74.78   | 74.54   | 74.40   | 74.38   |
| 3    | 74.56   | 74.57   | 74.76   | 74.83   | 75.13   | 75.20   | 75.13   | 74.95   | 74.76   | 74.54   | 74.43   | 74.36   |
| 4    | 74.57   | 74.58   | 74.77   | 74.86   | 75.12   | 75.20   | 75.14   | 74.94   | 74.72   | 74.56   | 74.42   | 74.33   |
| 5    | 74.58   | 74.57   | 74.77   | 74.87   | 75.14   | 75.21   | 75.13   | 74.93   | 74.73   | 74.55   | 74.41   | 74.37   |
| 6    | 74.58   | 74.56   | 74.76   | 74.87   | 75.14   | 75.21   | 75.12   | 74.92   | 74.73   | 74.53   | 74.40   | 74.37   |
| 7    | 74.59   | 74.55   | 74.76   | 74.90   | 75.15   | 75.19   | 75.12   | 74.93   | 74.73   | 74.51   | 74.41   | 74.34   |
| 8    | 74.60   | 74.54   | 74.78   | 74.91   | 75.13   | 75.19   | 75.12   | 74.92   | 74.72   | 74.51   | 74.40   | 74.33   |
| 9    | 74.60   | 74.56   | 74.76   | 74.93   | 75.16   | 75.20   | 75.11   | 74.91   | 74.71   | 74.51   | 74.40   | 74.37   |
| 10   | 74.61   | 74.56   | 74.75   | 74.93   | 75.16   | 75.20   | 75.10   | 74.91   | 74.70   | 74.51   | 74.40   | 74.36   |
| 11   | 74.61   | 74.55   | 74.71   | 74.94   | 75.17   | 75.18   | 75.09   | 74.89   | 74.71   | 74.50   | 74.40   | 74.35   |
| 12   | 74.63   | 74.56   | 74.76   | 74.95   | 75.17   | 75.19   | 75.09   | 74.89   | 74.69   | 74.50   | 74.41   | 74.36   |
| 13   | 74.63   | 74.58   | 74.78   | 74.98   | 75.17   | 75.18   | 75.09   | 74.89   | 74.71   | 74.49   | 74.40   | 74.35   |
| 14   | 74.61   | 74.58   | 74.75   | 74.98   | 75.16   | 75.18   | 75.09   | 74.91   | 74.71   | 74.49   | 74.39   | 74.38   |
| 15   | 74.62   | 74.60   | 74.76   | 75.00   | 75.16   | 75.17   | 75.09   | 74.91   | 74.69   | 74.49   | 74.38   | 74.35   |
| 16   | 74.62   | 74.63   | 74.76   | 74.99   | 75.16   | 75.17   | 75.09   | 74.92   | 74.68   | 74.49   | 74.35   | 74.36   |
| 17   | 74.60   | 74.64   | 74.77   | 75.02   | 75.17   | 75.16   | 75.09   | 74.90   | 74.69   | 74.49   | 74.37   | 74.35   |
| 18   | 74.60   | 74.65   | 74.77   | 75.03   | 75.18   | 75.17   | 75.08   | 74.89   | 74.68   | 74.47   | 74.38   | 74.35   |
| 19   | 74.58   | 74.67   | 74.75   | 75.04   | 75.17   | 75.17   | 75.08   | 74.87   | 74.67   | 74.48   | 74.38   | 74.36   |
| 20   | 74.57   | 74.65   | 74.77   | 75.03   | 75.18   | 75.17   | 75.08   | 74.85   | 74.66   | 74.48   | 74.36   | 74.32   |
| 21   | 74.59   | 74.68   | 74.78   | 75.05   | 75.18   | 75.15   | 75.07   | 74.86   | 74.65   | 74.48   | 74.36   | 74.38   |
| 22   | 74.58   | 74.70   | 74.76   | 75.07   | 75.18   | 75.15   | 75.04   | 74.86   | 74.65   | 74.47   | 74.35   | 74.33   |
| 23   | 74.59   | 74.70   | 74.76   | 75.08   | 75.18   | 75.15   | 75.03   | 74.85   | 74.63   | 74.47   | 74.33   | 74.35   |
| 24   | 74.59   | 74.70   | 74.78   | 75.07   | 75.19   | 75.15   | 75.02   | 74.84   | 74.63   | 74.46   | 74.34   | 74.36   |
| 25   | 74.55   | 74.70   | 74.79   | 75.08   | 75.21   | 75.16   | 75.02   | 74.83   | 74.61   | 74.45   | 74.35   | 74.32   |
| 26   | 74.60   | 74.71   | 74.78   | 75.11   | 75.19   | 75.16   | 75.01   | 74.82   | 74.62   | 74.45   | 74.34   | 74.34   |
| 27   | 74.57   | 74.73   | 74.80   | 75.12   | 75.19   | 75.17   | 75.00   | 74.81   | 74.62   | 74.46   | 74.35   | 74.38   |
| 28   | 74.60   | 74.78   | 74.81   | 75.12   | 75.21   | 75.17   | 74.99   | 74.81   | 74.60   | 74.44   | 74.34   | 74.35   |
| 29   | 74.58   | 74.72   | 74.80   | 75.11   | 75.21   | 75.15   | 74.98   | 74.80   | 74.59   | 74.44   | 74.33   | 74.36   |
| 30   | 74.59   |         | 74.80   | 75.12*  | 75.21   | 75.14   | 74.97   | 74.80   | 74.58   | 74.44   | 74.37   | 74.39   |
| 31   | 74.57   |         | 74.80   |         | 75.21   |         | 74.97   | 74.79   |         | 74.45   |         | 74.41   |
| MEAN | 74.59   | 74.63   | 74.77   | 74.99   | 75.17   | 75.18   | 75.07   | 74.88   | 74.68   | 74.49   | 74.38   | 74.36   |
| MAX. | 74.69   | 74.85   | 74.84   | 75.18   | 75.28   | 75.25   | 75.18   | 74.99   | 74.94   | 74.60   | 74.58   | 74.45   |
|      | 0500/13 | 1600/28 | 0600/21 | 1100/30 | 2200/28 | 2200/06 | 1900/06 | 1000/01 | 2300/13 | 1400/01 | 1200/13 | 2400/31 |
| MIN. | 74.52   | 74.49   | 74.65   | 74.79   | 75.06   | 75.11   | 74.94   | 74.74   | 74.55   | 74.37   | 74.30   | 74.24   |
|      | 0800/25 | 2200/08 | 1400/11 | 2200/01 | 1900/08 | 1200/30 | 2200/31 | 1400/30 | 2000/12 | 2400/28 | 0100/02 | 2300/07 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 74.77

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3007: Ashland Avenue, Niagara Falls, New York on Niagara River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 98.64 Jun  
Daily mean elevation: 99.71 23 Mar  
Instant/hourly elevation: 100.90 0500/23 Mar

LOWEST  
Monthly mean elevation: 97.11 Jan  
Daily mean elevation: 96.53 14 Dec  
Instant/hourly elevation: 95.73 2300/31 Oct

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev. | Date   |
|-------|--------|
| 97.80 | 8 Jan  |
| 97.83 | 29 Feb |
| 99.71 | 23 Mar |
| 99.07 | 6 Apr  |
| 98.99 | 1 May  |
| 98.83 | 19 Jun |
| 98.66 | 16 Jul |
| 98.79 | 31 Aug |
| 98.72 | 26 Sep |
| 98.86 | 3 Oct  |
| 98.79 | 16 Nov |
| 98.40 | 22 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev. | Date   |
|-------|--------|
| 96.57 | 29 Jan |
| 96.63 | 2 Feb  |
| 96.87 | 18 Mar |
| 98.22 | 22 Apr |
| 98.22 | 3 May  |
| 98.29 | 30 Jun |
| 98.26 | 29 Jul |
| 98.20 | 12 Aug |
| 97.89 | 30 Sep |
| 97.70 | 6 Oct  |
| 96.88 | 27 Nov |
| 96.53 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 99.60                                                   |     |     | 1   |     |     |     |     |     |     |     |     |     | 99.60         | 1                          |
| 99.45                                                   |     |     |     |     |     |     |     |     |     |     |     |     | 99.45         | 1                          |
| 99.30                                                   |     |     |     |     |     |     |     |     |     |     |     |     | 99.30         | 1                          |
| 99.15                                                   |     |     |     |     |     |     |     |     |     |     |     |     | 99.15         | 1                          |
| 99.00                                                   |     |     | 1   | 1   | 2   |     |     |     |     | 1   |     |     | 99.00         | 3                          |
| 98.85                                                   |     |     |     | 1   | 7   | 11  |     | 2   | 1   |     | 1   |     | 98.85         | 7                          |
| 98.70                                                   |     |     |     |     | 8   | 13  | 12  | 13  | 3   |     |     |     | 98.70         | 37                         |
| 98.55                                                   |     |     |     | 10  | 13  | 13  | 12  | 13  | 3   |     |     |     | 98.55         | 101                        |
| 98.40                                                   |     |     |     | 8   | 4   | 2   | 12  | 8   | 12  |     |     |     | 98.40         | 147                        |
| 98.25                                                   |     |     | 3   | 2   | 3   | 4   | 7   | 7   | 6   | 2   |     | 1   | 98.25         | 182                        |
| 98.10                                                   |     |     | 3   | 1   | 1   |     |     | 1   | 5   | 4   |     | 2   | 98.10         | 199                        |
| 97.95                                                   |     |     | 2   |     |     |     |     |     | 1   | 11  |     |     | 97.95         | 213                        |
| 97.80                                                   |     | 2   | 5   |     |     |     |     |     | 2   | 12  | 1   | 3   | 97.80         | 238                        |
| 97.65                                                   | 6   | 1   | 4   |     |     |     |     |     |     | 1   | 2   | 4   | 97.65         | 256                        |
| 97.50                                                   | 2   | 3   | 2   |     |     |     |     |     |     |     | 5   | 1   | 97.50         | 269                        |
| 97.35                                                   | 2   | 4   | 1   |     |     |     |     |     |     |     | 7   | 2   | 97.35         | 285                        |
| 97.20                                                   | 2   | 4   | 4   |     |     |     |     |     |     |     | 2   | 4   | 97.20         | 301                        |
| 97.05                                                   | 2   | 4   | 1   |     |     |     |     |     |     |     | 5   | 3   | 97.05         | 316                        |
| 96.90                                                   | 3   | 2   | 2   |     |     |     |     |     |     |     | 5   | 6   | 96.90         | 334                        |
| 96.75                                                   | 6   | 7   | 2   |     |     |     |     |     |     |     | 2   | 3   | 96.75         | 354                        |
| 96.60                                                   | 5   | 2   |     |     |     |     |     |     |     |     |     | 1   | 96.60         | 362                        |
| 96.45                                                   | 3   |     |     |     |     |     |     |     |     |     |     | 1   | 96.45         | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3007: Ashland Avenue, Niagara Falls, New York on Niagara River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 97.19   | 96.94   | 98.21   | 98.86   | 98.99   | 98.71   | 98.47   | 98.42   | 98.53   | 97.96   | 97.13   | 97.83   |
| 2    | 97.53   | 96.63   | 98.36   | 98.70   | 98.64   | 98.63   | 98.52   | 98.33   | 98.44   | 98.19   | 97.72   | 97.02   |
| 3    | 97.40   | 96.83   | 98.20   | 98.60   | 98.22   | 98.63   | 98.47   | 98.33   | 98.43   | 98.86   | 96.99   | 97.78   |
| 4    | 97.75   | 96.82   | 97.66   | 98.58   | 98.32   | 98.77   | 98.55   | 98.31   | 98.54   | 98.39   | 97.05   | 98.11   |
| 5    | 97.71   | 96.81   | 97.69   | 98.59   | 98.54   | 98.67   | 98.56   | 98.38   | 98.50   | 97.93   | 97.48   | 97.43   |
| 6    | 97.64   | 96.90   | 97.87   | 99.07   | 98.34   | 98.78   | 98.61   | 98.49   | 98.44   | 97.70   | 97.56   | 97.34   |
| 7    | 97.69   | 97.10   | 97.48   | 98.76   | 98.56   | 98.82   | 98.62   | 98.65   | 98.41   | 98.01   | 97.37   | 97.89   |
| 8    | 97.80   | 97.02   | 96.99   | 98.65   | 98.69   | 98.77   | 98.50   | 98.60   | 98.34   | 98.09   | 97.36   | 98.14   |
| 9    | 97.79   | 96.88   | 96.89   | 98.70   | 98.87   | 98.66   | 98.59   | 98.64   | 98.39   | 98.11   | 97.54   | 96.84   |
| 10   | 97.77   | 96.86   | 97.94   | 98.53   | 98.84   | 98.62   | 98.58   | 98.61   | 98.64   | 98.00   | 97.10   | 96.94   |
| 11   | 97.36   | 97.11   | 98.34   | 98.78   | 98.73   | 98.80   | 98.55   | 98.32   | 98.50   | 97.95   | 97.42   | 96.98   |
| 12   | 96.96   | 97.17   | 97.62   | 98.53   | 98.73   | 98.70   | 98.65   | 98.20   | 98.47   | 97.95   | 97.72   | 96.96   |
| 13   | 96.66   | 97.17   | 97.68   | 98.41   | 98.47   | 98.66   | 98.64   | 98.42   | 98.53   | 97.88   | 97.43   | 97.07   |
| 14   | 97.02   | 97.55   | 97.57   | 98.54   | 98.65   | 98.75   | 98.52   | 98.53   | 98.52   | 97.86   | 97.27   | 96.53   |
| 15   | 96.81   | 97.58   | 97.18   | 98.55   | 98.67   | 98.59   | 98.42   | 98.60   | 98.21   | 98.08   | 97.49   | 96.80   |
| 16   | 96.84   | 97.41   | 98.14   | 98.68   | 98.61   | 98.30   | 98.66   | 98.66   | 98.29   | 97.99   | 98.79   | 96.72   |
| 17   | 97.20   | 97.34   | 97.27   | 98.81   | 98.57   | 98.30   | 98.58   | 98.61   | 98.39   | 97.99   | 97.92   | 97.21   |
| 18   | 96.88   | 97.60   | 96.87   | 98.72   | 98.57   | 98.71   | 98.60   | 98.32   | 98.35   | 98.26   | 97.33   | 97.20   |
| 19   | 97.22   | 97.40   | 97.34   | 98.73   | 98.58   | 98.83   | 98.57   | 98.48   | 98.65   | 98.05   | 96.93   | 97.23   |
| 20   | 97.24   | 97.82   | 97.33   | 98.59   | 98.43   | 98.70   | 98.50   | 98.35   | 98.58   | 98.07   | 97.05   | 97.78   |
| 21   | 97.04   | 97.68   | 97.82   | 98.51   | 98.48   | 98.58   | 98.48   | 98.51   | 98.41   | 97.81   | 97.06   | 97.04   |
| 22   | 96.89   | 97.32   | 99.15   | 98.22   | 98.64   | 98.46   | 98.34   | 98.63   | 97.90   | 98.16   | 97.02   | 98.40   |
| 23   | 96.83   | 97.37   | 99.71   | 98.37   | 98.80   | 98.37   | 98.48   | 98.62   | 98.24   | 98.01   | 97.55   | 97.70   |
| 24   | 96.66   | 97.28   | 98.27   | 98.70   | 98.85   | 98.55   | 98.56   | 98.62   | 98.25   | 98.03   | 97.11   | 97.26   |
| 25   | 96.61   | 97.50   | 97.90   | 98.85   | 98.81   | 98.76   | 98.40   | 98.50   | 98.39   | 97.94   | 96.90   | 97.89   |
| 26   | 96.59   | 97.33   | 97.83   | 98.66   | 98.61   | 98.68   | 98.49   | 98.47   | 98.72   | 98.20   | 97.12   | 97.72   |
| 27   | 96.66   | 96.83   | 97.78   | 98.51   | 98.61   | 98.66   | 98.28   | 98.60   | 98.20   | 97.87   | 96.88   | 96.86   |
| 28   | 96.65   | 96.64   | 97.21   | 98.52   | 98.39   | 98.77   | 98.33   | 98.60   | 98.21   | 97.95   | 97.56   | 97.39   |
| 29   | 96.57   | 97.83   | 96.99   | 98.37   | 98.62   | 98.56   | 98.26   | 98.66   | 98.08   | 97.88   | 97.50   | 97.56   |
| 30   | 96.59   |         | 98.05   | 98.82   | 98.83   | 98.29   | 98.35   | 98.74   | 97.89   | 97.90   | 97.63   | 97.12   |
| 31   | 96.89   |         | 98.09   |         | 98.76   |         | 98.36   | 98.79   |         | 97.94   |         | 97.00   |
| MEAN | 97.11   | 97.20   | 97.79   | 98.63   | 98.63   | 98.64   | 98.50   | 98.52   | 98.38   | 98.03   | 97.37   | 97.35   |
| MAX. | 98.48   | 98.77   | 100.90  | 100.27  | 100.42  | 99.95   | 99.84   | 100.03  | 100.06  | 100.03  | 100.43  | 100.16  |
|      | 2400/08 | 1900/29 | 0500/23 | 1900/30 | 0900/01 | 1600/05 | 1400/06 | 1500/30 | 1400/19 | 1400/03 | 0500/16 | 2200/22 |
| MIN. | 96.13   | 96.16   | 96.06   | 96.24   | 95.86   | 96.45   | 96.19   | 96.07   | 96.12   | 95.73   | 95.84   | 95.78   |
|      | 0600/13 | 2000/27 | 0300/29 | 0100/05 | 2400/03 | 0200/23 | 0100/29 | 0100/12 | 0400/15 | 2300/31 | 0100/01 | 1300/14 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 98.01

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3009: American Falls, Niagara Falls, New York on Niagara River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 170.40 Jun  
Daily mean elevation: 170.65 16 Nov  
Instant/hourly elevation: 170.76 0700/16 Nov

LOWEST  
Monthly mean elevation: 170.21 Feb  
Daily mean elevation: 169.99 14 Dec  
Instant/hourly elevation: 169.88 1900/6 Oct

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 170.37 | 28 Jan |
| 170.31 | 20 Feb |
| 170.61 | 23 Mar |
| 170.52 | 6 Apr  |
| 170.48 | 1 May  |
| 170.50 | 28 Jun |
| 170.50 | 7 Jul  |
| 170.40 | 16 Aug |
| 170.33 | 3 Sep  |
| 170.46 | 3 Oct  |
| 170.65 | 16 Nov |
| 170.55 | 25 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 170.04 | 13 Jan |
| 170.04 | 28 Feb |
| 170.07 | 18 Mar |
| 170.20 | 9 Apr  |
| 170.18 | 3 May  |
| 170.28 | 23 Jun |
| 170.24 | 27 Jul |
| 170.18 | 20 Aug |
| 170.22 | 30 Sep |
| 170.10 | 31 Oct |
| 170.14 | 19 Nov |
| 169.99 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 170.60                                                  |     |     | 1   |     |     |     |     |     |     |     | 1   |     | 170.60        | 2                          |
| 170.55                                                  |     |     | 1   |     |     |     |     |     |     |     |     |     | 170.55        | 3                          |
| 170.50                                                  |     |     | 2   | 1   |     |     | 1   |     |     |     | 1   | 4   | 170.50        | 11                         |
| 170.45                                                  |     |     | 2   | 1   | 2   | 6   |     |     |     | 1   | 1   | 4   | 170.45        | 29                         |
| 170.40                                                  |     |     | 3   |     | 4   | 8   | 4   |     |     |     | 2   | 3   | 170.40        | 53                         |
| 170.35                                                  | 2   |     | 1   | 5   | 4   | 7   | 11  | 2   |     |     | 4   | 2   | 170.35        | 91                         |
| 170.30                                                  | 3   | 2   | 5   | 2   | 8   | 7   | 8   | 5   | 3   |     | 7   | 5   | 170.30        | 146                        |
| 170.25                                                  | 8   | 5   | 2   | 14  | 10  | 2   | 5   | 10  | 10  | 2   | 7   | 3   | 170.25        | 224                        |
| 170.20                                                  | 7   | 10  | 4   | 6   | 2   |     | 2   | 13  | 17  | 20  | 3   | 2   | 170.20        | 310                        |
| 170.15                                                  | 3   | 9   | 6   | 1   | 1   |     |     | 1   |     | 7   | 3   | 3   | 170.15        | 344                        |
| 170.10                                                  | 3   | 1   | 3   |     |     |     |     |     |     |     | 1   | 3   | 170.10        | 355                        |
| 170.05                                                  | 3   | 1   | 1   |     |     |     |     |     |     | 1   |     |     | 170.05        | 361                        |
| 170.00                                                  | 2   | 1   |     |     |     |     |     |     |     |     |     | 1   | 170.00        | 365                        |
| 169.95                                                  |     |     |     |     |     |     |     |     |     |     |     | 1   | 169.95        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3003: American Falls, Niagara Falls, New York on Niagara River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 170.26  | 170.22  | 170.34  | 170.48  | 170.48  | 170.41  | 170.45  | 170.22  | 170.26  | 170.23  | 170.29  | 170.49  |
| 2    | 170.27  | 170.13  | 170.46  | 170.38  | 170.26  | 170.35  | 170.43  | 170.23  | 170.25  | 170.25  | 170.48  | 170.32  |
| 3    | 170.24  | 170.10  | 170.36  | 170.35  | 170.18  | 170.41  | 170.42  | 170.25  | 170.33  | 170.46  | 170.30  | 170.41  |
| 4    | 170.21  | 170.20  | 170.19  | 170.26  | 170.25  | 170.41  | 170.40  | 170.28  | 170.26  | 170.23  | 170.36  | 170.54  |
| 5    | 170.27  | 170.19  | 170.17  | 170.37  | 170.32  | 170.36  | 170.40  | 170.29  | 170.24  | 170.19  | 170.38  | 170.33  |
| 6    | 170.33  | 170.19  | 170.22  | 170.52  | 170.29  | 170.42  | 170.36  | 170.35  | 170.22  | 170.18  | 170.32  | 170.29  |
| 7    | 170.29  | 170.22  | 170.24  | 170.40  | 170.28  | 170.42  | 170.50  | 170.36  | 170.24  | 170.21  | 170.28  | 170.48  |
| 8    | 170.36  | 170.27  | 170.16  | 170.27  | 170.28  | 170.41  | 170.41  | 170.27  | 170.26  | 170.23  | 170.30  | 170.54  |
| 9    | 170.32  | 170.20  | 170.14  | 170.20  | 170.42  | 170.39  | 170.36  | 170.35  | 170.29  | 170.22  | 170.34  | 170.16  |
| 10   | 170.25  | 170.18  | 170.33  | 170.23  | 170.41  | 170.38  | 170.29  | 170.35  | 170.31  | 170.22  | 170.31  | 170.05  |
| 11   | 170.26  | 170.18  | 170.32  | 170.26  | 170.33  | 170.41  | 170.36  | 170.23  | 170.28  | 170.21  | 170.41  | 170.12  |
| 12   | 170.22  | 170.19  | 170.11  | 170.24  | 170.30  | 170.31  | 170.34  | 170.23  | 170.26  | 170.23  | 170.44  | 170.19  |
| 13   | 170.04  | 170.24  | 170.18  | 170.25  | 170.25  | 170.34  | 170.32  | 170.25  | 170.27  | 170.23  | 170.30  | 170.22  |
| 14   | 170.16  | 170.28  | 170.28  | 170.22  | 170.32  | 170.39  | 170.36  | 170.28  | 170.23  | 170.21  | 170.24  | 169.99  |
| 15   | 170.13  | 170.31  | 170.22  | 170.25  | 170.27  | 170.33  | 170.34  | 170.35  | 170.24  | 170.20  | 170.31  | 170.17  |
| 16   | 170.15  | 170.22  | 170.28  | 170.27  | 170.27  | 170.30  | 170.38  | 170.40  | 170.27  | 170.21  | 170.65  | 170.15  |
| 17   | 170.29  | 170.24  | 170.11  | 170.33  | 170.28  | 170.36  | 170.36  | 170.29  | 170.26  | 170.21  | 170.53  | 170.32  |
| 18   | 170.24  | 170.26  | 170.07  | 170.29  | 170.27  | 170.50  | 170.36  | 170.25  | 170.24  | 170.22  | 170.39  | 170.30  |
| 19   | 170.26  | 170.22  | 170.20  | 170.29  | 170.32  | 170.50  | 170.32  | 170.24  | 170.25  | 170.18  | 170.14  | 170.30  |
| 20   | 170.08  | 170.31  | 170.19  | 170.29  | 170.31  | 170.40  | 170.32  | 170.18  | 170.31  | 170.27  | 170.16  | 170.45  |
| 21   | 170.05  | 170.27  | 170.35  | 170.28  | 170.32  | 170.35  | 170.38  | 170.22  | 170.22  | 170.24  | 170.21  | 170.12  |
| 22   | 170.06  | 170.19  | 170.58  | 170.21  | 170.35  | 170.33  | 170.33  | 170.23  | 170.22  | 170.25  | 170.19  | 170.55  |
| 23   | 170.16  | 170.21  | 170.61  | 170.26  | 170.41  | 170.28  | 170.36  | 170.29  | 170.25  | 170.22  | 170.37  | 170.46  |
| 24   | 170.10  | 170.21  | 170.52  | 170.27  | 170.39  | 170.46  | 170.35  | 170.22  | 170.24  | 170.23  | 170.30  | 170.40  |
| 25   | 170.12  | 170.25  | 170.44  | 170.40  | 170.35  | 170.50  | 170.26  | 170.23  | 170.24  | 170.21  | 170.29  | 170.55  |
| 26   | 170.24  | 170.26  | 170.45  | 170.30  | 170.37  | 170.44  | 170.31  | 170.23  | 170.29  | 170.23  | 170.25  | 170.47  |
| 27   | 170.20  | 170.16  | 170.44  | 170.27  | 170.36  | 170.49  | 170.24  | 170.26  | 170.22  | 170.19  | 170.18  | 170.22  |
| 28   | 170.37  | 170.04  | 170.33  | 170.28  | 170.27  | 170.50* | 170.29  | 170.26  | 170.24  | 170.26  | 170.35  | 170.33  |
| 29   | 170.31  | 170.24  | 170.24  | 170.26  | 170.39  | 170.39  | 170.28  | 170.30  | 170.25  | 170.19  | 170.33  | 170.45  |
| 30   | 170.22  |         | 170.46  | 170.38  | 170.46  | 170.35  | 170.26  | 170.29  | 170.22  | 170.18  | 170.34  | 170.37  |
| 31   | 170.30  |         | 170.54  |         | 170.44  |         | 170.25  | 170.31  |         | 170.10  |         | 170.34  |
| MEAN | 170.22  | 170.21  | 170.31  | 170.30  | 170.33  | 170.40  | 170.35  | 170.27  | 170.26  | 170.22  | 170.32  | 170.33  |
| MAX. | 170.51  | 170.40  | 170.74  | 170.72  | 170.61  | 170.65  | 170.59  | 170.56  | 170.52  | 170.59  | 170.76  | 170.74  |
|      | 0900/28 | 0800/20 | 2300/22 | 1900/30 | 1200/01 | 0600/28 | 0700/07 | 0700/07 | 0700/03 | 0700/03 | 0700/16 | 1700/03 |
| MIN. | 169.90  | 169.98  | 169.96  | 169.89  | 169.91  | 170.01  | 169.96  | 169.91  | 169.90  | 169.88  | 170.05  | 169.94  |
|      | 0900/13 | 1400/28 | 0500/18 | 2200/14 | 2100/03 | 2100/15 | 2100/27 | 2100/20 | 1900/28 | 1900/06 | 0700/20 | 0800/14 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 170.29

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3012: Niagara Intake, Niagara Falls, New York on Niagara River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 171.30 Jun  
Daily mean elevation: 171.67 23 Mar  
Instant/hourly elevation: 171.79 0400/23 Mar

LOWEST  
Monthly mean elevation: 171.02 Feb  
Daily mean elevation: 170.73 14 Dec  
Instant/hourly elevation: 170.51 2200/2 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 171.41 | 8 Jan  |
| 171.16 | 20 Feb |
| 171.67 | 23 Mar |
| 171.43 | 6 Apr  |
| 171.41 | 1 May  |
| 171.44 | 18 Jun |
| 171.45 | 2 Jul  |
| 171.32 | 16 Aug |
| 171.22 | 20 Sep |
| 171.40 | 3 Oct  |
| 171.57 | 16 Nov |
| 171.46 | 22 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 170.85 | 27 Jan |
| 170.82 | 28 Feb |
| 170.93 | 9 Mar  |
| 171.06 | 22 Apr |
| 171.04 | 3 May  |
| 171.16 | 23 Jun |
| 171.06 | 29 Jul |
| 171.07 | 20 Aug |
| 171.07 | 22 Sep |
| 170.90 | 31 Oct |
| 170.90 | 19 Nov |
| 170.73 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 171.65                                                  |     |     | 1   |     |     |     |     |     |     |     |     |     | 171.65        | 1                          |
| 171.60                                                  |     |     |     |     |     |     |     |     |     |     |     |     | 171.60        | 1                          |
| 171.55                                                  |     |     |     |     |     |     |     |     |     |     | 1   |     | 171.55        | 2                          |
| 171.50                                                  |     |     | 1   |     |     |     |     |     |     |     |     |     | 171.50        | 3                          |
| 171.45                                                  |     |     |     |     |     |     |     |     |     |     |     | 1   | 171.45        | 4                          |
| 171.40                                                  | 1   |     | 1   | 1   | 1   | 4   | 3   |     |     |     | 1   | 3   | 171.40        | 19                         |
| 171.35                                                  |     |     | 1   | 1   | 1   | 2   | 1   |     |     | 1   |     | 1   | 171.35        | 27                         |
| 171.30                                                  | 2   |     |     | 2   | 3   | 10  | 1   | 1   |     |     | 1   | 3   | 171.30        | 50                         |
| 171.25                                                  | 2   |     | 6   | 1   | 4   | 3   |     | 1   |     |     | 1   | 3   | 171.25        | 71                         |
| 171.20                                                  |     |     | 1   | 5   | 3   | 9   |     | 5   | 2   |     | 3   | 1   | 171.20        | 100                        |
| 171.15                                                  | 5   | 1   | 2   | 6   | 7   | 2   | 2   | 7   | 4   |     | 4   | 3   | 171.15        | 143                        |
| 171.10                                                  | 5   | 3   | 5   | 11  | 10  |     | 3   | 10  | 19  | 4   | 7   | 4   | 171.10        | 224                        |
| 171.05                                                  | 6   | 4   | 4   | 3   | 1   |     | 3   | 7   | 5   | 18  | 5   | 2   | 171.05        | 282                        |
| 171.00                                                  | 2   | 8   | 3   |     | 1   |     |     |     |     | 6   | 2   |     | 171.00        | 304                        |
| 170.95                                                  | 4   | 9   | 4   |     |     |     |     |     |     | 1   | 1   | 3   | 170.95        | 326                        |
| 170.90                                                  | 1   | 1   | 2   |     |     |     |     |     |     |     | 3   | 2   | 170.90        | 335                        |
| 170.85                                                  | 2   | 2   |     |     |     |     |     |     |     | 1   | 1   | 3   | 170.85        | 344                        |
| 170.80                                                  | 1   | 1   |     |     |     |     |     |     |     |     |     |     | 170.80        | 346                        |
| 170.75                                                  |     |     |     |     |     |     |     |     |     |     |     | 1   | 170.75        | 347                        |
| 170.70                                                  |     |     |     |     |     |     |     |     |     |     |     | 1   | 170.70        | 348                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3012: Niagara Intake, Niagara Falls, New York on Niagara River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 171.06  | 171.00  | 171.23  | 171.36  | 171.41  | 171.31  | 171.37  | 171.09  | 171.15  | 171.09  | 171.09  | 171.36  |
| 2    | 171.15  | 170.87  | 171.29  | 171.23  | 171.14  | 171.23  | 171.45* | 171.09  | 171.12  | 171.14  | 171.33  | 171.12  |
| 3    | 171.16  | 170.88  | 171.15  | 171.22  | 171.04  | 171.31  | /       | 171.11  | 171.22  | 171.40  | 171.10  | 171.29  |
| 4    | 171.14  | 170.98  | 171.00  | 171.13  | 171.12  | 171.32  | /       | 171.14  | 171.15  | 171.14  | 171.18  | 171.44  |
| 5    | 171.26  | 170.99  | 170.97  | 171.25  | 171.20  | 171.25  | /       | 171.16  | 171.13  | 171.05  | 171.21  | 171.16  |
| 6    | 171.32  | 170.99  | 171.04  | 171.43  | 171.15  | 171.33  | /       | 171.23  | 171.10  | 171.04  | 171.14  | 171.12  |
| 7    | 171.30  | 171.05  | 171.08  | 171.34  | 171.15  | 171.34  | 171.43* | 171.25  | 171.12  | 171.07  | 171.09  | 171.35  |
| 8    | 171.41  | 171.08  | 170.93  | 171.25  | 171.15  | 171.32  | 171.33  | 171.16  | 171.13  | 171.09  | 171.11  | 171.43  |
| 9    | 171.32  | 171.02  | 170.93  | 171.11  | 171.32  | 171.29  | 171.41* | 171.25  | 171.18  | 171.10  | 171.16  | 170.91  |
| 10   | 171.16  | 170.97  | 171.16  | 171.11  | 171.30  | 171.28  | /       | 171.25  | 171.20  | 171.09  | 171.11  | 170.80  |
| 11   | 171.17  | 170.99  | 171.29  | 171.15  | 171.20  | 171.33  | /       | 171.10  | 171.16  | 171.07  | 171.24  | 170.89  |
| 12   | 171.15  | 171.03  | 171.12  | 171.09  | 171.18  | 171.22  | /       | 171.09  | 171.14  | 171.09  | 171.29  | 170.97  |
| 13   | 171.03  | 171.03  | 171.09  | 171.11  | 171.10  | 171.25  | /       | 171.13  | 171.15  | 171.08  | 171.11  | 170.99  |
| 14   | 171.10  | 171.09  | 171.11  | 171.09  | 171.20  | 171.32  | /       | 171.17  | 171.11  | 171.07  | 171.03  | 170.73  |
| 15   | 171.02  | 171.13  | 171.02  | 171.12  | 171.14  | 171.24  | /       | 171.26  | 171.10  | 171.06  | 171.12  | 170.94  |
| 16   | 170.99  | 171.01  | 171.14  | 171.15  | 171.14  | 171.19  | /       | 171.32  | 171.15  | 171.07  | 171.57  | 170.90  |
| 17   | 171.19  | 171.03  | 171.06  | 171.22  | 171.14  | 171.25  | /       | 171.19  | 171.13  | 171.08  | 171.41  | 171.11  |
| 18   | 171.14  | 171.05  | 170.96  | 171.18  | 171.14  | 171.44  | /       | 171.12  | 171.11  | 171.08  | 171.21  | 171.09  |
| 19   | 171.17  | 171.01  | 171.08  | 171.18  | 171.19  | 171.43  | /       | 171.14  | 171.14  | 171.03  | 170.90  | 171.09  |
| 20   | 171.09  | 171.16  | 171.00  | 171.17  | 171.18  | 171.31  | /       | 171.07  | 171.22  | 171.12  | 170.93  | 171.30  |
| 21   | 171.08  | 171.13  | 171.20  | 171.15  | 171.19  | 171.25  | /       | 171.12  | 171.11  | 171.08  | 170.97  | 170.88  |
| 22   | 171.10  | 170.96  | 171.51  | 171.06  | 171.23  | 171.22  | /       | 171.13  | 171.07  | 171.11  | 170.95  | 171.46  |
| 23   | 171.15  | 170.99  | 171.67  | 171.13  | 171.31  | 171.16  | /       | 171.20  | 171.12  | 171.07  | 171.18  | 171.32  |
| 24   | 171.00  | 171.00  | 171.42  | 171.16  | 171.29  | 171.37  | 171.11* | 171.12  | 171.11  | 171.08  | 171.08  | 171.23  |
| 25   | 170.99  | 171.06  | 171.29  | 171.29  | 171.25  | 171.42  | 171.12  | 171.10  | 171.13  | 171.05  | 171.08  | 171.44  |
| 26   | 170.88  | 171.06  | 171.30  | 171.18  | 171.26  | 171.34  | 171.18  | 171.10  | 171.20  | 171.08  | 171.03  | 171.32  |
| 27   | 170.85  | 170.91  | 171.27  | 171.14  | 171.24  | 171.40  | 171.09  | 171.13  | 171.10  | 171.02  | 170.93  | 171.00  |
| 28   | 171.00  | 170.82  | 171.11  | 171.16  | 171.13  | 171.41  | 171.16* | 171.14  | 171.11  | 171.10  | 171.16  | 171.16  |
| 29   | 170.95  | 171.15  | 171.01  | 171.13  | 171.29  | 171.28  | 171.06* | 171.19  | 171.12  | 171.01  | 171.14  | 171.29  |
| 30   | 170.90  |         | 171.30  | 171.32  | 171.37  | 171.23  | 171.11  | 171.18  | 171.08  | 171.00  | 171.15  | 171.18  |
| 31   | 171.06  |         | 171.40  |         | 171.35  |         | 171.10  | 171.21  |         | 170.90  |         | 171.14  |
| MEAN | 171.11  | 171.02  | 171.17  | 171.19  | 171.21  | 171.30  | 171.22  | 171.16  | 171.14  | 171.08  | 171.13  | 171.14  |
| MAX. | 171.54  | 171.25  | 171.79  | 171.76  | 171.62  | 171.61  | 171.56  | 171.50  | 171.44  | 171.61  | 171.73  | 171.72  |
|      | 0500/05 | 0800/20 | 0400/23 | 1900/30 | 0800/01 | 0800/28 | 0700/01 | 0700/07 | 0700/10 | 1400/03 | 0400/16 | 1600/03 |
| MIN. | 170.81  | 170.73  | 170.75  | 170.51  | 170.77  | 170.92  | 170.82  | 170.79  | 170.80  | 170.75  | 170.80  | 170.64  |
|      | 1900/26 | 1400/28 | 1000/09 | 2200/02 | 2100/03 | 2100/23 | 2100/27 | 2100/11 | 1900/30 | 2200/31 | 0600/20 | 0700/14 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 171.16

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3020: Buffalo Harbor, Buffalo, New York on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 174.49 Jul  
Daily mean elevation: 174.76 16 Nov  
Instant/hourly elevation: 175.86 1632/30 Apr

LOWEST  
Monthly mean elevation: 174.14 Feb  
Daily mean elevation: 173.90 28 Feb  
Instant/hourly elevation: 173.43 1100/14 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.27 | 3 Jan  |
| 174.43 | 29 Feb |
| 174.65 | 22 Mar |
| 174.61 | 30 Apr |
| 174.57 | 1 May  |
| 174.61 | 27 Jun |
| 174.59 | 7 Jul  |
| 174.50 | 15 Aug |
| 174.42 | 20 Sep |
| 174.56 | 3 Oct  |
| 174.76 | 16 Nov |
| 174.74 | 22 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.03 | 12 Jan |
| 173.90 | 28 Feb |
| 174.03 | 8 Mar  |
| 174.22 | 22 Apr |
| 174.11 | 28 May |
| 174.40 | 15 Jun |
| 174.39 | 26 Jul |
| 174.30 | 20 Aug |
| 174.20 | 30 Sep |
| 174.06 | 31 Oct |
| 174.11 | 27 Nov |
| 173.91 | 14 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 174.75 | | | | | | | | | | | 1 | | 174.75 | 1 |
| 174.70 | | | | | | | | | | | | 1 | 174.70 | 2 |
| 174.65 | | | | | | | | | | | | | 174.65 | 2 |
| 174.60 | | | 1 | 1 | | 1 | | | | | | | 174.60 | 5 |
| 174.55 | | | | 1 | 1 | 1 | 3 | | | 1 | | | 174.55 | 12 |
| 174.50 | | | 1 | 1 | 2 | 7 | 11 | | | | | 2 | 174.50 | 36 |
| 174.45 | | | 1 | 4 | 6 | 13 | 9 | 6 | | | 1 | 2 | 174.45 | 78 |
| 174.40 | | 1 | 2 | 6 | 5 | 7 | 5 | 10 | 2 | | 2 | 2 | 174.40 | 120 |
| 174.35 | | | 4 | 6 | 10 | 1 | 3 | 11 | 10 | | 6 | 1 | 174.35 | 166 |
| 174.30 | | 1 | 5 | 9 | 4 | | | 3 | 8 | 2 | 6 | 4 | 174.30 | 208 |
| 174.25 | 4 | 2 | 5 | 1 | 1 | | | 1 | 9 | 4 | 1 | 1 | 174.25 | 237 |
| 174.20 | 3 | 6 | 4 | 1 | | | | | | 17 | 11 | 3 | 174.20 | 282 |
| 174.15 | 6 | 1 | 3 | | 1 | | | | 1 | 4 | 3 | 5 | 174.15 | 306 |
| 174.10 | 11 | 4 | 1 | | 1 | | | | | 2 | 5 | 7 | 174.10 | 337 |
| 174.05 | 6 | 9 | 1 | | | | | | | 1 | | 1 | 174.05 | 355 |
| 174.00 | 1 | 3 | 3 | | | | | | | | | 1 | 174.00 | 363 |
| 173.95 | | | | | | | | | | | | | 173.95 | 363 |
| 173.90 | | 1 | | | | | | | | | | 1 | 173.90 | 365 |
| 173.85 | | 1 | | | | | | | | | | | 173.85 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3020: Buffalo Harbor, Buffalo, New York on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 174.19 | 174.07 | 174.43 | 174.46 | 174.57 | 174.48 | 174.48 | 174.43 | 174.37 | 174.21 | 174.34 | 174.44 |
| 2 | 174.25 | 174.05 | 174.33 | 174.46 | 174.31 | 174.44 | 174.49 | 174.42 | 174.38 | 174.33 | 174.35 | 174.13 |
| 3 | 174.27 | 174.12 | 174.27 | 174.35 | 174.20 | 174.53 | 174.50 | 174.42 | 174.38 | 174.56 | 174.14 | 174.55 |
| 4 | 174.26 | 174.07 | 174.21 | 174.30 | 174.34 | 174.51 | 174.52 | 174.42 | 174.37 | 174.31 | 174.25 | 174.49 |
| 5 | 174.21 | 174.10 | 174.36 | 174.44 | 174.36 | 174.46 | 174.52 | 174.45 | 174.33 | 174.12 | 174.31 | 174.13 |
| 6 | 174.26 | 174.12 | 174.35 | 174.60 | 174.31 | 174.48 | 174.54 | 174.47 | 174.33 | 174.13 | 174.26 | 174.31 |
| 7 | 174.19 | 174.10 | 174.27 | 174.52 | 174.31 | 174.48 | 174.59 | 174.49 | 174.32 | 174.24 | 174.19 | 174.47 |
| 8 | 174.26 | 174.10 | 174.03 | 174.43 | 174.44 | 174.49 | 174.53 | 174.43 | 174.36 | 174.25 | 174.21 | 174.42 |
| 9 | 174.12 | 174.06 | 174.28 | 174.31 | 174.47 | 174.49 | 174.49 | 174.50 | 174.40 | 174.23 | 174.25 | 174.11 |
| 10 | 174.19 | 174.05 | 174.37 | 174.37 | 174.39 | 174.49 | 174.50 | 174.46 | 174.39 | 174.23 | 174.25 | 174.11 |
| 11 | 174.17 | 174.08 | 174.40 | 174.41 | 174.37 | 174.50 | 174.57 | 174.36 | 174.31 | 174.19 | 174.43 | 174.14 |
| 12 | 174.03 | 174.05 | 174.14 | 174.33 | 174.43 | 174.44 | 174.55 | 174.38 | 174.28 | 174.21 | 174.31 | 174.18 |
| 13 | 174.11 | 174.06 | 174.18 | 174.40 | 174.27 | 174.51 | 174.50 | 174.40 | 174.39 | 174.23 | 174.24 | 174.12 |
| 14 | 174.22 | 174.14 | 174.25 | 174.34 | 174.45 | 174.50 | 174.51 | 174.45 | 174.28 | 174.21 | 174.21 | 173.91 |
| 15 | 174.14 | 174.15 | 174.21 | 174.38 | 174.42 | 174.40 | 174.52 | 174.50 | 174.28 | 174.17 | 174.46 | 174.17 |
| 16 | 174.13 | 174.07 | 174.34 | 174.41 | 174.38 | 174.43 | 174.56 | 174.49 | 174.35 | 174.21 | 174.76 | 174.18 |
| 17 | 174.17 | 174.16 | 174.05 | 174.43 | 174.36 | 174.46 | 174.53 | 174.39 | 174.31 | 174.24 | 174.44 | 174.22 |
| 18 | 174.13 | 174.21 | 174.10 | 174.39 | 174.38 | 174.55 | 174.55 | 174.39 | 174.34 | 174.21 | 174.25 | 174.22 |
| 19 | 174.20 | 174.24 | 174.20 | 174.39 | 174.46 | 174.53 | 174.52 | 174.36 | 174.41 | 174.26 | 174.13 | 174.27 |
| 20 | 174.14 | 174.32 | 174.17 | 174.42 | 174.39 | 174.45 | 174.51 | 174.30 | 174.42 | 174.27 | 174.19 | 174.39 |
| 21 | 174.12 | 174.29 | 174.35 | 174.35 | 174.36 | 174.46 | 174.47 | 174.36 | 174.28 | 174.28 | 174.15 | 174.05 |
| 22 | 174.10 | 174.22 | 174.65 | 174.22 | 174.40 | 174.42 | 174.45 | 174.45 | 174.27 | 174.21 | 174.23 | 174.74 |
| 23 | 174.08 | 174.21 | 174.54 | 174.33 | 174.48 | 174.45 | 174.50 | 174.37 | 174.34 | 174.23 | 174.33 | 174.34 |
| 24 | 174.10 | 174.23 | 174.36 | 174.47 | 174.44 | 174.60 | 174.49 | 174.35 | 174.29 | 174.23 | 174.25 | 174.25 |
| 25 | 174.15 | 174.29 | 174.28 | 174.46 | 174.46 | 174.55 | 174.45 | 174.37 | 174.36 | 174.17 | 174.17 | 174.55 |
| 26 | 174.08 | 174.25 | 174.33 | 174.34 | 174.51 | 174.50 | 174.39 | 174.35 | 174.38 | 174.27 | 174.14 | 174.19 |
| 27 | 174.12 | 173.92 | 174.28 | 174.33 | 174.38 | 174.61 | 174.40 | 174.36 | 174.27 | 174.22 | 174.11 | 174.15 |
| 28 | 174.07 | 173.90 | 174.04 | 174.36 | 174.11 | 174.53 | 174.40 | 174.35 | 174.27 | 174.25 | 174.35 | 174.31 |
| 29 | 174.11 | 174.43 | 174.24 | 174.31 | 174.55 | 174.48 | 174.41 | 174.39 | 174.28 | 174.17 | 174.24 | 174.31 |
| 30 | 174.07 | | 174.45 | 174.61 | 174.50 | 174.44 | 174.42 | 174.44 | 174.20 | 174.22 | 174.21 | 174.20 |
| 31 | 174.11 | | 174.48 | | 174.49 | | 174.42 | 174.42 | | 174.06 | | 174.08 |
| MEAN | 174.15 | 174.14 | 174.29 | 174.40 | 174.40 | 174.49 | 174.49 | 174.41 | 174.33 | 174.23 | 174.27 | 174.26 |
| MAX. | 174.45 | 174.57 | 175.19 | 175.86 | 175.05 | 174.73 | 174.79 | 174.76 | 174.82 | 174.88 | 175.43 | 175.36 |
| | 1000/08 | 0500/20 | 1200/16 | 1632/30 | 0700/01 | 1000/24 | 1100/07 | 0200/09 | 0100/26 | 1300/03 | 0300/16 | 1100/03 |
| MIN. | 173.84 | 173.51 | 173.60 | 174.07 | 173.78 | 174.30 | 174.27 | 174.10 | 174.12 | 173.79 | 173.94 | 173.43 |
| | 1900/12 | 2200/27 | 1500/08 | 1500/22 | 2200/28 | 2200/14 | 0300/27 | 0400/20 | 0100/30 | 0300/21 | 0100/29 | 1100/14 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 174.32

ANNUAL SUMMARY OF LEVELS, 1984
Station 3028: Sturgeon Point, New York on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 174.48 Jul
Daily mean elevation: 174.69 16 Nov
Instant/hourly elevation: 175.53 1700/30 Apr

LOWEST
Monthly mean elevation: 174.15 Feb
Daily mean elevation: 173.93 14 Dec
Instant/hourly elevation: 173.50 1100/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.28 | 6 Jan |
| 174.43 | 29 Feb |
| 174.62 | 22 Mar |
| 174.58 | 30 Apr |
| 174.53 | 29 May |
| 174.59 | 27 Jun |
| 174.57 | 7 Jul |
| 174.48 | 15 Aug |
| 174.39 | 20 Sep |
| 174.50 | 3 Oct |
| 174.69 | 16 Nov |
| 174.66 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.05 | 12 Jan |
| 173.93 | 27 Feb |
| 174.05 | 8 Mar |
| 174.23 | 22 Apr |
| 174.15 | 28 May |
| 174.40 | 15 Jun |
| 174.38 | 26 Jul |
| 174.30 | 20 Aug |
| 174.20 | 30 Sep |
| 174.07 | 31 Oct |
| 174.11 | 27 Nov |
| 173.93 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 174.65 | | | | | | | | | | | 1 | 1 | 174.65 | 2 |
| 174.60 | | | 1 | | | | | | | | | | 174.60 | 3 |
| 174.55 | | | | 2 | | 2 | 1 | | | | | | 174.55 | 8 |
| 174.50 | | | 1 | 1 | 2 | 5 | 10 | | | | | | 174.50 | 27 |
| 174.45 | | | 2 | 2 | 4 | 14 | 12 | 4 | | 1 | | 3 | 174.45 | 69 |
| 174.40 | | 1 | 1 | 9 | 9 | 8 | 4 | 12 | | | 2 | 2 | 174.40 | 117 |
| 174.35 | | | 4 | 7 | 8 | 1 | 4 | 8 | 10 | | 1 | | 174.35 | 160 |
| 174.30 | | 1 | 6 | 8 | 3 | | | 6 | 9 | 1 | 5 | 3 | 174.30 | 202 |
| 174.25 | 5 | 2 | 6 | | 3 | | | 1 | 10 | 5 | 2 | 4 | 174.25 | 240 |
| 174.20 | 4 | 6 | 3 | 1 | 1 | | | | | 17 | 8 | 2 | 174.20 | 282 |
| 174.15 | 5 | 2 | 3 | | | | | | 1 | 4 | 6 | 5 | 174.15 | 308 |
| 174.10 | 10 | 4 | 1 | | 1 | | | | | 2 | 5 | 7 | 174.10 | 338 |
| 174.05 | 6 | 11 | 2 | | | | | | | 1 | | 2 | 174.05 | 360 |
| 174.00 | 1 | | 1 | | | | | | | | | 1 | 174.00 | 363 |
| 173.95 | | 1 | | | | | | | | | | | 173.95 | 364 |
| 173.90 | | 1 | | | | | | | | | | 1 | 173.90 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3028: Sturgeon Point, New York on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 174.21 | 174.07 | 174.43 | 174.45 | 174.52 | 174.48 | 174.47 | 174.42 | 174.36 | 174.21 | 174.31 | 174.42 |
| 2 | 174.27 | 174.06 | 174.33 | 174.46 | 174.30 | 174.44 | 174.48 | 174.41 | 174.37 | 174.32 | 174.32 | 174.12 |
| 3 | 174.28 | 174.13 | 174.27 | 174.37 | 174.21 | 174.53 | 174.49 | 174.41 | 174.39 | 174.50 | 174.14 | 174.49 |
| 4 | 174.28 | 174.08 | 174.21 | 174.32 | 174.35 | 174.49 | 174.50 | 174.41 | 174.37 | 174.30 | 174.22 | 174.46 |
| 5 | 174.23 | 174.11 | 174.36 | 174.45 | 174.35 | 174.46 | 174.51 | 174.43 | 174.32 | 174.14 | 174.30 | 174.12 |
| 6 | 174.28 | 174.12 | 174.35 | 174.58 | 174.32 | 174.47 | 174.53 | 174.45 | 174.32 | 174.14 | 174.27 | 174.31 |
| 7 | 174.21 | 174.10 | 174.28 | 174.52 | 174.30 | 174.47 | 174.57 | 174.47 | 174.32 | 174.24 | 174.19 | 174.41 |
| 8 | 174.27 | 174.10 | 174.05 | 174.44 | 174.42 | 174.49 | 174.51 | 174.42 | 174.34 | 174.25 | 174.20 | 174.34 |
| 9 | 174.14 | 174.07 | 174.28 | 174.33 | 174.44 | 174.49 | 174.47 | 174.48 | 174.38 | 174.23 | 174.23 | 174.10 |
| 10 | 174.20 | 174.07 | 174.36 | 174.38 | 174.38 | 174.48 | 174.48 | 174.44 | 174.36 | 174.23 | 174.25 | 174.12 |
| 11 | 174.17 | 174.09 | 174.40 | 174.41 | 174.36 | 174.49 | 174.55 | 174.36 | 174.31 | 174.20 | 174.41 | 174.14 |
| 12 | 174.05 | 174.06 | 174.16 | 174.34 | 174.42 | 174.43 | 174.53 | 174.37 | 174.27 | 174.21 | 174.31 | 174.15 |
| 13 | 174.12 | 174.07 | 174.19 | 174.41 | 174.28 | 174.49 | 174.49 | 174.39 | 174.38 | 174.23 | 174.25 | 174.12 |
| 14 | 174.24 | 174.15 | 174.26 | 174.35 | 174.43 | 174.49 | 174.49 | 174.43 | 174.29 | 174.22 | 174.19 | 173.93 |
| 15 | 174.15 | 174.16 | 174.22 | 174.38 | 174.42 | 174.40 | 174.51 | 174.48 | 174.29 | 174.17 | 174.41 | 174.17 |
| 16 | 174.15 | 174.09 | 174.35 | 174.41 | 174.38 | 174.42 | 174.53 | 174.47 | 174.34 | 174.21 | 174.69 | 174.16 |
| 17 | 174.17 | 174.17 | 174.07 | 174.42 | 174.36 | 174.44 | 174.53 | 174.39 | 174.30 | 174.24 | 174.40 | 174.20 |
| 18 | 174.14 | 174.21 | 174.13 | 174.39 | 174.37 | 174.53 | 174.53 | 174.37 | 174.33 | 174.21 | 174.24 | 174.21 |
| 19 | 174.20 | 174.25 | 174.22 | 174.39 | 174.44 | 174.51 | 174.51 | 174.37 | 174.38 | 174.26 | 174.14 | 174.26 |
| 20 | 174.14 | 174.32 | 174.18 | 174.42 | 174.40 | 174.45 | 174.49 | 174.30 | 174.39 | 174.26 | 174.19 | 174.35 |
| 21 | 174.13 | 174.30 | 174.34 | 174.36 | 174.36 | 174.46 | 174.46 | 174.34 | 174.28 | 174.28 | 174.15 | 174.05 |
| 22 | 174.10 | 174.23 | 174.62 | 174.23 | 174.41 | 174.42 | 174.44 | 174.43 | 174.27 | 174.22 | 174.23 | 174.66 |
| 23 | 174.09 | 174.23 | 174.53 | 174.34 | 174.47 | 174.44 | 174.48 | 174.36 | 174.32 | 174.23 | 174.31 | 174.29 |
| 24 | 174.10 | 174.25 | 174.37 | 174.46 | 174.42 | 174.59 | 174.48 | 174.34 | 174.29 | 174.22 | 174.23 | 174.23 |
| 25 | 174.16 | 174.30 | 174.30 | 174.44 | 174.44 | 174.53 | 174.43 | 174.35 | 174.34 | 174.17 | 174.16 | 174.49 |
| 26 | 174.08 | 174.25 | 174.35 | 174.35 | 174.49 | 174.49 | 174.38 | 174.34 | 174.38 | 174.28 | 174.15 | 174.18 |
| 27 | 174.12 | 173.93 | 174.31 | 174.34 | 174.38 | 174.59 | 174.40 | 174.35 | 174.27 | 174.22 | 174.11 | 174.15 |
| 28 | 174.07 | 173.97 | 174.09 | 174.36 | 174.15 | 174.51 | 174.39 | 174.35 | 174.27 | 174.25 | 174.31 | 174.28 |
| 29 | 174.12 | 174.43 | 174.28 | 174.31 | 174.53 | 174.47 | 174.39 | 174.37 | 174.28 | 174.17 | 174.23 | 174.28 |
| 30 | 174.07 | | 174.46 | 174.58 | 174.48 | 174.44 | 174.41 | 174.42 | 174.20 | 174.23 | 174.20 | 174.20 |
| 31 | 174.11 | | 174.48 | | 174.48 | | 174.41 | 174.41 | | 174.07 | | 174.09 |
| MEAN | 174.16 | 174.15 | 174.30 | 174.40 | 174.39 | 174.48 | 174.48 | 174.40 | 174.32 | 174.23 | 174.26 | 174.24 |
| MAX. | 174.43 | 174.53 | 175.14 | 175.53 | 174.95 | 174.69 | 174.74 | 174.74 | 174.80 | 174.77 | 175.28 | 175.11 |
| | 1000/08 | 0500/20 | 1200/16 | 1700/30 | 0700/01 | 2000/27 | 2300/06 | 0200/09 | 0100/26 | 1300/03 | 0200/16 | 1300/03 |
| MIN. | 173.86 | 173.59 | 173.67 | 174.03 | 173.96 | 174.33 | 174.28 | 174.10 | 174.14 | 173.86 | 173.98 | 173.50 |
| | 1900/12 | 2100/27 | 1600/08 | 2300/30 | 1900/13 | 2200/14 | 2000/26 | 0400/20 | 0100/30 | 0300/21 | 0100/29 | 1100/14 |

* Indicates Less than 90% of the Hourly Data Available.

ANNUAL MEAN: 174.32

/ Indicates No Data.

ANNUAL SUMMARY OF LEVELS, 1984
Station 3032: Barcelona, New York on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 174.49 Apr
Daily mean elevation: 174.57 16 Nov
Instant/hourly elevation: 175.12 1600/30 Apr

LOWEST
Monthly mean elevation: 174.18 Jan
Daily mean elevation: 173.98 14 Dec
Instant/hourly elevation: 173.62 1100/14 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.28 | 8 Jan |
| | Feb |
| | Mar |
| 174.49 | 30 Apr |
| 174.51 | 29 May |
| 174.57 | 27 Jun |
| 174.54 | 7 Jul |
| 174.46 | 15 Aug |
| 174.39 | 3 Sep |
| 174.44 | 3 Oct |
| 174.57 | 16 Nov |
| 174.52 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.10 | 28 Jan |
| | Feb |
| | Mar |
| 174.49 | 30 Apr |
| 174.21 | 28 May |
| 174.41 | 15 Jun |
| 174.39 | 26 Jul |
| 174.32 | 20 Aug |
| 174.22 | 30 Sep |
| 174.10 | 31 Oct |
| 174.11 | 27 Nov |
| 173.98 | 14 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 174.55 | | | | | | 2 | | | | | 1 | | 174.55 | 3 |
| 174.50 | | | | | 1 | 4 | 8 | | | | | 1 | 174.50 | 17 |
| 174.45 | | | | 1 | 5 | 16 | 14 | 3 | | | | | 174.45 | 56 |
| 174.40 | | | | | 6 | 8 | 6 | 11 | | 1 | | | 174.40 | 88 |
| 174.35 | | | | | 11 | | 3 | 10 | 4 | | 1 | 3 | 174.35 | 120 |
| 174.30 | | | | | 4 | | | 7 | 16 | | 4 | 2 | 174.30 | 153 |
| 174.25 | 5 | | | | 2 | | | | 9 | 5 | 5 | 3 | 174.25 | 182 |
| 174.20 | 6 | | | | 2 | | | | 1 | 19 | 7 | 5 | 174.20 | 222 |
| 174.15 | 8 | | | | | | | | | 4 | 9 | 6 | 174.15 | 249 |
| 174.10 | 11 | | | | | | | | | 1 | 3 | 7 | 174.10 | 271 |
| 174.05 | 1 | | | | | | | | | 1 | | 3 | 174.05 | 276 |
| 174.00 | | | | | | | | | | | | | 174.00 | 276 |
| 173.95 | | | | | | | | | | | | 1 | 173.95 | 277 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3032: Barcelona, New York on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|-----|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 174.23 | / | / | / | 174.46 | 174.47 | 174.47 | 174.42 | 174.35 | 174.23 | 174.27 | 174.35 |
| 2 | 174.26 | / | / | / | 174.30 | 174.45 | 174.48 | 174.41 | 174.35 | 174.30 | 174.31 | 174.13 |
| 3 | 174.27 | / | / | / | 174.24 | 174.51 | 174.49 | 174.42 | 174.39 | 174.44 | 174.14 | 174.39 |
| 4 | 174.28 | / | / | / | 174.35 | 174.48 | 174.49 | 174.41 | 174.37 | 174.29 | 174.21 | 174.39 |
| 5 | 174.24 | / | / | / | 174.34 | 174.46 | 174.51 | 174.43 | 174.34 | 174.17 | 174.28 | 174.13 |
| 6 | 174.26 | / | / | / | 174.32 | 174.47 | 174.52 | 174.44 | 174.33 | 174.15 | 174.26 | 174.29 |
| 7 | 174.25 | / | / | / | 174.32 | 174.47 | 174.54 | 174.46 | 174.31 | 174.24 | 174.20 | 174.34 |
| 8 | 174.28 | / | / | / | 174.40 | 174.48 | 174.50 | 174.41 | 174.32 | 174.24 | 174.20 | 174.27 |
| 9 | 174.22 | / | / | / | 174.41 | 174.48 | 174.47 | 174.46 | 174.35 | 174.24 | 174.21 | 174.10 |
| 10 | 174.21 | / | / | / | 174.37 | 174.48 | 174.49 | 174.44 | 174.33 | 174.23 | 174.23 | 174.10 |
| 11 | 174.20 | / | / | / | 174.36 | 174.48 | 174.53 | 174.37 | 174.32 | 174.21 | 174.36 | 174.14 |
| 12 | 174.14 | / | / | / | 174.40 | 174.44 | 174.51 | 174.38 | 174.28 | 174.22 | 174.32 | 174.14 |
| 13 | 174.12 | / | / | / | 174.30 | 174.48 | 174.49 | 174.40 | 174.36 | 174.24 | 174.25 | 174.12 |
| 14 | 174.24 | / | / | / | 174.41 | 174.48 | 174.49 | 174.43 | 174.30 | 174.22 | 174.20 | 173.98 |
| 15 | 174.19 | / | / | / | 174.41 | 174.41 | 174.50 | 174.46 | 174.32 | 174.19 | 174.33 | 174.17 |
| 16 | 174.16 | / | / | / | 174.38 | 174.43 | 174.51 | 174.45 | 174.33 | 174.21 | 174.57 | 174.15 |
| 17 | 174.18 | / | / | / | 174.36 | 174.45 | 174.51 | 174.39 | 174.31 | 174.24 | 174.34 | 174.18 |
| 18 | 174.16 | / | / | / | 174.38 | 174.52 | 174.52 | 174.38 | 174.32 | 174.22 | 174.21 | 174.19 |
| 19 | 174.20 | / | / | / | 174.42 | 174.51 | 174.49 | 174.39 | 174.34 | 174.25 | 174.16 | 174.25 |
| 20 | 174.20 | / | / | / | 174.39 | 174.46 | 174.48 | 174.32 | 174.35 | 174.26 | 174.19 | 174.29 |
| 21 | 174.14 | / | / | / | 174.37 | 174.46 | 174.45 | 174.34 | 174.27 | 174.26 | 174.16 | 174.07 |
| 22 | 174.12 | / | / | / | 174.40 | 174.43 | 174.44 | 174.42 | 174.26 | 174.21 | 174.21 | 174.52 |
| 23 | 174.11 | / | / | / | 174.46 | 174.45 | 174.46 | 174.37 | 174.30 | 174.23 | 174.26 | 174.24 |
| 24 | 174.11 | / | / | / | 174.43 | 174.57 | 174.47 | 174.35 | 174.29 | 174.22 | 174.19 | 174.22 |
| 25 | 174.16 | / | / | / | 174.44 | 174.53 | 174.43 | 174.35 | 174.34 | 174.19 | 174.16 | 174.39 |
| 26 | 174.13 | / | / | / | 174.48 | 174.50 | 174.39 | 174.34 | 174.37 | 174.26 | 174.15 | 174.17 |
| 27 | 174.12 | / | / | / | 174.39 | 174.57 | 174.40 | 174.35 | 174.28 | 174.22 | 174.11 | 174.16 |
| 28 | 174.10 | / | / | / | 174.21 | 174.50 | 174.40 | 174.34 | 174.26 | 174.24 | 174.28 | 174.24 |
| 29 | 174.13 | / | / | / | 174.51 | 174.48 | 174.41 | 174.36 | 174.28 | 174.18 | 174.21 | 174.25 |
| 30 | 174.12 | | / | 174.49 | 174.48 | 174.45 | 174.41 | 174.40 | 174.22 | 174.21 | 174.19 | 174.19 |
| 31 | 174.14 | | / | | 174.48 | | 174.41 | 174.40 | | 174.10 | | 174.11 |
| MEAN | 174.18 | / | / | 174.49 | 174.39 | 174.48 | 174.47 | 174.40 | 174.32 | 174.23 | 174.24 | 174.21 |
| MAX. | 174.34 | | | 175.12 | 174.79 | 174.65 | 174.70 | 174.74 | 174.71 | 174.67 | 175.03 | 174.88 |
| | 1500/08 | | | 1600/30 | 0600/01 | 2200/27 | 2300/06 | 0200/09 | 0200/26 | 1300/03 | 0200/16 | 1200/03 |
| MIN. | 174.01 | | | 174.13 | 174.00 | 174.33 | 174.28 | 174.13 | 174.15 | 173.96 | 174.02 | 173.62 |
| | 0100/13 | | | 2200/30 | 1900/13 | 0200/23 | 1900/26 | 0300/20 | 0200/30 | 0200/21 | 0100/29 | 1100/14 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 174.34

ANNUAL SUMMARY OF LEVELS, 1984
Station 3038: Erie, Pennsylvania on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 174.47 Apr
Daily mean elevation: 174.51 16 Nov
Instant/hourly elevation: 174.86 0200/16 Nov

LOWEST
Monthly mean elevation: 174.12 Feb
Daily mean elevation: 174.09 10 Feb
Instant/hourly elevation: 173.98 1900/12 Jan

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.26 | 6 Jan |
| 174.18 | 15 Feb |
| 174.48 | 31 Mar |
| 174.47 | 2 Apr |
| | May |
| | Jun |
| 174.44 | 31 Jul |
| 174.47 | 15 Aug |
| 174.40 | 4 Sep |
| 174.41 | 3 Oct |
| 174.51 | 16 Nov |
| 174.44 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.11 | 12 Jan |
| 174.09 | 10 Feb |
| 174.24 | 28 Mar |
| 174.47 | 2 Apr |
| | May |
| | Jun |
| 174.43 | 30 Jul |
| 174.36 | 28 Aug |
| 174.26 | 30 Sep |
| 174.15 | 31 Oct |
| 174.14 | 27 Nov |
| 174.10 | 21 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 174.50 | | | | | | | | | | | 1 | | 174.50 | 1 |
| 174.45 | | | 2 | 2 | | | | 4 | | | | | 174.45 | 9 |
| 174.40 | | | | | | | 2 | 16 | | 1 | | 1 | 174.40 | 29 |
| 174.35 | | | 3 | | | | | 10 | 8 | | | 2 | 174.35 | 52 |
| 174.30 | | | | | | | | | 16 | 1 | 4 | 3 | 174.30 | 76 |
| 174.25 | 1 | | | | | | | | 6 | 12 | 6 | 2 | 174.25 | 103 |
| 174.20 | 10 | | 1 | | | | | | | 14 | 11 | 8 | 174.20 | 147 |
| 174.15 | 10 | 3 | | | | | | | | 2 | 7 | 8 | 174.15 | 177 |
| 174.10 | 9 | 9 | | | | | | | | 1 | 1 | 5 | 174.10 | 202 |
| 174.05 | | 4 | | | | | | | | | | 1 | 174.05 | 207 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3038: Erie, Pennsylvania on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|-----|-----|---------|---------|---------|---------|---------|---------|
| 1 | 174.23 | 174.12 | / | 174.47 | / | / | / | 174.44 | 174.38 | 174.27 | 174.27 | 174.33 |
| 2 | 174.25 | 174.11 | / | 174.47* | / | / | / | 174.44 | 174.38 | 174.33 | 174.31 | 174.15 |
| 3 | 174.25 | 174.15 | / | / | / | / | / | 174.43 | 174.40 | 174.41 | 174.17 | 174.35 |
| 4 | 174.25 | 174.11 | / | / | / | / | / | 174.43 | 174.40 | 174.29 | 174.21 | 174.36 |
| 5 | 174.22 | 174.12 | / | / | / | / | / | 174.44 | 174.37 | 174.20 | 174.29 | 174.16 |
| 6 | 174.26 | 174.13 | / | / | / | / | / | 174.45 | 174.35 | 174.19 | 174.29 | 174.30 |
| 7 | 174.22 | 174.12 | / | / | / | / | / | 174.46 | 174.33 | 174.26 | 174.22 | 174.31 |
| 8 | 174.25* | 174.12 | / | / | / | / | / | 174.43 | 174.33 | 174.26 | 174.21 | 174.22 |
| 9 | 174.13* | 174.10 | / | / | / | / | / | / | 174.34 | 174.26 | 174.21 | 174.13 |
| 10 | 174.21 | 174.09 | / | / | / | / | / | 174.46* | 174.33 | 174.26 | 174.23 | 174.14 |
| 11 | 174.19 | 174.11 | / | / | / | / | / | 174.41 | 174.34 | 174.24 | 174.34 | 174.15 |
| 12 | 174.11 | 174.10 | / | / | / | / | / | 174.42 | 174.31 | 174.25 | 174.35 | 174.15* |
| 13 | 174.16 | 174.10 | / | / | / | / | / | 174.44 | 174.36 | 174.26 | 174.28 | 174.16 |
| 14 | 174.22 | 174.17 | / | / | / | / | / | 174.45 | 174.33 | 174.25 | 174.22 | / |
| 15 | 174.17 | 174.18 | / | / | / | / | / | 174.47 | 174.35 | 174.21 | 174.29 | 174.18 |
| 16 | 174.17 | 174.16* | / | / | / | / | / | 174.46 | 174.36 | 174.24 | 174.51 | 174.16 |
| 17 | 174.20 | / | / | / | / | / | / | 174.42 | 174.32 | 174.27 | 174.33 | 174.19 |
| 18 | 174.18 | / | / | / | / | / | / | 174.42 | 174.33 | 174.25 | 174.21 | 174.21 |
| 19 | 174.23 | / | / | / | / | / | / | 174.43 | 174.35 | 174.27 | 174.19 | 174.23 |
| 20 | 174.18 | / | / | / | / | / | / | 174.37 | 174.35 | 174.27 | 174.22 | 174.28 |
| 21 | 174.17* | / | / | / | / | / | / | 174.39 | 174.29 | 174.27 | 174.19 | 174.10 |
| 22 | / | / | / | / | / | / | / | 174.43 | 174.29 | 174.24 | 174.22 | 174.44 |
| 23 | 174.15* | / | / | / | / | / | / | 174.39 | 174.32 | 174.25 | 174.24 | 174.22 |
| 24 | 174.15 | / | / | / | / | / | / | 174.38 | 174.31 | 174.25 | 174.20 | 174.22 |
| 25 | 174.18 | / | / | / | / | / | / | 174.39 | 174.33 | 174.22 | 174.17 | 174.36 |
| 26 | 174.14 | / | 174.40* | / | / | / | / | 174.37 | 174.38 | 174.28 | 174.17 | 174.17 |
| 27 | 174.15 | / | 174.38 | / | / | / | / | 174.37 | 174.29 | 174.24 | 174.14 | 174.17* |
| 28 | 174.13 | / | 174.24 | / | / | / | / | 174.36 | 174.29 | 174.25 | 174.26 | 174.23 |
| 29 | 174.16 | / | 174.39 | / | / | / | / | 174.37 | 174.30 | 174.21 | 174.22 | 174.24 |
| 30 | 174.13 | | 174.47 | / | / | / | 174.43* | 174.38 | 174.26 | 174.24 | 174.18 | 174.22* |
| 31 | 174.14 | | 174.48 | / | / | | 174.44 | 174.41 | | 174.15 | | 174.16 |
| MEAN | 174.19 | 174.12 | 174.39 | 174.47 | / | / | 174.44 | 174.42 | 174.34 | 174.25 | 174.24 | 174.22 |
| MAX. | 174.34 | 174.23 | 174.53 | 174.49 | | | 174.46 | 174.58 | 174.72 | 174.54 | 174.86 | 174.77 |
| | 1100/08 | 1100/15 | 1300/30 | 0300/02 | | | 1500/31 | 0500/07 | 0300/26 | 1200/03 | 0200/16 | 1300/03 |
| MIN. | 173.98 | 174.05 | 174.05 | 174.45 | | | 174.40 | 174.16 | 174.20 | 174.03 | 174.07 | 173.99 |
| | 1900/12 | 0400/12 | 0100/29 | 0800/02 | | | 2300/30 | 1100/30 | 0200/30 | 0300/21 | 2400/28 | 0600/21 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 174.31

ANNUAL SUMMARY OF LEVELS, 1984
Station 3053: Fairport Harbor, Ohio on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 174.52 Jun
Daily mean elevation: 174.55 29 Jun
Instant/hourly elevation: 174.75 2300/28 May

LOWEST
Monthly mean elevation: 174.17 Dec
Daily mean elevation: 174.10 8 Dec
Instant/hourly elevation: 173.97 1400/3 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.26 | 1 Jan |
| 174.40 | 28 Feb |
| 174.51 | 29 Mar |
| 174.51 | 7 Apr |
| 174.53 | 28 May |
| 174.55 | 29 Jun |
| 174.53 | 13 Jul |
| 174.48 | 11 Aug |
| 174.41 | 4 Sep |
| 174.35 | 1 Oct |
| 174.32 | 12 Nov |
| 174.26 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.14 | 31 Jan |
| 174.13 | 10 Feb |
| 174.30 | 10 Mar |
| 174.35 | 30 Apr |
| 174.35 | 1 May |
| 174.49 | 13 Jun |
| 174.44 | 31 Jul |
| 174.36 | 29 Aug |
| 174.31 | 9 Sep |
| 174.25 | 30 Oct |
| 174.17 | 30 Nov |
| 174.10 | 8 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 174.50        |     |     | 1   | 1   | 1   | 18  | 18  |     |     |     |     |     | 174.50        | 39                         |
| 174.45        |     |     | 3   | 14  | 8   | 12  | 11  | 9   |     |     |     |     | 174.45        | 96                         |
| 174.40        |     |     | 5   | 10  | 7   |     | 2   | 14  | 2   |     |     |     | 174.40        | 136                        |
| 174.35        |     | 1   | 4   | 4   | 14  |     |     | 8   | 8   |     |     |     | 174.35        | 175                        |
| 174.30        |     | 2   | 16  | 1   | 1   |     |     |     | 20  | 2   | 1   |     | 174.30        | 218                        |
| 174.25        | 1   | 7   | 2   |     |     |     |     |     |     | 25  | 4   | 1   | 174.25        | 258                        |
| 174.20        | 13  | 5   |     |     |     |     |     |     |     | 4   | 12  | 3   | 174.20        | 295                        |
| 174.15        | 12  | 2   |     |     |     |     |     |     |     |     | 13  | 19  | 174.15        | 341                        |
| 174.10        | 5   | 12  |     |     |     |     |     |     |     |     |     | 7   | 174.10        | 365                        |
| 174.05        |     |     |     |     |     |     |     |     |     |     |     | 1   | 174.05        | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3053: Fairport Harbor, Ohio on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 174.26  | 174.14  | 174.30  | 174.47  | 174.35  | 174.50  | 174.52  | 174.44  | 174.39  | 174.35  | 174.24  | 174.17  |
| 2    | 174.25  | 174.13  | 174.31  | 174.47  | 174.36  | 174.50  | 174.52  | 174.44  | 174.39  | 174.31  | 174.25  | 174.17  |
| 3    | 174.23  | 174.13  | 174.32  | 174.49  | 174.39  | 174.51  | 174.51  | 174.45  | 174.41  | 174.27  | 174.21  | 174.15  |
| 4    | 174.23  | 174.14  | 174.32  | 174.50  | 174.39  | 174.50  | 174.51  | 174.45  | 174.41  | 174.29  | 174.20  | 174.15  |
| 5    | 174.23  | 174.14  | 174.32  | 174.50  | 174.37  | 174.51  | 174.51  | 174.45  | 174.40  | 174.30  | 174.26  | 174.17  |
| 6    | 174.23  | 174.14  | 174.32  | 174.50  | 174.38  | 174.51  | 174.53  | 174.45  | 174.37  | 174.29  | 174.27  | 174.23  |
| 7    | 174.23  | 174.14  | 174.33  | 174.51  | 174.38  | 174.51  | 174.53  | 174.46  | 174.33  | 174.28  | 174.24  | 174.13  |
| 8    | 174.22  | 174.14  | 174.35  | 174.50  | 174.39  | 174.50  | 174.51  | 174.46  | 174.33  | 174.28  | 174.21  | 174.10  |
| 9    | 174.23  | 174.14  | 174.32  | 174.49  | 174.39  | 174.50  | 174.51  | 174.46  | 174.31  | 174.29  | 174.18  | 174.14  |
| 10   | 174.23  | 174.13  | 174.30  | 174.49  | 174.39  | 174.50  | 174.52  | 174.46  | 174.32  | 174.29  | 174.20  | 174.17  |
| 11   | 174.22  | 174.14  | 174.31  | 174.48  | 174.39  | 174.50  | 174.51  | 174.48  | 174.36  | 174.29  | 174.27  | 174.16  |
| 12   | 174.23  | 174.14  | 174.31  | 174.47  | 174.39  | 174.50  | 174.52  | 174.47  | 174.37  | 174.28  | 174.32  | 174.13  |
| 13   | 174.23  | 174.16  | 174.33  | 174.46  | 174.41  | 174.49  | 174.53  | 174.47  | 174.35  | 174.28  | 174.28  | 174.17  |
| 14   | 174.20  | 174.19  | 174.31  | 174.47  | 174.40  | 174.50  | 174.51  | 174.46  | 174.38  | 174.27  | 174.22  | 174.22  |
| 15   | 174.21  | 174.22  | 174.31  | 174.46  | 174.42  | 174.50  | 174.51  | 174.45  | 174.39  | 174.29  | 174.20  | 174.18  |
| 16   | 174.19  | 174.23  | 174.33  | 174.44  | 174.41  | 174.50  | 174.51  | 174.45  | 174.35  | 174.29  | 174.21  | 174.17  |
| 17   | 174.18  | 174.25  | 174.35  | 174.44  | 174.40  | 174.51  | 174.52  | 174.44  | 174.35  | 174.29  | 174.23  | 174.17  |
| 18   | 174.19  | 174.25  | 174.38  | 174.43  | 174.42  | 174.51  | 174.51  | 174.44  | 174.34  | 174.28  | 174.21  | 174.19  |
| 19   | 174.17  | 174.26  | 174.35  | 174.42  | 174.39  | 174.54  | 174.50  | 174.47  | 174.32  | 174.28  | 174.25  | 174.18  |
| 20   | 174.17  | 174.25  | 174.37  | 174.41  | 174.44  | 174.54  | 174.49  | 174.44  | 174.32  | 174.26  | 174.24  | 174.16  |
| 21   | 174.16  | 174.26  | 174.37  | 174.41  | 174.44  | 174.53  | 174.49  | 174.41  | 174.32  | 174.27  | 174.22  | 174.18  |
| 22   | 174.16  | 174.27  | 174.38  | 174.39  | 174.44  | 174.52  | 174.49  | 174.40  | 174.33  | 174.28  | 174.19  | 174.15  |
| 23   | 174.16  | 174.27  | 174.42  | 174.42  | 174.47  | 174.54  | 174.47  | 174.43  | 174.32  | 174.27  | 174.17  | 174.15  |
| 24   | 174.16  | 174.27  | 174.42  | 174.41  | 174.47  | 174.54  | 174.48  | 174.40  | 174.32  | 174.26  | 174.17  | 174.19  |
| 25   | 174.15  | 174.33  | 174.44  | 174.40  | 174.46  | 174.54  | 174.47  | 174.39  | 174.33  | 174.26  | 174.18  | 174.17  |
| 26   | 174.16  | 174.28  | 174.43  | 174.42  | 174.48  | 174.54  | 174.46  | 174.39  | 174.35  | 174.25  | 174.18  | 174.17  |
| 27   | 174.15  | 174.29  | 174.45  | 174.42  | 174.49  | 174.53  | 174.49  | 174.38  | 174.32  | 174.25  | 174.17  | 174.19  |
| 28   | 174.15  | 174.40  | 174.48  | 174.39  | 174.53  | 174.53  | 174.47  | 174.37  | 174.32  | 174.25  | 174.18  | 174.18  |
| 29   | 174.15  | 174.35  | 174.51  | 174.38  | 174.49  | 174.55  | 174.46  | 174.36  | 174.32  | 174.26  | 174.19  | 174.18  |
| 30   | 174.16  |         | 174.47  | 174.35  | 174.50  | 174.54  | 174.45  | 174.38  | 174.34  | 174.25  | 174.17  | 174.23  |
| 31   | 174.14  |         | 174.47  |         | 174.50  |         | 174.44  | 174.41  |         | 174.27  |         | 174.26  |
| MEAN | 174.19  | 174.21  | 174.37  | 174.45  | 174.42  | 174.52  | 174.50  | 174.43  | 174.35  | 174.28  | 174.22  | 174.17  |
| MAX. | 174.30  | 174.48  | 174.59  | 174.57  | 174.75  | 174.68  | 174.63  | 174.63  | 174.55  | 174.40  | 174.47  | 174.34  |
|      | 0200/13 | 1400/28 | 0300/29 | 2300/04 | 2300/28 | 2200/24 | 2200/06 | 1500/30 | 2200/25 | 1900/21 | 2100/01 | 1300/19 |
| MIN. | 174.11  | 174.09  | 174.22  | 174.20  | 174.25  | 174.42  | 174.42  | 174.12  | 174.25  | 174.18  | 174.02  | 173.97  |
|      | 0300/29 | 0600/03 | 1300/16 | 1700/30 | 0900/01 | 2100/13 | 0900/11 | 1600/30 | 1300/20 | 1100/21 | 2000/28 | 1400/03 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 174.34

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3063: Cleveland, Ohio on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 174.50 Jun  
Daily mean elevation: 174.57 28 May  
Instant/hourly elevation: 174.70 0400/29 Mar

LOWEST  
Monthly mean elevation: 174.14 Dec  
Daily mean elevation: 174.04 8 Dec  
Instant/hourly elevation: 173.87 1300/3 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.25 | 12 Jan |
| 174.52 | 28 Feb |
| 174.55 | 29 Mar |
| 174.53 | 9 Apr  |
| 174.57 | 28 May |
| 174.55 | 20 Jun |
| 174.51 | 13 Jul |
| 174.49 | 19 Aug |
| 174.42 | 3 Sep  |
| 174.36 | 1 Oct  |
| 174.29 | 12 Nov |
| 174.28 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.13 | 31 Jan |
| 174.10 | 3 Feb  |
| 174.26 | 10 Mar |
| 174.27 | 30 Apr |
| 174.32 | 1 May  |
| 174.47 | 13 Jun |
| 174.43 | 31 Jul |
| 174.36 | 29 Aug |
| 174.26 | 9 Sep  |
| 174.21 | 3 Oct  |
| 174.12 | 16 Nov |
| 174.04 | 8 Dec  |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 174.55 | | | | | 1 | | | | | | | | 174.55 | 1 |
| 174.50 | | 1 | 2 | 5 | | 11 | 3 | | | | | | 174.50 | 23 |
| 174.45 | | | 4 | 9 | 6 | 19 | 25 | 7 | | | | | 174.45 | 93 |
| 174.40 | | | 5 | 7 | 6 | | 3 | 16 | 2 | | | | 174.40 | 132 |
| 174.35 | | 2 | 4 | 8 | 16 | | | 8 | 6 | 1 | | | 174.35 | 177 |
| 174.30 | | 1 | 9 | | 2 | | | | 16 | 2 | | | 174.30 | 207 |
| 174.25 | | 3 | 7 | 1 | | | | | 6 | 18 | 3 | 1 | 174.25 | 246 |
| 174.20 | 9 | 8 | | | | | | | | 10 | 8 | 2 | 174.20 | 283 |
| 174.15 | 10 | 1 | | | | | | | | | 13 | 10 | 174.15 | 317 |
| 174.10 | 12 | 12 | | | | | | | | | 6 | 10 | 174.10 | 357 |
| 174.05 | | 1 | | | | | | | | | | 6 | 174.05 | 364 |
| 174.00 | | | | | | | | | | | | 2 | 174.00 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3063: Cleveland, Ohio on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 174.25 | 174.13 | 174.31 | 174.47 | 174.32 | 174.49 | 174.51 | 174.43 | 174.38 | 174.36 | 174.18 | 174.11 |
| 2 | 174.23 | 174.12 | 174.31 | 174.46 | 174.36 | 174.50 | 174.49 | 174.43 | 174.35 | 174.30 | 174.25 | 174.17 |
| 3 | 174.19 | 174.10 | 174.32 | 174.49 | 174.39 | 174.48 | 174.49 | 174.43 | 174.42 | 174.21 | 174.21 | 174.10 |
| 4 | 174.18 | 174.12 | 174.32 | 174.52 | 174.39 | 174.49 | 174.48 | 174.44 | 174.41 | 174.28 | 174.16 | 174.09 |
| 5 | 174.19 | 174.14 | 174.29 | 174.51 | 174.36 | 174.50 | 174.49 | 174.43 | 174.40 | 174.31 | 174.25 | 174.17 |
| 6 | 174.21 | 174.14 | 174.30 | 174.48 | 174.37 | 174.48 | 174.49 | 174.42 | 174.37 | 174.31 | 174.26 | 174.19 |
| 7 | 174.22 | 174.14 | 174.34 | 174.50 | 174.38 | 174.49 | 174.51 | 174.43 | 174.31 | 174.26 | 174.23 | 174.04 |
| 8 | 174.20 | 174.11 | 174.42 | 174.51 | 174.36 | 174.48 | 174.50 | 174.46 | 174.30 | 174.26 | 174.17 | 174.04 |
| 9 | 174.22 | 174.12 | 174.30 | 174.53 | 174.35 | 174.49 | 174.48 | 174.44 | 174.26 | 174.28 | 174.15 | 174.14 |
| 10 | 174.23 | 174.11 | 174.26 | 174.51 | 174.37 | 174.49 | 174.49 | 174.45 | 174.31 | 174.28 | 174.16 | 174.15 |
| 11 | 174.22 | 174.12 | 174.29 | 174.48 | 174.37 | 174.49 | 174.49 | 174.49 | 174.35 | 174.29 | 174.23 | 174.14 |
| 12 | 174.25 | 174.14 | 174.32 | 174.49 | 174.38 | 174.49 | 174.50 | 174.48 | 174.36 | 174.28 | 174.29 | 174.10 |
| 13 | 174.23 | 174.14 | 174.35 | 174.46 | 174.42 | 174.47 | 174.51 | 174.48 | 174.32 | 174.27 | 174.27 | 174.17 |
| 14 | 174.19 | 174.18 | 174.31 | 174.46 | 174.38 | 174.49 | 174.50 | 174.46 | 174.38 | 174.27 | 174.20 | 174.24 |
| 15 | 174.20 | 174.21 | 174.30 | 174.44 | 174.40 | 174.50 | 174.48 | 174.44 | 174.40 | 174.30 | 174.12 | 174.17 |
| 16 | 174.19 | 174.24 | 174.31 | 174.44 | 174.40 | 174.48 | 174.49 | 174.44 | 174.35 | 174.29 | 174.12 | 174.15 |
| 17 | 174.16 | 174.24 | 174.40 | 174.42 | 174.39 | 174.49 | 174.47 | 174.45 | 174.34 | 174.28 | 174.18 | 174.16 |
| 18 | 174.18 | 174.23 | 174.42 | 174.43 | 174.39 | 174.49 | 174.49 | 174.44 | 174.32 | 174.28 | 174.20 | 174.17 |
| 19 | 174.14 | 174.24 | 174.36 | 174.41 | 174.37 | 174.53 | 174.48 | 174.49 | 174.30 | 174.25 | 174.25 | 174.15 |
| 20 | 174.14 | 174.23 | 174.40 | 174.40 | 174.42 | 174.55 | 174.47 | 174.46 | 174.28 | 174.25 | 174.24 | 174.11 |
| 21 | 174.14 | 174.24 | 174.36 | 174.40 | 174.44 | 174.53 | 174.48 | 174.41 | 174.32 | 174.25 | 174.22 | 174.18 |
| 22 | 174.15 | 174.25 | 174.30 | 174.40 | 174.42 | 174.53 | 174.48 | 174.38 | 174.32 | 174.28 | 174.17 | 174.07 |
| 23 | 174.15 | 174.26 | 174.41 | 174.41 | 174.45 | 174.53 | 174.45 | 174.44 | 174.29 | 174.26 | 174.13 | 174.10 |
| 24 | 174.15 | 174.27 | 174.42 | 174.40 | 174.47 | 174.51 | 174.46 | 174.41 | 174.31 | 174.25 | 174.16 | 174.16 |
| 25 | 174.13 | 174.33 | 174.47 | 174.39 | 174.44 | 174.53 | 174.46 | 174.39 | 174.30 | 174.25 | 174.17 | 174.08 |
| 26 | 174.15 | 174.28 | 174.45 | 174.41 | 174.46 | 174.53 | 174.46 | 174.39 | 174.35 | 174.23 | 174.17 | 174.14 |
| 27 | 174.14 | 174.36 | 174.46 | 174.39 | 174.49 | 174.49 | 174.48 | 174.37 | 174.32 | 174.24 | 174.17 | 174.17 |
| 28 | 174.14 | 174.52 | 174.55 | 174.37 | 174.57 | 174.52 | 174.47 | 174.37 | 174.32 | 174.24 | 174.15 | 174.13 |
| 29 | 174.13 | 174.38 | 174.55 | 174.39 | 174.48 | 174.53 | 174.46 | 174.36 | 174.32 | 174.27 | 174.17 | 174.15 |
| 30 | 174.17 | | 174.46 | 174.27 | 174.49 | 174.53 | 174.44 | 174.37 | 174.35 | 174.23 | 174.14 | 174.22 |
| 31 | 174.13 | | 174.46 | | 174.49 | | 174.43 | 174.40 | | 174.28 | | 174.28 |
| MEAN | 174.18 | 174.21 | 174.37 | 174.44 | 174.41 | 174.50 | 174.48 | 174.43 | 174.34 | 174.27 | 174.19 | 174.14 |
| MAX. | 174.33 | 174.60 | 174.70 | 174.59 | 174.70 | 174.64 | 174.60 | 174.66 | 174.57 | 174.43 | 174.41 | 174.39 |
| | 2300/12 | 1300/28 | 0400/29 | 0100/05 | 2200/28 | 2000/13 | 2000/06 | 2000/18 | 2100/02 | 2100/03 | 2200/01 | 1100/14 |
| MIN. | 174.07 | 174.07 | 174.13 | 174.10 | 174.12 | 174.38 | 174.38 | 174.23 | 174.18 | 174.08 | 173.88 | 173.87 |
| | 2000/19 | 0700/03 | 1500/16 | 1800/30 | 0800/01 | 2400/13 | 1900/05 | 0600/29 | 1000/02 | 1100/21 | 0200/16 | 1300/03 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 174.33

ANNUAL SUMMARY OF LEVELS, 1984
Station 3079: Marblehead, Ohio on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 174.52 Jun
Daily mean elevation: 174.76 28 May
Instant/hourly elevation: 174.99 1500/28 May

LOWEST
Monthly mean elevation: 174.11 Dec
Daily mean elevation: 173.74 16 Nov
Instant/hourly elevation: 173.48 1400/3 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| | Jan |
| | Feb |
| 174.53 | 25 Mar |
| 174.55 | 22 Apr |
| 174.76 | 28 May |
| 174.60 | 22 Jun |
| 174.54 | 1 Jul |
| 174.52 | 20 Aug |
| 174.42 | 14 Sep |
| 174.42 | 1 Oct |
| 174.28 | 19 Nov |
| 174.35 | 14 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| | Jan |
| | Feb |
| 174.12 | 22 Mar |
| 174.12 | 30 Apr |
| 174.20 | 1 May |
| 174.42 | 27 Jun |
| 174.45 | 31 Jul |
| 174.35 | 22 Aug |
| 174.25 | 9 Sep |
| 174.11 | 3 Oct |
| 173.74 | 16 Nov |
| 173.85 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 174.75        |     |     |     |     | 1   |     |     |     |     |     |     |     | 174.75        | 1                          |
| 174.70        |     |     |     |     |     |     |     |     |     |     |     |     | 174.70        | 1                          |
| 174.65        |     |     |     |     |     |     |     |     |     |     |     |     | 174.65        | 1                          |
| 174.60        |     |     |     |     |     |     |     |     |     |     |     |     | 174.60        | 1                          |
| 174.55        |     |     |     |     |     | 8   |     |     |     |     |     |     | 174.55        | 9                          |
| 174.50        |     |     | 2   | 3   | 1   | 10  | 7   | 3   |     |     |     |     | 174.50        | 35                         |
| 174.45        |     |     | 1   | 4   | 7   | 11  | 21  | 9   |     |     |     |     | 174.45        | 88                         |
| 174.40        |     |     | 3   | 9   | 7   | 1   | 3   | 11  | 2   | 1   |     |     | 174.40        | 125                        |
| 174.35        |     |     | 3   | 3   | 11  |     |     | 7   | 9   | 3   |     |     | 174.35        | 161                        |
| 174.30        |     |     | 5   | 1   | 2   |     |     | 1   | 11  | 6   |     | 2   | 174.30        | 189                        |
| 174.25        |     |     | 1   |     |     |     |     |     | 7   | 13  | 2   |     | 174.25        | 212                        |
| 174.20        |     |     |     |     |     |     |     |     | 1   | 7   | 7   | 3   | 174.20        | 230                        |
| 174.15        |     |     | 2   |     | 1   |     |     |     |     |     | 11  | 7   | 174.15        | 251                        |
| 174.10        |     |     | 1   | 1   |     |     |     |     |     | 1   | 5   | 7   | 174.10        | 266                        |
| 174.05        |     |     |     |     |     |     |     |     |     |     | 2   | 4   | 174.05        | 272                        |
| 174.00        |     |     |     |     |     |     |     |     |     |     | 2   | 1   | 174.00        | 275                        |
| 173.95        |     |     |     |     |     |     |     |     |     |     |     | 2   | 173.95        | 277                        |
| 173.90        |     |     |     |     |     |     |     |     |     |     |     | 4   | 173.90        | 281                        |
| 173.85        |     |     |     |     |     |     |     |     |     |     |     |     | 173.85        | 281                        |
| 173.80        |     |     |     |     |     |     |     |     |     |     |     | 1   | 173.80        | 282                        |
| 173.75        |     |     |     |     |     |     |     |     |     |     |     |     | 173.75        | 282                        |
| 173.70        |     |     |     |     |     |     |     |     |     |     | 1   |     | 173.70        | 283                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3079: Marblehead, Ohio on Lake Erie

| Day  | Jan | Feb | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|-----|-----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | /   | /   | /       | /       | 174.20  | 174.49  | 174.54  | 174.45  | 174.39  | 174.42  | 174.14  | 173.99  |
| 2    | /   | /   | /       | /       | 174.39  | 174.53  | 174.52  | 174.45  | 174.35  | 174.27  | 174.18  | 174.22  |
| 3    | /   | /   | /       | /       | 174.48  | 174.48  | 174.51  | 174.46  | 174.39  | 174.11  | 174.27  | 173.92  |
| 4    | /   | /   | /       | /       | 174.37  | 174.50  | 174.50  | 174.47  | 174.38  | 174.28  | 174.17  | 173.94  |
| 5    | /   | /   | /       | /       | 174.37  | 174.51  | 174.49  | 174.44  | 174.42  | 174.38  | 174.18  | 174.19  |
| 6    | /   | /   | /       | /       | 174.40  | 174.51  | 174.49  | 174.42  | 174.38  | 174.39  | 174.22  | 174.06  |
| 7    | /   | /   | /       | /       | 174.41  | 174.50  | 174.50  | 174.42  | 174.32  | 174.28  | 174.23  | 173.91  |
| 8    | /   | /   | /       | /       | 174.33  | 174.47  | 174.51  | 174.46  | 174.30  | 174.28  | 174.17  | 173.96  |
| 9    | /   | /   | 174.28* | /       | 174.31  | 174.49  | 174.50  | 174.43  | 174.25  | 174.30  | 174.15  | 174.16  |
| 10   | /   | /   | 174.17  | 174.49* | 174.38  | 174.49  | 174.50  | 174.46  | 174.31  | 174.31  | 174.17  | 174.17  |
| 11   | /   | /   | 174.17  | 174.49  | 174.38  | 174.49  | 174.48  | 174.52  | 174.36  | 174.33  | 174.16  | 174.15  |
| 12   | /   | /   | 174.40  | 174.53  | 174.37  | 174.51  | 174.50  | 174.50  | 174.39  | 174.31  | 174.18  | 174.13  |
| 13   | /   | /   | 174.37  | 174.46  | 174.49  | 174.47  | 174.52  | 174.49  | 174.30  | 174.29  | 174.22  | 174.20  |
| 14   | /   | /   | 174.32  | 174.51  | 174.39  | 174.53  | 174.51  | 174.46  | 174.42  | 174.30  | 174.21  | 174.35  |
| 15   | /   | /   | 174.34  | 174.47  | 174.40  | 174.57  | 174.47  | 174.42  | 174.40  | 174.34  | 174.02  | 174.19  |
| 16   | /   | /   | 174.32  | 174.45  | 174.42  | 174.53  | 174.48  | 174.44  | 174.35  | 174.30  | 173.74* | 174.16  |
| 17   | /   | /   | 174.51  | 174.42  | 174.42  | 174.51  | 174.45  | 174.47  | 174.35  | 174.29  | 174.09  | 174.15  |
| 18   | /   | /   | 174.44  | 174.44  | 174.38  | 174.49  | 174.47  | 174.45  | 174.33  | 174.32  | 174.20  | 174.15  |
| 19   | /   | /   | 174.40  | 174.42  | 174.38  | 174.56  | 174.48  | 174.52  | 174.28  | 174.24  | 174.28  | 174.09  |
| 20   | /   | /   | 174.45  | 174.40  | 174.42  | 174.60  | 174.46  | 174.52  | 174.28  | 174.25  | 174.22  | 174.04  |
| 21   | /   | /   | 174.32  | 174.43  | 174.46  | 174.58  | 174.48  | 174.43  | 174.37  | 174.22  | 174.22  | 174.25  |
| 22   | /   | /   | 174.12  | 174.55  | 174.43* | 174.60  | 174.49  | 174.35  | 174.34  | 174.28  | 174.14  | 173.85  |
| 23   | /   | /   | 174.34  | 174.44  | /       | 174.56  | 174.45  | 174.46  | 174.29  | 174.27  | 174.08  | 174.07  |
| 24   | /   | /   | 174.43  | 174.35  | 174.47* | 174.49  | 174.46  | 174.43  | 174.32  | 174.26  | 174.16  | 174.13  |
| 25   | /   | /   | 174.53  | 174.39  | 174.44  | 174.55  | 174.48  | 174.40  | 174.26  | 174.28  | 174.18  | 173.95  |
| 26   | /   | /   | 174.48  | 174.43  | 174.45  | 174.55  | 174.53  | 174.40  | 174.30  | 174.21  | 174.19  | 174.14  |
| 27   | /   | /   | /       | 174.43  | 174.55  | 174.42  | 174.50  | 174.37  | 174.35  | 174.25  | 174.22  | 174.20  |
| 28   | /   | /   | /       | 174.39  | 174.76  | 174.53  | 174.50  | 174.36  | 174.34  | 174.24  | 174.04  | 174.10  |
| 29   | /   | /   | /       | 174.42  | 174.46  | 174.57  | 174.49  | 174.36  | 174.33  | 174.31  | 174.15  | 174.14  |
| 30   | /   | /   | /       | 174.12  | 174.49  | 174.57  | 174.48* | 174.36  | 174.39  | 174.24  | 174.14  | 174.25  |
| 31   | /   | /   | /       | /       | 174.49  | /       | 174.45  | 174.36  | /       | 174.37  | /       | 174.34  |
| MEAN | /   | /   | 174.36  | 174.43  | 174.42  | 174.52  | 174.49  | 174.44  | 174.34  | 174.29  | 174.16  | 174.11  |
| MAX. |     |     | 174.71  | 174.65  | 174.99  | 174.67  | 174.73  | 174.69  | 174.55  | 174.51  | 174.40  | 174.60  |
| MIN. |     |     | 2300/17 | 1500/22 | 1500/28 | 0300/23 | 2300/26 | 0500/20 | 2200/14 | 0300/21 | 1700/02 | 0900/14 |
|      |     |     | 173.96  | 173.64  | 173.85  | 174.34  | 174.36  | 174.19  | 174.06  | 173.90  | 173.49  | 173.48  |
|      |     |     | 1500/16 | 1500/30 | 0600/01 | 1100/27 | 0900/25 | 1600/30 | 0100/26 | 0900/03 | 0400/16 | 1400/03 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 174.36

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3085: Toledo, Ohio on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 174.53 Jun  
Daily mean elevation: 174.99 28 May  
Instant/hourly elevation: 175.50 2300/27 Feb

LOWEST  
Monthly mean elevation: 174.09 Dec  
Daily mean elevation: 173.59 22 Dec  
Instant/hourly elevation: 172.89 1800/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.33 | 12 Jan |
| 174.95 | 27 Feb |
| 174.84 | 28 Mar |
| 174.89 | 22 Apr |
| 174.99 | 28 May |
| 174.68 | 22 Jun |
| 174.57 | 26 Jul |
| 174.58 | 20 Aug |
| 174.46 | 14 Sep |
| 174.49 | 31 Oct |
| 174.34 | 3 Nov  |
| 174.45 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.12 | 29 Jan |
| 174.10 | 3 Feb  |
| 173.93 | 22 Mar |
| 173.68 | 30 Apr |
| 173.97 | 1 May  |
| 174.31 | 27 Jun |
| 174.39 | 17 Jul |
| 174.31 | 22 Aug |
| 174.18 | 25 Sep |
| 174.00 | 3 Oct  |
| 173.59 | 16 Nov |
| 173.59 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 174.95 | | | | | 1 | | | | | | | | 174.95 | 1 |
| 174.90 | | 1 | | | | | | | | | | | 174.90 | 2 |
| 174.85 | | | | 2 | | | | | | | | | 174.85 | 4 |
| 174.80 | | 1 | 1 | | | | | | | | | | 174.80 | 6 |
| 174.75 | | | | | | | | | | | | | 174.75 | 6 |
| 174.70 | | | | 1 | | | | | | | | | 174.70 | 7 |
| 174.65 | | | 1 | 1 | | 2 | | | | | | | 174.65 | 11 |
| 174.60 | | | 4 | 3 | 1 | 2 | | | | | | | 174.60 | 21 |
| 174.55 | | | 1 | | 1 | 7 | 1 | 2 | | | | | 174.55 | 33 |
| 174.50 | | | 2 | 5 | 1 | 8 | 8 | 2 | | | | | 174.50 | 59 |
| 174.45 | | | 2 | 7 | 4 | 6 | 13 | 7 | 1 | 3 | | | 174.45 | 102 |
| 174.40 | | | 5 | 4 | 11 | 4 | 8 | 11 | 4 | 2 | | 2 | 174.40 | 153 |
| 174.35 | | | 2 | 3 | 6 | | 1 | 3 | 7 | 2 | | | 174.35 | 177 |
| 174.30 | 1 | 2 | 3 | 2 | 2 | 1 | | 6 | 9 | 8 | 1 | 1 | 174.30 | 213 |
| 174.25 | 2 | 5 | 2 | 1 | 1 | | | | 6 | 9 | 3 | 2 | 174.25 | 244 |
| 174.20 | 9 | 5 | 3 | | 1 | | | | 2 | 3 | 6 | 4 | 174.20 | 277 |
| 174.15 | 13 | 6 | 1 | | | | | | 1 | 3 | 7 | 5 | 174.15 | 313 |
| 174.10 | 6 | 8 | 2 | | | | | | | | 3 | 3 | 174.10 | 335 |
| 174.05 | | 1 | | | | | | | | | 4 | 4 | 174.05 | 344 |
| 174.00 | | | 1 | | | | | | | | 3 | 1 | 174.00 | 349 |
| 173.95 | | | | | 1 | | | | | 1 | | 1 | 173.95 | 352 |
| 173.90 | | | 1 | | | | | | | | 1 | 1 | 173.90 | 355 |
| 173.85 | | | | | | | | | | | 1 | 2 | 173.85 | 358 |
| 173.80 | | | | | | | | | | | | 1 | 173.80 | 359 |
| 173.75 | | | | | | | | | | | | 2 | 173.75 | 361 |
| 173.70 | | | | | | | | | | | | 1 | 173.70 | 362 |
| 173.65 | | | | 1 | | | | | | | | | 173.65 | 363 |
| 173.60 | | | | | | | | | | | | | 173.60 | 363 |
| 173.55 | | | | | | | | | | | 1 | 1 | 173.55 | 365 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3085: Toledo, Ohio on Lake Erie

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 174.29 | 174.17 | 174.14 | 174.48 | 173.97 | 174.52 | 174.55 | 174.45 | 174.38 | 174.42 | 174.07 | 173.90 |
| 2 | 174.23 | 174.18 | 174.25 | 174.48 | 174.44 | 174.58 | 174.53 | 174.44 | 174.32 | 174.25 | 174.09 | 174.28 |
| 3 | 174.19 | 174.10 | 174.33 | 174.62 | 174.57 | 174.47 | 174.49 | 174.46 | 174.35 | 174.00 | 174.34 | 173.74 |
| 4 | 174.18 | 174.16 | 174.43 | 174.69 | 174.36 | 174.53 | 174.49 | 174.48 | 174.35 | 174.27 | 174.18 | 173.78 |
| 5 | 174.22 | 174.14 | 174.21 | 174.52 | 174.33 | 174.51 | 174.48 | 174.44 | 174.44 | 174.46 | 174.10 | 174.22 |
| 6 | 174.18 | 174.12 | 174.21 | 174.42 | 174.40 | 174.51 | 174.43 | 174.39 | 174.40 | 174.49 | 174.18 | 173.91 |
| 7 | 174.22 | 174.13 | 174.36 | 174.49 | 174.44 | 174.48 | 174.46 | 174.42 | 174.37 | 174.31 | 174.25 | 173.79 |
| 8 | 174.16 | 174.12 | 174.68 | 174.63 | 174.28* | 174.41 | 174.53 | 174.46 | 174.29 | 174.30 | 174.21 | 173.90 |
| 9 | 174.28 | 174.14 | 174.28 | 174.87 | 174.24 | 174.49 | 174.50 | 174.41 | 174.26 | 174.31 | 174.17 | 174.19 |
| 10 | 174.22 | 174.16 | 174.14 | 174.71 | 174.37 | 174.46 | 174.50 | 174.46 | 174.30 | 174.32 | 174.20 | 174.18 |
| 11 | 174.25 | 174.15 | 174.05 | 174.54 | 174.42* | 174.50 | 174.43 | 174.57 | 174.37 | 174.36 | 174.05 | 174.16 |
| 12 | 174.33 | 174.19 | 174.48 | 174.61 | / | 174.54 | 174.49 | 174.51 | 174.42 | 174.33 | 174.08 | 174.14 |
| 13 | 174.25 | 174.21 | 174.41 | 174.49 | 174.47* | 174.45 | 174.53 | 174.48 | 174.25 | 174.30 | 174.19 | 174.25 |
| 14 | 174.18 | 174.24 | 174.34 | 174.55 | 174.33* | 174.54 | 174.51 | 174.46 | 174.46 | 174.34 | 174.26 | 174.44 |
| 15 | 174.23 | 174.27 | 174.38 | 174.51 | 174.42 | 174.65 | 174.44 | 174.39 | 174.35 | 174.40 | 173.89 | 174.22 |
| 16 | 174.21 | 174.33 | 174.30 | 174.49 | 174.42 | 174.56 | 174.44 | 174.42 | 174.34 | 174.34 | 173.59 | 174.17 |
| 17 | 174.17 | 174.29 | 174.65 | 174.42 | 174.45* | 174.50 | 174.39 | 174.50 | 174.36 | 174.29 | 174.04 | 174.16 |
| 18 | 174.21 | 174.25 | 174.57 | 174.47 | 174.36* | 174.45 | 174.43 | 174.44 | 174.32 | 174.42 | 174.22 | 174.14 |
| 19 | 174.12 | 174.25 | 174.46 | 174.45 | 174.37 | 174.57 | 174.46 | 174.51 | 174.26 | 174.20 | 174.28 | 174.03 |
| 20 | 174.15 | 174.14 | 174.54 | 174.41 | 174.43 | 174.68 | 174.42 | 174.58 | 174.27 | 174.28 | 174.19 | 173.98 |
| 21 | 174.17 | 174.20 | 174.32 | 174.54 | 174.52 | 174.63 | 174.49 | 174.45 | 174.43 | 174.20 | 174.24 | 174.35 |
| 22 | 174.19 | 174.28 | 173.93 | 174.89 | 174.42 | 174.68 | 174.51 | 174.31 | 174.36 | 174.29 | 174.11 | 173.59 |
| 23 | 174.19 | 174.29 | 174.18 | 174.47 | 174.40 | 174.57 | 174.44 | 174.45 | 174.28 | 174.26 | 174.04 | 174.07 |
| 24 | 174.18 | 174.29 | 174.45 | 174.31 | 174.48 | 174.41 | 174.46 | 174.44 | 174.31 | 174.27 | 174.17 | 174.10 |
| 25 | 174.12 | 174.25 | 174.63 | 174.30 | 174.44 | 174.53 | 174.50 | 174.40 | 174.18 | 174.32 | 174.21 | 173.81 |
| 26 | 174.19 | 174.32 | 174.54 | 174.35 | 174.41 | 174.56 | 174.57 | 174.41 | 174.23 | 174.19 | 174.22 | 174.15 |
| 27 | 174.15 | 174.95 | 174.61 | 174.39 | 174.61 | 174.31 | 174.50 | 174.35 | 174.36 | 174.26 | 174.26 | 174.24 |
| 28 | 174.19 | 174.82 | 174.84 | 174.38 | 174.99 | 174.52 | 174.53 | 174.35 | 174.35 | 174.23 | 173.95 | 174.06 |
| 29 | 174.12 | 174.15 | 174.64 | 174.39 | 174.43 | 174.60 | 174.51 | 174.35 | 174.33 | 174.34 | 174.15 | 174.10 |
| 30 | 174.20 | | 174.43 | 173.68 | 174.48 | 174.59 | 174.49 | 174.32 | 174.42 | 174.25 | 174.15 | 174.29 |
| 31 | 174.14 | | 174.44 | | 174.49 | | 174.45 | 174.32 | | 174.49 | | 174.45 |
| MEAN | 174.20 | 174.25 | 174.39 | 174.48 | 174.42 | 174.53 | 174.48 | 174.43 | 174.34 | 174.31 | 174.14 | 174.09 |
| MAX. | 174.53 | 175.50 | 175.21 | 175.10 | 175.42 | 174.78 | 174.87 | 174.88 | 174.70 | 174.70 | 174.54 | 174.80 |
| MIN. | 2100/12 | 2300/27 | 0300/29 | 1300/22 | 1700/28 | 1200/20 | 2000/26 | 0300/20 | 2200/14 | 1000/31 | 0900/03 | 1100/14 |
| | 173.97 | 174.01 | 173.72 | 172.89 | 173.46 | 174.10 | 174.21 | 174.12 | 173.75 | 173.61 | 173.16 | 173.13 |
| | 0200/31 | 1200/25 | 0800/11 | 1800/30 | 0800/01 | 1200/27 | 1200/07 | 1100/23 | 0300/26 | 0900/03 | 0600/16 | 1500/03 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 174.34

ANNUAL SUMMARY OF LEVELS, 1984
Station 3087: Monroe, Michigan on Lake Erie

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 174.54 Jun
Daily mean elevation: 174.83 27 Feb
Instant/hourly elevation: 175.24 2100/27 Feb

LOWEST
Monthly mean elevation: 174.10 Dec
Daily mean elevation: 173.68 22 Dec
Instant/hourly elevation: 173.19 1600/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.31 | 12 Jan |
| 174.83 | 27 Feb |
| 174.79 | 28 Mar |
| 174.77 | 9 Apr |
| 174.82 | 28 May |
| 174.66 | 22 Jun |
| 174.55 | 26 Jul |
| 174.48 | 21 Aug |
| 174.44 | 14 Sep |
| 174.47 | 6 Oct |
| 174.35 | 3 Nov |
| 174.40 | 14 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.11 | 29 Jan |
| 174.09 | 3 Feb |
| 174.03 | 22 Mar |
| 173.96 | 30 Apr |
| 174.18 | 1 May |
| 174.38 | 27 Jun |
| 174.42 | 17 Jul |
| 174.32 | 30 Aug |
| 174.22 | 25 Sep |
| 174.05 | 3 Oct |
| 173.68 | 16 Nov |
| 173.68 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 174.80        |     | 1   |     |     | 1   |     |     |     |     |     |     |     | 174.80        | 2                          |
| 174.75        |     |     | 1   | 1   |     |     |     |     |     |     |     |     | 174.75        | 4                          |
| 174.70        |     |     |     |     |     |     |     |     |     |     |     |     | 174.70        | 4                          |
| 174.65        |     |     |     |     |     | 2   |     |     |     |     |     |     | 174.65        | 6                          |
| 174.60        |     |     |     | 1   |     | 1   |     |     |     |     |     |     | 174.60        | 8                          |
| 174.55        |     | 1   | 4   | 4   | 2   | 5   |     |     |     |     |     |     | 174.55        | 24                         |
| 174.50        |     |     | 3   | 4   | 3   | 8   | 12  |     |     |     |     |     | 174.50        | 54                         |
| 174.45        |     |     | 3   | 9   | 3   | 3   | 14  | 1   |     | 1   |     |     | 174.45        | 88                         |
| 174.40        |     |     | 4   | 4   | 11  | 1   | 5   | 5   | 6   | 2   |     |     | 174.40        | 126                        |
| 174.35        |     |     | 2   | 2   | 7   | 1   |     | 3   | 7   | 3   |     | 2   | 174.35        | 153                        |
| 174.30        | 1   | 2   | 4   | 1   | 1   |     |     | 3   | 11  | 9   | 1   | 1   | 174.30        | 187                        |
| 174.25        | 2   | 5   | 4   |     | 2   |     |     |     | 4   | 10  | 2   | 2   | 174.25        | 218                        |
| 174.20        | 5   | 6   | 2   |     |     |     |     |     | 2   | 5   | 7   | 4   | 174.20        | 249                        |
| 174.15        | 11  | 5   |     |     | 1   |     |     |     |     |     | 9   | 7   | 174.15        | 282                        |
| 174.10        | 8   | 8   | 2   |     |     |     |     |     |     |     | 3   | 3   | 174.10        | 306                        |
| 174.05        |     | 1   | 1   |     |     |     |     |     |     |     | 4   | 3   | 174.05        | 315                        |
| 174.00        |     |     | 1   |     |     |     |     |     |     | 1   |     |     | 174.00        | 317                        |
| 173.95        |     |     |     | 1   |     |     |     |     |     |     | 3   | 1   | 173.95        | 322                        |
| 173.90        |     |     |     |     |     |     |     |     |     |     |     | 2   | 173.90        | 324                        |
| 173.85        |     |     |     |     |     |     |     |     |     |     |     | 2   | 173.85        | 326                        |
| 173.80        |     |     |     |     |     |     |     |     |     |     |     | 3   | 173.80        | 329                        |
| 173.75        |     |     |     |     |     |     |     |     |     |     |     |     | 173.75        | 329                        |
| 173.70        |     |     |     |     |     |     |     |     |     |     |     |     | 173.70        | 329                        |
| 173.65        |     |     |     |     |     |     |     |     |     |     | 1   | 1   | 173.65        | 331                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3087: Monroe, Michigan on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 174.27  | 174.15  | 174.15  | 174.48  | 174.18  | 174.51  | 174.55  | 174.41* | 174.40  | 174.39  | 174.11  | 173.92  |
| 2    | 174.21  | 174.16  | 174.26  | 174.49  | 174.45  | 174.57  | 174.54  | /       | 174.34  | 174.27  | 174.10  | 174.28  |
| 3    | 174.17  | 174.09  | 174.33  | 174.59  | 174.57* | 174.48  | 174.52  | /       | 174.36  | 174.05  | 174.35  | 173.81  |
| 4    | 174.17  | 174.16  | 174.44  | 174.60* | 174.36  | 174.53  | 174.51  | /       | 174.34  | 174.27  | 174.21  | 173.84  |
| 5    | 174.20  | 174.13  | 174.22  | /       | 174.38  | 174.54  | 174.49  | /       | 174.41  | 174.43  | 174.11  | 174.21  |
| 6    | 174.16  | 174.11  | 174.23  | 174.42* | 174.42  | 174.53  | 174.44  | /       | 174.42  | 174.47  | 174.17  | 173.90  |
| 7    | 174.20  | 174.13  | 174.35  | 174.47  | 174.45  | 174.53  | 174.47  | /       | 174.42  | 174.32  | 174.25  | 173.88  |
| 8    | 174.15  | 174.11  | 174.60  | 174.60  | 174.30  | 174.50  | 174.54  | /       | 174.35  | 174.31  | 174.25  | 173.94  |
| 9    | 174.26  | 174.14  | 174.29  | 174.77  | 174.27  | 174.51  | 174.54  | /       | 174.30  | 174.30  | 174.20  | 174.19  |
| 10   | 174.21  | 174.16  | 174.15  | 174.65  | 174.37  | 174.50* | 174.53  | /       | 174.32  | 174.32  | 174.20  | 174.18  |
| 11   | 174.23  | 174.14  | 174.07  | 174.52  | 174.41  | /       | 174.46  | /       | 174.38  | 174.34  | 173.99  | 174.17  |
| 12   | 174.31  | 174.19  | 174.47  | 174.60  | 174.36  | /       | 174.49  | /       | 174.43  | 174.32  | 174.06  | 174.17  |
| 13   | 174.22  | 174.21  | 174.39  | 174.50  | 174.55  | /       | 174.54  | /       | 174.29  | 174.30  | 174.17  | 174.21  |
| 14   | 174.16  | 174.21  | 174.32  | 174.53  | 174.34  | /       | 174.53  | /       | 174.44  | 174.34  | 174.27  | 174.40  |
| 15   | 174.21  | 174.24  | 174.36  | 174.51  | 174.41  | /       | 174.48  | /       | 174.33  | 174.39  | 173.97  | 174.21  |
| 16   | 174.20* | 174.33  | 174.28  | 174.46  | 174.41  | /       | 174.45  | /       | 174.35  | 174.34  | 173.68  | 174.19  |
| 17   | /       | 174.27  | 174.59  | 174.42  | 174.45  | /       | 174.42  | /       | 174.37  | 174.29  | 174.06  | 174.16  |
| 18   | 174.17* | 174.27  | 174.51  | 174.46  | 174.39  | /       | 174.44  | /       | 174.34  | 174.38  | 174.20  | 174.14  |
| 19   | 174.15* | 174.24  | 174.44  | 174.43  | 174.39  | /       | 174.48  | /       | 174.28  | 174.24  | 174.22  | 174.06  |
| 20   | /       | 174.20  | 174.52  | 174.54* | 174.45  | 174.66* | 174.45  | /       | 174.29  | 174.27  | 174.17  | 174.00  |
| 21   | /       | 174.23  | 174.35  | /       | 174.51  | 174.62  | 174.50  | 174.48* | 174.41  | 174.22  | 174.22  | 174.34  |
| 22   | /       | 174.30  | 174.03  | /       | 174.45  | 174.66  | 174.51  | 174.33  | 174.37  | 174.29  | 174.14  | 173.68  |
| 23   | 174.14* | 174.30  | 174.28  | 174.45* | 174.40  | 174.60  | 174.46  | 174.42  | 174.31  | 174.25  | 174.06  | 174.10  |
| 24   | 174.14  | 174.29  | 174.46  | 174.32  | 174.51  | 174.43  | 174.46  | 174.44  | 174.33  | 174.26  | 174.17  | 174.08  |
| 25   | 174.11  | 174.24  | 174.56  | 174.40  | 174.47  | 174.54  | 174.50  | 174.41  | 174.22  | 174.32  | 174.21  | 173.85  |
| 26   | 174.18  | 174.32  | 174.50  | 174.47  | 174.45  | 174.57  | 174.55  | 174.42  | 174.24  | 174.21  | 174.22  | 174.16  |
| 27   | 174.14  | 174.83  | 174.56  | 174.47  | 174.58  | 174.38  | 174.48  | 174.38  | 174.36  | 174.28  | 174.27  | 174.23  |
| 28   | 174.18  | 174.56  | 174.79  | 174.40  | 174.82  | 174.54  | 174.52  | 174.39  | 174.35  | 174.24  | 173.98  | 174.13  |
| 29   | 174.11  | 174.13  | 174.55  | 174.48  | 174.43  | 174.58  | 174.50  | 174.36  | 174.32  | 174.31  | 174.16  | 174.15  |
| 30   | 174.17  |         | 174.44  | 173.96  | 174.48  | 174.57  | 174.49  | 174.32  | 174.39  | 174.26  | 174.16  | 174.28  |
| 31   | 174.13  |         | 174.45  |         | 174.49  |         | 174.47  | 174.33  |         | 174.44  |         | 174.39  |
| MEAN | 174.18  | 174.24  | 174.39  | 174.48  | 174.44  | 174.54  | 174.49  | 174.39  | 174.35  | 174.30  | 174.14  | 174.10  |
| MAX. | 174.49  | 175.24  | 175.08  | 174.96  | 175.16  | 174.78  | 174.75  | 174.60  | 174.62  | 174.64  | 174.55  | 174.74  |
|      | 2100/12 | 2100/27 | 0100/29 | 0300/10 | 1800/28 | 0100/23 | 2200/26 | 1800/23 | 0700/14 | 0800/22 | 0900/03 | 1100/14 |
| MIN. | 173.96  | 173.96  | 173.66  | 173.19  | 173.60  | 174.23  | 174.25  | 174.14  | 173.70  | 173.72  | 173.28  | 173.21  |
|      | 2400/30 | 1100/25 | 0700/11 | 1600/30 | 0800/01 | 1100/27 | 2400/06 | 1800/30 | 0300/26 | 0800/03 | 0500/16 | 1400/03 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 174.34

ANNUAL SUMMARY OF LEVELS, 1984  
Station 3090: Fermi Power Plant, Stony Point, Michigan on Lake Erie

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 174.52 Jun  
Daily mean elevation: 174.78 28 May  
Instant/hourly elevation: 175.14 2100/27 Feb

LOWEST  
Monthly mean elevation: 174.10 Dec  
Daily mean elevation: 173.70 22 Dec  
Instant/hourly elevation: 173.28 1400/3 Dec

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.31 | 12 Jan |
| 174.74 | 27 Feb |
| 174.74 | 28 Mar |
| 174.72 | 22 Apr |
| 174.78 | 28 May |
| 174.62 | 22 Jun |
| 174.53 | 26 Jul |
| 174.52 | 20 Aug |
| 174.41 | 14 Sep |
| 174.45 | 6 Oct  |
| 174.33 | 3 Nov  |
| 174.37 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.10 | 19 Jan |
| 174.09 | 3 Feb  |
| 174.05 | 22 Mar |
| 174.03 | 30 Apr |
| 174.11 | 1 May  |
| 174.38 | 27 Jun |
| 174.42 | 18 Jul |
| 174.32 | 30 Aug |
| 174.20 | 26 Sep |
| 174.05 | 3 Oct  |
| 173.70 | 16 Nov |
| 173.70 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 174.75                                                  |     |     |     |     | 1   |     |     |     |     |     |     |     | 174.75        | 1                          |
| 174.70                                                  |     | 1   | 1   | 2   |     |     |     |     |     |     |     |     | 174.70        | 5                          |
| 174.65                                                  |     |     |     |     |     |     |     |     |     |     |     |     | 174.65        | 5                          |
| 174.60                                                  |     |     |     | 2   |     | 2   |     |     |     |     |     |     | 174.60        | 9                          |
| 174.55                                                  |     |     | 1   | 3   | 1   | 4   |     |     |     |     |     |     | 174.55        | 18                         |
| 174.50                                                  |     |     | 5   | 1   | 1   | 12  | 8   | 1   |     |     |     |     | 174.50        | 46                         |
| 174.45                                                  |     | 1   | 2   | 7   | 6   | 10  | 13  | 6   |     |     |     |     | 174.45        | 91                         |
| 174.40                                                  |     |     | 6   | 9   | 9   | 1   | 10  | 14  | 3   | 3   |     |     | 174.40        | 146                        |
| 174.35                                                  |     |     | 2   | 4   | 7   | 1   |     | 7   | 7   | 2   |     | 1   | 174.35        | 177                        |
| 174.30                                                  | 1   | 1   | 4   | 1   | 3   |     |     | 3   | 12  | 6   | 1   | 2   | 174.30        | 211                        |
| 174.25                                                  | 2   | 4   | 3   |     | 2   |     |     |     | 6   | 11  | 2   | 2   | 174.25        | 243                        |
| 174.20                                                  | 6   | 6   | 3   |     |     |     |     |     | 1   | 7   | 6   | 2   | 174.20        | 274                        |
| 174.15                                                  | 14  | 5   | 1   |     |     |     |     |     | 1   | 1   | 9   | 7   | 174.15        | 312                        |
| 174.10                                                  | 7   | 8   | 1   |     | 1   |     |     |     |     |     | 3   | 6   | 174.10        | 338                        |
| 174.05                                                  | 1   | 3   | 1   |     |     |     |     |     |     |     | 5   | 2   | 174.05        | 350                        |
| 174.00                                                  |     |     | 1   | 1   |     |     |     |     |     | 1   |     |     | 174.00        | 353                        |
| 173.95                                                  |     |     |     |     |     |     |     |     |     |     | 3   | 1   | 173.95        | 357                        |
| 173.90                                                  |     |     |     |     |     |     |     |     |     |     |     | 4   | 173.90        | 361                        |
| 173.85                                                  |     |     |     |     |     |     |     |     |     |     |     | 1   | 173.85        | 362                        |
| 173.80                                                  |     |     |     |     |     |     |     |     |     |     |     | 2   | 173.80        | 364                        |
| 173.75                                                  |     |     |     |     |     |     |     |     |     |     |     |     | 173.75        | 364                        |
| 173.70                                                  |     |     |     |     |     |     |     |     |     |     |     |     | 173.70        | 364                        |
| 173.65                                                  |     |     |     |     |     |     |     |     |     |     | 1   | 1   | 173.65        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 3090: Fermi Power Plant, Stony Point, Michigan on Lake Erie

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 174.26  | 174.15  | 174.14  | 174.47  | 174.11  | 174.49  | 174.52  | 174.44  | 174.38  | 174.37  | 174.13  | 173.93  |
| 2    | 174.21  | 174.16  | 174.25  | 174.48  | 174.42  | 174.55  | 174.52  | 174.44  | 174.34  | 174.27  | 174.08  | 174.27  |
| 3    | 174.17  | 174.09  | 174.31  | 174.57  | 174.50  | 174.46  | 174.51  | 174.45  | 174.33  | 174.05  | 174.33  | 173.83  |
| 4    | 174.16  | 174.15  | 174.42  | 174.62  | 174.33  | 174.51  | 174.49  | 174.47  | 174.34  | 174.26  | 174.21  | 173.85  |
| 5    | 174.20  | 174.12  | 174.22  | 174.47  | 174.38  | 174.52  | 174.49  | 174.44  | 174.41  | 174.41  | 174.10  | 174.21  |
| 6    | 174.16  | 174.10  | 174.22  | 174.40  | 174.42  | 174.52  | 174.45  | 174.42  | 174.40  | 174.45  | 174.17  | 173.92  |
| 7    | 174.21  | 174.12  | 174.33  | 174.46  | 174.42  | 174.51  | 174.45  | 174.41  | 174.41  | 174.31  | 174.25  | 173.91  |
| 8    | 174.15  | 174.10  | 174.56  | 174.56  | 174.28  | 174.49  | 174.52  | 174.46  | 174.34  | 174.30  | 174.25  | 173.94  |
| 9    | 174.26  | 174.13  | 174.29  | 174.72  | 174.28  | 174.49  | 174.53  | 174.42  | 174.30  | 174.29  | 174.20  | 174.17  |
| 10   | 174.21  | 174.14  | 174.17  | 174.61  | 174.38  | 174.49  | 174.50  | 174.44  | 174.32  | 174.29  | 174.20  | 174.17  |
| 11   | 174.23  | 174.13  | 174.07  | 174.50  | 174.39  | 174.48  | 174.45  | 174.50  | 174.36  | 174.32  | 173.99  | 174.16  |
| 12   | 174.31  | 174.17  | 174.45  | 174.57  | 174.34  | 174.53  | 174.49  | 174.48  | 174.40  | 174.30  | 174.07  | 174.16  |
| 13   | 174.23  | 174.19  | 174.38  | 174.49  | 174.53  | 174.46  | 174.53  | 174.46  | 174.28  | 174.29  | 174.17  | 174.18  |
| 14   | 174.17  | 174.19  | 174.32  | 174.53  | 174.35  | 174.50  | 174.51  | 174.45  | 174.41  | 174.32  | 174.26  | 174.37  |
| 15   | 174.21  | 174.22  | 174.36  | 174.49  | 174.38  | 174.59  | 174.47  | 174.39  | 174.32  | 174.36  | 174.00  | 174.20  |
| 16   | 174.20  | 174.31  | 174.26  | 174.45  | 174.41  | 174.54  | 174.44  | 174.42  | 174.33  | 174.32  | 173.70  | 174.20  |
| 17   | 174.15  | 174.25  | 174.54  | 174.41  | 174.44  | 174.52  | 174.43  | 174.48  | 174.36  | 174.28  | 174.06  | 174.15  |
| 18   | 174.18  | 174.25  | 174.48  | 174.45  | 174.38  | 174.47  | 174.42  | 174.43  | 174.32  | 174.35  | 174.19  | 174.13  |
| 19   | 174.10  | 174.23  | 174.42  | 174.43  | 174.38  | 174.54  | 174.47  | 174.44  | 174.27  | 174.25  | 174.21  | 174.06  |
| 20   | 174.14  | 174.19  | 174.51  | 174.40  | 174.42  | 174.61  | 174.45  | 174.52  | 174.27  | 174.25  | 174.16  | 174.00  |
| 21   | 174.16  | 174.22  | 174.34  | 174.43  | 174.49  | 174.59  | 174.48  | 174.45  | 174.38  | 174.23  | 174.21  | 174.33  |
| 22   | 174.17  | 174.29  | 174.05  | 174.72  | 174.45  | 174.62  | 174.50  | 174.33  | 174.35  | 174.27  | 174.14  | 173.70  |
| 23   | 174.17  | 174.28  | 174.28  | 174.45  | 174.41  | 174.57  | 174.45  | 174.40  | 174.30  | 174.25  | 174.06  | 174.12  |
| 24   | 174.17  | 174.27  | 174.44  | 174.31  | 174.48  | 174.42  | 174.45  | 174.42  | 174.32  | 174.25  | 174.16  | 174.08  |
| 25   | 174.11  | 174.23  | 174.53  | 174.39  | 174.47  | 174.50  | 174.48  | 174.39  | 174.23  | 174.31  | 174.20  | 173.87  |
| 26   | 174.17  | 174.30  | 174.48  | 174.45  | 174.42  | 174.56  | 174.53  | 174.40  | 174.20  | 174.20  | 174.21  | 174.15  |
| 27   | 174.14  | 174.74  | 174.54  | 174.45  | 174.56  | 174.38  | 174.46  | 174.37  | 174.35  | 174.28  | 174.26  | 174.22  |
| 28   | 174.17  | 174.49  | 174.74  | 174.39  | 174.78  | 174.52  | 174.50  | 174.36  | 174.33  | 174.23  | 174.00  | 174.13  |
| 29   | 174.11  | 174.11  | 174.53  | 174.45  | 174.39  | 174.55  | 174.49  | 174.37  | 174.30  | 174.30  | 174.16  | 174.14  |
| 30   | 174.17  |         | 174.43  | 174.03  | 174.46  | 174.54  | 174.48  | 174.32  | 174.38  | 174.25  | 174.15  | 174.26  |
| 31   | 174.13  |         | 174.44  |         | 174.49  |         | 174.45  | 174.33  |         | 174.41  |         | 174.35  |
| MEAN | 174.18  | 174.22  | 174.37  | 174.47  | 174.42  | 174.52  | 174.48  | 174.42  | 174.33  | 174.29  | 174.14  | 174.10  |
| MAX. | 174.49  | 175.14  | 175.02  | 174.90  | 175.06  | 174.74  | 174.71  | 174.74  | 174.60  | 174.58  | 174.53  | 174.69  |
|      | 2100/12 | 2100/27 | 0100/29 | 1400/22 | 1500/28 | 0200/23 | 2200/26 | 0300/20 | 0800/14 | 1900/06 | 0900/03 | 1000/14 |
| MIN. | 173.97  | 173.95  | 173.68  | 173.38  | 173.64  | 174.28  | 174.23  | 174.15  | 173.74  | 173.78  | 173.31  | 173.28  |
|      | 0100/31 | 1100/25 | 0700/11 | 1800/30 | 0800/01 | 0300/14 | 1200/07 | 1000/23 | 0300/26 | 0900/03 | 0500/16 | 1400/03 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 174.33

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4020: Gibraltar, Michigan on Detroit River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 174.58 Jun  
Daily mean elevation: 174.78 28 May  
Instant/hourly elevation: 175.08 2000/27 Feb

LOWEST  
Monthly mean elevation: 174.18 Dec  
Daily mean elevation: 173.83 22 Dec  
Instant/hourly elevation: 173.48 1600/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.38 | 12 Jan |
| 174.72 | 27 Feb |
| 174.73 | 28 Mar |
| 174.73 | 9 Apr  |
| 174.78 | 28 May |
| 174.67 | 22 Jun |
| 174.61 | 9 Jul  |
| 174.59 | 20 Aug |
| 174.53 | 7 Sep  |
| 174.50 | 6 Oct  |
| 174.43 | 3 Nov  |
| 174.42 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 174.19 | 29 Jan |
| 174.15 | 29 Feb |
| 174.13 | 11 Mar |
| 174.16 | 30 Apr |
| 174.17 | 1 May  |
| 174.48 | 27 Jun |
| 174.49 | 18 Jul |
| 174.41 | 31 Aug |
| 174.29 | 26 Sep |
| 174.17 | 3 Oct  |
| 173.85 | 16 Nov |
| 173.83 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 174.75 | | | | | 1 | | | | | | | | 174.75 | 1 |
| 174.70 | | 1 | 1 | 2 | | | | | | | | | 174.70 | 5 |
| 174.65 | | | | | | 2 | | | | | | | 174.65 | 7 |
| 174.60 | | | | 2 | 1 | 4 | 1 | | | | | | 174.60 | 15 |
| 174.55 | | | 2 | 3 | 1 | 14 | 11 | 2 | | | | | 174.55 | 48 |
| 174.50 | | | 5 | 7 | 6 | 8 | 17 | 13 | 1 | | | | 174.50 | 105 |
| 174.45 | | 1 | 7 | 7 | 7 | 2 | 2 | 13 | 5 | 3 | | | 174.45 | 152 |
| 174.40 | | | 3 | 7 | 9 | | | 3 | 15 | 3 | 1 | 1 | 174.40 | 194 |
| 174.35 | 3 | 1 | 4 | | 3 | | | | 7 | 12 | 1 | 2 | 174.35 | 227 |
| 174.30 | 7 | 6 | 1 | 1 | 2 | | | | 1 | 11 | 3 | 2 | 174.30 | 261 |
| 174.25 | 7 | 6 | 5 | | | | | | 1 | 1 | 7 | 3 | 174.25 | 291 |
| 174.20 | 11 | 8 | 1 | | | | | | | | 9 | 11 | 174.20 | 331 |
| 174.15 | 3 | 5 | 1 | 1 | 1 | | | | | | 3 | 1 | 174.15 | 347 |
| 174.10 | | 1 | 1 | | | | | | | | 3 | 2 | 174.10 | 354 |
| 174.05 | | | | | | | | | | | 2 | 1 | 174.05 | 357 |
| 174.00 | | | | | | | | | | | | 3 | 174.00 | 360 |
| 173.95 | | | | | | | | | | | | 3 | 173.95 | 363 |
| 173.90 | | | | | | | | | | | | 1 | 173.90 | 364 |
| 173.85 | | | | | | | | | | | | | 173.85 | 364 |
| 173.80 | | | | | | | | | | | 1 | 1 | 173.80 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4020: Gibraltar, Michigan on Detroit River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 174.36 | 174.23 | 174.21 | 174.51 | 174.17 | 174.54 | 174.58 | 174.51 | 174.47 | 174.43 | 174.24 | 174.03 |
| 2 | 174.31 | 174.23 | 174.30 | 174.52 | 174.46 | 174.60 | 174.58 | 174.51 | 174.43 | 174.36 | 174.16 | 174.34 |
| 3 | 174.28 | 174.17 | 174.36 | 174.60 | 174.53 | 174.51 | 174.57 | 174.52 | 174.41 | 174.17 | 174.43 | 173.96 |
| 4 | 174.26 | 174.23 | 174.47 | 174.64 | 174.37 | 174.56 | 174.56 | 174.53 | 174.41 | 174.34 | 174.30 | 173.95 |
| 5 | 174.31 | 174.20 | 174.29 | 174.51 | 174.43 | 174.58 | 174.56 | 174.51 | 174.47 | 174.47 | 174.20 | 174.26 |
| 6 | 174.28 | 174.18 | 174.27 | 174.44 | 174.46 | 174.57 | 174.51 | 174.49 | 174.48 | 174.50 | 174.24 | 173.99 |
| 7 | 174.32 | 174.20 | 174.37 | 174.48 | 174.46 | 174.57 | 174.51 | 174.49 | 174.53 | 174.40 | 174.32 | 174.04 |
| 8 | 174.32 | 174.19 | 174.55 | 174.59 | 174.33 | 174.56 | 174.59 | 174.54 | 174.45 | 174.38 | 174.36 | 174.04 |
| 9 | 174.38 | 174.21 | 174.36 | 174.73 | 174.34 | 174.55 | 174.61 | 174.49 | 174.42 | 174.37 | 174.30 | 174.24 |
| 10 | 174.31 | 174.22 | 174.26 | 174.63 | 174.43 | 174.55 | 174.58 | 174.51 | 174.41 | 174.36 | 174.28 | 174.22 |
| 11 | 174.32 | 174.21 | 174.13 | 174.53 | 174.45 | 174.53 | 174.52 | 174.56 | 174.43 | 174.39 | 174.06 | 174.23 |
| 12 | 174.38 | 174.25 | 174.48 | 174.60 | 174.39 | 174.59 | 174.55 | 174.54 | 174.49 | 174.38 | 174.14 | 174.23 |
| 13 | 174.31 | 174.27 | 174.41 | 174.51 | 174.56 | 174.52 | 174.58 | 174.53 | 174.38 | 174.36 | 174.24 | 174.23 |
| 14 | 174.25 | 174.26 | 174.36 | 174.54 | 174.40 | 174.55 | 174.58 | 174.52 | 174.48 | 174.39 | 174.35 | 174.42 |
| 15 | 174.28 | 174.29 | 174.41 | 174.52 | 174.42 | 174.64 | 174.54 | 174.48 | 174.39 | 174.43 | 174.14 | 174.25 |
| 16 | 174.28 | 174.37 | 174.29 | 174.46 | 174.45 | 174.59 | 174.50 | 174.49 | 174.41 | 174.39 | 173.85 | 174.27 |
| 17 | 174.23 | 174.31 | 174.55 | 174.43 | 174.49 | 174.58 | 174.51 | 174.55 | 174.44 | 174.35 | 174.16 | 174.21 |
| 18 | 174.26 | 174.31 | 174.50 | 174.46 | 174.43 | 174.54 | 174.49 | 174.52 | 174.41 | 174.42 | 174.25 | 174.18 |
| 19 | 174.20 | 174.29 | 174.46 | 174.45 | 174.43 | 174.60 | 174.54 | 174.50 | 174.36 | 174.35 | 174.26 | 174.15 |
| 20 | 174.23 | 174.25 | 174.54 | 174.42 | 174.47 | 174.66 | 174.53 | 174.59 | 174.36 | 174.33 | 174.23 | 174.10 |
| 21 | 174.23 | 174.28 | 174.42 | 174.43 | 174.53 | 174.64 | 174.54 | 174.53 | 174.45 | 174.31 | 174.28 | 174.39 |
| 22 | 174.24 | 174.35 | 174.16 | 174.71 | 174.50 | 174.67 | 174.57 | 174.42 | 174.44 | 174.34 | 174.24 | 173.83 |
| 23 | 174.25 | 174.34 | 174.33 | 174.47 | 174.45 | 174.64 | 174.52 | 174.46 | 174.39 | 174.32 | 174.15 | 174.22 |
| 24 | 174.25 | 174.32 | 174.49 | 174.34 | 174.54 | 174.48 | 174.51 | 174.48 | 174.40 | 174.32 | 174.24 | 174.15 |
| 25 | 174.20 | 174.26 | 174.56 | 174.42 | 174.53 | 174.56 | 174.55 | 174.47 | 174.32 | 174.39 | 174.27 | 173.98 |
| 26 | 174.26 | 174.34 | 174.52 | 174.47 | 174.47 | 174.63 | 174.59 | 174.48 | 174.29 | 174.28 | 174.28 | 174.22 |
| 27 | 174.22 | 174.72 | 174.57 | 174.47 | 174.61 | 174.48 | 174.53 | 174.46 | 174.42 | 174.35 | 174.34 | 174.28 |
| 28 | 174.25 | 174.46 | 174.73 | 174.42 | 174.78 | 174.58 | 174.55 | 174.46 | 174.41 | 174.31 | 174.10 | 174.21 |
| 29 | 174.19 | 174.15 | 174.55 | 174.48 | 174.44 | 174.60 | 174.55 | 174.47 | 174.37 | 174.36 | 174.23 | 174.22 |
| 30 | 174.24 | | 174.48 | 174.16 | 174.51 | 174.60 | 174.54 | 174.42 | 174.44 | 174.33 | 174.23 | 174.31 |
| 31 | 174.21 | | 174.48 | | 174.53 | | 174.53 | 174.41 | | 174.46 | | 174.39 |
| MEAN | 174.27 | 174.28 | 174.41 | 174.50 | 174.46 | 174.58 | 174.55 | 174.50 | 174.42 | 174.37 | 174.23 | 174.18 |
| MAX. | 174.55 | 175.08 | 174.98 | 174.92 | 175.04 | 174.78 | 174.76 | 174.78 | 174.65 | 174.65 | 174.63 | 174.72 |
| | 2100/12 | 2000/27 | 0200/29 | 1400/22 | 1500/28 | 1700/23 | 2200/26 | 0300/20 | 1000/26 | 1900/06 | 0900/03 | 1100/14 |
| MIN. | 174.07 | 173.99 | 173.74 | 173.48 | 173.78 | 174.31 | 174.30 | 174.24 | 173.85 | 173.95 | 173.56 | 173.50 |
| | 0200/31 | 1100/25 | 0800/11 | 1600/30 | 0800/01 | 0300/14 | 2300/06 | 1000/23 | 0300/26 | 0900/03 | 0500/16 | 1400/03 |

* Indicates Less than 90% of the Hourly Data Available.

ANNUAL MEAN: 174.40

/ Indicates No Data.

ANNUAL SUMMARY OF LEVELS, 1984
Station 4030: Wyandotte, Michigan on Detroit River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 174.95 Jun
Daily mean elevation: 175.09 28 May
Instant/hourly elevation: 175.26 1500/28 May

LOWEST
Monthly mean elevation: 174.64 Dec
Daily mean elevation: 174.39 30 Apr
Instant/hourly elevation: 174.02 1500/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.92 | 7 Jan |
| 174.95 | 27 Feb |
| 175.03 | 28 Mar |
| 174.92 | 4 Apr |
| 175.09 | 28 May |
| 175.03 | 22 Jun |
| 174.98 | 9 Jul |
| 174.97 | 20 Aug |
| 174.90 | 7 Sep |
| 174.88 | 6 Oct |
| 174.80 | 3 Nov |
| 174.81 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.61 | 19 Jan |
| 174.61 | 3 Feb |
| 174.67 | 11 Mar |
| 174.39 | 30 Apr |
| 174.53 | 1 May |
| 174.88 | 27 Jun |
| 174.91 | 17 Jul |
| 174.85 | 31 Aug |
| 174.77 | 26 Sep |
| 174.67 | 3 Oct |
| 174.48 | 16 Nov |
| 174.43 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 175.05 | | | | | 1 | | | | | | | | 175.05 | 1 |
| 175.00 | | | 1 | | | 4 | | | | | | | 175.00 | 6 |
| 174.95 | | | 2 | | 1 | 8 | 10 | 2 | | | | | 174.95 | 29 |
| 174.90 | 1 | 2 | 7 | 1 | 2 | 15 | 21 | 20 | | | | | 174.90 | 98 |
| 174.85 | 4 | | 3 | 1 | 6 | 3 | | 8 | 12 | 2 | | | 174.85 | 137 |
| 174.80 | 2 | | 5 | 4 | 13 | | | 1 | 16 | 9 | | 1 | 174.80 | 188 |
| 174.75 | 5 | 4 | 5 | 1 | 5 | | | | 2 | 15 | 2 | 3 | 174.75 | 230 |
| 174.70 | 2 | 12 | 7 | 4 | 2 | | | | | 4 | 10 | 2 | 174.70 | 273 |
| 174.65 | 6 | 4 | 1 | 2 | | | | | | 1 | 11 | 8 | 174.65 | 306 |
| 174.60 | 11 | 7 | | 3 | | | | | | | 5 | 8 | 174.60 | 340 |
| 174.55 | | | | 4 | | | | | | | 1 | 1 | 174.55 | 346 |
| 174.50 | | | | 8 | 1 | | | | | | | 5 | 174.50 | 360 |
| 174.45 | | | | 1 | | | | | | | 1 | 2 | 174.45 | 364 |
| 174.40 | | | | | | | | | | | | 1 | 174.40 | 365 |
| 174.35 | | | | 1 | | | | | | | | | 174.35 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4030: Wyandotte, Michigan on Detroit River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 174.79 | 174.62 | 174.74 | 174.84 | 174.53 | 174.93 | 174.97 | 174.92 | 174.88 | 174.85 | 174.70 | 174.55 |
| 2 | 174.78 | 174.62 | 174.79 | 174.84 | 174.76 | 174.95 | 174.96 | 174.92 | 174.86 | 174.80 | 174.64 | 174.72 |
| 3 | 174.80 | 174.61 | 174.81 | 174.89 | 174.83 | 174.90 | 174.95 | 174.92 | 174.85 | 174.67 | 174.80 | 174.49 |
| 4 | 174.83 | 174.65 | 174.86 | 174.92 | 174.77 | 174.92 | 174.95 | 174.93 | 174.85 | 174.79 | 174.73 | 174.49 |
| 5 | 174.88 | 174.66 | 174.75 | 174.84 | 174.79 | 174.93 | 174.95 | 174.92 | 174.89 | 174.86 | 174.67 | 174.67 |
| 6 | 174.90 | 174.64 | 174.73 | 174.77 | 174.81 | 174.93 | 174.92 | 174.89 | 174.88 | 174.88 | 174.70 | 174.54 |
| 7 | 174.92 | 174.64 | 174.78 | 174.75 | 174.83 | 174.92 | 174.92 | 174.91 | 174.90 | 174.81 | 174.74 | 174.51 |
| 8 | 174.87 | 174.64 | 174.89 | 174.75 | 174.74 | 174.90 | 174.96 | 174.93 | 174.84 | 174.81 | 174.75 | 174.54 |
| 9 | 174.90 | 174.67 | 174.80 | 174.82 | 174.74 | 174.92 | 174.98 | 174.91 | 174.82 | 174.80 | 174.72 | 174.65 |
| 10 | 174.83 | 174.69 | 174.74 | 174.74 | 174.80 | 174.91 | 174.96 | 174.93 | 174.83 | 174.80 | 174.72 | 174.66 |
| 11 | 174.77 | 174.71 | 174.67 | 174.65 | 174.81 | 174.92 | 174.93 | 174.96 | 174.86 | 174.81 | 174.64 | 174.65 |
| 12 | 174.76 | 174.71 | 174.81 | 174.68 | 174.78 | 174.94 | 174.95 | 174.95 | 174.89 | 174.80 | 174.67 | 174.64 |
| 13 | 174.72 | 174.71 | 174.74 | 174.62 | 174.89 | 174.91 | 174.97 | 174.94 | 174.82 | 174.79 | 174.73 | 174.67 |
| 14 | 174.67 | 174.71 | 174.73 | 174.66 | 174.81 | 174.94 | 174.96 | 174.93 | 174.89 | 174.81 | 174.78 | 174.80 |
| 15 | 174.67 | 174.73 | 174.77 | 174.62 | 174.83 | 174.98 | 174.94 | 174.90 | 174.85 | 174.83 | 174.64 | 174.69 |
| 16 | 174.67 | 174.78 | 174.77 | 174.57 | 174.84 | 174.96 | 174.91 | 174.92 | 174.85 | 174.81 | 174.48 | 174.68 |
| 17 | 174.64 | 174.77 | 174.93 | 174.52 | 174.85 | 174.94 | 174.91 | 174.95 | 174.86 | 174.79 | 174.64 | 174.66 |
| 18 | 174.64 | 174.77 | 174.94 | 174.54 | 174.81 | 174.92 | 174.92 | 174.92 | 174.84 | 174.82 | 174.71 | 174.65 |
| 19 | 174.61 | 174.75 | 174.93 | 174.53 | 174.82 | 174.97 | 174.94 | 174.94 | 174.81 | 174.76 | 174.72 | 174.63 |
| 20 | 174.62 | 174.72 | 174.96 | 174.52 | 174.84 | 175.02 | 174.93 | 174.97 | 174.81 | 174.75 | 174.70 | 174.60 |
| 21 | 174.62 | 174.73 | 174.87 | 174.54 | 174.88 | 175.02 | 174.94 | 174.92 | 174.86 | 174.76 | 174.72 | 174.77 |
| 22 | 174.64 | 174.76 | 174.74 | 174.74 | 174.85 | 175.03 | 174.96 | 174.86 | 174.85 | 174.77 | 174.68 | 174.43 |
| 23 | 174.64 | 174.75 | 174.82 | 174.56 | 174.84 | 175.02 | 174.92 | 174.91 | 174.81 | 174.76 | 174.64 | 174.64 |
| 24 | 174.63 | 174.74 | 174.91 | 174.48 | 174.89 | 174.91 | 174.93 | 174.92 | 174.83 | 174.76 | 174.68 | 174.65 |
| 25 | 174.62 | 174.70 | 174.96 | 174.52 | 174.87 | 174.96 | 174.95 | 174.91 | 174.78 | 174.79 | 174.69 | 174.53 |
| 26 | 174.69 | 174.74 | 174.92 | 174.55 | 174.88 | 174.99 | 174.96 | 174.89 | 174.77 | 174.74 | 174.70 | 174.67 |
| 27 | 174.71 | 174.95 | 174.93 | 174.56 | 174.96 | 174.88 | 174.94 | 174.87 | 174.86 | 174.77 | 174.72 | 174.71 |
| 28 | 174.69 | 174.91 | 175.03 | 174.53 | 175.09 | 174.96 | 174.96 | 174.86 | 174.84 | 174.74 | 174.59 | 174.65 |
| 29 | 174.64 | 174.71 | 174.95 | 174.60 | 174.89 | 174.99 | 174.95 | 174.88 | 174.82 | 174.78 | 174.67 | 174.66 |
| 30 | 174.67 | | 174.85 | 174.39 | 174.91 | 174.98 | 174.94 | 174.86 | 174.86 | 174.75 | 174.67 | 174.76 |
| 31 | 174.62 | | 174.83 | | 174.92 | | 174.92 | 174.85 | | 174.84 | | 174.81 |
| MEAN | 174.72 | 174.72 | 174.84 | 174.65 | 174.83 | 174.95 | 174.94 | 174.91 | 174.85 | 174.79 | 174.69 | 174.64 |
| MAX. | 174.94 | 175.19 | 175.19 | 174.99 | 175.26 | 175.09 | 175.06 | 175.08 | 174.97 | 174.98 | 174.92 | 174.97 |
| | 1500/07 | 2100/27 | 0100/29 | 1900/04 | 1500/28 | 0100/23 | 2200/26 | 0400/20 | 0900/14 | 0400/21 | 1000/03 | 1100/14 |
| MIN. | 174.56 | 174.58 | 174.51 | 174.02 | 174.36 | 174.80 | 174.83 | 174.79 | 174.59 | 174.53 | 174.37 | 174.30 |
| | 2200/19 | 1200/25 | 0800/11 | 1500/30 | 0900/01 | 1400/27 | 1300/07 | 1500/29 | 0400/26 | 1000/03 | 0600/16 | 1500/03 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 174.79

ANNUAL SUMMARY OF LEVELS, 1984
Station 4036: Fort Wayne, Detroit, Michigan on Detroit River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 175.08 Jul
Daily mean elevation: 175.20 28 May
Instant/hourly elevation: 175.34 1700/28 May

LOWEST
Monthly mean elevation: 174.71 Apr
Daily mean elevation: 174.49 30 Apr
Instant/hourly elevation: 174.17 1600/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 175.09 | 1 Jan |
| 175.10 | 28 Feb |
| 175.14 | 28 Mar |
| 175.01 | 4 Apr |
| 175.20 | 28 May |
| 175.16 | 22 Jun |
| 175.11 | 13 Jul |
| 175.10 | 20 Aug |
| 175.04 | 7 Sep |
| 175.02 | 6 Oct |
| 174.94 | 14 Nov |
| 174.96 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 174.87 | 31 Jan |
| 174.78 | 3 Feb |
| 174.87 | 11 Mar |
| 174.49 | 30 Apr |
| 174.65 | 1 May |
| 175.03 | 27 Jun |
| 175.06 | 31 Jul |
| 175.00 | 31 Aug |
| 174.94 | 26 Sep |
| 174.85 | 3 Oct |
| 174.68 | 16 Nov |
| 174.62 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 175.15        |     |     |     |     | 1   | 1   |     |     |     |     |     |     | 175.15        | 2                          |
| 175.10        |     |     | 1   |     |     | 6   | 2   |     |     |     |     |     | 175.10        | 11                         |
| 175.05        | 6   | 2   | 7   |     | 1   | 13  | 29  | 18  |     |     |     |     | 175.05        | 87                         |
| 175.00        | 4   |     | 5   | 1   | 6   | 10  |     | 12  | 13  | 1   |     |     | 175.00        | 139                        |
| 174.95        | 4   |     | 7   | 2   | 8   |     |     | 1   | 15  | 13  |     | 1   | 174.95        | 190                        |
| 174.90        | 11  | 5   | 7   | 2   | 10  |     |     |     | 2   | 14  | 2   | 2   | 174.90        | 245                        |
| 174.85        | 6   | 8   | 4   | 1   | 4   |     |     |     |     | 2   | 13  | 3   | 174.85        | 286                        |
| 174.80        |     | 11  |     | 3   |     |     |     |     |     | 1   | 13  | 9   | 174.80        | 323                        |
| 174.75        |     | 3   |     | 1   |     |     |     |     |     |     | 1   | 7   | 174.75        | 335                        |
| 174.70        |     |     |     | 2   |     |     |     |     |     |     |     | 5   | 174.70        | 342                        |
| 174.65        |     |     |     | 4   |     |     |     |     |     |     | 1   | 3   | 174.65        | 350                        |
| 174.60        |     |     |     | 1   | 1   |     |     |     |     |     |     | 1   | 174.60        | 353                        |
| 174.55        |     |     |     | 10  |     |     |     |     |     |     |     |     | 174.55        | 363                        |
| 174.50        |     |     |     | 2   |     |     |     |     |     |     |     |     | 174.50        | 365                        |
| 174.45        |     |     |     | 1   |     |     |     |     |     |     |     |     | 174.45        | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4036: Fort Wayne, Detroit, Michigan on Detroit River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 175.09  | 174.86  | 174.95  | 174.95  | 174.65  | 175.06  | 175.10  | 175.06  | 175.02  | 175.00  | 174.86  | 174.73  |
| 2    | 175.06  | 174.84  | 174.97  | 174.95  | 174.86  | 175.07  | 175.10  | 175.06  | 175.01  | 174.96  | 174.81  | 174.87  |
| 3    | 175.06  | 174.78  | 174.97  | 174.99  | 174.93  | 175.03  | 175.09  | 175.06  | 175.00  | 174.85  | 174.94  | 174.67  |
| 4    | 175.06  | 174.79  | 174.99  | 175.01  | 174.89  | 175.06  | 175.09  | 175.07  | 175.00  | 174.95  | 174.89  | 174.67  |
| 5    | 175.06  | 174.80  | 174.90  | 174.96  | 174.91  | 175.06  | 175.09  | 175.06  | 175.03  | 175.00  | 174.84  | 174.81  |
| 6    | 175.05  | 174.82  | 174.88  | 174.89  | 174.94  | 175.05  | 175.07  | 175.04  | 175.03  | 175.02  | 174.86  | 174.71  |
| 7    | 175.06  | 174.83  | 174.92  | 174.84  | 174.95  | 175.05  | 175.06  | 175.05  | 175.04  | 174.97  | 174.90  | 174.68  |
| 8    | 175.02  | 174.81  | 175.01  | 174.81  | 174.89  | 175.03  | 175.10  | 175.07  | 174.99  | 174.96  | 174.90  | 174.71  |
| 9    | 175.03  | 174.82  | 174.99  | 174.85  | 174.88  | 175.05  | 175.11  | 175.05  | 174.97  | 174.95  | 174.87  | 174.80  |
| 10   | 175.02  | 174.83  | 174.94  | 174.79  | 174.92  | 175.04  | 175.10  | 175.07  | 174.99  | 174.96  | 174.88  | 174.80  |
| 11   | 174.99  | 174.83  | 174.87  | 174.69  | 174.94  | 175.05  | 175.07  | 175.10  | 175.02  | 174.96  | 174.83  | 174.80  |
| 12   | 174.96  | 174.84  | 175.01  | 174.71  | 174.92  | 175.06  | 175.09  | 175.09  | 175.03  | 174.96  | 174.85  | 174.79  |
| 13   | 174.93  | 174.84  | 174.99  | 174.67  | 175.01  | 175.04  | 175.11  | 175.08  | 174.98  | 174.94  | 174.90  | 174.82  |
| 14   | 174.92  | 174.85  | 174.92  | 174.69  | 174.95  | 175.07  | 175.10  | 175.08  | 175.03  | 174.96  | 174.94  | 174.92  |
| 15   | 174.91  | 174.88  | 174.91  | 174.66  | 174.97  | 175.10  | 175.08  | 175.05  | 175.01  | 174.97  | 174.82  | 174.84  |
| 16   | 174.93  | 174.92  | 174.90  | 174.60  | 174.97  | 175.09  | 175.06  | 175.06  | 175.00  | 174.96  | 174.68  | 174.82  |
| 17   | 174.92  | 174.92  | 175.04  | 174.55  | 174.98  | 175.07  | 175.06  | 175.08  | 175.01  | 174.94  | 174.82  | 174.81  |
| 18   | 174.92  | 174.92  | 175.07  | 174.57  | 174.95  | 175.05  | 175.06  | 175.06  | 175.00  | 174.96  | 174.87  | 174.80  |
| 19   | 174.89  | 174.91  | 175.06  | 174.56  | 174.95  | 175.10  | 175.08  | 175.09  | 174.97  | 174.92  | 174.89  | 174.78  |
| 20   | 174.89  | 174.88  | 175.08  | 174.56  | 174.97  | 175.14  | 175.07  | 175.10  | 174.97  | 174.91  | 174.86  | 174.75  |
| 21   | 174.92  | 174.89  | 175.02  | 174.57  | 175.00  | 175.14  | 175.09  | 175.06  | 175.01  | 174.92  | 174.89  | 174.90  |
| 22   | 174.90  | 174.90  | 174.92  | 174.74  | 174.97  | 175.16  | 175.10  | 175.02  | 175.00  | 174.93  | 174.84  | 174.62  |
| 23   | 174.91  | 174.89  | 174.99  | 174.60  | 174.97  | 175.15  | 175.06  | 175.04  | 174.97  | 174.92  | 174.81  | 174.79  |
| 24   | 174.95  | 174.88  | 175.07  | 174.53  | 175.01  | 175.06  | 175.07  | 175.06  | 174.98  | 174.92  | 174.84  | 174.81  |
| 25   | 174.94  | 174.85  | 175.09  | 174.56  | 175.00  | 175.10  | 175.09  | 175.05  | 174.94  | 174.94  | 174.85  | 174.71  |
| 26   | 174.96  | 174.88  | 175.05  | 174.59  | 175.03  | 175.12  | 175.10  | 175.03  | 174.94  | 174.90  | 174.85  | 174.82  |
| 27   | 174.94  | 175.06  | 175.06  | 174.59  | 175.09  | 175.03  | 175.09  | 175.01  | 175.01  | 174.92  | 174.87  | 174.86  |
| 28   | 174.97  | 175.10  | 175.14  | 174.57  | 175.20  | 175.09  | 175.09  | 175.01  | 175.00  | 174.90  | 174.76  | 174.81  |
| 29   | 174.90  | 174.94  | 175.07  | 174.64  | 175.04  | 175.12  | 175.09  | 175.03  | 174.99  | 174.93  | 174.82  | 174.82  |
| 30   | 174.89  |         | 174.99  | 174.49  | 175.04  | 175.11  | 175.08  | 175.01  | 175.01  | 174.91  | 174.82  | 174.91  |
| 31   | 174.87  |         | 174.95  |         | 175.05  |         | 175.06  | 175.00  |         | 174.98  |         | 174.96  |
| MEAN | 174.97  | 174.87  | 174.99  | 174.71  | 174.96  | 175.08  | 175.08  | 175.05  | 175.00  | 174.94  | 174.85  | 174.79  |
| MAX. | 175.13  | 175.26  | 175.26  | 175.08  | 175.34  | 175.22  | 175.18  | 175.19  | 175.09  | 175.12  | 175.01  | 175.07  |
|      | 0600/03 | 2100/27 | 0300/29 | 2000/04 | 1700/28 | 2100/23 | 2300/26 | 0400/20 | 1000/14 | 0400/21 | 1000/03 | 1100/14 |
| MIN. | 174.80  | 174.75  | 174.78  | 174.17  | 174.50  | 174.96  | 174.99  | 174.95  | 174.80  | 174.75  | 174.61  | 174.54  |
|      | 1300/20 | 1200/25 | 0800/11 | 1600/30 | 1000/01 | 1600/27 | 2000/17 | 0700/30 | 0400/26 | 1000/03 | 0700/16 | 0500/04 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 174.94

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4049: Windmill Point, Detroit, Michigan on Detroit River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 175.35 Jul  
Daily mean elevation: 175.41 22 Jun  
Instant/hourly elevation: 175.55 1700/28 May

LOWEST  
Monthly mean elevation: 174.81 Apr  
Daily mean elevation: 174.62 19 Apr  
Instant/hourly elevation: 174.36 1100/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 175.31 | 1 Jan  |
| 175.38 | 28 Feb |
| 175.37 | 28 Mar |
| 175.21 | 4 Apr  |
| 175.41 | 28 May |
| 175.41 | 22 Jun |
| 175.37 | 13 Jul |
| 175.38 | 19 Aug |
| 175.31 | 14 Sep |
| 175.28 | 1 Oct  |
| 175.23 | 14 Nov |
| 175.25 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 175.04 | 31 Jan |
| 174.97 | 3 Feb  |
| 175.11 | 15 Mar |
| 174.62 | 19 Apr |
| 174.89 | 1 May  |
| 175.26 | 8 Jun  |
| 175.32 | 31 Jul |
| 175.27 | 28 Aug |
| 175.22 | 25 Sep |
| 175.17 | 3 Oct  |
| 175.06 | 16 Nov |
| 174.98 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 175.40                                                  |     |     |     |     | 1   | 1   |     |     |     |     |     |     | 175.40        | 2                          |
| 175.35                                                  |     | 1   | 1   |     |     | 9   | 9   | 3   |     |     |     |     | 175.35        | 25                         |
| 175.30                                                  | 1   |     | 5   |     | 4   | 13  | 22  | 21  | 1   |     |     |     | 175.30        | 92                         |
| 175.25                                                  | 1   | 1   | 6   |     | 1   | 7   |     | 7   | 21  | 3   |     |     | 175.25        | 139                        |
| 175.20                                                  | 7   | 4   | 7   | 1   | 13  |     |     |     | 8   | 20  | 2   | 1   | 175.20        | 202                        |
| 175.15                                                  | 3   | 8   | 8   | 4   | 7   |     |     |     |     | 8   | 12  | 2   | 175.15        | 254                        |
| 175.10                                                  | 11  | 2   | 4   | 1   | 3   |     |     |     |     |     | 12  | 9   | 175.10        | 296                        |
| 175.05                                                  | 7   | 2   |     |     | 1   |     |     |     |     |     | 4   | 11  | 175.05        | 321                        |
| 175.00                                                  | 1   | 7   |     | 1   |     |     |     |     |     |     |     | 4   | 175.00        | 334                        |
| 174.95                                                  |     | 4   |     |     |     |     |     |     |     |     |     | 4   | 174.95        | 342                        |
| 174.90                                                  |     |     |     | 2   |     |     |     |     |     |     |     |     | 174.90        | 344                        |
| 174.85                                                  |     |     |     | 1   | 1   |     |     |     |     |     |     |     | 174.85        | 346                        |
| 174.80                                                  |     |     |     |     |     |     |     |     |     |     |     |     | 174.80        | 346                        |
| 174.75                                                  |     |     |     | 3   |     |     |     |     |     |     |     |     | 174.75        | 349                        |
| 174.70                                                  |     |     |     | 4   |     |     |     |     |     |     |     |     | 174.70        | 353                        |
| 174.65                                                  |     |     |     | 3   |     |     |     |     |     |     |     |     | 174.65        | 356                        |
| 174.60                                                  |     |     |     | 10  |     |     |     |     |     |     |     |     | 174.60        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4049: Windmill Point, Detroit, Michigan on Detroit River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 175.31  | 175.02  | 175.25  | 175.18  | 174.89  | 175.32  | 175.36  | 175.32  | 175.28  | 175.28  | 175.14  | 175.05  |
| 2    | 175.28  | 175.00  | 175.24  | 175.18  | 175.07  | 175.32  | 175.35  | 175.33  | 175.28  | 175.23  | 175.13  | 175.12  |
| 3    | 175.25  | 174.97  | 175.23  | 175.20  | 175.15  | 175.31  | 175.35  | 175.33  | 175.29  | 175.17  | 175.20  | 174.99  |
| 4    | 175.23  | 174.98  | 175.21  | 175.21  | 175.15  | 175.31  | 175.35  | 175.34  | 175.28  | 175.24  | 175.16  | 175.00  |
| 5    | 175.22  | 175.00  | 175.16  | 175.19  | 175.16  | 175.31  | 175.35  | 175.33  | 175.30  | 175.26  | 175.15  | 175.08  |
| 6    | 175.22  | 175.03  | 175.16  | 175.11  | 175.19  | 175.30  | 175.34  | 175.31  | 175.29  | 175.27  | 175.17  | 175.04  |
| 7    | 175.24  | 175.03  | 175.17  | 175.03  | 175.19  | 175.30  | 175.34  | 175.33  | 175.27  | 175.24  | 175.17  | 174.98  |
| 8    | 175.21  | 175.03  | 175.21  | 174.93  | 175.16  | 175.26  | 175.36  | 175.33  | 175.24  | 175.23  | 175.16  | 175.02  |
| 9    | 175.21  | 175.03  | 175.20  | 174.91  | 175.15  | 175.30  | 175.36  | 175.31  | 175.22  | 175.23  | 175.14  | 175.07  |
| 10   | 175.18  | 175.03  | 175.17  | 174.87  | 175.18  | 175.29  | 175.36  | 175.35  | 175.25  | 175.24  | 175.16  | 175.08  |
| 11   | 175.14  | 175.05  | 175.14  | 174.78  | 175.19  | 175.31  | 175.35  | 175.36  | 175.29  | 175.23  | 175.18  | 175.07  |
| 12   | 175.12  | 175.07  | 175.17  | 174.76  | 175.19  | 175.31  | 175.36  | 175.36  | 175.29  | 175.23  | 175.19  | 175.06  |
| 13   | 175.10  | 175.09  | 175.15  | 174.75  | 175.24  | 175.30  | 175.37  | 175.35  | 175.25  | 175.22  | 175.22  | 175.12  |
| 14   | 175.08  | 175.13  | 175.12  | 174.78  | 175.22  | 175.34  | 175.36  | 175.35  | 175.31  | 175.22  | 175.23  | 175.17  |
| 15   | 175.10  | 175.17  | 175.11  | 174.73  | 175.24  | 175.34  | 175.35  | 175.33  | 175.30  | 175.24  | 175.13  | 175.12  |
| 16   | 175.10  | 175.20  | 175.16  | 174.68  | 175.23  | 175.33  | 175.34  | 175.33  | 175.29  | 175.23  | 175.06  | 175.09  |
| 17   | 175.10  | 175.22  | 175.23  | 174.62  | 175.23  | 175.32  | 175.32  | 175.34  | 175.28  | 175.21  | 175.13  | 175.11  |
| 18   | 175.13  | 175.22  | 175.28  | 174.62  | 175.21  | 175.31  | 175.35  | 175.32  | 175.28  | 175.23  | 175.17  | 175.10  |
| 19   | 175.14  | 175.21  | 175.28  | 174.62  | 175.21  | 175.36  | 175.35  | 175.38  | 175.26  | 175.18  | 175.19  | 175.09  |
| 20   | 175.15  | 175.19  | 175.29  | 174.63  | 175.23  | 175.38  | 175.33  | 175.35  | 175.25  | 175.20  | 175.17  | 175.07  |
| 21   | 175.17  | 175.19  | 175.28  | 174.64  | 175.24  | 175.39  | 175.35  | 175.32  | 175.28  | 175.20  | 175.18  | 175.15  |
| 22   | 175.16  | 175.17  | 175.26  | 174.74  | 175.21  | 175.41  | 175.35  | 175.30  | 175.27  | 175.21  | 175.12  | 174.98  |
| 23   | 175.14  | 175.16  | 175.30  | 174.66  | 175.24  | 175.40  | 175.32  | 175.31  | 175.25  | 175.21  | 175.12  | 175.07  |
| 24   | 175.12  | 175.17  | 175.34  | 174.63  | 175.24  | 175.36  | 175.35  | 175.32  | 175.25  | 175.21  | 175.13  | 175.13  |
| 25   | 175.11  | 175.14  | 175.35  | 174.63  | 175.24  | 175.37  | 175.35  | 175.31  | 175.22  | 175.21  | 175.12  | 175.04  |
| 26   | 175.12  | 175.17  | 175.32  | 174.64  | 175.30  | 175.37  | 175.35  | 175.29  | 175.26  | 175.20  | 175.12  | 175.12  |
| 27   | 175.13  | 175.26  | 175.31  | 174.64  | 175.33  | 175.30  | 175.36  | 175.27  | 175.29  | 175.19  | 175.12  | 175.14  |
| 28   | 175.14  | 175.38  | 175.37  | 174.65  | 175.41  | 175.35  | 175.36  | 175.27  | 175.28  | 175.19  | 175.07  | 175.10  |
| 29   | 175.08  | 175.25  | 175.33  | 174.73  | 175.34  | 175.38  | 175.35  | 175.28  | 175.28  | 175.22  | 175.10  | 175.12  |
| 30   | 175.06  |         | 175.25  | 174.67  | 175.32  | 175.37  | 175.34  | 175.29  | 175.29  | 175.19  | 175.10  | 175.20  |
| 31   | 175.04  |         | 175.20  |         | 175.32  |         | 175.32  | 175.28  |         | 175.24  |         | 175.25  |
| MEAN | 175.15  | 175.12  | 175.23  | 174.81  | 175.22  | 175.33  | 175.35  | 175.32  | 175.27  | 175.22  | 175.15  | 175.09  |
| MAX. | 175.32  | 175.43  | 175.48  | 175.25  | 175.55  | 175.45  | 175.42  | 175.42  | 175.35  | 175.35  | 175.26  | 175.31  |
|      | 0200/01 | 1300/28 | 2100/28 | 2000/04 | 1700/28 | 2100/23 | 1900/28 | 1500/19 | 2100/14 | 0400/21 | 0500/11 | 2300/31 |
| MIN. | 175.03  | 174.96  | 175.08  | 174.36  | 174.78  | 175.20  | 175.26  | 175.20  | 175.14  | 175.09  | 174.98  | 174.86  |
|      | 2400/31 | 0400/04 | 0500/11 | 1100/30 | 0100/01 | 1200/08 | 0500/06 | 0700/30 | 2000/25 | 1300/03 | 2200/15 | 2000/07 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 175.19

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4052: St. Clair Shores, Michigan on Lake St. Clair

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 175.42 Jul  
Daily mean elevation: 175.46 23 Jun  
Instant/hourly elevation: 175.50 1700/28 May

LOWEST  
Monthly mean elevation: 174.85 Apr  
Daily mean elevation: 174.64 19 Apr  
Instant/hourly elevation: 174.58 1048/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 175.34 | 1 Jan  |
| 175.37 | 28 Feb |
| 175.42 | 21 Mar |
| 175.26 | 4 Apr  |
| 175.42 | 28 May |
| 175.46 | 23 Jun |
| 175.43 | 14 Jul |
| 175.41 | 20 Aug |
| 175.36 | 6 Sep  |
| 175.32 | 1 Oct  |
| 175.29 | 14 Nov |
| 175.30 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 175.10 | 31 Jan |
| 175.04 | 3 Feb  |
| 175.19 | 15 Mar |
| 174.64 | 19 Apr |
| 174.98 | 1 May  |
| 175.35 | 8 Jun  |
| 175.39 | 31 Jul |
| 175.35 | 31 Aug |
| 175.29 | 25 Sep |
| 175.24 | 28 Oct |
| 175.15 | 28 Nov |
| 175.08 | 4 Dec  |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 175.45                                                  |     |     |     |     |     | 2   |     |     |     |     |     |     | 175.45        | 2                          |
| 175.40                                                  |     |     |     |     | 1   | 9   | 24  | 6   |     |     |     |     | 175.40        | 44                         |
| 175.35                                                  |     | 1   | 11  |     | 5   | 18  | 7   | 21  | 3   |     |     |     | 175.35        | 110                        |
| 175.30                                                  | 2   | 2   | 5   |     | 2   | 1   |     | 4   | 26  | 3   |     |     | 175.30        | 155                        |
| 175.25                                                  | 7   | 6   | 7   | 1   | 13  |     |     |     | 1   | 24  | 3   | 2   | 175.25        | 219                        |
| 175.20                                                  | 3   | 6   | 4   | 4   | 7   |     |     |     |     | 4   | 16  | 3   | 175.20        | 266                        |
| 175.15                                                  | 13  | 1   | 2   | 1   | 1   |     |     |     |     |     | 10  | 12  | 175.15        | 306                        |
| 175.10                                                  | 5   | 3   |     |     | 1   |     |     |     |     |     | 1   | 10  | 175.10        | 326                        |
| 175.05                                                  | 1   | 8   |     | 1   |     |     |     |     |     |     |     | 4   | 175.05        | 340                        |
| 175.00                                                  |     | 2   |     |     |     |     |     |     |     |     |     |     | 175.00        | 342                        |
| 174.95                                                  |     |     |     | 1   | 1   |     |     |     |     |     |     |     | 174.95        | 344                        |
| 174.90                                                  |     |     |     | 1   |     |     |     |     |     |     |     |     | 174.90        | 345                        |
| 174.85                                                  |     |     |     | 1   |     |     |     |     |     |     |     |     | 174.85        | 346                        |
| 174.80                                                  |     |     |     | 2   |     |     |     |     |     |     |     |     | 174.80        | 348                        |
| 174.75                                                  |     |     |     | 5   |     |     |     |     |     |     |     |     | 174.75        | 353                        |
| 174.70                                                  |     |     |     | 1   |     |     |     |     |     |     |     |     | 174.70        | 354                        |
| 174.65                                                  |     |     |     | 7   |     |     |     |     |     |     |     |     | 174.65        | 361                        |
| 174.60                                                  |     |     |     | 5   |     |     |     |     |     |     |     |     | 174.60        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4052: St. Clair Shores, Michigan on Lake St. Clair

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 175.34  | 175.08  | 175.36  | 175.24  | 174.98  | 175.38  | 175.42  | 175.39  | 175.36  | 175.32  | 175.22  | 175.13  |
| 2    | 175.32  | 175.06  | 175.34  | 175.23  | 175.13  | 175.38  | 175.42  | 175.39  | 175.36  | 175.30  | 175.19  | 175.18  |
| 3    | 175.30  | 175.04  | 175.32  | 175.25  | 175.20  | 175.37  | 175.41  | 175.39  | 175.34  | 175.25  | 175.27  | 175.09  |
| 4    | 175.28  | 175.05  | 175.31  | 175.26  | 175.21  | 175.38  | 175.42  | 175.40  | 175.34  | 175.29  | 175.24  | 175.08  |
| 5    | 175.28  | 175.06  | 175.28  | 175.24  | 175.23  | 175.37  | 175.42  | 175.39  | 175.35  | 175.31  | 175.21  | 175.15  |
| 6    | 175.27  | 175.09  | 175.26  | 175.17  | 175.25  | 175.37  | 175.41  | 175.38  | 175.36  | 175.31  | 175.22  | 175.11  |
| 7    | 175.29  | 175.10  | 175.28  | 175.07  | 175.26  | 175.36  | 175.40  | 175.39  | 175.35  | 175.30  | 175.24  | 175.09  |
| 8    | 175.27  | 175.09  | 175.29  | 174.96  | 175.23  | 175.35  | 175.43  | 175.39  | 175.32  | 175.29  | 175.23  | 175.11  |
| 9    | 175.26  | 175.09  | 175.29  | 174.92  | 175.22  | 175.37  | 175.43  | 175.39  | 175.31  | 175.29  | 175.22  | 175.14  |
| 10   | 175.23  | 175.09  | 175.27  | 174.88  | 175.25  | 175.36  | 175.43  | 175.40  | 175.33  | 175.28  | 175.22  | 175.14  |
| 11   | 175.19  | 175.11  | 175.22  | 174.81  | 175.26  | 175.37  | 175.42  | 175.41  | 175.35  | 175.28  | 175.21  | 175.14  |
| 12   | 175.16  | 175.13  | 175.24  | 174.78  | 175.25  | 175.38  | 175.42  | 175.41  | 175.35  | 175.28  | 175.24  | 175.13  |
| 13   | 175.14  | 175.15  | 175.23  | 174.79  | 175.29  | 175.37  | 175.43  | 175.41  | 175.32  | 175.28  | 175.28  | 175.16  |
| 14   | 175.14  | 175.20  | 175.20  | 174.80  | 175.29  | 175.38  | 175.43  | 175.41  | 175.35  | 175.28  | 175.29  | 175.21  |
| 15   | 175.15  | 175.24  | 175.19  | 174.76  | 175.30  | 175.39  | 175.42  | 175.39  | 175.34  | 175.29  | 175.23  | 175.18  |
| 16   | 175.16  | 175.27  | 175.24  | 174.70  | 175.29  | 175.39  | 175.40  | 175.39  | 175.34  | 175.29  | 175.16  | 175.17  |
| 17   | 175.16  | 175.29  | 175.33  | 174.64  | 175.30  | 175.38  | 175.40  | 175.39  | 175.35  | 175.28  | 175.21  | 175.17  |
| 18   | 175.17  | 175.30  | 175.37  | 174.64  | 175.28  | 175.38  | 175.41  | 175.39  | 175.34  | 175.28  | 175.23  | 175.17  |
| 19   | 175.20  | 175.30  | 175.38  | 174.64  | 175.28  | 175.41  | 175.42  | 175.41  | 175.32  | 175.26  | 175.23  | 175.17  |
| 20   | 175.20  | 175.28  | 175.40  | 174.65  | 175.29  | 175.44  | 175.42  | 175.41  | 175.32  | 175.25  | 175.22  | 175.15  |
| 21   | 175.22  | 175.27  | 175.42  | 174.65  | 175.30  | 175.45  | 175.42  | 175.39  | 175.33  | 175.26  | 175.23  | 175.22  |
| 22   | 175.21  | 175.25  | 175.38  | 174.73  | 175.29  | 175.46  | 175.42  | 175.37  | 175.33  | 175.26  | 175.20  | 175.10  |
| 23   | 175.19  | 175.23  | 175.38  | 174.68  | 175.30  | 175.46  | 175.40  | 175.36  | 175.31  | 175.27  | 175.19  | 175.16  |
| 24   | 175.17  | 175.22  | 175.41  | 174.66  | 175.32  | 175.42  | 175.40  | 175.38  | 175.31  | 175.26  | 175.19  | 175.18  |
| 25   | 175.16  | 175.21  | 175.40  | 174.66  | 175.31  | 175.43  | 175.41  | 175.38  | 175.29  | 175.28  | 175.19  | 175.14  |
| 26   | 175.18  | 175.24  | 175.38  | 174.66  | 175.36  | 175.43  | 175.42  | 175.36  | 175.31  | 175.26  | 175.19  | 175.19  |
| 27   | 175.18  | 175.33  | 175.37  | 174.67  | 175.39  | 175.38  | 175.42  | 175.35  | 175.35  | 175.26  | 175.19  | 175.21  |
| 28   | 175.19  | 175.37  | 175.40  | 174.68  | 175.42  | 175.41  | 175.42  | 175.35  | 175.34  | 175.24  | 175.15  | 175.17  |
| 29   | 175.14  | 175.35  | 175.37  | 174.76  | 175.39  | 175.42  | 175.41  | 175.36  | 175.33  | 175.27  | 175.17  | 175.20  |
| 30   | 175.11  |         | 175.31  | 174.81  | 175.38  | 175.42  | 175.40  | 175.35  | 175.33  | 175.25  | 175.17  | 175.26  |
| 31   | 175.10  |         | 175.26  |         | 175.39  |         | 175.39  | 175.35  |         | 175.28  |         | 175.30  |
| MEAN | 175.21  | 175.19  | 175.32  | 174.85  | 175.28  | 175.40  | 175.42  | 175.38  | 175.33  | 175.28  | 175.21  | 175.16  |
| MAX. | 175.35  | 175.43  | 175.47  | 175.28  | 175.50  | 175.49  | 175.46  | 175.45  | 175.39  | 175.37  | 175.31  | 175.34  |
|      | 0200/01 | 0700/28 | 2100/28 | 2000/04 | 1700/28 | 2300/22 | 0900/06 | 2100/08 | 0500/02 | 0400/21 | 2000/14 | 2400/31 |
| MIN. | 175.09  | 175.03  | 175.16  | 174.58  | 174.85  | 175.32  | 175.35  | 175.27  | 175.19  | 175.20  | 175.11  | 174.99  |
|      | 2400/31 | 0100/04 | 0600/16 | 1048/30 | 0200/01 | 0600/11 | 2100/23 | 1000/30 | 2000/25 | 1700/21 | 0900/02 | 1300/22 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 175.25

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4070: Algonac, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 175.56 Jul  
Daily mean elevation: 175.70 6 Apr  
Instant/hourly elevation: 175.78 0700/6 Apr

LOWEST  
Monthly mean elevation: 175.14 Apr  
Daily mean elevation: 174.78 22 Apr  
Instant/hourly elevation: 174.72 1700/22 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 175.51 | 7 Jan  |
| 175.52 | 29 Feb |
| 175.60 | 9 Mar  |
| 175.70 | 6 Apr  |
| 175.53 | 30 May |
| 175.59 | 24 Jun |
| 175.59 | 17 Jul |
| 175.57 | 9 Aug  |
| 175.53 | 17 Sep |
| 175.50 | 3 Oct  |
| 175.47 | 15 Nov |
| 175.42 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 175.31 | 13 Jan |
| 175.28 | 2 Feb  |
| 175.40 | 15 Mar |
| 174.78 | 22 Apr |
| 175.28 | 2 May  |
| 175.50 | 6 Jun  |
| 175.55 | 31 Jul |
| 175.51 | 28 Aug |
| 175.48 | 30 Sep |
| 175.42 | 31 Oct |
| 175.33 | 26 Nov |
| 175.31 | 13 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 175.65 | | | | 1 | | | | | | | | | 175.65 | 1 |
| 175.60 | | | | | | | | | | | | | 175.60 | 1 |
| 175.55 | | | 3 | 1 | | 6 | 26 | 8 | | | | | 175.55 | 45 |
| 175.50 | 1 | 1 | 13 | | 4 | 19 | 5 | 23 | 21 | | | | 175.50 | 132 |
| 175.45 | 8 | | 7 | 2 | 4 | 5 | | | 9 | 5 | 3 | | 175.45 | 175 |
| 175.40 | 3 | 11 | 6 | 3 | 14 | | | | | 26 | 13 | 6 | 175.40 | 257 |
| 175.35 | 4 | 10 | 2 | 1 | 6 | | | | | | 11 | 13 | 175.35 | 304 |
| 175.30 | 11 | 4 | | 1 | 1 | | | | | | 3 | 12 | 175.30 | 336 |
| 175.25 | | 3 | | | 2 | | | | | | | | 175.25 | 341 |
| 175.20 | | | | | | | | | | | | | 175.20 | 341 |
| 175.15 | | | | 2 | | | | | | | | | 175.15 | 343 |
| 175.10 | | | | 3 | | | | | | | | | 175.10 | 346 |
| 175.05 | | | | 3 | | | | | | | | | 175.05 | 349 |
| 175.00 | | | | 1 | | | | | | | | | 175.00 | 350 |
| 174.95 | | | | 4 | | | | | | | | | 174.95 | 354 |
| 174.90 | | | | 2 | | | | | | | | | 174.90 | 356 |
| 174.85 | | | | 3 | | | | | | | | | 174.85 | 359 |
| 174.80 | | | | 2 | | | | | | | | | 174.80 | 361 |
| 174.75 | | | | 1 | | | | | | | | | 174.75 | 362 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4070: Algonac, Michigan on St. Clair River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 175.46 | 175.29 | 175.54 | 175.46 | 175.28 | 175.51 | 175.55 | 175.55 | 175.53 | 175.47 | 175.43 | 175.38 |
| 2 | 175.46 | 175.28 | 175.53 | 175.44 | 175.28 | 175.50 | 175.56 | 175.54 | 175.53 | 175.49 | 175.42 | 175.35 |
| 3 | 175.43 | 175.30 | 175.53 | 175.45 | 175.32 | 175.50 | 175.56 | 175.54 | 175.51 | 175.50 | 175.41 | 175.39 |
| 4 | 175.47 | 175.34 | 175.52 | 175.44 | 175.36 | 175.50 | 175.56 | 175.54 | 175.52 | 175.46 | 175.41 | 175.36 |
| 5 | 175.46 | 175.40 | 175.48 | 175.58 | 175.38 | 175.50 | 175.56 | 175.55 | 175.52 | 175.45 | 175.41 | 175.34 |
| 6 | 175.50 | 175.44 | 175.44 | 175.70 | 175.38 | 175.50 | 175.57 | 175.55 | 175.52 | 175.44 | 175.41 | 175.35 |
| 7 | 175.51 | 175.43 | 175.44 | 175.46 | 175.38 | 175.52 | 175.57 | 175.54 | 175.52 | 175.45 | 175.40 | 175.40 |
| 8 | 175.49 | 175.41 | 175.53 | 175.20 | 175.40 | 175.53 | 175.56 | 175.54 | 175.52 | 175.45 | 175.41 | 175.35 |
| 9 | 175.47 | 175.41 | 175.60 | 175.11 | 175.41 | 175.53 | 175.58 | 175.57 | 175.50 | 175.45 | 175.40 | 175.31 |
| 10 | 175.41 | 175.39 | 175.52 | 175.13 | 175.40 | 175.53 | 175.57 | 175.56 | 175.51 | 175.44 | 175.39 | 175.31 |
| 11 | 175.35 | 175.37 | 175.55 | 175.08 | 175.41 | 175.52 | 175.58 | 175.55 | 175.51 | 175.45 | 175.43 | 175.33 |
| 12 | 175.32 | 175.34 | 175.42 | 175.07 | 175.41 | 175.52 | 175.57 | 175.56 | 175.52 | 175.45 | 175.46 | 175.32 |
| 13 | 175.31 | 175.31 | 175.40 | 175.10 | 175.41 | 175.52 | 175.57 | 175.56 | 175.52 | 175.44 | 175.45 | 175.31 |
| 14 | 175.34 | 175.35 | 175.42 | 175.17 | 175.43 | 175.51 | 175.57 | 175.56 | 175.51 | 175.44 | 175.45 | 175.33 |
| 15 | 175.34 | 175.39 | 175.40 | 175.00 | 175.43 | 175.52 | 175.58 | 175.56 | 175.51 | 175.44 | 175.47 | 175.35 |
| 16 | 175.33 | 175.41 | 175.46 | 174.90 | 175.43 | 175.52 | 175.57 | 175.55 | 175.53 | 175.44 | 175.46 | 175.36 |
| 17 | 175.35 | 175.43 | 175.44 | 174.85 | 175.43 | 175.51 | 175.59 | 175.55 | 175.53 | 175.44 | 175.44 | 175.37 |
| 18 | 175.37 | 175.43 | 175.49 | 174.82* | 175.42 | 175.53 | 175.57 | 175.56 | 175.52 | 175.44 | 175.41 | 175.36 |
| 19 | 175.39* | 175.43 | 175.50 | 174.88* | 175.42 | 175.54 | 175.57 | 175.54 | 175.51 | 175.45 | 175.39 | 175.37 |
| 20 | / | 175.43 | 175.51 | 174.91 | 175.42 | 175.55 | 175.58 | 175.55 | 175.50 | 175.43 | 175.40 | 175.38 |
| 21 | / | 175.42 | 175.55 | 174.87 | 175.41 | 175.57 | 175.56 | 175.56 | 175.50 | 175.46 | 175.39 | 175.35 |
| 22 | / | 175.38 | 175.58 | 174.78 | 175.43 | 175.57 | 175.56 | 175.54 | 175.49 | 175.44 | 175.42 | 175.41 |
| 23 | / | 175.37 | 175.53 | 174.92 | 175.45 | 175.57 | 175.56 | 175.52 | 175.50 | 175.44 | 175.38 | 175.42 |
| 24 | 175.33* | 175.36 | 175.55 | 175.00 | 175.46 | 175.59 | 175.55 | 175.53 | 175.49 | 175.44 | 175.37 | 175.38 |
| 25 | 175.37 | 175.37 | 175.52 | 175.05 | 175.49 | 175.56 | 175.55 | 175.53 | 175.51 | 175.44 | 175.35 | 175.42 |
| 26 | 175.42 | 175.37 | 175.50 | 174.99 | 175.51 | 175.55 | 175.56 | 175.52 | 175.51 | 175.44 | 175.33 | 175.38 |
| 27 | 175.46 | 175.36 | 175.48 | 175.00 | 175.50 | 175.57 | 175.56 | 175.52 | 175.51 | 175.43 | 175.34 | 175.37 |
| 28 | 175.37 | 175.42 | 175.44 | 175.11 | 175.50 | 175.54 | 175.56 | 175.51 | 175.50 | 175.44 | 175.37* | 175.38 |
| 29 | 175.33 | 175.52 | 175.46 | 175.39 | 175.53 | 175.53 | 175.56 | 175.53 | 175.49 | 175.42 | 175.38 | 175.41 |
| 30 | 175.35 | | 175.57 | 175.33 | 175.53 | 175.55 | 175.55 | 175.53 | 175.48 | 175.43 | 175.37 | 175.42 |
| 31 | 175.33 | | 175.55 | | 175.51 | | 175.55 | 175.53 | | 175.42 | | 175.42 |
| MEAN | 175.40 | 175.38 | 175.50 | 175.14 | 175.42 | 175.53 | 175.56 | 175.54 | 175.51 | 175.45 | 175.40 | 175.37 |
| MAX. | 175.53 | 175.53 | 175.65 | 175.78 | 175.61 | 175.61 | 175.63 | 175.64 | 175.62 | 175.55 | 175.53 | 175.51 |
| | 0700/08 | 0800/29 | 1500/30 | 0700/06 | 1500/25 | 2400/24 | 2000/17 | 1700/18 | 1800/02 | 0100/03 | 1900/01 | 2000/25 |
| MIN. | 175.29 | 175.24 | 175.35 | 174.72 | 175.24 | 175.47 | 175.52 | 175.46 | 175.46 | 175.36 | 175.31 | 175.26 |
| | 1400/13 | 2200/02 | 1200/15 | 1700/22 | 2200/01 | 0200/03 | 1900/04 | 0800/30 | 0500/02 | 0300/21 | 1800/27 | 0700/12 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 175.43

ANNUAL SUMMARY OF LEVELS, 1984
Station 4080: St. Clair S.P., St. Clair, Michigan on St. Clair River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.03 Jul
Daily mean elevation: 176.46 7 Apr
Instant/hourly elevation: 176.60 1800/7 Apr

LOWEST
Monthly mean elevation: 175.83 Dec
Daily mean elevation: 175.70 13 Feb
Instant/hourly elevation: 175.56 1800/22 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.19 | 11 Jan |
| 176.00 | 1 Feb |
| 176.07 | 13 Mar |
| 176.46 | 7 Apr |
| 176.00 | 29 May |
| 176.05 | 24 Jun |
| 176.06 | 18 Jul |
| 176.04 | 19 Aug |
| 176.02 | 26 Sep |
| 176.00 | 3 Oct |
| 176.03 | 11 Nov |
| 175.89 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 175.92 | 27 Jan |
| 175.70 | 13 Feb |
| 175.80 | 17 Mar |
| 175.73 | 30 Apr |
| 175.80 | 2 May |
| 175.93 | 2 Jun |
| 176.01 | 10 Jul |
| 175.96 | 28 Aug |
| 175.92 | 8 Sep |
| 175.87 | 19 Oct |
| 175.79 | 26 Nov |
| 175.77 | 12 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.45        |     |     |     | 1   |     |     |     |     |     |     |     |     | 176.45        | 1                          |
| 176.40        |     |     |     |     |     |     |     |     |     |     |     |     | 176.40        | 1                          |
| 176.35        |     |     |     |     |     |     |     |     |     |     |     |     | 176.35        | 1                          |
| 176.30        |     |     |     |     |     |     |     |     |     |     |     |     | 176.30        | 1                          |
| 176.25        |     |     |     | 2   |     |     |     |     |     |     |     |     | 176.25        | 3                          |
| 176.20        |     |     |     | 2   |     |     |     |     |     |     |     |     | 176.20        | 5                          |
| 176.15        | 2   |     |     | 4   |     |     |     |     |     |     |     |     | 176.15        | 11                         |
| 176.10        | 2   |     |     | 3   |     |     |     |     |     |     |     |     | 176.10        | 16                         |
| 176.05        | 6   |     | 2   | 2   |     |     | 2   |     |     |     |     |     | 176.05        | 28                         |
| 176.00        | 10  |     |     | 1   |     | 12  | 29  | 23  | 2   |     | 1   |     | 176.00        | 106                        |
| 175.95        | 6   | 3   | 1   | 2   | 6   | 9   |     | 8   | 22  | 2   | 1   |     | 175.95        | 166                        |
| 175.90        | 5   | 2   | 7   | 2   | 3   | 9   |     |     | 6   | 19  | 8   |     | 175.90        | 227                        |
| 175.85        |     | 5   | 9   | 1   | 14  |     |     |     |     | 10  | 10  | 11  | 175.85        | 287                        |
| 175.80        |     | 8   | 9   | 8   | 7   |     |     |     |     |     | 8   | 11  | 175.80        | 338                        |
| 175.75        |     | 9   | 3   | 1   | 1   |     |     |     |     |     | 2   | 9   | 175.75        | 363                        |
| 175.70        |     | 1   |     | 1   |     |     |     |     |     |     |     |     | 175.70        | 365                        |
| 175.65        |     | 1   |     |     |     |     |     |     |     |     |     |     | 175.65        | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4080: St. Clair S.P., St. Clair, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.00  | 176.00  | 175.93  | 175.82  | 175.81  | 175.95  | 176.02  | 176.02  | 176.00  | 175.95  | 175.86  | 175.86  |
| 2    | 176.02  | 175.92  | 175.90  | 175.81  | 175.80  | 175.93  | 176.02  | 176.02  | 175.98  | 175.95  | 175.95  | 175.82  |
| 3    | 175.92  | 175.86  | 175.89  | 175.82  | 175.81  | 175.95  | 176.02  | 176.02  | 176.00  | 176.00  | 175.87  | 175.81  |
| 4    | 176.01  | 175.88  | 175.84  | 175.82  | 175.85  | 175.96  | 176.02  | 176.02  | 176.00  | 175.96  | 175.85  | 175.86  |
| 5    | 176.03  | 175.87  | 175.80  | 175.99  | 175.85  | 175.94  | 176.02  | 176.01  | 176.00  | 175.94  | 175.92  | 175.82  |
| 6    | 176.08  | 175.89  | 175.83  | 176.26  | 175.85  | 175.94  | 176.04  | 176.01  | 175.99  | 175.89  | 175.92  | 175.85  |
| 7    | 176.00  | 175.96  | 175.82  | 176.46  | 175.84  | 175.94  | 176.06  | 176.02  | 175.93  | 175.89  | 175.88  | 175.84  |
| 8    | 176.05  | 175.90  | 175.86  | 176.15  | 175.86  | 175.94  | 176.03  | 176.01  | 175.92  | 175.91  | 175.83  | 175.85  |
| 9    | 176.06  | 175.84  | 175.96  | 176.04  | 175.87  | 175.96  | 176.02  | 176.02  | 175.96  | 175.93  | 175.87  | 175.77  |
| 10   | 176.18  | 175.77  | 175.88  | 176.15  | 175.87  | 175.95  | 176.01  | 176.04  | 175.97  | 175.92  | 175.88  | 175.79  |
| 11   | 176.19  | 175.76  | 175.95  | 176.08  | 175.85  | 175.98  | 176.04  | 176.04  | 175.98  | 175.92  | 176.03  | 175.78  |
| 12   | 176.13  | 175.73  | 176.06  | 176.19  | 175.88  | 175.95  | 176.04  | 176.04  | 175.95  | 175.91  | 176.00  | 175.77  |
| 13   | 176.07  | 175.70  | 176.07  | 176.18  | 175.87  | 175.97  | 176.03  | 176.04  | 175.96  | 175.91  | 175.95  | 175.83  |
| 14   | 176.11  | 175.76  | 175.94  | 176.22  | 175.89  | 175.99  | 176.03  | 176.03  | 176.01  | 175.91  | 175.89  | 175.79  |
| 15   | 176.05  | 175.81  | 175.80  | 175.95  | 175.91  | 175.98  | 176.04  | 176.03  | 175.99  | 175.89  | 175.88  | 175.80  |
| 16   | 176.01  | 175.81  | 175.88  | 175.85  | 175.88  | 175.97  | 176.04  | 176.03  | 176.00  | 175.89  | 175.95  | 175.78  |
| 17   | 176.01  | 175.82  | 175.80  | 175.83  | 175.87  | 175.96  | 176.05  | 176.01  | 176.00  | 175.89  | 175.95  | 175.86  |
| 18   | 176.02  | 175.82  | 175.82  | 175.80  | 175.86  | 175.99  | 176.06  | 176.02  | 175.98  | 175.92  | 175.91  | 175.84  |
| 19   | 176.01  | 175.80  | 175.83  | 175.94  | 175.88  | 176.01  | 176.04  | 176.04  | 175.98  | 175.87  | 175.89  | 175.83  |
| 20   | 176.04  | 175.83  | 175.84  | 176.20  | 175.88  | 176.02  | 176.05  | 176.01  | 175.99  | 175.92  | 175.91  | 175.86  |
| 21   | 176.00  | 175.82  | 175.87  | 176.21  | 175.87  | 176.03  | 176.04  | 176.00  | 175.98  | 175.94  | 175.88  | 175.79  |
| 22   | 175.99  | 175.77  | 175.91  | 175.85  | 175.88  | 176.02  | 176.02  | 175.99  | 175.93  | 175.92  | 175.85  | 175.83  |
| 23   | 175.95  | 175.76  | 175.92  | 175.85  | 175.91  | 176.02  | 176.03  | 176.03  | 175.97  | 175.93  | 175.88  | 175.89  |
| 24   | 175.94  | 175.80  | 175.91  | 176.12  | 175.89  | 176.05  | 176.05  | 176.00  | 175.94  | 175.91  | 175.85  | 175.87  |
| 25   | 175.97  | 175.84  | 175.90  | 176.07  | 175.91  | 176.04  | 176.04  | 176.00  | 175.98  | 175.92  | 175.82  | 175.87  |
| 26   | 175.97  | 175.80  | 175.88  | 175.86  | 175.96  | 176.01  | 176.03  | 175.98  | 176.02  | 175.90  | 175.79  | 175.88  |
| 27   | 175.92  | 175.80  | 175.85  | 175.96  | 175.96  | 176.02  | 176.04  | 175.97  | 175.98  | 175.88  | 175.80  | 175.80  |
| 28   | 175.95  | 175.96  | 175.85  | 176.27  | 175.96  | 176.03  | 176.04  | 175.96  | 175.98  | 175.93  | 175.84  | 175.81  |
| 29   | 176.06  | 175.94  | 175.85  | 176.16  | 176.00  | 176.01  | 176.03  | 175.97  | 175.98  | 175.91  | 175.85  | 175.88  |
| 30   | 176.10  |         | 175.92  | 175.73  | 175.98  | 176.03  | 176.02  | 176.01  | 175.95  | 175.90  | 175.83  | 175.89  |
| 31   | 176.07  |         | 175.89  |         | 175.96  |         | 176.02  | 176.01  |         | 175.90  |         | 175.89  |
| MEAN | 176.03  | 175.84  | 175.89  | 176.02  | 175.89  | 175.98  | 176.03  | 176.01  | 175.98  | 175.92  | 175.89  | 175.83  |
| MAX. | 176.25  | 176.07  | 176.13  | 176.60  | 176.06  | 176.13  | 176.11  | 176.19  | 176.18  | 176.07  | 176.11  | 175.97  |
|      | 2100/10 | 2100/28 | 1000/13 | 1800/07 | 0500/29 | 2100/24 | 1300/11 | 0500/30 | 2200/25 | 1000/03 | 1100/11 | 2100/25 |
| MIN. | 175.76  | 175.65  | 175.72  | 175.56  | 175.70  | 175.86  | 175.91  | 175.89  | 175.86  | 175.78  | 175.76  | 175.67  |
|      | 1900/03 | 1200/13 | 1100/15 | 1800/22 | 0100/01 | 2000/02 | 2300/10 | 0900/30 | 0400/13 | 2300/31 | 1800/26 | 2000/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 175.94

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4084: Marysville, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.32 Apr  
Daily mean elevation: 176.61 21 Apr  
Instant/hourly elevation: 176.74 0200/21 Apr

LOWEST  
Monthly mean elevation: 176.05 Feb  
Daily mean elevation: 175.92 13 Feb  
Instant/hourly elevation: 175.84 1100/15 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.35 | 11 Jan |
| 176.25 | 28 Feb |
| 176.21 | 12 Mar |
| 176.61 | 21 Apr |
| 176.26 | 29 May |
| 176.20 | 4 Jun  |
| 176.32 | 24 Jul |
| 176.33 | 19 Aug |
| 176.31 | 26 Sep |
| 176.25 | 3 Oct  |
| 176.33 | 11 Nov |
| 176.15 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.10 | 24 Jan |
| 175.92 | 13 Feb |
| 175.97 | 15 Mar |
| 175.95 | 30 Apr |
| 176.07 | 2 May  |
| 176.17 | 2 Jun  |
| 176.27 | 31 Jul |
| 176.21 | 28 Aug |
| 176.18 | 22 Sep |
| 176.10 | 19 Oct |
| 176.03 | 26 Nov |
| 176.02 | 16 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 176.60                                                  |     |     |     | 1   |     |     |     |     |     |     |     |     | 176.60        | 1                          |
| 176.55                                                  |     |     |     | 1   |     |     |     |     |     |     |     |     | 176.55        | 2                          |
| 176.50                                                  |     |     |     | 2   |     |     |     |     |     |     |     |     | 176.50        | 4                          |
| 176.45                                                  |     |     |     | 5   |     |     |     |     |     |     |     |     | 176.45        | 9                          |
| 176.40                                                  |     |     |     | 2   |     |     |     |     |     |     |     |     | 176.40        | 11                         |
| 176.35                                                  |     |     |     | 3   |     |     |     |     |     |     |     |     | 176.35        | 14                         |
| 176.30                                                  | 4   |     |     | 4   |     |     | 2   | 6   | 1   |     | 1   |     | 176.30        | 32                         |
| 176.25                                                  | 6   |     |     | 4   | 1   |     | 18  | 20  | 3   |     | 1   |     | 176.25        | 85                         |
| 176.20                                                  | 10  | 1   | 1   | 2   | 4   |     |     | 5   | 13  | 4   | 3   |     | 176.20        | 128                        |
| 176.15                                                  | 6   | 2   | 2   | 1   | 4   | 4   |     |     | 2   | 18  | 6   |     | 176.15        | 173                        |
| 176.10                                                  | 4   | 1   | 4   |     | 15  |     |     |     |     | 8   | 8   | 13  | 176.10        | 226                        |
| 176.05                                                  | 1   | 6   | 13  |     | 7   |     |     |     |     | 1   | 9   | 5   | 176.05        | 268                        |
| 176.00                                                  |     | 11  | 5   | 4   |     |     |     |     |     |     | 2   | 11  | 176.00        | 301                        |
| 175.95                                                  |     | 6   | 6   |     |     |     |     |     |     |     |     |     | 175.95        | 313                        |
| 175.90                                                  |     | 2   |     | 1   |     |     |     |     |     |     |     |     | 175.90        | 316                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4084: Marysville, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.33  | 176.17  | 176.15  | 176.02  | 176.09  | 176.20  | /       | 176.28  | 176.28* | 176.22  | 176.09  | 176.12  |
| 2    | 176.34  | 176.10  | 176.11  | 176.02  | 176.07  | 176.17  | /       | 176.27  | /       | 176.21  | 176.23  | 176.07  |
| 3    | 176.22  | 176.04  | 176.10  | 176.03  | 176.08  | 176.20  | /       | 176.28  | /       | 176.25  | 176.13  | 176.04  |
| 4    | 176.29  | 176.06  | 176.03  | 176.03  | 176.12  | 176.20* | /       | 176.27  | /       | 176.22  | 176.09  | 176.13  |
| 5    | 176.23  | 176.08  | 175.99  | 176.18  | 176.12  | /       | /       | 176.26  | /       | 176.19  | 176.19  | 176.09  |
| 6    | 176.28  | 176.10  | 176.06  | 176.36  | 176.09  | /       | /       | 176.26  | /       | 176.13  | 176.20  | 176.13  |
| 7    | 176.22  | 176.14  | 176.04  | 176.52  | 176.08  | /       | /       | 176.28  | /       | 176.13  | 176.13  | 176.08  |
| 8    | 176.24  | 176.08  | 176.05  | 176.46  | 176.11  | /       | /       | 176.26  | /       | 176.16  | 176.06  | 176.12  |
| 9    | 176.26  | 176.05  | 176.10  | 176.39  | 176.12  | /       | /       | 176.28  | /       | 176.19  | 176.11  | 176.03  |
| 10   | 176.35  | 175.97  | 176.00  | 176.47  | 176.12  | /       | /       | 176.31  | /       | 176.18  | 176.13  | 176.05* |
| 11   | 176.35  | 175.98  | 176.16  | 176.48  | 176.09  | /       | /       | 176.31  | /       | 176.18  | 176.33  | 176.02  |
| 12   | 176.28  | 175.95  | 176.21  | 176.44  | 176.13  | /       | 176.27* | 176.31  | /       | 176.18  | 176.28  | 176.03  |
| 13   | 176.24  | 175.92  | 176.20  | 176.32  | 176.13  | /       | 176.27  | 176.31  | 176.25* | 176.17  | 176.22  | 176.11  |
| 14   | 176.28  | 175.98  | 176.10  | 176.44  | 176.13  | /       | 176.27  | 176.30  | 176.27  | 176.16  | 176.13  | 176.04  |
| 15   | 176.22  | 176.02  | 175.97  | 176.31  | 176.16  | /       | 176.27  | 176.29  | 176.25  | 176.13  | 176.10  | 176.05  |
| 16   | 176.17  | 176.02  | 176.08  | 176.27  | 176.13  | /       | 176.29  | 176.30  | 176.26  | 176.14  | 176.20  | 176.02  |
| 17   | 176.19  | 176.02  | 175.99  | 176.28  | 176.11  | /       | 176.28  | 176.28  | 176.25  | 176.14  | 176.22  | 176.13  |
| 18   | 176.21  | 176.03  | 175.98  | 176.26  | 176.10  | /       | 176.30  | 176.28  | 176.22  | 176.18  | 176.18  | 176.11  |
| 19   | 176.20  | 176.00  | 176.00  | 176.36  | 176.14  | /       | 176.29  | 176.33  | 176.23  | 176.10  | 176.16  | 176.08  |
| 20   | 176.24  | 176.05  | 176.02  | 176.57  | 176.13  | /       | 176.29  | 176.28  | 176.25  | 176.18  | 176.18  | 176.13  |
| 21   | 176.18  | 176.04  | 176.04  | 176.61  | 176.11  | /       | 176.29  | 176.26  | 176.24  | 176.20  | 176.15  | 176.03  |
| 22   | 176.17  | 175.98  | 176.08  | 176.25  | 176.12  | /       | 176.27  | 176.26  | 176.18  | 176.18  | 176.09  | 176.08  |
| 23   | 176.12  | 175.98  | 176.13  | 176.26  | 176.17  | /       | 176.28  | 176.31  | 176.23  | 176.19  | 176.14  | 176.14  |
| 24   | 176.10  | 176.04  | 176.11  | 176.51  | 176.15  | /       | 176.32  | 176.27  | 176.19  | 176.17  | 176.10  | 176.14  |
| 25   | 176.15  | 176.09  | 176.10  | 176.47  | 176.16  | /       | 176.30  | 176.26  | 176.24  | 176.18  | 176.08  | 176.12  |
| 26   | 176.16  | 176.04  | 176.09  | 176.25  | 176.21  | /       | 176.28  | 176.23  | 176.31  | 176.15  | 176.03  | 176.15  |
| 27   | 176.15  | 176.05  | 176.06  | 176.33  | 176.20  | /       | 176.31  | 176.22  | 176.24  | 176.13  | 176.04  | 176.03  |
| 28   | 176.13  | 176.25  | 176.07  | 176.47  | 176.22  | /       | 176.30  | 176.21  | 176.23  | 176.20  | 176.09  | 176.04  |
| 29   | 176.23  | 176.17  | 176.06  | 176.33  | 176.26  | /       | 176.28  | 176.22  | 176.24  | 176.17  | 176.11  | 176.14  |
| 30   | 176.29  |         | 176.09  | 175.95  | 176.22  | /       | 176.27  | 176.25  | 176.22  | 176.15  | 176.08  | /       |
| 31   | 176.25  |         | 176.06  |         | 176.21  |         | 176.27  | 176.28  |         | 176.17  |         | /       |
| MEAN | 176.23  | 176.05  | 176.07  | 176.32  | 176.14  | 176.19  | 176.28  | 176.27  | 176.24  | 176.17  | 176.14  | 176.08  |
| MAX. | 176.42  | 176.36  | 176.32  | 176.74  | 176.32  | 176.23  | 176.37  | 176.48  | 176.47  | 176.34  | 176.43  | 176.26  |
| MIN. | 1100/10 | 1800/28 | 0500/11 | 0200/21 | 0400/29 | 2400/03 | 2400/23 | 2000/22 | 2100/25 | 1200/03 | 1100/11 | 0700/26 |
|      | 176.04  | 175.85  | 175.84  | 175.85  | 175.95  | 176.12  | 176.21  | 176.09  | 176.07  | 176.02  | 175.97  | 175.87  |
|      | 0100/25 | 1200/13 | 1100/15 | 1000/30 | 0100/01 | 2400/02 | 1000/15 | 0900/30 | 2200/24 | 2400/31 | 2300/27 | 1900/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 176.18

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4087: Dry Dock, Port Huron, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.42 Jul  
Daily mean elevation: 176.64 21 Apr  
Instant/hourly elevation: 176.75 0300/21 Apr

LOWEST  
Monthly mean elevation: 176.15 Feb  
Daily mean elevation: 176.03 13 Feb  
Instant/hourly elevation: 175.94 1100/15 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.37 | 11 Jan |
| 176.41 | 28 Feb |
| 176.28 | 12 Mar |
| 176.64 | 21 Apr |
| 176.40 | 29 May |
| 176.43 | 28 Jun |
| 176.46 | 24 Jul |
| 176.47 | 19 Aug |
| 176.45 | 26 Sep |
| 176.39 | 3 Oct  |
| 176.49 | 11 Nov |
| 176.30 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.15 | 24 Jan |
| 176.03 | 13 Feb |
| 176.07 | 15 Mar |
| 176.08 | 30 Apr |
| 176.21 | 7 May  |
| 176.29 | 8 Jun  |
| 176.39 | 9 Jul  |
| 176.35 | 29 Aug |
| 176.25 | 7 Sep  |
| 176.22 | 19 Oct |
| 176.17 | 27 Nov |
| 176.14 | 16 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.60 | | | | 1 | | | | | | | | | 176.60 | 1 |
| 176.55 | | | | 3 | | | | | | | | | 176.55 | 4 |
| 176.50 | | | | 3 | | | | | | | | | 176.50 | 7 |
| 176.45 | | | | 7 | | | 2 | 3 | | | 1 | | 176.45 | 20 |
| 176.40 | | 1 | | 6 | | 7 | 25 | 16 | 5 | | 1 | | 176.40 | 81 |
| 176.35 | 2 | | | 3 | 1 | 10 | 4 | 7 | 17 | 3 | 3 | | 176.35 | 131 |
| 176.30 | 6 | | | 1 | 6 | 9 | | 3 | 6 | 16 | 6 | | 176.30 | 184 |
| 176.25 | 7 | 1 | 3 | 1 | 12 | 4 | | | 1 | 11 | 7 | 13 | 176.25 | 244 |
| 176.20 | 11 | 2 | 7 | | 12 | | | | 1 | 1 | 9 | 6 | 176.20 | 293 |
| 176.15 | 4 | 9 | 11 | | | | | | | | 3 | 10 | 176.15 | 330 |
| 176.10 | 1 | 8 | 7 | 4 | | | | | | | | 2 | 176.10 | 352 |
| 176.05 | | 7 | 3 | 1 | | | | | | | | | 176.05 | 363 |
| 176.00 | | 1 | | | | | | | | | | | 176.00 | 364 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4087: Dry Dock, Port Huron, Michigan on St. Clair River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.34 | 176.17 | 176.27 | 176.12 | 176.25 | 176.32 | 176.42 | 176.42 | 176.41* | 176.36 | 176.22 | 176.26 |
| 2 | 176.34 | 176.12 | 176.23 | 176.13 | 176.23 | 176.30 | 176.40 | 176.41 | 176.35* | 176.33 | 176.37 | 176.21 |
| 3 | 176.22 | 176.11 | 176.21 | 176.14 | 176.23 | 176.33 | 176.40 | 176.42 | 176.41 | 176.39 | 176.27 | 176.17 |
| 4 | 176.32 | 176.15 | 176.13 | 176.14 | 176.26 | 176.34 | 176.41 | 176.42 | 176.41 | 176.37 | 176.22 | 176.28 |
| 5 | 176.25 | 176.18 | 176.09 | 176.27 | 176.26 | 176.30 | 176.41 | 176.40 | 176.40 | 176.32 | 176.34 | 176.24 |
| 6 | 176.32 | 176.20 | 176.18 | 176.41 | 176.23 | 176.30 | 176.43 | 176.41 | 176.37 | 176.26 | 176.34 | 176.28 |
| 7 | 176.26 | 176.23 | 176.18* | 176.55 | 176.21 | 176.31 | 176.46 | 176.42 | 176.25 | 176.26 | 176.27 | 176.20 |
| 8 | 176.28 | 176.17 | 176.18* | 176.52 | 176.25 | 176.29 | 176.42 | 176.40 | 176.27 | 176.29 | 176.18 | 176.27 |
| 9 | 176.29 | 176.14 | 176.20 | 176.46 | 176.26 | 176.36 | 176.39 | 176.42 | 176.32 | 176.32 | 176.24 | 176.19* |
| 10 | 176.37 | 176.07 | 176.13 | 176.48 | 176.25 | 176.31 | 176.40 | 176.45 | 176.36 | 176.32 | 176.26 | 176.22* |
| 11 | 176.37 | 176.08 | 176.28 | 176.53 | 176.23 | 176.38 | 176.43 | 176.46 | 176.37 | 176.32 | 176.49 | 176.15 |
| 12 | 176.29 | 176.06 | 176.28 | 176.47 | 176.27 | 176.31 | 176.44 | 176.46 | 176.35 | 176.31 | 176.43 | 176.17 |
| 13 | 176.25 | 176.03 | 176.25 | 176.35 | 176.27 | 176.35 | 176.42 | 176.45 | 176.34 | 176.30 | 176.36 | 176.26 |
| 14 | 176.31 | 176.10 | 176.18 | 176.47 | 176.27 | 176.39 | 176.42 | 176.42 | 176.42 | 176.29 | 176.26 | 176.17 |
| 15 | 176.25 | 176.14 | 176.07 | 176.45 | 176.31 | 176.37 | 176.42 | 176.42* | 176.40 | 176.26 | 176.22 | 176.18 |
| 16 | 176.21 | 176.13 | 176.22 | 176.40 | 176.28 | 176.34 | 176.44 | / | 176.40 | 176.27 | 176.35 | 176.14 |
| 17 | 176.23 | 176.13 | 176.12 | 176.40 | 176.25 | 176.33 | 176.42 | / | 176.38 | 176.27 | 176.36 | 176.27 |
| 18 | 176.25 | 176.15 | 176.09 | 176.41 | 176.23 | 176.39 | 176.45 | 176.42* | 176.37 | 176.33 | 176.34 | 176.25 |
| 19 | 176.25 | 176.10 | 176.12 | 176.48 | 176.28 | 176.41 | 176.44 | 176.47 | 176.36 | 176.22 | 176.31 | 176.21 |
| 20 | 176.29 | 176.17 | 176.12 | 176.60 | 176.27 | 176.40 | 176.43 | 176.41 | 176.39 | 176.33 | 176.33 | 176.27 |
| 21 | 176.22 | 176.16 | 176.13 | 176.64 | 176.24 | 176.41 | 176.43 | 176.38 | 176.38 | 176.34 | 176.29 | 176.16 |
| 22 | 176.20 | 176.10 | 176.17 | 176.46 | 176.24 | 176.40 | 176.41 | 176.39 | 176.31 | 176.32 | 176.21 | 176.19 |
| 23 | 176.16 | 176.10 | 176.24 | 176.41 | 176.30 | 176.39 | 176.42 | 176.45 | 176.36 | 176.34 | 176.28 | 176.28 |
| 24 | 176.15 | 176.17 | 176.22 | 176.57 | 176.27 | 176.42 | 176.46 | 176.41 | 176.32 | 176.31 | 176.24 | 176.29 |
| 25 | 176.20 | 176.23 | 176.22 | 176.58 | 176.27 | 176.43 | 176.44 | 176.39 | 176.36 | 176.33 | 176.22 | 176.24 |
| 26 | 176.22 | 176.17 | 176.20 | 176.39 | 176.34 | 176.37 | 176.42 | 176.36 | 176.45 | 176.28 | 176.17 | 176.30 |
| 27 | 176.22 | 176.18 | 176.17 | 176.45 | 176.33 | 176.38 | 176.45 | 176.35 | 176.38 | 176.26 | 176.17 | 176.16 |
| 28 | 176.18 | 176.41 | 176.19 | 176.50 | 176.35 | 176.43 | 176.44 | 176.35 | 176.37 | 176.34 | 176.22 | 176.16 |
| 29 | 176.27 | 176.30 | 176.18 | 176.42 | 176.40 | 176.41 | 176.42 | 176.35 | 176.38 | 176.32 | 176.26 | 176.27 |
| 30 | 176.31 | | 176.18 | 176.08 | 176.35 | 176.42 | 176.41 | 176.39 | 176.36 | 176.29 | 176.22 | 176.28 |
| 31 | 176.26 | | 176.15 | | 176.33 | | 176.41 | 176.42 | | 176.31 | | 176.29 |
| MEAN | 176.26 | 176.15 | 176.18 | 176.41 | 176.27 | 176.36 | 176.42 | 176.41 | 176.37 | 176.31 | 176.28 | 176.23 |
| MAX. | 176.43 | 176.53 | 176.48 | 176.75 | 176.45 | 176.49 | 176.52 | 176.63 | 176.58 | 176.50 | 176.60 | 176.42 |
| MIN. | 1100/10 | 1800/28 | 0500/11 | 0300/21 | 1100/29 | 2000/24 | 1000/11 | 2000/22 | 2100/25 | 1100/03 | 1000/11 | 0900/26 |
| | 176.01 | 175.97 | 175.94 | 175.95 | 176.08 | 176.24 | 176.31 | 176.25 | 176.13 | 176.12 | 176.07 | 175.96 |
| | 1900/03 | 1100/13 | 1100/15 | 1400/30 | 0100/01 | 1000/08 | 0300/10 | 0500/30 | 0300/13 | 0800/19 | 1200/01 | 2000/21 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.30

ANNUAL SUMMARY OF LEVELS, 1984
Station 4090: Mouth of Black River, Port Huron, Michigan on St. Clair River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.55 Jul
Daily mean elevation: 176.67 21 Apr
Instant/hourly elevation: 176.77 0200/21 Apr

LOWEST
Monthly mean elevation: 176.25 Feb
Daily mean elevation: 176.13 13 Feb
Instant/hourly elevation: 176.03 1400/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.45 | 11 Jan |
| 176.54 | 28 Feb |
| 176.37 | 11 Mar |
| 176.67 | 21 Apr |
| 176.52 | 29 May |
| 176.56 | 30 Jun |
| 176.60 | 24 Jul |
| 176.60 | 19 Aug |
| 176.60 | 26 Sep |
| 176.52 | 3 Oct |
| 176.64 | 11 Nov |
| 176.43 | 31 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.20 | 24 Jan |
| 176.13 | 13 Feb |
| 176.16 | 15 Mar |
| 176.19 | 30 Apr |
| 176.32 | 7 May |
| 176.41 | 8 Jun |
| 176.50 | 9 Jul |
| 176.46 | 29 Aug |
| 176.36 | 7 Sep |
| 176.34 | 19 Oct |
| 176.28 | 26 Nov |
| 176.25 | 11 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.65        |     |     |     | 1   |     |     |     |     |     |     |     |     | 176.65        | 1                          |
| 176.60        |     |     |     | 2   |     |     |     |     |     |     | 1   |     | 176.60        | 4                          |
| 176.55        |     |     |     | 5   |     | 3   | 13  | 9   | 2   |     | 1   |     | 176.55        | 37                         |
| 176.50        |     | 1   |     | 10  | 1   | 10  | 17  | 15  | 11  | 1   | 1   |     | 176.50        | 104                        |
| 176.45        |     |     |     | 5   | 2   | 6   | 1   | 7   | 12  | 8   | 7   |     | 176.45        | 152                        |
| 176.40        | 2   | 1   |     |     | 5   | 11  |     |     | 3   | 14  | 3   | 6   | 176.40        | 197                        |
| 176.35        | 7   |     | 2   | 2   | 16  |     |     |     | 2   | 7   | 7   | 10  | 176.35        | 250                        |
| 176.30        | 11  | 1   | 8   |     | 7   |     |     |     |     | 1   | 7   | 4   | 176.30        | 289                        |
| 176.25        | 6   | 6   | 9   |     |     |     |     |     |     |     | 3   | 10  | 176.25        | 323                        |
| 176.20        |     | 8   | 8   | 4   |     |     |     |     |     |     |     | 1   | 176.20        | 344                        |
| 176.15        | 1   | 7   | 4   | 1   |     |     |     |     |     |     |     |     | 176.15        | 357                        |
| 176.10        |     | 1   |     |     |     |     |     |     |     |     |     |     | 176.10        | 358                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4090: Mouth of Black River, Port Huron, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.38  | /       | 176.37  | 176.21  | 176.38  | 176.44  | 176.55  | 176.55  | 176.51  | 176.49  | 176.34  | 176.38  |
| 2    | 176.38  | /       | 176.34  | 176.24  | 176.36  | 176.42  | 176.53  | 176.54  | 176.46  | 176.46  | 176.51  | 176.33  |
| 3    | 176.34* | 176.19  | 176.31  | 176.24  | 176.35  | 176.45  | 176.53  | 176.55  | 176.55  | 176.52  | 176.39  | 176.27  |
| 4    | 176.38* | 176.23  | 176.22  | 176.24  | 176.38  | 176.45  | 176.54  | 176.54  | 176.54  | 176.50  | 176.34  | 176.41  |
| 5    | 176.31  | 176.27  | 176.17  | 176.37  | 176.38  | 176.41  | 176.53  | 176.53  | 176.53  | 176.45  | 176.47  | 176.36  |
| 6    | 176.40  | /       | 176.28  | 176.47  | 176.35  | 176.42  | 176.56  | 176.53  | 176.49  | 176.39  | 176.47  | 176.41  |
| 7    | 176.34  | /       | 176.27  | 176.58  | 176.32  | 176.42  | 176.59  | 176.55  | 176.36  | 176.38  | 176.39  | 176.31  |
| 8    | 176.35  | 176.22* | 176.23  | 176.55  | 176.37  | 176.41  | 176.54  | 176.52  | 176.38  | 176.41  | 176.30  | 176.39  |
| 9    | 176.38  | 176.23  | 176.26  | 176.49  | 176.38  | 176.48  | 176.50  | 176.55  | 176.43  | 176.45  | 176.36  | 176.29  |
| 10   | 176.42  | 176.17  | 176.20  | 176.51  | 176.37  | 176.44  | 176.52  | 176.58  | 176.47  | 176.44  | 176.39  | 176.33  |
| 11   | 176.45* | 176.18  | 176.37  | 176.55  | 176.34  | 176.51  | 176.56  | 176.60  | 176.49  | 176.45  | 176.64  | 176.25  |
| 12   | 176.34  | 176.17  | 176.34  | 176.50  | 176.40  | 176.43  | 176.56  | 176.59  | 176.48  | 176.43  | 176.58  | 176.28  |
| 13   | 176.31  | 176.13  | 176.31  | 176.39  | 176.39  | 176.47  | 176.55  | 176.58  | 176.47  | 176.42  | 176.50  | 176.39  |
| 14   | 176.37  | 176.21  | 176.25  | 176.49  | 176.40  | 176.52  | 176.54  | 176.56  | 176.56  | 176.41  | 176.38  | 176.29  |
| 15   | 176.32  | 176.25  | 176.16  | 176.56  | 176.43  | 176.49  | 176.54  | 176.56  | 176.54  | 176.38  | 176.33  | 176.30  |
| 16   | 176.27  | 176.24  | 176.32  | 176.52  | 176.39  | 176.46  | 176.57  | 176.56  | 176.54  | 176.39  | 176.47  | 176.26  |
| 17   | 176.29  | 176.24  | 176.21  | 176.54  | 176.36  | 176.45  | 176.54  | 176.53  | 176.51  | 176.39  | 176.49  | 176.40  |
| 18   | 176.31  | 176.25  | 176.19  | 176.55  | 176.34  | 176.52  | 176.58  | 176.53  | 176.49  | 176.45  | 176.46  | 176.38  |
| 19   | 176.30  | 176.20  | 176.21  | 176.58  | 176.38  | 176.54  | 176.56  | 176.60  | 176.50  | 176.34  | 176.45  | 176.33  |
| 20   | 176.34  | 176.27  | 176.21  | 176.63  | 176.37  | 176.54  | 176.56  | 176.53  | 176.53  | 176.46  | 176.46  | 176.39  |
| 21   | 176.35* | 176.27  | 176.22  | 176.67  | 176.35  | 176.54  | 176.56  | 176.50  | 176.51  | 176.46  | 176.41  | 176.27  |
| 22   | /       | 176.19  | 176.26  | 176.59  | 176.35  | 176.53  | 176.53  | 176.50  | 176.44  | 176.45  | 176.33  | 176.30  |
| 23   | /       | 176.20  | 176.35  | 176.51  | 176.42  | 176.52  | 176.55  | 176.58  | 176.49  | 176.47  | 176.41  | 176.39  |
| 24   | 176.20* | 176.28  | 176.31  | 176.60  | 176.39  | 176.55  | 176.60  | 176.53  | 176.45  | 176.44  | 176.36  | 176.42  |
| 25   | 176.27  | 176.35  | 176.32  | 176.63  | 176.40  | 176.56  | 176.57  | 176.51  | 176.50  | 176.46  | 176.34  | 176.36  |
| 26   | 176.28  | 176.28  | 176.30  | 176.52  | 176.45  | 176.50  | 176.55  | 176.48  | 176.60  | 176.39  | 176.28  | 176.43  |
| 27   | 176.30  | 176.30  | 176.27  | 176.53  | 176.45  | 176.49  | 176.59  | 176.47  | 176.51  | 176.38  | 176.29  | 176.27  |
| 28   | /       | 176.54  | 176.30  | 176.54  | 176.48  | 176.56  | 176.58  | 176.47  | 176.50  | 176.48  | 176.34  | 176.27  |
| 29   | 176.33* | 176.42  | 176.28  | 176.50  | 176.52  | 176.55  | 176.55  | 176.46  | 176.51  | 176.45  | 176.38  | 176.40  |
| 30   | 176.38  |         | 176.26  | 176.19  | 176.47  | 176.56  | 176.54  | 176.50  | 176.49  | 176.42  | 176.34  | 176.42  |
| 31   | /       |         | 176.24  |         | 176.44  |         | 176.54  | 176.55  |         | 176.43  |         | 176.43  |
| MEAN | 176.34  | 176.25  | 176.27  | 176.48  | 176.39  | 176.49  | 176.55  | 176.54  | 176.49  | 176.43  | 176.41  | 176.35  |
| MAX. | 176.50  | 176.66  | 176.68  | 176.77  | 176.58  | 176.68  | 176.67  | 176.71  | 176.76  | 176.62  | 176.75  | 176.57  |
|      | 1600/06 | 1800/28 | 0500/11 | 0200/21 | 1000/29 | 2100/24 | 0100/24 | 2000/22 | 2100/25 | 1200/03 | 0800/11 | 0800/26 |
| MIN. | 176.17  | 176.06  | 176.06  | 176.03  | 176.21  | 176.34  | 176.41  | 176.24  | 176.27  | 176.22  | 176.17  | 176.08  |
|      | 0100/25 | 1100/13 | 1100/15 | 1400/30 | 0100/01 | 2400/05 | 0300/10 | 0200/29 | 0300/13 | 2200/31 | 1100/01 | 2000/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 176.42

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4096: Dunn Paper Co., Port Huron, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.68 Jul  
Daily mean elevation: 176.77 11 Nov  
Instant/hourly elevation: 176.93 2000/22 Aug

LOWEST  
Monthly mean elevation: 176.36 Feb  
Daily mean elevation: 176.24 15 Mar  
Instant/hourly elevation: 176.09 1400/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.49 | 10 Jan |
| 176.66 | 28 Feb |
| 176.49 | 1 Mar  |
| 176.69 | 21 Apr |
| 176.65 | 29 May |
| 176.67 | 30 Jun |
| 176.74 | 24 Jul |
| 176.73 | 19 Aug |
| 176.72 | 26 Sep |
| 176.66 | 3 Oct  |
| 176.77 | 11 Nov |
| 176.58 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.25 | 24 Jan |
| 176.24 | 13 Feb |
| 176.24 | 15 Mar |
| 176.29 | 30 Apr |
| 176.45 | 7 May  |
| 176.52 | 8 Jun  |
| 176.63 | 9 Jul  |
| 176.59 | 29 Aug |
| 176.48 | 7 Sep  |
| 176.45 | 19 Oct |
| 176.42 | 27 Nov |
| 176.38 | 16 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 176.75                                                  |     |     |     |     |     |     |     |     |     |     | 1   |     | 176.75        | 1                          |
| 176.70                                                  |     |     |     |     |     |     | 5   | 6   | 1   |     |     |     | 176.70        | 13                         |
| 176.65                                                  |     | 1   |     | 2   |     | 5   | 23  | 16  | 6   | 1   | 1   |     | 176.65        | 68                         |
| 176.60                                                  |     |     |     | 8   | 2   | 10  | 3   | 6   | 15  | 3   | 5   |     | 176.60        | 120                        |
| 176.55                                                  |     |     |     | 8   | 6   | 9   |     | 3   | 6   | 15  | 4   | 3   | 176.55        | 174                        |
| 176.50                                                  |     | 1   |     | 5   | 15  | 6   |     |     |     | 9   | 6   | 11  | 176.50        | 227                        |
| 176.45                                                  | 6   | 1   | 3   |     | 7   |     |     |     | 2   | 2   | 8   | 5   | 176.45        | 261                        |
| 176.40                                                  | 7   | 3   | 9   | 2   | 1   |     |     |     |     | 1   | 5   | 7   | 176.40        | 296                        |
| 176.35                                                  | 10  | 7   | 4   |     |     |     |     |     |     |     |     | 5   | 176.35        | 322                        |
| 176.30                                                  | 6   | 10  | 9   | 4   |     |     |     |     |     |     |     |     | 176.30        | 351                        |
| 176.25                                                  | 1   | 5   | 5   | 1   |     |     |     |     |     |     |     |     | 176.25        | 363                        |
| 176.20                                                  | 1   | 1   | 1   |     |     |     |     |     |     |     |     |     | 176.20        | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4096: Dunn Paper Co., Port Huron, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.44  | 176.32  | 176.49  | 176.31  | 176.54  | 176.56  | 176.67  | 176.69  | 176.65  | 176.62  | 176.46  | 176.52  |
| 2    | 176.44  | 176.27  | 176.46  | 176.34  | 176.51  | 176.54  | 176.66  | 176.68  | 176.59  | 176.58  | 176.65  | 176.47  |
| 3    | 176.32  | 176.28  | 176.42  | 176.34  | 176.50  | 176.58  | 176.65  | 176.69  | 176.68  | 176.66  | 176.51  | 176.39  |
| 4    | 176.46  | 176.33  | 176.32  | 176.33  | 176.53  | 176.59  | 176.66  | 176.68  | 176.67  | 176.63  | 176.46  | 176.55  |
| 5    | 176.38  | 176.38  | 176.26* | 176.45  | 176.52  | 176.54  | 176.65  | 176.67  | 176.67  | 176.58  | 176.61  | 176.50  |
| 6    | 176.49  | 176.40  | 176.44* | 176.53  | 176.48  | 176.54  | 176.67  | 176.67  | 176.63  | 176.51  | 176.61  | 176.55  |
| 7    | 176.42  | 176.40  | 176.38  | 176.61  | 176.45  | 176.55  | 176.73  | 176.69  | 176.48  | 176.49  | 176.52  | 176.44  |
| 8    | 176.43  | 176.35  | 176.33  | 176.57  | 176.50  | 176.52  | 176.67  | 176.65  | 176.50  | 176.53  | 176.42  | 176.53  |
| 9    | 176.46  | 176.34  | 176.34  | 176.52  | 176.51  | 176.61  | 176.63  | 176.68  | 176.56  | 176.57  | 176.49  | 176.43  |
| 10   | 176.49  | 176.27  | 176.28  | 176.53  | 176.51  | 176.55  | 176.66  | 176.72  | 176.61  | 176.57  | 176.53  | 176.47  |
| 11   | 176.47  | 176.29  | 176.48  | 176.58  | 176.47  | 176.63  | 176.68  | 176.72  | 176.64  | 176.57  | 176.77  | 176.38  |
| 12   | 176.40  | 176.28  | 176.42  | 176.54  | 176.53  | 176.56  | 176.70  | 176.72  | 176.60  | 176.56  | 176.70  | 176.42  |
| 13   | 176.36  | 176.24  | 176.38  | 176.43  | 176.53  | 176.60  | 176.68  | 176.71  | 176.59  | 176.55  | 176.63  | 176.54  |
| 14   | 176.44  | 176.32  | 176.34  | 176.52  | 176.53  | 176.65  | 176.67  | 176.69  | 176.69  | 176.55  | 176.49  | 176.42  |
| 15   | 176.39  | 176.36  | 176.24  | 176.62  | 176.56  | 176.62  | 176.68  | 176.68  | 176.66  | 176.51  | 176.44  | 176.44  |
| 16   | 176.34  | 176.35  | 176.43  | 176.60  | 176.54  | 176.59  | 176.70  | 176.70  | 176.66  | 176.52  | 176.60  | 176.38  |
| 17   | 176.37  | 176.35  | 176.31  | 176.62  | 176.51  | 176.57  | 176.68  | 176.66  | 176.64  | 176.52  | 176.62  | 176.55  |
| 18   | 176.38  | 176.36  | 176.27  | 176.61  | 176.49  | 176.63  | 176.72  | 176.66  | 176.62  | 176.59  | 176.59  | 176.52  |
| 19   | 176.38  | 176.31  | 176.30  | 176.63  | 176.55  | 176.66  | 176.70  | 176.73  | 176.63  | 176.45  | 176.58  | 176.47  |
| 20   | 176.41  | 176.38  | 176.30  | 176.65  | 176.53  | 176.65  | 176.69  | 176.66  | 176.65  | 176.59  | 176.60  | 176.54  |
| 21   | 176.34  | 176.38  | 176.31  | 176.69  | 176.50  | 176.65  | 176.70  | 176.63  | 176.63  | 176.60  | 176.55  | 176.41  |
| 22   | 176.31  | 176.31  | 176.34  | 176.61  | 176.49  | 176.63  | 176.67  | 176.64  | 176.56  | 176.59  | 176.45  | 176.43  |
| 23   | 176.27  | 176.33  | 176.45  | 176.56  | 176.56  | 176.62  | 176.67  | 176.71  | 176.61  | 176.60  | 176.53  | 176.53  |
| 24   | 176.25  | 176.42  | 176.42  | 176.63  | 176.53  | 176.65  | 176.74  | 176.67  | 176.56  | 176.57  | 176.49  | 176.56  |
| 25   | 176.34  | 176.49  | 176.42  | 176.66  | 176.52  | 176.67  | 176.70  | 176.65  | 176.62  | 176.60  | 176.47  | 176.49  |
| 26   | 176.36  | 176.42  | 176.41  | 176.60  | 176.60  | 176.60  | 176.69  | 176.61  | 176.72  | 176.53  | 176.42  | 176.58  |
| 27   | 176.39  | 176.43  | 176.38  | 176.56  | 176.59  | 176.58  | 176.72  | 176.60  | 176.63  | 176.50  | 176.42  | 176.40  |
| 28   | 176.31  | 176.66  | 176.42  | 176.60  | 176.60  | 176.67  | 176.71  | 176.60  | 176.62  | 176.61  | 176.47  | 176.39  |
| 29   | 176.39  | 176.54  | 176.38  | 176.59  | 176.65  | 176.66  | 176.69  | 176.59  | 176.64  | 176.58  | 176.52  | 176.53  |
| 30   | 176.46  |         | 176.35  | 176.29  | 176.62* | 176.67  | 176.67  | 176.65  | 176.62  | 176.55  | 176.46  | 176.55  |
| 31   | 176.41  |         | 176.32  |         | 176.56* |         | 176.67  | 176.68  |         | 176.57  |         | 176.56  |
| MEAN | 176.39  | 176.36  | 176.37  | 176.54  | 176.53  | 176.60  | 176.68  | 176.67  | 176.62  | 176.56  | 176.54  | 176.48  |
| MAX. | 176.58  | 176.76  | 176.76  | 176.80  | 176.71  | 176.74  | 176.81  | 176.93  | 176.90  | 176.78  | 176.89  | 176.74  |
| MIN. | 1600/06 | 1800/28 | 0500/11 | 0200/21 | 0400/29 | 1400/14 | 1500/11 | 2000/22 | 2100/25 | 1100/03 | 0700/11 | 0800/26 |
|      | 176.12  | 176.10  | 176.15  | 176.09  | 176.32  | 176.46  | 176.52  | 176.35  | 176.37  | 176.34  | 176.27  | 176.20  |
|      | 1800/03 | 2000/02 | 1000/15 | 1400/30 | 0100/01 | 0100/27 | 0300/10 | 0200/29 | 2200/24 | 2200/31 | 1100/01 | 2000/21 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 176.53

ANNUAL SUMMARY OF LEVELS, 1984  
Station 4098: Fort Gratiot, Port Huron, Michigan on St. Clair River

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.82 Jul  
Daily mean elevation: 176.98 11 Nov  
Instant/hourly elevation: 177.16 2000/22 Aug

LOWEST  
Monthly mean elevation: 176.46 Jan  
Daily mean elevation: 176.33 15 Mar  
Instant/hourly elevation: 176.12 1400/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.58 | 6 Jan  |
| 176.88 | 28 Feb |
| 176.60 | 11 Mar |
| 176.71 | 21 Apr |
| 176.81 | 29 May |
| 176.84 | 30 Jun |
| 176.88 | 24 Jul |
| 176.90 | 19 Aug |
| 176.89 | 26 Sep |
| 176.81 | 3 Oct  |
| 176.98 | 11 Nov |
| 176.73 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.35 | 24 Jan |
| 176.33 | 2 Feb  |
| 176.33 | 15 Mar |
| 176.39 | 30 Apr |
| 176.59 | 7 May  |
| 176.66 | 8 Jun  |
| 176.78 | 9 Jul  |
| 176.71 | 29 Aug |
| 176.59 | 7 Sep  |
| 176.59 | 19 Oct |
| 176.54 | 8 Nov  |
| 176.49 | 16 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 176.95                                                  |     |     |     |     |     |     |     |     |     |     | 1   |     | 176.95        | 1                          |
| 176.90                                                  |     |     |     |     |     |     |     |     |     |     | 1   |     | 176.90        | 1                          |
| 176.85                                                  |     | 1   |     |     |     |     | 5   | 6   | 1   |     | 1   |     | 176.85        | 15                         |
| 176.80                                                  |     |     |     |     | 1   | 5   | 17  | 12  | 6   | 1   | 1   |     | 176.80        | 58                         |
| 176.75                                                  |     |     |     |     | 1   | 10  | 9   | 9   | 14  | 3   | 4   |     | 176.75        | 108                        |
| 176.70                                                  |     |     |     | 1   | 5   | 7   |     | 4   | 4   | 15  | 4   | 2   | 176.70        | 150                        |
| 176.65                                                  |     | 1   |     | 4   | 12  | 8   |     |     | 3   | 6   | 5   | 11  | 176.65        | 200                        |
| 176.60                                                  |     | 1   |     | 9   | 10  |     |     |     | 1   | 5   | 6   | 5   | 176.60        | 237                        |
| 176.55                                                  | 1   | 1   | 5   | 8   | 2   |     |     |     | 1   | 1   | 6   | 5   | 176.55        | 267                        |
| 176.50                                                  | 8   | 5   | 7   | 2   |     |     |     |     |     |     | 2   | 6   | 176.50        | 297                        |
| 176.45                                                  | 6   | 4   | 3   | 4   |     |     |     |     |     |     |     | 2   | 176.45        | 316                        |
| 176.40                                                  | 9   | 9   | 8   | 1   |     |     |     |     |     |     |     |     | 176.40        | 343                        |
| 176.35                                                  | 6   | 4   | 7   | 1   |     |     |     |     |     |     |     |     | 176.35        | 361                        |
| 176.30                                                  | 1   | 3   | 1   |     |     |     |     |     |     |     |     |     | 176.30        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 4098: Fort Gratiot, Port Huron, Michigan on St. Clair River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.47  | 176.38  | 176.60  | 176.42  | 176.70  | 176.71  | 176.83  | 176.82  | 176.78  | 176.77  | 176.58  | 176.67  |
| 2    | 176.48  | 176.33  | 176.58  | 176.46  | 176.67  | 176.70  | 176.80  | 176.81  | 176.71  | 176.72  | 176.81  | 176.61  |
| 3    | 176.36  | 176.35  | 176.53  | 176.46  | 176.65  | 176.72  | 176.79  | 176.82  | 176.84  | 176.81  | 176.65  | 176.52  |
| 4    | 176.53  | 176.41  | 176.42  | 176.46  | 176.69  | 176.73  | 176.81  | 176.81  | 176.83  | 176.77  | 176.60  | 176.70  |
| 5    | 176.45  | 176.47  | 176.37  | 176.56  | 176.66  | 176.67  | 176.81* | 176.79  | 176.82  | 176.72  | 176.77  | 176.64  |
| 6    | 176.58  | 176.51  | 176.53  | 176.60  | 176.63  | 176.68  | 176.84  | 176.79  | 176.77  | 176.65  | 176.77  | 176.71  |
| 7    | 176.51  | 176.49  | 176.51  | 176.65  | 176.59  | 176.69  | 176.88  | 176.81  | 176.59  | 176.64  | 176.66  | 176.57  |
| 8    | 176.52  | 176.43  | 176.44  | 176.58  | 176.64  | 176.66  | 176.82  | 176.77  | 176.63  | 176.67  | 176.54  | 176.69  |
| 9    | 176.54  | 176.43  | 176.42  | 176.55  | 176.65  | 176.76  | 176.78  | 176.81  | 176.68  | 176.72  | 176.62  | 176.56  |
| 10   | 176.55  | 176.37  | 176.37  | 176.56  | 176.65  | 176.70  | 176.80  | 176.86  | 176.76  | 176.72  | 176.67  | 176.62  |
| 11   | 176.52  | 176.40  | 176.60  | 176.60  | 176.61  | 176.80  | 176.83  | 176.88  | 176.79  | 176.72  | 176.98  | 176.50  |
| 12   | 176.45  | 176.40  | 176.50  | 176.56  | 176.68  | 176.70  | 176.83  | 176.88  | 176.74  | 176.71  | 176.87  | 176.55  |
| 13   | 176.42  | 176.34  | 176.45  | 176.47  | 176.67  | 176.75  | 176.81  | 176.86  | 176.72  | 176.70  | 176.78  | 176.70  |
| 14   | 176.51  | 176.43  | 176.42  | 176.55  | 176.68  | 176.80  | 176.81  | 176.82  | 176.84  | 176.69  | 176.62  | 176.56  |
| 15   | 176.45  | 176.47  | 176.33  | 176.63  | 176.72  | 176.77  | 176.80  | 176.82  | 176.81  | 176.65  | 176.56  | 176.57  |
| 16   | 176.39  | 176.45  | 176.56  | 176.63  | 176.68  | 176.73  | 176.85  | 176.84  | 176.80  | 176.65  | 176.75  | 176.49  |
| 17   | 176.44  | 176.45  | 176.40  | 176.65  | 176.63  | 176.70  | 176.80  | 176.81  | 176.78  | 176.67  | 176.77  | 176.68  |
| 18   | 176.46  | 176.47  | 176.37  | 176.64  | 176.61  | 176.78  | 176.86  | 176.80  | 176.76  | 176.73  | 176.74  | 176.65  |
| 19   | 176.44  | 176.41  | 176.39  | 176.66  | 176.67  | 176.80  | 176.84  | 176.90  | 176.77  | 176.59  | 176.74  | 176.60  |
| 20   | 176.48  | 176.51  | 176.40  | 176.67  | 176.66  | 176.80  | 176.83  | 176.80  | 176.81  | 176.75  | 176.75  | 176.68  |
| 21   | 176.39  | 176.51  | 176.38  | 176.71  | 176.63  | 176.79  | 176.84  | 176.76  | 176.78  | 176.75  | 176.70  | 176.53  |
| 22   | 176.37  | 176.42  | 176.42  | 176.62  | 176.60  | 176.78  | 176.80  | 176.77  | 176.69  | 176.74  | 176.58  | 176.54  |
| 23   | 176.37  | 176.44  | 176.56  | 176.58  | 176.70  | 176.77  | 176.81  | 176.87  | 176.75  | 176.75  | 176.69  | 176.66  |
| 24   | 176.35  | 176.55  | 176.51  | 176.65  | 176.65  | 176.81  | 176.88  | 176.81  | 176.70  | 176.72  | 176.64  | 176.70  |
| 25   | 176.43  | 176.63  | 176.52  | 176.68  | 176.66  | 176.83  | 176.84  | 176.78  | 176.76  | 176.75  | 176.61  | 176.63  |
| 26   | 176.45  | 176.54  | 176.52  | 176.63  | 176.73  | 176.75  | 176.82  | 176.74  | 176.89  | 176.67  | 176.56  | 176.73  |
| 27   | 176.48  | 176.57  | 176.49  | 176.58  | 176.72  | 176.74  | 176.87  | 176.72  | 176.78  | 176.64  | 176.55  | 176.53  |
| 28   | 176.37  | 176.88  | 176.53  | 176.64  | 176.76  | 176.84  | 176.86  | 176.73  | 176.77  | 176.77  | 176.61  | 176.51  |
| 29   | 176.45  | 176.69  | 176.50  | 176.68  | 176.81  | 176.83  | 176.82  | 176.71  | 176.80  | 176.74  | 176.66  | 176.67  |
| 30   | 176.52  |         | 176.45  | 176.39  | 176.74  | 176.84  | 176.80  | 176.78  | 176.77  | 176.70  | 176.60  | 176.69  |
| 31   | 176.47  |         | 176.41  |         | 176.72  |         | 176.80  | 176.82  |         | 176.72  |         | 176.68  |
| MEAN | 176.46  | 176.47  | 176.47  | 176.58  | 176.67  | 176.75  | 176.82  | 176.81  | 176.76  | 176.71  | 176.68  | 176.62  |
| MAX. | 176.69  | 177.02  | 177.05  | 176.83  | 176.90  | 176.94  | 176.99  | 177.16  | 177.13  | 177.01  | 177.16  | 176.91  |
| MIN. | 1600/06 | 1800/28 | 0500/11 | 0200/21 | 1000/29 | 2000/24 | 1500/11 | 2000/22 | 2100/25 | 2300/30 | 0700/11 | 0800/26 |
|      | 176.13  | 176.12  | 176.23  | 176.12  | 176.47  | 176.58  | 176.61  | 176.42  | 176.46  | 176.43  | 176.35  | 176.27  |
|      | 1800/03 | 2000/02 | 1000/15 | 1400/30 | 1500/07 | 1000/08 | 0100/10 | 0200/29 | 2400/12 | 2200/31 | 1100/01 | 0200/22 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 176.65

ANNUAL SUMMARY OF LEVELS, 1984  
Station 5002: Lakeport, Michigan on Lake Huron

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.86 Jul  
Daily mean elevation: 176.95 11 Nov  
Instant/hourly elevation: 177.15 2100/25 Sep

LOWEST  
Monthly mean elevation: 176.49 Jan  
Daily mean elevation: 176.37 2 Feb  
Instant/hourly elevation: 176.19 2000/2 Feb

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.58 | 6 Jan  |
| 176.82 | 28 Feb |
| 176.69 | 16 Mar |
| 176.70 | 21 Apr |
| 176.83 | 29 May |
| 176.88 | 28 Jun |
| 176.91 | 24 Jul |
| 176.91 | 19 Aug |
| 176.92 | 26 Sep |
| 176.86 | 3 Oct  |
| 176.95 | 11 Nov |
| 176.78 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.38 | 24 Jan |
| 176.37 | 2 Feb  |
| 176.40 | 15 Mar |
| 176.43 | 30 Apr |
| 176.63 | 18 May |
| 176.69 | 8 Jun  |
| 176.80 | 9 Jul  |
| 176.77 | 29 Aug |
| 176.64 | 7 Sep  |
| 176.62 | 19 Oct |
| 176.59 | 26 Nov |
| 176.56 | 28 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 176.90                                                  |     |     |     |     |     |     | 2   | 2   | 1   |     | 1   |     | 176.90        | 6                          |
| 176.85                                                  |     |     |     |     |     | 4   | 13  | 10  | 1   | 1   | 2   |     | 176.85        | 37                         |
| 176.80                                                  |     | 1   |     |     | 1   | 9   | 15  | 14  | 12  | 1   | 3   |     | 176.80        | 93                         |
| 176.75                                                  |     |     |     |     | 4   | 7   | 1   | 5   | 11  | 13  | 5   | 1   | 176.75        | 140                        |
| 176.70                                                  |     |     |     |     | 10  | 9   |     |     | 3   | 9   | 3   | 11  | 176.70        | 185                        |
| 176.65                                                  |     | 1   | 1   | 6   | 12  | 1   |     |     | 1   | 6   | 6   | 6   | 176.65        | 225                        |
| 176.60                                                  |     | 2   | 3   | 11  | 4   |     |     |     | 1   | 1   | 7   | 5   | 176.60        | 259                        |
| 176.55                                                  | 3   | 2   | 9   | 4   |     |     |     |     |     |     | 3   | 8   | 176.55        | 288                        |
| 176.50                                                  | 10  | 5   | 6   | 7   |     |     |     |     |     |     |     |     | 176.50        | 316                        |
| 176.45                                                  | 9   | 8   | 8   | 1   |     |     |     |     |     |     |     |     | 176.45        | 342                        |
| 176.40                                                  | 4   | 7   | 3   | 1   |     |     |     |     |     |     |     |     | 176.40        | 357                        |
| 176.35                                                  | 5   | 3   | 1   |     |     |     |     |     |     |     |     |     | 176.35        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5002: Lakeport, Michigan on Lake Huron

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.47  | 176.43  | 176.63  | 176.55  | 176.74  | 176.74  | 176.86  | 176.87  | 176.83  | 176.80  | 176.63  | 176.71  |
| 2    | 176.49  | 176.37  | 176.60  | 176.54  | 176.71  | 176.72  | 176.84  | 176.85  | 176.76  | 176.76  | 176.86  | 176.66  |
| 3    | 176.38  | 176.38  | 176.56  | 176.55  | 176.70  | 176.75  | 176.82  | 176.86  | 176.85  | 176.86  | 176.69  | 176.56  |
| 4    | 176.53  | 176.45  | 176.48  | 176.55  | 176.73  | 176.76  | 176.84  | 176.85  | 176.85  | 176.82  | 176.64  | 176.74  |
| 5    | 176.47  | 176.51  | 176.42  | 176.62  | 176.70  | 176.71  | 176.83  | 176.82  | 176.84  | 176.77  | 176.80  | 176.69  |
| 6    | 176.58  | 176.52  | 176.56  | 176.64  | 176.66  | 176.71  | 176.85  | 176.83  | 176.80  | 176.70  | 176.81  | 176.74  |
| 7    | 176.52  | 176.51  | 176.55  | 176.67  | 176.63  | 176.72  | 176.91  | 176.86  | 176.64  | 176.68  | 176.70  | 176.62  |
| 8    | 176.54  | 176.47  | 176.52  | 176.57  | 176.68  | 176.69  | 176.84  | 176.81  | 176.67  | 176.72  | 176.59  | 176.73  |
| 9    | 176.56  | 176.47  | 176.49  | 176.55  | 176.69  | 176.79  | 176.80  | 176.84  | 176.72  | 176.75  | 176.68  | 176.62  |
| 10   | 176.57  | 176.41  | 176.43  | 176.55  | 176.69  | 176.73  | 176.82  | 176.90  | 176.79  | 176.75  | 176.73  | 176.66  |
| 11   | 176.54  | 176.44  | 176.63  | 176.57  | 176.65  | 176.81  | 176.87  | 176.91  | 176.81  | 176.76  | 176.95  | 176.57  |
| 12   | 176.48  | 176.42  | 176.54  | 176.54  | 176.71  | 176.73  | 176.88  | 176.90  | 176.76  | 176.74  | 176.89  | 176.60  |
| 13   | 176.45  | 176.38  | 176.48  | 176.50  | 176.72  | 176.79  | 176.85  | 176.89  | 176.76  | 176.73  | 176.81  | 176.73  |
| 14   | 176.55  | 176.45  | 176.46  | 176.56  | 176.72  | 176.84  | 176.84  | 176.86  | 176.86  | 176.73  | 176.67  | 176.62  |
| 15   | 176.49  | 176.50  | 176.40  | 176.63  | 176.75  | 176.81  | 176.85  | 176.86  | 176.84  | 176.69  | 176.61  | 176.62  |
| 16   | 176.44  | 176.48  | 176.69  | 176.63  | 176.72  | 176.76  | 176.88  | 176.88  | 176.84  | 176.69  | 176.79  | 176.56  |
| 17   | 176.47  | 176.49  | 176.53  | 176.66  | 176.67  | 176.74  | 176.85  | 176.85  | 176.82  | 176.70  | 176.82  | 176.74  |
| 18   | 176.50  | 176.49  | 176.48  | 176.64  | 176.63  | 176.81  | 176.90  | 176.84  | 176.78  | 176.76  | 176.78  | 176.69  |
| 19   | 176.48  | 176.44  | 176.49  | 176.65  | 176.70  | 176.84  | 176.88  | 176.91  | 176.80  | 176.62  | 176.77  | 176.63  |
| 20   | 176.51  | 176.53  | 176.47  | 176.65  | 176.69  | 176.83  | 176.87  | 176.84  | 176.84  | 176.78  | 176.78  | 176.73  |
| 21   | 176.42  | 176.53  | 176.45  | 176.70  | 176.66  | 176.82  | 176.87  | 176.80  | 176.82  | 176.79  | 176.73  | 176.59  |
| 22   | 176.39  | 176.46  | 176.49  | 176.61  | 176.65  | 176.81  | 176.84  | 176.81  | 176.73  | 176.77  | 176.63  | 176.59  |
| 23   | 176.40  | 176.48  | 176.63  | 176.61  | 176.74  | 176.80  | 176.85  | 176.90  | 176.79  | 176.79  | 176.73  | 176.72  |
| 24   | 176.38  | 176.59  | 176.56  | 176.67  | 176.69  | 176.84  | 176.91  | 176.85  | 176.74  | 176.75  | 176.69  | 176.74  |
| 25   | 176.48  | 176.64  | 176.56  | 176.67  | 176.69  | 176.86  | 176.88  | 176.82  | 176.78  | 176.79  | 176.65  | 176.67  |
| 26   | 176.52  | 176.58  | 176.55  | 176.63  | 176.76  | 176.80  | 176.87  | 176.78  | 176.92  | 176.72  | 176.59  | 176.78  |
| 27   | 176.53  | 176.61  | 176.54  | 176.58  | 176.76  | 176.78  | 176.90  | 176.77  | 176.82  | 176.69  | 176.60  | 176.58  |
| 28   | 176.40  | 176.82  | 176.59  | 176.63  | 176.78  | 176.88  | 176.90  | 176.77  | 176.80  | 176.80  | 176.65  | 176.56  |
| 29   | 176.45  | 176.68  | 176.60  | 176.69  | 176.83  | 176.86  | 176.87  | 176.77  | 176.83  | 176.77  | 176.70  | 176.70  |
| 30   | 176.55  |         | 176.58  | 176.43  | 176.77  | 176.87  | 176.84  | 176.83  | 176.80  | 176.74  | 176.65  | 176.73  |
| 31   | 176.52  |         | 176.57  |         | 176.75  |         | 176.84  | 176.85  |         | 176.77  |         | 176.73  |
| MEAN | 176.49  | 176.50  | 176.53  | 176.60  | 176.71  | 176.79  | 176.86  | 176.84  | 176.80  | 176.75  | 176.72  | 176.66  |
| MAX. | 176.69  | 176.95  | 176.92  | 176.80  | 176.95  | 177.00  | 176.99  | 177.05  | 177.15  | 176.99  | 177.13  | 176.96  |
|      | 1500/06 | 1800/28 | 0500/11 | 0200/21 | 0400/29 | 2000/24 | 2000/24 | 0400/30 | 2100/25 | 2300/30 | 0700/11 | 0800/26 |
| MIN. | 176.21  | 176.19  | 176.26  | 176.22  | 176.50  | 176.63  | 176.71  | 176.62  | 176.51  | 176.51  | 176.39  | 176.27  |
|      | 1800/03 | 2000/02 | 1000/15 | 1300/30 | 2200/24 | 1500/08 | 0300/10 | 0600/30 | 0300/13 | 0800/19 | 1200/01 | 0300/22 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 176.69

ANNUAL SUMMARY OF LEVELS, 1984  
Station 5014: Harbor Beach, Michigan on Lake Huron

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.86 Jul  
Daily mean elevation: 176.91 7 Jul  
Instant/hourly elevation: 177.02 0200/10 Aug

LOWEST  
Monthly mean elevation: 176.49 Feb  
Daily mean elevation: 176.39 13 Feb  
Instant/hourly elevation: 176.31 2100/2 Feb

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.56 | 6 Jan  |
| 176.65 | 28 Feb |
| 176.60 | 23 Mar |
| 176.68 | 29 Apr |
| 176.79 | 29 May |
| 176.88 | 28 Jun |
| 176.91 | 7 Jul  |
| 176.88 | 10 Aug |
| 176.90 | 26 Sep |
| 176.84 | 3 Oct  |
| 176.85 | 2 Nov  |
| 176.77 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.39 | 24 Jan |
| 176.39 | 13 Feb |
| 176.41 | 15 Mar |
| 176.50 | 30 Apr |
| 176.64 | 18 May |
| 176.70 | 2 Jun  |
| 176.80 | 9 Jul  |
| 176.78 | 29 Aug |
| 176.68 | 7 Sep  |
| 176.63 | 19 Oct |
| 176.61 | 27 Nov |
| 176.59 | 3 Dec  |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec           |                            |
| 176.90                                                  |     |     |     |     |     |     | 1   |     |     |     |     |               | 176.90 1                   |
| 176.85                                                  |     |     |     |     |     | 1   | 14  | 11  | 1   |     |     |               | 176.85 28                  |
| 176.80                                                  |     |     |     |     |     | 8   | 15  | 16  | 12  | 2   | 4   |               | 176.80 85                  |
| 176.75                                                  |     |     |     |     | 2   | 10  | 1   | 4   | 13  | 8   | 5   | 1             | 176.75 129                 |
| 176.70                                                  |     |     |     |     | 9   | 10  |     |     | 2   | 14  | 6   | 7             | 176.70 177                 |
| 176.65                                                  |     |     |     | 2   | 15  | 1   |     |     | 2   | 6   | 10  | 10            | 176.65 223                 |
| 176.60                                                  |     | 1   |     | 10  | 5   |     |     |     |     | 1   | 5   | 10            | 176.60 255                 |
| 176.55                                                  | 1   | 2   | 7   | 7   |     |     |     |     |     |     |     | 3             | 176.55 275                 |
| 176.50                                                  | 11  | 5   | 10  | 9   |     |     |     |     |     |     |     |               | 176.50 310                 |
| 176.45                                                  | 11  | 12  | 8   | 2   |     |     |     |     |     |     |     |               | 176.45 343                 |
| 176.40                                                  | 7   | 6   | 6   |     |     |     |     |     |     |     |     |               | 176.40 362                 |
| 176.35                                                  | 1   | 3   |     |     |     |     |     |     |     |     |     |               | 176.35 366                 |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5014: Harbor Beach, Michigan on Lake Huron

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.48  | 176.42  | 176.59  | 176.54  | 176.75  | 176.73  | 176.84  | 176.86  | 176.84  | 176.78  | 176.64  | 176.71  |
| 2    | 176.49  | 176.39  | 176.58  | 176.54  | 176.71  | 176.70  | 176.83  | 176.84  | 176.76  | 176.77  | 176.85  | 176.67  |
| 3    | 176.46  | 176.40  | 176.54  | 176.53  | 176.67  | 176.75  | 176.83  | 176.84  | 176.81  | 176.84  | 176.73  | 176.59  |
| 4    | 176.53  | 176.47  | 176.47  | 176.52  | 176.69  | 176.75  | 176.84  | 176.84  | 176.83  | 176.82  | 176.67  | 176.75  |
| 5    | 176.49  | 176.50  | 176.43  | 176.59  | 176.69  | 176.71  | 176.84  | 176.83  | 176.83  | 176.74  | 176.78  | 176.70  |
| 6    | 176.56  | 176.50  | 176.54  | 176.60  | 176.65  | 176.72  | 176.84  | 176.83  | 176.80  | 176.68  | 176.79  | 176.71  |
| 7    | 176.51  | 176.50  | 176.53  | 176.62  | 176.64  | 176.73  | 176.91  | 176.86  | 176.68  | 176.67  | 176.70  | 176.67  |
| 8    | 176.52  | 176.47  | 176.48  | 176.55  | 176.68  | 176.72  | 176.84  | 176.83  | 176.70  | 176.70  | 176.63  | 176.71  |
| 9    | 176.55  | 176.46  | 176.48  | 176.52  | 176.70  | 176.79  | 176.80  | 176.84  | 176.76  | 176.74  | 176.68  | 176.63  |
| 10   | 176.53  | 176.42  | 176.45  | 176.53  | 176.69  | 176.74  | 176.82  | 176.88  | 176.79  | 176.73  | 176.70  | 176.65  |
| 11   | 176.52  | 176.44  | 176.60  | 176.56  | 176.65  | 176.81  | 176.87  | 176.87  | 176.79  | 176.73  | 176.84  | 176.62  |
| 12   | 176.47  | 176.42  | 176.52  | 176.53  | 176.71  | 176.75  | 176.87  | 176.86  | 176.77  | 176.72  | 176.83  | 176.63  |
| 13   | 176.44  | 176.39  | 176.45  | 176.50  | 176.69  | 176.78  | 176.85  | 176.86  | 176.77  | 176.72  | 176.78  | 176.69  |
| 14   | 176.52  | 176.45  | 176.45  | 176.53  | 176.70  | 176.82  | 176.84  | 176.85  | 176.83  | 176.71  | 176.68  | 176.61  |
| 15   | 176.49  | 176.48  | 176.41  | 176.61  | 176.72  | 176.80  | 176.86  | 176.86  | 176.81  | 176.68  | 176.65  | 176.61  |
| 16   | 176.44  | 176.46  | 176.58  | 176.60  | 176.70  | 176.76  | 176.88  | 176.87  | 176.84  | 176.68  | 176.79  | 176.60  |
| 17   | 176.48  | 176.47  | 176.50  | 176.65  | 176.68  | 176.75  | 176.86  | 176.84  | 176.83  | 176.69  | 176.84  | 176.73  |
| 18   | 176.50  | 176.49  | 176.45  | 176.62  | 176.64  | 176.80  | 176.89  | 176.82  | 176.80  | 176.75  | 176.77  | 176.69  |
| 19   | 176.48  | 176.45  | 176.48  | 176.63  | 176.70  | 176.83  | 176.88  | 176.86  | 176.81  | 176.63  | 176.74  | 176.64  |
| 20   | 176.51  | 176.53  | 176.46  | 176.63  | 176.69  | 176.81  | 176.87  | 176.83  | 176.83  | 176.77  | 176.74  | 176.73  |
| 21   | 176.45  | 176.52  | 176.47  | 176.65  | 176.65  | 176.80  | 176.87  | 176.81  | 176.81  | 176.78  | 176.71  | 176.62  |
| 22   | 176.43  | 176.48  | 176.50  | 176.59  | 176.66  | 176.79  | 176.84  | 176.82  | 176.73  | 176.76  | 176.66  | 176.61  |
| 23   | 176.41  | 176.49  | 176.60  | 176.60  | 176.71  | 176.79  | 176.85  | 176.87  | 176.79  | 176.77  | 176.73  | 176.75  |
| 24   | 176.39  | 176.55  | 176.54  | 176.65  | 176.70  | 176.83  | 176.89  | 176.82  | 176.75  | 176.75  | 176.69  | 176.69  |
| 25   | 176.49  | 176.59  | 176.52  | 176.67  | 176.70  | 176.85  | 176.88  | 176.81  | 176.80  | 176.78  | 176.67  | 176.69  |
| 26   | 176.52  | 176.55  | 176.52  | 176.61  | 176.75  | 176.80  | 176.86  | 176.79  | 176.90  | 176.71  | 176.61  | 176.77  |
| 27   | 176.51  | 176.55  | 176.51  | 176.58  | 176.74  | 176.79  | 176.86  | 176.79  | 176.80  | 176.71  | 176.61  | 176.60  |
| 28   | 176.43  | 176.65  | 176.54  | 176.63  | 176.73  | 176.88  | 176.87  | 176.78  | 176.79  | 176.78  | 176.66  | 176.61  |
| 29   | 176.45  | 176.60  | 176.55  | 176.68  | 176.79  | 176.85  | 176.85  | 176.78  | 176.81  | 176.75  | 176.72  | 176.69  |
| 30   | 176.52  |         | 176.56  | 176.50  | 176.77  | 176.84  | 176.84  | 176.84  | 176.79  | 176.73  | 176.66  | 176.70  |
| 31   | 176.49  |         | 176.56  |         | 176.74  |         | 176.84  | 176.86  |         | 176.75  |         | 176.70  |
| MEAN | 176.49  | 176.49  | 176.51  | 176.59  | 176.70  | 176.78  | 176.86  | 176.84  | 176.80  | 176.74  | 176.72  | 176.67  |
| MAX. | 176.60  | 176.70  | 176.68  | 176.73  | 176.83  | 176.93  | 176.95  | 177.02  | 177.02  | 176.94  | 176.92  | 176.85  |
| MIN. | 0600/09 | 1200/28 | 1000/16 | 0800/29 | 2200/22 | 1400/28 | 1400/11 | 0200/10 | 2200/25 | 1800/03 | 1600/02 | 0700/26 |
|      | 176.35  | 176.31  | 176.35  | 176.34  | 176.57  | 176.62  | 176.76  | 176.67  | 176.52  | 176.53  | 176.52  | 176.34  |
|      | 2100/23 | 2100/02 | 1000/15 | 1600/30 | 1700/07 | 1300/08 | 0100/10 | 0300/29 | 1900/12 | 1000/19 | 1100/01 | 0100/22 |

\* Indicates Less than 90% of the Hourly Data Available.

ANNUAL MEAN: 176.68

/ Indicates No Data.

ANNUAL SUMMARY OF LEVELS, 1984  
Station 5035: Essexville, Michigan on Lake Huron (Saginaw Bay)

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.84 Aug  
Daily mean elevation: 177.03 11 Nov  
Instant/hourly elevation: 177.22 0800/11 Nov

LOWEST  
Monthly mean elevation: 176.47 Jan  
Daily mean elevation: 175.83 30 Apr  
Instant/hourly elevation: 174.84 1400/30 Apr

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.54 | 26 Jan |
| 176.86 | 28 Feb |
| 176.74 | 28 Mar |
| 176.81 | 21 Apr |
| 176.96 | 28 May |
| 176.88 | 30 Jun |
| 176.95 | 27 Jul |
| 176.96 | 11 Aug |
| 176.93 | 3 Sep  |
| 176.86 | 21 Oct |
| 177.03 | 11 Nov |
| 176.86 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.37 | 3 Jan  |
| 176.38 | 3 Feb  |
| 176.33 | 10 Mar |
| 175.83 | 30 Apr |
| 176.61 | 8 May  |
| 176.63 | 8 Jun  |
| 176.76 | 6 Jul  |
| 176.73 | 27 Aug |
| 176.59 | 7 Sep  |
| 176.51 | 19 Oct |
| 176.47 | 22 Nov |
| 176.32 | 3 Dec  |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 177.00 | | | | | | | | | | | 1 | | 177.00 | 1 |
| 176.95 | | | | | 1 | | | 1 | | | | | 176.95 | 3 |
| 176.90 | | | | | 1 | | 1 | 4 | 1 | | | | 176.90 | 10 |
| 176.85 | | 1 | | | | 3 | 9 | 5 | 3 | 1 | | 1 | 176.85 | 33 |
| 176.80 | | | | 1 | | 9 | 15 | 12 | 7 | 4 | 2 | | 176.80 | 83 |
| 176.75 | | | | 1 | 3 | 7 | 6 | 5 | 9 | 6 | 6 | 2 | 176.75 | 128 |
| 176.70 | | | 1 | 6 | 9 | 6 | | 4 | 6 | 11 | 3 | 3 | 176.70 | 177 |
| 176.65 | | | 2 | 4 | 10 | 4 | | | 2 | 8 | 5 | 7 | 176.65 | 219 |
| 176.60 | | 1 | 1 | 6 | 7 | 1 | | | 1 | | 8 | 7 | 176.60 | 251 |
| 176.55 | | 2 | 5 | 7 | | | | | 1 | | 2 | 5 | 176.55 | 273 |
| 176.50 | 8 | 4 | 10 | 4 | | | | | | 1 | 1 | 1 | 176.50 | 302 |
| 176.45 | 13 | 12 | 9 | | | | | | | | 2 | 1 | 176.45 | 339 |
| 176.40 | 7 | 8 | 2 | | | | | | | | | 1 | 176.40 | 357 |
| 176.35 | 3 | 1 | | | | | | | | | | 1 | 176.35 | 362 |
| 176.30 | | | 1 | | | | | | | | | 2 | 176.30 | 365 |
| 176.25 | | | | | | | | | | | | | 176.25 | 365 |
| 176.20 | | | | | | | | | | | | | 176.20 | 365 |
| 176.15 | | | | | | | | | | | | | 176.15 | 365 |
| 176.10 | | | | | | | | | | | | | 176.10 | 365 |
| 176.05 | | | | | | | | | | | | | 176.05 | 365 |
| 176.00 | | | | | | | | | | | | | 176.00 | 365 |
| 175.95 | | | | | | | | | | | | | 175.95 | 365 |
| 175.90 | | | | | | | | | | | | | 175.90 | 365 |
| 175.85 | | | | | | | | | | | | | 175.85 | 365 |
| 175.80 | | | | 1 | | | | | | | | | 175.80 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5035: Essexville, Michigan on Lake Huron (Saginaw Bay)

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.50 | 176.45 | 176.55 | 176.53 | 176.62 | 176.76 | 176.86 | 176.84 | 176.85 | 176.77 | 176.57 | 176.67 |
| 2 | 176.48 | 176.43 | 176.55 | 176.53 | 176.70 | 176.71 | 176.83 | 176.84 | 176.75 | 176.68 | 176.75 | 176.68 |
| 3 | 176.37 | 176.38 | 176.53 | 176.59 | 176.80 | 176.74 | 176.80 | 176.86 | 176.93 | 176.75 | 176.69 | 176.32 |
| 4 | 176.53 | 176.48 | 176.49 | 176.60 | 176.71 | 176.74 | 176.83 | 176.84 | 176.86 | 176.81 | 176.64 | 176.56 |
| 5 | 176.47 | 176.49 | 176.42 | 176.75 | 176.69 | 176.71 | 176.83 | 176.81 | 176.85 | 176.84 | 176.78 | 176.62 |
| 6 | 176.53 | 176.49 | 176.52 | 176.63 | 176.67 | 176.70 | 176.76 | 176.79 | 176.78 | 176.71 | 176.78 | 176.68 |
| 7 | 176.51 | 176.48 | 176.54 | 176.64 | 176.61 | 176.70 | 176.85 | 176.87 | 176.59 | 176.70 | 176.70 | 176.37 |
| 8 | 176.47 | 176.44 | 176.51 | 176.65 | 176.61 | 176.63 | 176.83 | 176.84 | 176.62 | 176.72 | 176.60 | 176.65 |
| 9 | 176.54 | 176.47 | 176.47 | 176.60 | 176.67 | 176.78 | 176.77 | 176.82 | 176.67 | 176.80 | 176.70 | 176.63 |
| 10 | 176.51 | 176.43 | 176.33 | 176.58 | 176.67 | 176.68 | 176.82 | 176.91 | 176.76 | 176.75 | 176.81 | 176.66 |
| 11 | 176.51 | 176.44 | 176.52 | 176.60 | 176.63 | 176.81 | 176.84 | 176.96 | 176.81 | 176.76 | 177.03 | 176.58 |
| 12 | 176.49 | 176.46 | 176.54 | 176.58 | 176.70 | 176.72 | 176.86 | 176.92 | 176.76 | 176.75 | 176.84 | 176.63 |
| 13 | 176.47 | 176.42 | 176.47 | 176.52 | 176.74 | 176.80 | 176.82 | 176.88 | 176.71 | 176.73 | 176.78 | 176.76 |
| 14 | 176.50 | 176.45 | 176.47 | 176.66 | 176.72 | 176.84 | 176.81 | 176.85 | 176.89 | 176.75 | 176.65 | 176.72 |
| 15 | 176.49 | 176.49 | 176.45 | 176.76 | 176.74 | 176.84 | 176.81 | 176.83 | 176.85 | 176.72 | 176.50 | 176.60 |
| 16 | 176.42 | 176.49 | 176.62 | 176.72 | 176.71 | 176.76 | 176.85 | 176.89 | 176.81 | 176.70 | 176.63 | 176.49 |
| 17 | 176.45 | 176.48 | 176.69 | 176.71 | 176.67 | 176.74 | 176.80 | 176.85 | 176.79 | 176.68 | 176.71 | 176.70 |
| 18 | 176.47 | 176.50 | 176.50 | 176.71 | 176.62 | 176.79 | 176.88 | 176.86 | 176.72 | 176.83 | 176.79 | 176.64 |
| 19 | 176.44 | 176.45 | 176.49 | 176.69 | 176.70 | 176.86 | 176.83 | 176.95 | 176.78 | 176.51 | 176.79 | 176.57 |
| 20 | 176.46 | 176.51 | 176.49 | 176.63 | 176.73 | 176.86 | 176.86 | 176.81 | 176.79 | 176.67 | 176.77 | 176.62 |
| 21 | 176.41 | 176.52 | 176.48 | 176.81 | 176.67 | 176.84 | 176.88 | 176.74 | 176.85 | 176.86 | 176.72 | 176.64 |
| 22 | 176.40 | 176.47 | 176.49 | 176.71 | 176.64 | 176.83 | 176.84 | 176.79 | 176.74 | 176.74 | 176.47 | 176.34 |
| 23 | 176.42 | 176.48 | 176.60 | 176.65 | 176.71 | 176.83 | 176.79 | 176.92 | 176.77 | 176.74 | 176.68 | 176.75 |
| 24 | 176.38 | 176.54 | 176.55 | 176.65 | 176.65 | 176.80 | 176.88 | 176.85 | 176.73 | 176.71 | 176.63 | 176.70 |
| 25 | 176.44 | 176.56 | 176.56 | 176.66 | 176.66 | 176.85 | 176.88 | 176.80 | 176.70 | 176.77 | 176.65 | 176.41 |
| 26 | 176.54 | 176.55 | 176.55 | 176.66 | 176.77 | 176.77 | 176.87 | 176.77 | 176.86 | 176.69 | 176.62 | 176.78 |
| 27 | 176.47 | 176.62 | 176.57 | 176.59 | 176.73 | 176.69 | 176.95 | 176.73 | 176.80 | 176.69 | 176.63 | 176.60 |
| 28 | 176.46 | 176.86 | 176.74 | 176.55 | 176.96 | 176.84 | 176.89 | 176.75 | 176.75 | 176.77 | 176.55 | 176.55 |
| 29 | 176.44 | 176.59 | 176.66 | 176.71 | 176.94 | 176.85 | 176.84 | 176.74 | 176.82 | 176.77 | 176.68 | 176.67 |
| 30 | 176.52 | | 176.56 | 175.83 | 176.78 | 176.88 | 176.81 | 176.80 | 176.79 | 176.68 | 176.64 | 176.71 |
| 31 | 176.48 | | 176.56 | | 176.72 | | 176.80 | 176.82 | | 176.83 | | 176.86 |
| MEAN | 176.47 | 176.50 | 176.53 | 176.62 | 176.71 | 176.78 | 176.84 | 176.84 | 176.78 | 176.74 | 176.69 | 176.62 |
| MAX. | 176.61 | 176.98 | 177.01 | 177.00 | 177.12 | 176.99 | 176.99 | 177.14 | 177.04 | 177.15 | 177.22 | 177.10 |
| | 1500/30 | 1200/28 | 1600/28 | 0500/21 | 0500/29 | 2100/19 | 1100/11 | 2100/18 | 0700/03 | 0900/21 | 0800/11 | 2400/31 |
| MIN. | 176.23 | 176.26 | 176.14 | 174.84 | 176.28 | 176.54 | 176.66 | 176.60 | 176.45 | 176.31 | 176.35 | 175.93 |
| | 1700/03 | 0200/03 | 2200/10 | 1400/30 | 0100/01 | 1200/08 | 0600/11 | 0600/29 | 1200/07 | 1600/19 | 2000/15 | 0300/22 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.68

ANNUAL SUMMARY OF LEVELS, 1984
Station 5059: Harrisville, Michigan on Lake Huron

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.80 Aug
Daily mean elevation: 176.86 28 Jun
Instant/hourly elevation: 176.94 0800/30 Aug

LOWEST
Monthly mean elevation: 176.45 Feb
Daily mean elevation: 176.39 13 Feb
Instant/hourly elevation: 176.34 0200/22 Dec

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.52 | 4 Jan |
| 176.51 | 26 Feb |
| 176.54 | 23 Mar |
| 176.66 | 29 Apr |
| 176.73 | 30 May |
| 176.86 | 28 Jun |
| | Jul |
| 176.85 | 9 Aug |
| 176.83 | 26 Sep |
| 176.79 | 3 Oct |
| 176.80 | 17 Nov |
| 176.74 | 26 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.40 | 24 Jan |
| 176.39 | 13 Feb |
| 176.42 | 18 Mar |
| 176.48 | 13 Apr |
| 176.61 | 7 May |
| 176.67 | 2 Jun |
| | Jul |
| 176.74 | 29 Aug |
| 176.70 | 7 Sep |
| 176.65 | 19 Oct |
| 176.62 | 26 Nov |
| 176.57 | 22 Dec |

| Elev.
(m.) | ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 176.85 | | | | | | 1 | | | | | | | 176.85 | 1 |
| 176.80 | | | | | | 1 | | 10 | 2 | | | | 176.80 | 14 |
| 176.75 | | | | | | 8 | | 11 | 19 | 4 | 2 | | 176.75 | 58 |
| 176.70 | | | | | 5 | 12 | | 2 | 8 | 12 | 9 | 1 | 176.70 | 107 |
| 176.65 | | | | 1 | 17 | 3 | | | 1 | 13 | 14 | 13 | 176.65 | 169 |
| 176.60 | | | | 3 | 9 | | | | | 2 | 5 | 11 | 176.60 | 199 |
| 176.55 | | | | 10 | | | | | | | | 6 | 176.55 | 215 |
| 176.50 | 1 | 2 | 6 | 8 | | | | | | | | | 176.50 | 232 |
| 176.45 | 16 | 10 | 16 | 8 | | | | | | | | | 176.45 | 282 |
| 176.40 | 13 | 16 | 9 | | | | | | | | | | 176.40 | 320 |
| 176.35 | 1 | 1 | | | | | | | | | | | 176.35 | 322 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5059: Harrisville, Michigan on Lake Huron

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|-----|---------|---------|---------|---------|---------|
| 1 | 176.47 | 176.42 | 176.52 | 176.51 | 176.70 | 176.69 | / | / | 176.80 | 176.74 | 176.65 | 176.67 |
| 2 | 176.46 | 176.41 | 176.51 | 176.50 | 176.67 | 176.67 | / | / | 176.76 | 176.75 | 176.80 | 176.67 |
| 3 | 176.48 | 176.42 | 176.49 | 176.49 | 176.61 | 176.73 | / | / | 176.77 | 176.79 | 176.73 | 176.59 |
| 4 | 176.52 | 176.45 | 176.46 | 176.48 | 176.65 | 176.73 | / | / | 176.78 | 176.78 | 176.68 | 176.70 |
| 5 | 176.47 | 176.45 | 176.42 | 176.52 | 176.67 | 176.69 | / | / | 176.77 | 176.70 | 176.72 | 176.67 |
| 6 | 176.49 | 176.45 | 176.48 | 176.54 | 176.63 | 176.71 | / | / | 176.77 | 176.67 | 176.74 | 176.62 |
| 7 | 176.49 | 176.46 | 176.49 | 176.55 | 176.61 | 176.71 | / | / | 176.70 | 176.67 | 176.69 | 176.67 |
| 8 | 176.46 | 176.45 | 176.44 | 176.52 | 176.66 | 176.71 | / | / | 176.72 | 176.69 | 176.66 | 176.70 |
| 9 | 176.50 | 176.45 | 176.46 | 176.49 | 176.67 | 176.75 | / | 176.85* | 176.75 | 176.71 | 176.68 | 176.61 |
| 10 | 176.47 | 176.41 | 176.45 | 176.49 | 176.67 | 176.72 | / | 176.83 | 176.75 | 176.70 | 176.67 | 176.60 |
| 11 | 176.48 | 176.42 | 176.49 | 176.52 | 176.63 | 176.79 | / | 176.82 | 176.75 | 176.70 | 176.72 | 176.61 |
| 12 | 176.46 | 176.42 | 176.50 | 176.50 | 176.68 | 176.74 | / | 176.82 | 176.74 | 176.68 | 176.73 | 176.61 |
| 13 | 176.43 | 176.39 | 176.42 | 176.48 | 176.66 | 176.74 | / | 176.83 | 176.74 | 176.69 | 176.72 | 176.65 |
| 14 | 176.45 | 176.44 | 176.45 | 176.50 | 176.67 | 176.77 | / | 176.82 | 176.79 | 176.67 | 176.67 | 176.60 |
| 15 | 176.46 | 176.45 | 176.42 | 176.57 | 176.69 | 176.74 | / | 176.84 | 176.76 | 176.65 | 176.64 | 176.58 |
| 16 | 176.43 | 176.42 | 176.48 | 176.55 | 176.66 | 176.73 | / | 176.83 | 176.80 | 176.66 | 176.75 | 176.61 |
| 17 | 176.45 | 176.44 | 176.48 | 176.60 | 176.66 | 176.74 | / | 176.80 | 176.81 | 176.68 | 176.80 | 176.70 |
| 18 | 176.46 | 176.47 | 176.42 | 176.58 | 176.63 | 176.78 | / | 176.81 | 176.80 | 176.71 | 176.71 | 176.66 |
| 19 | 176.45 | 176.44 | 176.45 | 176.60 | 176.67 | 176.80 | / | 176.80 | 176.80 | 176.65 | 176.67 | 176.64 |
| 20 | 176.46 | 176.49 | 176.44 | 176.60 | 176.65 | 176.77 | / | 176.80 | 176.79 | 176.77 | 176.68 | 176.69 |
| 21 | 176.44 | 176.49 | 176.48 | 176.60 | 176.63 | 176.77 | / | 176.78 | 176.78 | 176.74 | 176.67 | 176.64 |
| 22 | 176.43 | 176.47 | 176.47 | 176.56 | 176.63 | 176.77 | / | 176.77 | 176.73 | 176.72 | 176.66 | 176.57 |
| 23 | 176.42 | 176.48 | 176.54 | 176.56 | 176.68 | 176.76* | / | 176.80 | 176.77 | 176.74 | 176.73 | 176.69 |
| 24 | 176.40 | 176.50 | 176.51 | 176.62 | 176.69 | / | / | 176.78 | 176.73 | 176.73 | 176.68 | 176.63 |
| 25 | 176.46 | 176.51 | 176.48 | 176.63 | 176.68 | / | / | 176.78 | 176.76 | 176.76 | 176.66 | 176.66 |
| 26 | 176.48 | 176.51 | 176.49 | 176.60 | 176.72 | / | / | 176.77 | 176.83 | 176.69 | 176.62 | 176.74 |
| 27 | 176.43 | 176.50 | 176.48 | 176.57 | 176.72 | / | / | 176.76 | 176.78 | 176.71 | 176.63 | 176.58 |
| 28 | 176.44 | 176.50 | 176.49 | 176.62 | 176.69 | 176.86* | / | 176.74 | 176.77 | 176.75 | 176.66 | 176.61 |
| 29 | 176.41 | 176.47 | 176.50 | 176.66 | 176.72 | 176.82* | / | 176.74 | 176.77 | 176.72 | 176.70 | 176.65 |
| 30 | 176.45 | | 176.52 | 176.54 | 176.73 | / | / | 176.78 | 176.76 | 176.70 | 176.64 | 176.67 |
| 31 | 176.45 | | 176.52 | | 176.72 | | / | 176.82 | | 176.73 | | 176.67 |
| MEAN | 176.46 | 176.45 | 176.48 | 176.55 | 176.67 | 176.75 | / | 176.80 | 176.77 | 176.71 | 176.69 | 176.64 |
| MAX. | 176.55 | 176.56 | 176.57 | 176.70 | 176.78 | 176.88 | | 176.94 | 176.88 | 176.85 | 176.86 | 176.79 |
| | 0100/04 | 0300/28 | 2000/23 | 0600/29 | 0600/25 | 1600/28 | | 0800/30 | 0600/26 | 2400/25 | 1500/02 | 1000/26 |
| MIN. | 176.36 | 176.36 | 176.37 | 176.36 | 176.57 | 176.63 | | 176.63 | 176.63 | 176.58 | 176.58 | 176.34 |
| | 1100/27 | 1000/13 | 1100/05 | 1600/30 | 1500/07 | 0600/02 | | 0600/29 | 2000/12 | 1400/19 | 1300/26 | 0200/22 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.63

ANNUAL SUMMARY OF LEVELS, 1984
Station 5080: Mackinaw City, Michigan on Straits of Mackinac

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.83 Jul
Daily mean elevation: 176.87 19 Jul
Instant/hourly elevation: 177.02 0600/17 Oct

LOWEST
Monthly mean elevation: 176.45 Feb
Daily mean elevation: 176.34 28 Feb
Instant/hourly elevation: 176.19 0500/11 Mar

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.57 | 3 Jan |
| 176.53 | 22 Feb |
| 176.51 | 21 Mar |
| 176.71 | 30 Apr |
| 176.74 | 31 May |
| 176.84 | 26 Jun |
| 176.87 | 19 Jul |
| 176.86 | 9 Aug |
| 176.85 | 18 Sep |
| 176.81 | 20 Oct |
| 176.77 | 8 Nov |
| 176.75 | 7 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.40 | 27 Jan |
| 176.34 | 28 Feb |
| 176.35 | 11 Mar |
| 176.46 | 5 Apr |
| 176.62 | 3 May |
| 176.72 | 1 Jun |
| 176.81 | 27 Jul |
| 176.75 | 23 Aug |
| 176.75 | 21 Sep |
| 176.69 | 18 Oct |
| 176.63 | 11 Nov |
| 176.59 | 31 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 176.85 | | | | | | | 3 | 1 | | | | | 176.85 | 4 |
| 176.80 | | | | | | 5 | 28 | 18 | 9 | 3 | | | 176.80 | 67 |
| 176.75 | | | | | | 17 | | 11 | 20 | 3 | 6 | | 176.75 | 124 |
| 176.70 | | | | 1 | 6 | 8 | | 1 | 1 | 21 | 4 | 2 | 176.70 | 168 |
| 176.65 | | | | 2 | 17 | | | | | 4 | 14 | 10 | 176.65 | 215 |
| 176.60 | | | | 4 | 8 | | | | | | 6 | 16 | 176.60 | 249 |
| 176.55 | 1 | | | 7 | | | | | | | | 3 | 176.55 | 260 |
| 176.50 | 3 | 2 | 1 | 7 | | | | | | | | | 176.50 | 273 |
| 176.45 | 17 | 11 | 20 | 9 | | | | | | | | | 176.45 | 330 |
| 176.40 | 8 | 13 | 8 | | | | | | | | | | 176.40 | 359 |
| 176.35 | 2 | 1 | 1 | | | | | | | | | | 176.35 | 363 |
| 176.30 | | 2 | 1 | | | | | | | | | | 176.30 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5080: Mackinaw City, Michigan on Straits of Mackinac

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.50 | 176.47 | 176.42 | 176.50 | 176.66 | 176.72 | 176.81 | 176.83 | 176.76 | 176.76 | 176.73 | 176.65 |
| 2 | 176.48 | 176.49 | 176.43 | 176.50 | 176.65 | 176.73 | 176.82 | 176.83 | 176.78 | 176.81 | 176.71 | 176.67 |
| 3 | 176.57 | 176.47 | 176.46 | 176.49 | 176.62 | 176.75 | 176.83 | 176.82 | 176.77 | 176.72 | 176.77 | 176.69 |
| 4 | 176.49 | 176.45 | 176.48 | 176.47 | 176.64 | 176.74 | 176.82 | 176.83 | 176.78 | 176.74 | 176.76 | 176.67 |
| 5 | 176.51 | 176.40 | 176.46 | 176.46 | 176.66 | 176.75 | 176.82 | 176.83 | 176.77 | 176.70 | 176.69 | 176.70 |
| 6 | 176.43 | 176.43 | 176.42 | 176.47 | 176.66 | 176.75 | 176.81 | 176.84 | 176.79 | 176.72 | 176.69 | 176.59 |
| 7 | 176.51 | 176.45 | 176.44 | 176.49 | 176.67 | 176.76 | 176.81 | 176.83 | 176.84 | 176.72 | 176.73 | 176.75 |
| 8 | 176.42 | 176.46 | 176.43 | 176.50 | 176.69 | 176.80 | 176.81 | 176.84 | 176.84 | 176.72 | 176.77 | 176.63 |
| 9 | 176.48 | 176.47 | 176.46 | 176.49 | 176.65 | 176.76 | 176.82 | 176.86 | 176.81 | 176.71 | 176.70 | 176.66 |
| 10 | 176.43 | 176.46 | 176.50 | 176.51 | 176.66 | 176.78 | 176.81 | 176.84 | 176.80 | 176.71 | 176.65 | 176.62 |
| 11 | 176.47 | 176.45 | 176.35 | 176.52 | 176.67 | 176.76 | 176.83 | 176.81 | 176.79 | 176.71 | 176.63 | 176.70 |
| 12 | 176.48 | 176.45 | 176.47 | 176.51 | 176.65 | 176.77 | 176.84 | 176.82 | 176.81 | 176.71 | 176.66 | 176.63 |
| 13 | 176.47 | 176.48 | 176.45 | 176.53 | 176.64 | 176.78 | 176.85 | 176.82 | 176.82 | 176.72 | 176.69 | 176.60 |
| 14 | 176.42 | 176.49 | 176.47 | 176.52 | 176.66 | 176.75 | 176.86 | 176.82 | 176.79 | 176.70 | 176.76 | 176.63 |
| 15 | 176.48 | 176.45 | 176.48 | 176.53 | 176.65 | 176.75 | 176.85 | 176.84 | 176.79 | 176.69 | 176.76 | 176.65 |
| 16 | 176.50 | 176.45 | 176.38 | 176.54 | 176.66 | 176.78 | 176.84 | 176.80 | 176.81 | 176.72 | 176.69 | 176.71 |
| 17 | 176.47 | 176.45 | 176.44 | 176.56 | 176.68 | 176.80 | 176.85 | 176.81 | 176.83 | 176.74 | 176.70 | 176.63 |
| 18 | 176.46 | 176.46 | 176.45 | 176.58 | 176.69 | 176.80 | 176.83 | 176.80 | 176.85 | 176.69 | 176.65 | 176.64 |
| 19 | 176.48 | 176.45 | 176.46 | 176.59 | 176.67 | 176.79 | 176.87 | 176.79 | 176.81 | 176.81 | 176.64 | 176.67 |
| 20 | 176.44 | 176.48 | 176.48 | 176.60 | 176.65 | 176.78 | 176.83 | 176.81 | 176.76 | 176.81 | 176.65 | 176.62 |
| 21 | 176.51 | 176.49 | 176.51 | 176.56 | 176.67 | 176.78 | 176.83 | 176.83 | 176.75 | 176.72 | 176.67 | 176.69 |
| 22 | 176.47 | 176.53 | 176.46 | 176.57 | 176.69 | 176.78 | 176.86 | 176.79 | 176.80 | 176.75 | 176.76 | 176.61 |
| 23 | 176.48 | 176.52 | 176.48 | 176.60 | 176.69 | 176.80 | 176.85 | 176.75 | 176.78 | 176.74 | 176.67 | 176.62 |
| 24 | 176.49 | 176.45 | 176.50 | 176.63 | 176.72 | 176.81 | 176.82 | 176.77 | 176.80 | 176.77 | 176.70 | 176.61 |
| 25 | 176.40 | 176.45 | 176.49 | 176.63 | 176.71 | 176.81 | 176.83 | 176.79 | 176.77 | 176.72 | 176.68 | 176.67 |
| 26 | 176.46 | 176.45 | 176.50 | 176.62 | 176.71 | 176.84 | 176.82 | 176.80 | 176.77 | 176.73 | 176.69 | 176.61 |
| 27 | 176.40 | 176.45 | 176.48 | 176.67 | 176.71 | 176.83 | 176.81 | 176.81 | 176.79 | 176.78 | 176.70 | 176.64 |
| 28 | 176.50 | 176.34 | 176.46 | 176.68 | 176.67 | 176.82 | 176.82 | 176.79 | 176.77 | 176.73 | 176.72 | 176.68 |
| 29 | 176.42 | 176.35 | 176.47 | 176.63 | 176.70 | 176.80 | 176.83 | 176.79 | 176.77 | 176.74 | 176.69 | 176.62 |
| 30 | 176.42 | | 176.49 | 176.71 | 176.73 | 176.80 | 176.84 | 176.78 | 176.77 | 176.72 | 176.65 | 176.63 |
| 31 | 176.45 | | 176.50 | | 176.74 | | 176.85 | 176.79 | | 176.73 | | 176.59 |
| MEAN | 176.47 | 176.45 | 176.46 | 176.56 | 176.67 | 176.78 | 176.83 | 176.81 | 176.79 | 176.73 | 176.70 | 176.65 |
| MAX. | 176.66 | 176.58 | 176.56 | 176.88 | 176.85 | 176.97 | 176.93 | 176.90 | 176.95 | 177.02 | 176.86 | 176.90 |
| MIN. | 1400/03 | 1200/23 | 1100/20 | 1000/30 | 0400/25 | 2300/26 | 2000/14 | 1400/09 | 2300/12 | 0600/17 | 1400/22 | 1500/25 |
| | 0800/27 | 0100/29 | 0500/11 | 0600/05 | 1400/13 | 0300/02 | 0600/11 | 0200/30 | 2400/25 | 1700/30 | 0300/11 | 0600/22 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.66

ANNUAL SUMMARY OF LEVELS, 1984
Station 5099: DeTour Village, Michigan on Lake Huron

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.81 Jul
Daily mean elevation: 176.85 19 Jul
Instant/hourly elevation: 176.91 2200/12 Sep

LOWEST
Monthly mean elevation: 176.43 Feb
Daily mean elevation: 176.31 29 Feb
Instant/hourly elevation: 176.20 0700/11 Mar

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.55 | 3 Jan |
| 176.49 | 23 Feb |
| 176.50 | 24 Mar |
| 176.66 | 29 Apr |
| 176.72 | 31 May |
| 176.82 | 28 Jun |
| 176.85 | 19 Jul |
| 176.84 | 9 Aug |
| 176.82 | 18 Sep |
| 176.79 | 20 Oct |
| 176.79 | 3 Nov |
| 176.73 | 21 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.37 | 27 Jan |
| 176.31 | 29 Feb |
| 176.36 | 16 Mar |
| 176.43 | 5 Apr |
| 176.59 | 3 May |
| 176.68 | 2 Jun |
| 176.78 | 27 Jul |
| 176.75 | 23 Aug |
| 176.72 | 3 Sep |
| 176.66 | 15 Oct |
| 176.56 | 11 Nov |
| 176.51 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 176.80 | | | | | | 2 | 20 | 11 | 7 | | | | 176.80 | 40 |
| 176.75 | | | | | | 12 | 11 | 19 | 13 | 2 | 2 | | 176.75 | 99 |
| 176.70 | | | | | 4 | 14 | | 1 | 10 | 12 | 8 | 2 | 176.70 | 150 |
| 176.65 | | | | 1 | 10 | 2 | | | | 17 | 13 | 9 | 176.65 | 202 |
| 176.60 | | | | 4 | 16 | | | | | | 6 | 11 | 176.60 | 239 |
| 176.55 | | | | 5 | 1 | | | | | | 1 | 8 | 176.55 | 254 |
| 176.50 | 4 | | | 4 | | | | | | | | 1 | 176.50 | 263 |
| 176.45 | 12 | 5 | 9 | 14 | | | | | | | | | 176.45 | 303 |
| 176.40 | 10 | 21 | 18 | 2 | | | | | | | | | 176.40 | 354 |
| 176.35 | 5 | 1 | 4 | | | | | | | | | | 176.35 | 364 |
| 176.30 | | 2 | | | | | | | | | | | 176.30 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 5099: DeTour Village, Michigan on Lake Huron

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.50 | 176.45 | 176.42 | 176.49 | 176.66 | 176.70 | 176.79 | 176.82 | 176.77 | 176.74 | 176.63 | 176.63 |
| 2 | 176.46 | 176.46 | 176.42 | 176.49 | 176.66 | 176.68 | 176.80 | 176.79 | 176.74 | 176.78 | 176.70 | 176.70 |
| 3 | 176.55 | 176.44 | 176.45 | 176.47 | 176.59 | 176.73 | 176.81 | 176.80 | 176.72 | 176.71 | 176.79 | 176.60 |
| 4 | 176.52 | 176.44 | 176.46 | 176.44 | 176.61 | 176.74 | 176.80 | 176.80 | 176.77 | 176.74 | 176.72 | 176.68 |
| 5 | 176.50 | 176.38 | 176.42 | 176.43 | 176.66 | 176.72 | 176.79 | 176.81 | 176.75 | 176.68 | 176.67 | 176.70 |
| 6 | 176.42 | 176.41 | 176.41 | 176.46 | 176.63 | 176.72 | 176.79 | 176.82 | 176.78 | 176.67 | 176.70 | 176.57 |
| 7 | 176.49 | 176.42 | 176.44 | 176.48 | 176.63 | 176.74 | 176.82 | 176.81 | 176.82 | 176.69 | 176.71 | 176.71 |
| 8 | 176.40 | 176.45 | 176.40 | 176.49 | 176.66 | 176.76 | 176.80 | 176.82 | 176.82 | 176.69 | 176.74 | 176.69 |
| 9 | 176.48 | 176.45 | 176.44 | 176.46 | 176.64 | 176.76 | 176.79 | 176.84 | 176.81 | 176.70 | 176.70 | 176.66 |
| 10 | 176.41 | 176.43 | 176.48 | 176.47 | 176.65 | 176.73 | 176.78 | 176.83 | 176.79 | 176.69 | 176.61 | 176.61 |
| 11 | 176.45 | 176.43 | 176.36 | 176.50 | 176.63 | 176.76 | 176.81 | 176.80 | 176.77 | 176.70 | 176.56 | 176.69 |
| 12 | 176.45 | 176.44 | 176.49 | 176.49 | 176.63 | 176.75 | 176.83 | 176.80 | 176.81 | 176.69 | 176.63 | 176.63 |
| 13 | 176.41 | 176.42 | 176.41 | 176.46 | 176.64 | 176.75 | 176.83 | 176.81 | 176.78 | 176.69 | 176.69 | 176.59 |
| 14 | 176.38 | 176.45 | 176.44 | 176.47 | 176.62 | 176.74 | 176.84 | 176.80 | 176.78 | 176.68 | 176.73 | 176.59 |
| 15 | 176.46 | 176.44 | 176.45 | 176.50 | 176.64 | 176.74 | 176.83 | 176.83 | 176.75 | 176.66 | 176.71 | 176.60 |
| 16 | 176.49 | 176.42 | 176.36 | 176.49 | 176.64 | 176.74 | 176.83 | 176.79 | 176.79 | 176.67 | 176.67 | 176.67 |
| 17 | 176.45 | 176.41 | 176.42 | 176.53 | 176.67 | 176.77 | 176.84 | 176.79 | 176.81 | 176.68 | 176.76 | 176.64 |
| 18 | 176.46 | 176.46 | 176.38 | 176.54 | 176.65 | 176.77 | 176.81 | 176.79 | 176.82 | 176.70 | 176.66 | 176.63 |
| 19 | 176.46 | 176.44 | 176.43 | 176.57 | 176.66 | 176.78 | 176.85 | 176.77 | 176.81 | 176.70 | 176.62 | 176.65 |
| 20 | 176.43 | 176.45 | 176.44 | 176.57 | 176.64 | 176.75 | 176.82 | 176.81 | 176.74 | 176.79 | 176.63 | 176.62 |
| 21 | 176.51 | 176.47 | 176.46 | 176.56 | 176.64 | 176.75 | 176.81 | 176.82 | 176.76 | 176.72 | 176.66 | 176.73 |
| 22 | 176.46 | 176.49 | 176.43 | 176.54 | 176.65 | 176.76 | 176.84 | 176.77 | 176.75 | 176.73 | 176.72 | 176.51 |
| 23 | 176.46 | 176.49 | 176.45 | 176.55 | 176.67 | 176.75 | 176.82 | 176.75 | 176.77 | 176.73 | 176.71 | 176.67 |
| 24 | 176.45 | 176.44 | 176.50 | 176.60 | 176.72 | 176.78 | 176.80 | 176.76 | 176.77 | 176.74 | 176.69 | 176.58 |
| 25 | 176.41 | 176.45 | 176.45 | 176.63 | 176.70 | 176.80 | 176.81 | 176.77 | 176.73 | 176.75 | 176.68 | 176.64 |
| 26 | 176.47 | 176.45 | 176.47 | 176.60 | 176.69 | 176.81 | 176.81 | 176.78 | 176.78 | 176.70 | 176.66 | 176.69 |
| 27 | 176.37 | 176.45 | 176.46 | 176.61 | 176.71 | 176.80 | 176.78 | 176.79 | 176.76 | 176.75 | 176.68 | 176.63 |
| 28 | 176.51 | 176.31 | 176.43 | 176.63 | 176.64 | 176.82 | 176.80 | 176.77 | 176.75 | 176.72 | 176.68 | 176.65 |
| 29 | 176.39 | 176.31 | 176.43 | 176.66 | 176.67 | 176.79 | 176.81 | 176.77 | 176.74 | 176.73 | 176.72 | 176.60 |
| 30 | 176.40 | | 176.47 | 176.63 | 176.72 | 176.77 | 176.81 | 176.76 | 176.75 | 176.69 | 176.63 | 176.65 |
| 31 | 176.43 | | 176.49 | | 176.72 | | 176.82 | 176.78 | | 176.75 | | 176.60 |
| MEAN | 176.45 | 176.43 | 176.44 | 176.53 | 176.66 | 176.76 | 176.81 | 176.80 | 176.77 | 176.71 | 176.68 | 176.64 |
| MAX. | 176.63 | 176.53 | 176.55 | 176.75 | 176.77 | 176.87 | 176.91 | 176.88 | 176.91 | 176.84 | 176.87 | 176.86 |
| | 1600/03 | 1200/23 | 0400/12 | 1600/30 | 1700/30 | 2400/26 | 0800/17 | 1700/09 | 2200/12 | 1700/20 | 1400/17 | 2000/21 |
| MIN. | 176.26 | 176.23 | 176.20 | 176.39 | 176.54 | 176.64 | 176.73 | 176.69 | 176.58 | 176.56 | 176.44 | 176.29 |
| | 1000/27 | 1900/28 | 0700/11 | 0600/05 | 0300/04 | 0400/02 | 1200/10 | 1200/30 | 2100/25 | 1900/30 | 2100/01 | 0500/22 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.64

ANNUAL SUMMARY OF LEVELS, 1984
 Station 6060: US Slip below locks, Sault St Marie, Michigan on St Marys River

INTERNATIONAL
 GREAT LAKES
 DATUM (1955)

HIGHEST
 Monthly mean elevation: 177.24 Aug
 Daily mean elevation: 177.31 7 Sep
 Instant/hourly elevation: 177.47 0100/13 Sep

LOWEST
 Monthly mean elevation: 176.82 Apr
 Daily mean elevation: 176.61 11 Nov
 Instant/hourly elevation: 176.57 1800/11 Nov

HIGHEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 177.13 | 3 Jan |
| 177.08 | 3 Feb |
| 177.04 | 12 Mar |
| 176.99 | 30 Apr |
| 177.07 | 31 May |
| 177.17 | 27 Jun |
| 177.27 | 31 Jul |
| 177.28 | 9 Aug |
| 177.31 | 7 Sep |
| 177.16 | 2 Oct |
| 177.08 | 3 Nov |
| 177.10 | 27 Dec |

LOWEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.84 | 29 Jan |
| 176.67 | 29 Feb |
| 176.72 | 3 Mar |
| 176.70 | 6 Apr |
| 176.91 | 1 May |
| 177.05 | 2 Jun |
| 177.13 | 1 Jul |
| 177.18 | 23 Aug |
| 177.06 | 29 Sep |
| 176.85 | 28 Oct |
| 176.61 | 11 Nov |
| 176.77 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 177.30 | | | | | | | | | 1 | | | | 177.30 | 1 |
| 177.25 | | | | | | | 4 | 8 | 1 | | | | 177.25 | 14 |
| 177.20 | | | | | | | 12 | 22 | 7 | | | | 177.20 | 55 |
| 177.15 | | | | | | 3 | 13 | 1 | 13 | 1 | | | 177.15 | 86 |
| 177.10 | 2 | | | | | 18 | 2 | | 6 | 1 | | | 177.10 | 115 |
| 177.05 | 11 | 5 | | | 4 | 8 | | | 2 | 1 | 1 | 3 | 177.05 | 150 |
| 177.00 | 11 | 2 | 1 | | 14 | 1 | | | | 1 | | 1 | 177.00 | 181 |
| 176.95 | 4 | 2 | 1 | 3 | 8 | | | | | 12 | 2 | 2 | 176.95 | 215 |
| 176.90 | 2 | 4 | 5 | 3 | 5 | | | | | 12 | 2 | 8 | 176.90 | 256 |
| 176.85 | | 1 | 6 | 2 | | | | | | 2 | 5 | 8 | 176.85 | 280 |
| 176.80 | 1 | 6 | 9 | 4 | | | | | | 1 | 11 | 4 | 176.80 | 316 |
| 176.75 | | 1 | 7 | 12 | | | | | | | 3 | 5 | 176.75 | 344 |
| 176.70 | | 5 | 2 | 4 | | | | | | | 5 | | 176.70 | 360 |
| 176.65 | | 3 | | 2 | | | | | | | | | 176.65 | 365 |
| 176.60 | | | | | | | | | | | 1 | | 176.60 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 6060: US Slip below locks, Sault St Marie, Michigan on St Marys River

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.98 | 177.06 | 176.80 | 176.79 | 176.91 | 177.08 | 177.13 | 177.26 | 177.24 | 177.12 | 176.92 | 176.78 |
| 2 | 177.02 | 177.06 | 176.81 | 176.78 | 176.98 | 177.05 | 177.16 | 177.24 | 177.24 | 177.16 | 176.86 | 176.93 |
| 3 | 177.13 | 177.08 | 176.72 | 176.78 | 176.98 | 177.06 | 177.16 | 177.23 | 177.18 | 176.97 | 177.08 | 176.88 |
| 4 | 177.11 | 177.06 | 176.76 | 176.75 | 176.95 | 177.09 | 177.17 | 177.25 | 177.20 | 176.95 | 176.96 | 176.92 |
| 5 | 177.09 | 176.92 | 176.79 | 176.70 | 177.01 | 177.08 | 177.18 | 177.25 | 177.18 | 176.95 | 176.84 | 176.95 |
| 6 | 177.07 | 176.98 | 176.81 | 176.70 | 177.02 | 177.10 | 177.17 | 177.22 | 177.21 | 176.92 | 176.85 | 176.77 |
| 7 | 177.04 | 177.02 | 176.87 | 176.73 | 177.03 | 177.11 | 177.14 | 177.25 | 177.31 | 176.96 | 176.90 | 176.93 |
| 8 | 177.09 | 177.07 | 176.90 | 176.79 | 177.02 | 177.16 | 177.19 | 177.28 | 177.26 | 176.96 | 176.97 | 176.90 |
| 9 | 177.07 | 177.01 | 176.93 | 176.78 | 176.98 | 177.12 | 177.20 | 177.28 | 177.24 | 176.96 | 176.84 | 176.90 |
| 10 | 176.99 | 176.99 | 176.95 | 176.77 | 177.02 | 177.13 | 177.19 | 177.27 | 177.20 | 176.96 | 176.73 | 176.83 |
| 11 | 177.03 | 176.92 | 176.95 | 176.80 | 177.02 | 177.08 | 177.17 | 177.25 | 177.16 | 176.93 | 176.61 | 176.93 |
| 12 | 177.07 | 176.92 | 177.04 | 176.78 | 176.93 | 177.13 | 177.19 | 177.24 | 177.23 | 176.92 | 176.72 | 176.90 |
| 13 | 177.06 | 176.94 | 176.97 | 176.76 | 177.00 | 177.13 | 177.22 | 177.24 | 177.24 | 176.88 | 176.81 | 176.79 |
| 14 | 177.02 | 176.87 | 176.92 | 176.72 | 176.94 | 177.07 | 177.22 | 177.24 | 177.16 | 176.87 | 176.92 | 176.86 |
| 15 | 177.04 | 176.83 | 176.94 | 176.77 | 176.95 | 177.12 | 177.24 | 177.27 | 177.13 | 176.92 | 176.90 | 176.80 |
| 16 | 177.09 | 176.74 | 176.85 | 176.76 | 176.98 | 177.13 | 177.19 | 177.23 | 177.15 | 176.92 | 176.74 | 176.95 |
| 17 | 176.99 | 176.72 | 176.87 | 176.74 | 177.04 | 177.13 | 177.25 | 177.24 | 177.20 | 176.99 | 176.84 | 176.82 |
| 18 | 176.95 | 176.74 | 176.85 | 176.81 | 177.04 | 177.12 | 177.17 | 177.27 | 177.24 | 176.95 | 176.76 | 176.83 |
| 19 | 177.06 | 176.82 | 176.86 | 176.84 | 176.96 | 177.11 | 177.26 | 177.22 | 177.18 | 177.06 | 176.74 | 176.89 |
| 20 | 177.04 | 176.81 | 176.82 | 176.82 | 177.02 | 177.13 | 177.26 | 177.24 | 177.12 | 176.99 | 176.73 | 176.84 |
| 21 | 177.06 | 176.79 | 176.85 | 176.83 | 177.03 | 177.12 | 177.23 | 177.27 | 177.13 | 176.92 | 176.80 | 177.08 |
| 22 | 176.99 | 176.85 | 176.85 | 176.79 | 177.00 | 177.13 | 177.27 | 177.24 | 177.17 | 176.96 | 176.89 | 176.77 |
| 23 | 177.01 | 176.85 | 176.79 | 176.87 | 176.99 | 177.13 | 177.23 | 177.18 | 177.16 | 176.97 | 176.85 | 176.90 |
| 24 | 177.02 | 176.81 | 176.89 | 176.89 | 177.06 | 177.10 | 177.16 | 177.21 | 177.18 | 177.00 | 176.83 | 176.88 |
| 25 | 177.08 | 176.71 | 176.87 | 176.92 | 177.07 | 177.13 | 177.24 | 177.23 | 177.17 | 177.00 | 176.82 | 176.95 |
| 26 | 177.06 | 176.69 | 176.85 | 176.94 | 177.01 | 177.15 | 177.24 | 177.25 | 177.15 | 176.96 | 176.83 | 177.02 |
| 27 | 177.01 | 176.72 | 176.83 | 176.98 | 177.06 | 177.17 | 177.23 | 177.26 | 177.16 | 176.95 | 176.84 | 177.10 |
| 28 | 176.95 | 176.70 | 176.79 | 176.96 | 177.02 | 177.14 | 177.23 | 177.24 | 177.14 | 176.85 | 176.81 | 177.08 |
| 29 | 176.84 | 176.67 | 176.75 | 176.95 | 177.01 | 177.16 | 177.25 | 177.25 | 177.06 | 176.95 | 176.87 | 176.98 |
| 30 | 177.03 | | 176.76 | 176.99 | 177.05 | 177.13 | 177.24 | 177.21 | 177.09 | 176.95 | 176.78 | 176.99 |
| 31 | 177.05 | | 176.77 | | 177.07 | | 177.27 | 177.22 | | 177.02 | | 176.94 |
| MEAN | 177.03 | 176.87 | 176.85 | 176.82 | 177.00 | 177.12 | 177.21 | 177.24 | 177.18 | 176.96 | 176.83 | 176.91 |
| MAX. | 177.21 | 177.11 | 177.09 | 177.13 | 177.13 | 177.25 | 177.34 | 177.38 | 177.47 | 177.23 | 177.13 | 177.32 |
| | 2100/03 | 2100/08 | 1000/12 | 2000/27 | 2300/17 | 0300/27 | 0100/31 | 1600/08 | 0100/13 | 2100/02 | 0300/01 | 2000/21 |
| MIN. | 176.69 | 176.60 | 176.61 | 176.64 | 176.84 | 176.97 | 177.09 | 177.11 | 177.00 | 176.72 | 176.57 | 176.63 |
| | 1400/29 | 0500/29 | 1500/03 | 1500/05 | 1900/12 | 0800/03 | 1500/24 | 1600/06 | 1600/29 | 2100/03 | 1800/11 | 1600/06 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 177.00

ANNUAL SUMMARY OF LEVELS, 1984
Station 6070: SW Pier above locks, Sault St Marie, Michigan on St Marys River

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 183.21 Aug
Daily mean elevation: 183.46 16 Nov
Instant/hourly elevation: 183.73 0700/2 Nov

LOWEST
Monthly mean elevation: 182.96 Apr
Daily mean elevation: 182.84 14 Mar
Instant/hourly elevation: 182.46 1700/27 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.14 | 8 Jan |
| 183.07 | 24 Feb |
| 183.06 | 22 Mar |
| 183.11 | 30 Apr |
| 183.15 | 1 May |
| 183.25 | 28 Jun |
| 183.32 | 6 Jul |
| 183.25 | 31 Aug |
| 183.32 | 25 Sep |
| 183.36 | 3 Oct |
| 183.46 | 16 Nov |
| 183.43 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 182.91 | 31 Jan |
| 182.86 | 2 Feb |
| 182.84 | 14 Mar |
| 182.85 | 27 Apr |
| 182.96 | 17 May |
| 182.98 | 1 Jun |
| 183.15 | 22 Jul |
| 183.15 | 26 Aug |
| 182.99 | 7 Sep |
| 183.06 | 31 Oct |
| 183.04 | 14 Nov |
| 182.85 | 27 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 183.45        |     |     |     |     |     |     |     |     |     |     | 1   |     | 183.45        | 1                          |
| 183.40        |     |     |     |     |     |     |     |     |     |     |     | 1   | 183.40        | 2                          |
| 183.35        |     |     |     |     |     |     |     |     |     | 1   | 2   |     | 183.35        | 5                          |
| 183.30        |     |     |     |     |     |     | 1   |     | 1   | 1   | 2   | 1   | 183.30        | 11                         |
| 183.25        |     |     |     |     |     |     |     |     | 2   | 1   |     | 2   | 183.25        | 16                         |
| 183.20        |     |     |     |     |     | 5   | 11  | 15  | 9   | 3   | 7   | 6   | 183.20        | 72                         |
| 183.15        |     |     |     |     |     | 6   | 14  | 15  | 11  | 10  | 8   | 6   | 183.15        | 142                        |
| 183.10        | 2   |     |     | 1   | 6   | 11  | 1   | 1   | 4   | 10  | 6   | 5   | 183.10        | 189                        |
| 183.05        | 2   | 3   | 1   |     | 9   | 3   |     |     | 2   | 5   | 1   | 4   | 183.05        | 219                        |
| 183.00        | 10  | 8   | 3   | 3   | 10  | 3   |     |     |     |     | 3   | 2   | 183.00        | 261                        |
| 182.95        | 13  | 10  | 11  | 16  | 6   | 2   |     |     | 1   |     |     | 3   | 182.95        | 323                        |
| 182.90        | 4   | 6   | 12  | 4   |     |     |     |     |     |     |     |     | 182.90        | 349                        |
| 182.85        |     | 2   | 3   | 5   |     |     |     |     |     |     |     |     | 182.85        | 359                        |
| 182.80        |     |     | 1   | 1   |     |     |     |     |     |     |     | 1   | 182.80        | 362                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 6070: SW Pier above locks, Sault St Marie, Michigan on St Marys River

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 182.99  | 182.91  | 183.03  | 182.96  | 183.15  | 182.98  | 183.19  | 183.20  | 183.18  | 183.17  | 183.40  | 183.23  |
| 2    | 183.02  | 182.86  | 183.03  | 182.97  | 183.04  | 183.04  | 183.17  | 183.20  | 183.16  | 183.15  | 183.38  | 183.08  |
| 3    | 182.97  | 182.98  | 182.98  | 182.95  | 183.02  | 183.08  | 183.18  | 183.21  | 183.21  | 183.36  | 183.04  | 183.32  |
| 4    | 183.05  | 182.98  | 182.93  | 182.97  | 183.05  | 183.07  | 183.19  | 183.21  | 183.21  | 183.23  | 183.20  | 183.28  |
| 5    | 182.98  | 183.03  | 182.98  | 182.99  | 183.00  | 183.00  | 183.18  | 183.18  | 183.20  | 183.10  | 183.32  | 183.15  |
| 6    | 183.08  | 182.97  | 183.00  | 183.04  | 183.00  | 183.05  | 183.32  | 183.22  | 183.14  | 183.11  | 183.23  | 183.24  |
| 7    | 182.93  | 182.97  | 182.94  | 182.94  | 182.97  | 183.05  | 183.25  | 183.20  | 182.99  | 183.13  | 183.12  | 183.13  |
| 8    | 183.14  | 182.94  | 182.94  | 182.90  | 183.04  | 183.06  | 183.18  | 183.17  | 183.11  | 183.19  | 183.11  | 183.18  |
| 9    | 183.00  | 182.90  | 182.91  | 182.89  | 183.11  | 183.12  | 183.16  | 183.19  | 183.17  | 183.17  | 183.21  | 183.07  |
| 10   | 183.06  | 182.91  | 182.94  | 182.92  | 183.02  | 183.12  | 183.20  | 183.25  | 183.18  | 183.17  | 183.23  | 183.16  |
| 11   | 183.00  | 182.94  | 182.97  | 182.93  | 183.04  | 183.13  | 183.24  | 183.23  | 183.19  | 183.16  | 183.22  | 183.01  |
| 12   | 182.96  | 182.91  | 182.87  | 182.89  | 183.13  | 183.12  | 183.20  | 183.23  | 183.07  | 183.14  | 183.20  | 183.18  |
| 13   | 182.97  | 182.91  | 182.87  | 182.89  | 183.07  | 183.16  | 183.19  | 183.22  | 183.22  | 183.15  | 183.15  | 183.11  |
| 14   | 183.01  | 182.97  | 182.84  | 182.97  | 183.11  | 183.19  | 183.17  | 183.20  | 183.22  | 183.15  | 183.04  | 183.06  |
| 15   | 182.96  | 182.97  | 182.91  | 182.99  | 183.11  | 183.12  | 183.21  | 183.22  | 183.22  | 183.09  | 183.21  | 183.04  |
| 16   | 183.01  | 182.97  | 182.98  | 183.04  | 183.05  | 183.11  | 183.24  | 183.24  | 183.21  | 183.08  | 183.46  | 183.09  |
| 17   | 183.05  | 183.00  | 182.89  | 183.04  | 182.96  | 183.14  | 183.21* | 183.18  | 183.16  | 183.11  | 183.31  | 183.19  |
| 18   | 183.04  | 183.01  | 182.92  | 183.00  | 183.02  | 183.16  | /       | 183.23  | 183.18  | 183.12  | 183.25  | 183.22  |
| 19   | 183.03  | 183.05  | 182.93  | 182.98  | 183.08  | 183.19  | 183.21* | 183.21  | 183.18  | 183.06  | 183.22  | 183.17  |
| 20   | 183.05  | 183.01  | 182.93  | 183.00  | 183.06  | 183.16  | 183.23  | 183.18  | 183.26  | 183.20  | 183.20  | 183.27  |
| 21   | 182.99  | 182.98  | 183.02  | 182.98  | 182.97  | 183.15  | 183.19  | 183.17  | 183.13  | 183.19  | 183.11  | 182.96  |
| 22   | 183.00  | 182.97  | 183.06  | 182.97  | 183.05  | 183.12  | 183.15  | 183.24  | 183.06  | 183.21  | 183.18  | 183.43  |
| 23   | 182.93  | 183.01  | 183.00  | 182.96  | 183.08  | 183.11  | 183.24  | 183.25  | 183.18  | 183.21  | 183.18  | 183.23  |
| 24   | 182.96  | 183.07  | 182.95  | 182.97  | 183.00  | 183.24  | 183.25  | 183.19  | 183.13  | 183.17  | 183.13  | 183.25  |
| 25   | 183.11  | 183.06  | 182.97  | 182.96  | 183.11  | 183.18  | 183.21  | 183.16  | 183.32  | 183.17  | 183.11  | 183.24  |
| 26   | 182.96  | 183.04  | 182.95  | 182.90  | 183.09  | 183.11  | 183.23  | 183.15  | 183.28  | 183.13  | 183.05  | 182.98  |
| 27   | 183.05  | 183.02  | 182.95  | 182.85  | 183.08  | 183.23  | 183.19* | 183.16  | 183.22  | 183.11  | 183.07  | 182.85  |
| 28   | 182.93  | 183.05  | 182.96  | 182.96  | 183.09  | 183.25  | /       | 183.18  | 183.24  | 183.33  | 183.17  | 182.99  |
| 29   | 183.05  | 183.06  | 183.00  | 182.97  | 183.07  | 183.24  | /       | 183.19  | 183.22  | 183.16  | 183.18  | 183.20  |
| 30   | 182.97  |         | 182.99  | 183.11  | 183.08  | 183.22  | /       | 183.25  | 183.18  | 183.28  | 183.20  | 183.13  |
| 31   | 182.91  |         | 182.97  |         | 183.01  |         | 183.20* | 183.25  |         | 183.06  |         | 183.11  |
| MEAN | 183.01  | 182.98  | 182.96  | 182.96  | 183.05  | 183.13  | 183.21  | 183.21  | 183.18  | 183.16  | 183.20  | 183.15  |
| MAX. | 183.31  | 183.15  | 183.40  | 183.58  | 183.32  | 183.47  | 183.50  | 183.38  | 183.57  | 183.63  | 183.73  | 183.65  |
| MIN. | 0500/27 | 2200/28 | 2300/10 | 2000/30 | 0100/01 | 1200/27 | 2400/14 | 0400/31 | 2100/25 | 0400/28 | 0700/02 | 0300/17 |
|      | 182.73  | 182.73  | 182.67  | 182.46  | 182.79  | 182.56  | 182.77  | 182.84  | 182.75  | 182.74  | 182.88  | 182.71  |
|      | 1100/03 | 1400/02 | 2400/14 | 1700/27 | 1300/24 | 0200/10 | 1300/13 | 1300/09 | 1800/07 | 2100/31 | 1200/03 | 0200/27 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 183.10

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7023: Ludington, Michigan on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.90 Jul  
Daily mean elevation: 176.95 2 Sep  
Instant/hourly elevation: 177.09 1100/19 Oct

LOWEST  
Monthly mean elevation: 176.55 Jan  
Daily mean elevation: 176.46 11 Mar  
Instant/hourly elevation: 176.42 1500/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.63 | 13 Jan |
| 176.60 | 19 Feb |
| 176.66 | 21 Mar |
| 176.86 | 30 Apr |
| 176.82 | 28 May |
| 176.92 | 27 Jun |
| 176.94 | 17 Jul |
| 176.95 | 8 Aug  |
| 176.95 | 2 Sep  |
| 176.90 | 19 Oct |
| 176.87 | 1 Nov  |
| 176.81 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.50 | 26 Jan |
| 176.52 | 8 Feb  |
| 176.46 | 11 Mar |
| 176.57 | 6 Apr  |
| 176.66 | 1 May  |
| 176.80 | 9 Jun  |
| 176.82 | 7 Jul  |
| 176.83 | 31 Aug |
| 176.78 | 26 Sep |
| 176.75 | 31 Oct |
| 176.66 | 17 Nov |
| 176.58 | 26 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.90 | | | | | | 5 | 13 | 7 | 6 | | | | 176.90 | 31 |
| 176.85 | | | | 1 | | 15 | 17 | 14 | 11 | 6 | 2 | | 176.85 | 97 |
| 176.80 | | | | | 4 | 7 | 1 | 10 | 11 | 12 | 6 | 2 | 176.80 | 150 |
| 176.75 | | | | 2 | 10 | 3 | | | 2 | 10 | 13 | 4 | 176.75 | 194 |
| 176.70 | | | | 8 | 16 | | | | | 3 | 5 | 13 | 176.70 | 239 |
| 176.65 | | | 1 | 10 | 1 | | | | | | 4 | 6 | 176.65 | 261 |
| 176.60 | 1 | | 6 | 4 | | | | | | | | 5 | 176.60 | 277 |
| 176.55 | 12 | 17 | 12 | 5 | | | | | | | | 1 | 176.55 | 324 |
| 176.50 | 16 | 12 | 10 | | | | | | | | | | 176.50 | 362 |
| 176.45 | 2 | | 2 | | | | | | | | | | 176.45 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7023: Ludington, Michigan on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.57 | 176.56 | 176.51 | 176.58 | 176.66 | 176.83 | 176.88 | 176.88 | 176.87 | 176.81 | 176.87 | 176.74 |
| 2 | 176.58 | 176.58 | 176.52 | 176.60 | 176.72 | 176.86 | 176.89 | 176.91 | 176.95 | 176.81 | 176.69 | 176.77 |
| 3 | 176.55 | 176.58 | 176.52 | 176.60 | 176.76 | 176.80 | 176.88 | 176.90 | 176.92 | 176.76 | 176.77 | 176.81 |
| 4 | 176.52 | 176.55 | 176.55 | 176.65 | 176.75 | 176.80 | 176.88 | 176.90 | 176.86 | 176.75 | 176.81 | 176.65 |
| 5 | 176.58 | 176.56 | 176.61 | 176.61 | 176.73 | 176.85 | 176.88 | 176.90 | 176.86 | 176.84 | 176.77 | 176.70 |
| 6 | 176.55 | 176.56 | 176.53 | 176.57 | 176.78 | 176.84 | 176.89 | 176.92 | 176.84 | 176.86 | 176.73 | 176.72 |
| 7 | 176.56 | 176.53 | 176.54 | 176.58 | 176.81 | 176.85 | 176.82 | 176.91 | 176.90 | 176.86 | 176.80 | 176.68 |
| 8 | 176.54 | 176.52 | 176.56 | 176.63 | 176.74 | 176.85 | 176.87 | 176.95 | 176.91 | 176.86 | 176.81 | 176.62 |
| 9 | 176.55 | 176.53 | 176.55 | 176.66 | 176.73 | 176.80 | 176.92 | 176.94 | 176.89 | 176.83 | 176.84 | 176.71 |
| 10 | 176.55 | 176.56 | 176.56 | 176.66 | 176.74 | 176.87 | 176.92 | 176.92 | 176.87 | 176.83 | 176.85 | 176.74 |
| 11 | 176.56 | 176.55 | 176.46 | 176.63 | 176.78 | 176.81 | 176.93 | 176.93 | 176.91 | 176.82 | 176.86 | 176.69 |
| 12 | 176.56 | 176.55 | 176.49 | 176.67 | 176.72 | 176.87 | 176.90 | 176.90 | 176.92 | 176.83 | 176.78 | 176.75 |
| 13 | 176.63 | 176.60 | 176.59 | 176.74 | 176.75 | 176.86 | 176.91 | 176.89 | 176.94 | 176.81 | 176.77 | 176.73 |
| 14 | 176.60 | 176.56 | 176.53 | 176.70 | 176.74 | 176.81 | 176.92 | 176.88 | 176.86 | 176.82 | 176.80 | 176.81 |
| 15 | 176.56 | 176.56 | 176.58 | 176.69 | 176.72 | 176.86 | 176.92 | 176.86 | 176.90 | 176.86 | 176.83 | 176.77 |
| 16 | 176.57 | 176.58 | 176.54 | 176.70 | 176.73 | 176.87 | 176.88 | 176.89 | 176.82 | 176.87 | 176.69 | 176.77 |
| 17 | 176.54 | 176.60 | 176.58 | 176.67 | 176.75 | 176.91 | 176.94 | 176.90 | 176.83 | 176.81 | 176.66 | 176.67 |
| 18 | 176.53 | 176.55 | 176.64 | 176.71 | 176.77 | 176.90 | 176.90 | 176.88 | 176.82 | 176.81 | 176.74 | 176.70 |
| 19 | 176.53 | 176.60 | 176.58 | 176.70 | 176.72 | 176.88 | 176.88 | 176.88 | 176.82 | 176.90 | 176.78 | 176.74 |
| 20 | 176.51 | 176.56 | 176.61 | 176.69 | 176.75 | 176.92 | 176.91 | 176.85 | 176.82 | 176.76 | 176.77 | 176.63 |
| 21 | 176.53 | 176.55 | 176.66 | 176.71 | 176.79 | 176.89 | 176.92 | 176.84 | 176.83 | 176.79 | 176.77 | 176.73 |
| 22 | 176.54 | 176.57 | 176.61 | 176.74 | 176.77 | 176.92 | 176.92 | 176.85 | 176.88 | 176.80 | 176.76 | 176.71 |
| 23 | 176.56 | 176.58 | 176.55 | 176.78 | 176.74 | 176.92 | 176.93 | 176.84 | 176.84 | 176.76 | 176.67 | 176.64 |
| 24 | 176.59 | 176.56 | 176.58 | 176.72 | 176.74 | 176.88 | 176.89 | 176.85 | 176.89 | 176.77 | 176.72 | 176.71 |
| 25 | 176.50 | 176.54 | 176.60 | 176.72 | 176.81 | 176.86 | 176.90 | 176.83 | 176.87 | 176.75 | 176.74 | 176.64 |
| 26 | 176.50 | 176.55 | 176.60 | 176.75 | 176.77 | 176.90 | 176.92 | 176.83 | 176.78 | 176.80 | 176.77 | 176.58 |
| 27 | 176.52 | 176.54 | 176.63 | 176.80 | 176.77 | 176.92 | 176.91 | 176.84 | 176.82 | 176.81 | 176.81 | 176.76 |
| 28 | 176.54 | 176.58 | 176.63 | 176.74 | 176.82 | 176.86 | 176.89 | 176.85 | 176.82 | 176.76 | 176.78 | 176.74 |
| 29 | 176.56 | 176.53 | 176.60 | 176.70 | 176.81 | 176.88 | 176.88 | 176.88 | 176.81 | 176.77 | 176.72 | 176.71 |
| 30 | 176.52 | | 176.58 | 176.86 | 176.78 | 176.90 | 176.88 | 176.89 | 176.80 | 176.79 | 176.78 | 176.69 |
| 31 | 176.54 | | 176.58 | | 176.80 | | 176.87 | 176.83 | | 176.75 | | 176.75 |
| MEAN | 176.55 | 176.56 | 176.57 | 176.69 | 176.76 | 176.87 | 176.90 | 176.88 | 176.86 | 176.81 | 176.77 | 176.71 |
| MAX. | 176.67 | 176.65 | 176.76 | 177.02 | 176.97 | 177.03 | 177.06 | 177.07 | 177.07 | 177.09 | 177.02 | 176.95 |
| | 2000/13 | 0400/13 | 2400/15 | 1100/30 | 1700/25 | 0700/27 | 1000/11 | 0700/08 | 0900/02 | 1100/19 | 1300/01 | 1800/14 |
| MIN. | 176.42 | 176.49 | 176.42 | 176.53 | 176.58 | 176.71 | 176.77 | 176.75 | 176.67 | 176.64 | 176.59 | 176.52 |
| | 0600/26 | 1900/29 | 1500/11 | 1500/29 | 1900/24 | 0900/09 | 0300/07 | 0900/27 | 0700/26 | 0800/31 | 0800/17 | 1100/26 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 176.74

ANNUAL SUMMARY OF LEVELS, 1984
Station 7031: Holland, Michigan on Lake Michigan

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.86 Jul
Daily mean elevation: 176.95 2 Sep
Instant/hourly elevation: 177.03 2200/2 Sep

LOWEST
Monthly mean elevation: 176.51 Jan
Daily mean elevation: 176.44 3 Jan
Instant/hourly elevation: 176.36 0600/28 Jan

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.59 | 13 Jan |
| 176.67 | 28 Feb |
| 176.65 | 22 Mar |
| 176.74 | 27 Apr |
| 176.82 | 28 May |
| 176.91 | 23 Jun |
| 176.91 | 21 Jul |
| 176.91 | 11 Aug |
| 176.95 | 2 Sep |
| 176.83 | 19 Oct |
| 176.90 | 10 Nov |
| 176.78 | 3 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.44 | 3 Jan |
| 176.48 | 8 Feb |
| 176.46 | 12 Mar |
| 176.55 | 2 Apr |
| 176.63 | 1 May |
| 176.76 | 4 Jun |
| 176.78 | 7 Jul |
| 176.78 | 27 Aug |
| 176.73 | 26 Sep |
| 176.70 | 31 Oct |
| 176.61 | 17 Nov |
| 176.56 | 26 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.90        |     |     |     |     |     | 1   | 1   | 1   | 2   |     |     |     | 176.90        | 5                          |
| 176.85        |     |     |     |     |     | 8   | 15  | 16  | 1   |     | 2   |     | 176.85        | 47                         |
| 176.80        |     |     |     |     | 1   | 12  | 14  | 10  | 13  | 6   | 1   |     | 176.80        | 104                        |
| 176.75        |     |     |     |     | 5   | 9   | 1   | 4   | 11  | 11  | 6   | 2   | 176.75        | 153                        |
| 176.70        |     |     |     | 4   | 13  |     |     |     | 3   | 10  | 8   | 6   | 176.70        | 197                        |
| 176.65        |     | 1   |     | 11  | 11  |     |     |     |     | 4   | 7   | 9   | 176.65        | 240                        |
| 176.60        |     |     | 7   | 6   | 1   |     |     |     |     |     | 6   | 8   | 176.60        | 268                        |
| 176.55        | 4   | 6   | 9   | 4   |     |     |     |     |     |     |     | 6   | 176.55        | 297                        |
| 176.50        | 14  | 20  | 9   | 2   |     |     |     |     |     |     |     |     | 176.50        | 342                        |
| 176.45        | 12  | 2   | 6   |     |     |     |     |     |     |     |     |     | 176.45        | 362                        |
| 176.40        | 1   |     |     |     |     |     |     |     |     |     |     |     | 176.40        | 363                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7031: Holland, Michigan on Lake Michigan

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.52  | 176.52  | 176.50  | 176.55  | 176.63  | 176.79  | 176.85  | 176.83  | 176.83  | 176.77  | 176.84  | 176.69  |
| 2    | 176.53  | 176.52  | 176.53  | 176.55  | 176.67  | 176.82  | 176.84* | 176.87  | 176.95  | 176.72* | 176.65  | 176.68  |
| 3    | 176.44  | 176.52  | 176.49  | 176.59  | 176.76  | 176.76  | 176.84* | 176.88  | 176.93  | 176.72  | 176.67  | 176.78  |
| 4    | 176.49  | 176.55  | 176.50  | 176.63  | 176.72  | 176.76  | 176.84  | 176.87  | 176.84  | 176.71  | 176.77  | 176.61  |
| 5    | 176.51  | 176.60  | 176.59  | 176.63  | 176.69  | 176.80  | 176.85  | 176.86  | 176.84  | 176.80  | 176.73  | 176.62  |
| 6    | 176.54  | 176.55  | 176.54  | 176.59  | 176.74  | 176.79  | 176.85  | 176.86  | 176.80  | 176.81  | 176.70  | 176.73  |
| 7    | 176.50  | 176.52  | 176.51  | 176.57  | 176.75  | 176.80  | 176.78  | 176.88  | 176.80  | 176.81  | 176.73  | 176.58  |
| 8    | 176.56  | 176.48  | 176.56  | 176.60  | 176.69  | 176.78  | 176.83  | 176.90  | 176.82  | 176.81  | 176.74  | 176.59  |
| 9    | 176.50  | 176.49  | 176.52  | 176.64  | 176.70  | 176.79  | 176.87  | 176.88  | 176.82  | 176.80  | 176.77  | 176.65  |
| 10   | 176.56  | 176.52  | 176.51  | 176.63  | 176.70  | 176.83  | 176.88  | 176.90  | 176.84  | 176.79  | 176.90  | 176.69  |
| 11   | 176.53  | 176.51  | 176.48  | 176.61  | 176.74  | 176.78  | 176.88  | 176.91  | 176.85  | 176.78  | 176.88  | 176.60  |
| 12   | 176.54  | 176.52  | 176.46  | 176.64  | 176.69  | 176.82  | 176.85  | 176.88  | 176.84  | 176.78  | 176.77  | 176.70  |
| 13   | 176.59  | 176.56  | 176.55  | 176.69  | 176.74  | 176.82  | 176.87  | 176.87  | 176.89  | 176.78  | 176.73  | 176.73  |
| 14   | 176.58  | 176.52  | 176.50  | 176.70  | 176.71  | 176.83  | 176.86  | 176.86  | 176.85  | 176.79  | 176.70  | 176.77  |
| 15   | 176.52  | 176.52  | 176.54  | 176.70  | 176.70  | 176.84  | 176.87  | 176.82  | 176.85  | 176.82  | 176.77  | 176.74  |
| 16   | 176.51  | 176.56  | 176.62  | 176.73  | 176.69  | 176.85  | 176.85  | 176.87  | 176.77  | 176.81  | 176.68  | 176.66  |
| 17   | 176.53  | 176.56  | 176.57  | 176.70* | 176.69  | 176.86  | 176.89  | 176.89  | 176.75  | 176.80  | 176.61  | 176.64  |
| 18   | 176.50  | 176.52  | 176.62  | 176.70* | 176.73  | 176.84  | 176.88  | 176.90  | 176.73  | 176.74  | 176.75  | 176.65  |
| 19   | 176.51  | 176.60  | 176.56  | 176.68  | 176.69  | 176.86  | 176.83  | 176.87  | 176.76  | 176.83  | 176.76  | 176.66  |
| 20   | 176.53  | 176.53  | 176.60  | 176.67  | 176.72  | 176.89  | 176.89  | 176.82  | 176.79  | 176.70  | 176.74  | 176.60  |
| 21   | 176.46  | 176.53  | 176.62  | /       | 176.75  | 176.88  | 176.91  | 176.79  | 176.79  | 176.77  | 176.72  | 176.66  |
| 22   | 176.48  | 176.52  | 176.65  | /       | 176.75  | 176.89  | 176.87  | 176.84  | 176.83  | 176.75  | 176.64  | 176.71  |
| 23   | 176.49  | 176.52  | 176.54  | /       | 176.72  | 176.91  | 176.87  | 176.84  | 176.80  | 176.73  | 176.63  | 176.63  |
| 24   | 176.49  | 176.54  | 176.55  | 176.68  | 176.69  | 176.84  | 176.88  | 176.82  | 176.81  | 176.70  | 176.64  | 176.71  |
| 25   | 176.47  | 176.51  | 176.60  | 176.67  | 176.75  | 176.83  | 176.85  | 176.81  | 176.84  | 176.70  | 176.67  | 176.56  |
| 26   | 176.49  | 176.52  | 176.58  | 176.73  | 176.77  | 176.85  | 176.87  | 176.78  | 176.73  | 176.77  | 176.70  | 176.56  |
| 27   | 176.51  | 176.54  | 176.61  | 176.74  | 176.75  | 176.88  | 176.89  | 176.78  | 176.77  | 176.73  | 176.73  | 176.69  |
| 28   | 176.47  | 176.67  | 176.64  | 176.68  | 176.82  | 176.83  | 176.86  | 176.83  | 176.79  | 176.73  | 176.70  | 176.63  |
| 29   | 176.55  | 176.58  | 176.62  | 176.68  | 176.79  | 176.87  | 176.85  | 176.84  | 176.77  | 176.73  | 176.65  | 176.68  |
| 30   | 176.53  |         | 176.57  | 176.73  | 176.76  | 176.87  | 176.84  | 176.85  | 176.76  | 176.74  | 176.76  | 176.65  |
| 31   | 176.49  |         | 176.56  |         | 176.76  |         | 176.81  | 176.79  |         | 176.70  |         | 176.73  |
| MEAN | 176.51  | 176.54  | 176.56  | 176.66  | 176.72  | 176.83  | 176.86  | 176.85  | 176.81  | 176.76  | 176.72  | 176.66  |
| MAX. | 176.67  | 176.73  | 176.77  | 176.83  | 176.85  | 176.94  | 176.96  | 176.96  | 177.03  | 176.91  | 177.00  | 176.89  |
|      | 0500/08 | 1300/28 | 0200/16 | 1800/30 | 2000/28 | 0700/23 | 0500/11 | 0300/30 | 2200/02 | 0900/19 | 1500/10 | 0300/22 |
| MIN. | 176.36  | 176.45  | 176.38  | 176.52  | 176.58  | 176.71  | 176.74  | 176.74  | 176.68  | 176.62  | 176.56  | 176.45  |
|      | 0600/28 | 2300/08 | 1800/11 | 1900/01 | 1000/01 | 2000/03 | 1600/07 | 2000/26 | 1700/18 | 0800/25 | 0500/17 | 1500/25 |

\* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 176.71

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7044: Calumet Harbor, Illinois on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.89 Aug  
Daily mean elevation: 177.09 10 Nov  
Instant/hourly elevation: 177.29 2300/10 Nov

LOWEST  
Monthly mean elevation: 176.50 Jan  
Daily mean elevation: 176.34 3 Jan  
Instant/hourly elevation: 176.19 1500/3 Jan

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.68 | 14 Jan |
| 177.03 | 28 Feb |
| 176.78 | 28 Mar |
| 176.85 | 22 Apr |
| 176.99 | 28 May |
| 176.96 | 20 Jun |
| 176.95 | 27 Jul |
| 177.00 | 11 Aug |
| 177.04 | 3 Sep  |
| 176.86 | 5 Oct  |
| 177.09 | 10 Nov |
| 176.89 | 31 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.34 | 3 Jan  |
| 176.46 | 8 Feb  |
| 176.45 | 10 Mar |
| 176.53 | 30 Apr |
| 176.63 | 1 May  |
| 176.73 | 8 Jun  |
| 176.83 | 23 Jul |
| 176.71 | 29 Aug |
| 176.72 | 8 Sep  |
| 176.67 | 2 Oct  |
| 176.56 | 22 Nov |
| 176.50 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 177.05 | | | | | | | | | | | 1 | | 177.05 | 1 |
| 177.00 | | 1 | | | | | | | 1 | | 1 | | 177.00 | 4 |
| 176.95 | | | | | 1 | 1 | | 2 | 1 | | | | 176.95 | 9 |
| 176.90 | | | | | | 6 | 8 | 8 | 3 | | | | 176.90 | 34 |
| 176.85 | | | | | 1 | 8 | 16 | 14 | 2 | 1 | 1 | 1 | 176.85 | 78 |
| 176.80 | | 1 | | 2 | 1 | 7 | 7 | 2 | 13 | 13 | 3 | 2 | 176.80 | 129 |
| 176.75 | | | 1 | 5 | 8 | 7 | | 1 | 7 | 8 | 5 | 3 | 176.75 | 174 |
| 176.70 | | 1 | 2 | 7 | 11 | 1 | | 1 | 3 | 4 | 4 | 4 | 176.70 | 212 |
| 176.65 | 1 | 1 | 6 | 11 | 8 | | | | | 5 | 7 | 7 | 176.65 | 258 |
| 176.60 | 2 | 1 | 5 | 1 | 1 | | | | | | 6 | 7 | 176.60 | 281 |
| 176.55 | 7 | 11 | 7 | 3 | | | | | | | 2 | 5 | 176.55 | 316 |
| 176.50 | 3 | 9 | 9 | 1 | | | | | | | | 1 | 176.50 | 339 |
| 176.45 | 8 | 4 | | | | | | | | | | 1 | 176.45 | 352 |
| 176.40 | 5 | | 1 | | | | | | | | | | 176.40 | 358 |
| 176.35 | 4 | | | | | | | | | | | | 176.35 | 362 |
| 176.30 | 1 | | | | | | | | | | | | 176.30 | 363 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7044: Calumet Harbor, Illinois on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.50 | 176.49 | 176.55 | 176.57 | 176.63 | 176.79 | 176.91 | 176.85 | 176.82 | 176.79 | 176.81 | 176.71 |
| 2 | 176.54 | 176.48 | 176.55 | 176.60 | 176.76 | 176.86 | 176.88 | 176.90 | 176.97 | 176.67 | 176.70 | 176.68 |
| 3 | 176.34 | 176.49 | 176.53 | 176.69 | 176.88 | 176.77 | 176.85 | 176.89 | 177.04 | 176.69 | 176.65 | 176.66 |
| 4 | 176.47 | 176.56 | 176.55 | 176.71 | 176.80 | 176.78 | 176.87 | 176.90 | 176.91 | 176.74 | 176.73 | 176.60 |
| 5 | 176.45 | 176.68 | 176.55 | 176.70 | 176.74 | 176.79 | 176.88 | 176.87 | 176.89 | 176.86 | 176.76 | 176.61 |
| 6 | 176.59 | 176.58 | 176.60 | 176.64 | 176.79 | 176.80 | 176.87 | 176.86 | 176.82 | 176.84 | 176.74 | 176.77 |
| 7 | 176.51 | 176.52 | 176.57 | 176.60 | 176.77 | 176.80 | 176.84 | 176.89 | 176.73 | 176.81 | 176.71 | 176.52 |
| 8 | 176.59 | 176.46 | 176.67 | 176.67 | 176.69 | 176.73 | 176.86 | 176.90 | 176.72 | 176.83 | 176.68 | 176.60 |
| 9 | 176.56 | 176.51 | 176.55 | 176.72 | 176.68 | 176.81 | 176.87 | 176.86 | 176.79 | 176.84 | 176.78 | 176.70 |
| 10 | 176.65 | 176.56 | 176.45 | 176.70 | 176.68 | 176.80 | 176.89 | 176.93 | 176.83 | 176.84 | 177.09 | 176.74 |
| 11 | 176.57 | 176.53 | 176.53 | 176.67 | 176.73 | 176.81 | 176.88 | 177.00 | 176.85 | 176.82 | 177.03 | 176.60 |
| 12 | 176.58 | 176.54 | 176.52 | 176.68 | 176.68 | 176.83 | 176.87 | 176.95 | 176.84 | 176.82 | 176.84 | 176.72 |
| 13 | 176.64 | 176.55 | 176.58 | 176.70 | 176.76 | 176.84 | 176.88 | 176.94 | 176.86 | 176.81 | 176.75 | 176.85 |
| 14 | 176.68 | 176.52 | 176.52 | 176.74 | 176.73 | 176.87 | 176.85 | 176.90 | 176.94 | 176.84 | 176.67 | 176.84 |
| 15 | 176.56 | 176.56 | 176.57 | 176.79 | 176.71 | 176.91 | 176.86 | 176.86 | 176.95 | 176.85 | 176.68 | 176.76 |
| 16 | 176.48 | 176.61 | 176.74 | 176.84 | 176.71 | 176.87 | 176.85 | 176.92 | 176.82 | 176.83 | 176.65 | 176.61 |
| 17 | 176.50 | 176.57 | 176.70 | 176.77 | 176.68 | 176.86 | 176.88 | 176.91 | 176.77 | 176.81 | 176.58 | 176.64 |
| 18 | 176.45 | 176.56 | 176.70 | 176.77 | 176.71 | 176.85 | 176.92 | 176.92 | 176.73 | 176.77 | 176.81 | 176.70 |
| 19 | 176.40 | 176.56 | 176.64 | 176.71 | 176.70 | 176.89 | 176.84 | 176.93 | 176.76 | 176.76 | 176.86 | 176.63 |
| 20 | 176.45 | 176.52 | 176.64 | 176.71 | 176.73 | 176.96 | 176.90 | 176.88 | 176.80 | 176.68 | 176.80 | 176.62 |
| 21 | 176.37 | 176.56 | 176.61 | 176.79 | 176.74 | 176.95 | 176.92 | 176.80 | 176.82 | 176.83 | 176.76 | 176.63 |
| 22 | 176.40 | 176.52 | 176.68 | 176.85 | 176.73 | 176.93 | 176.89 | 176.90 | 176.83 | 176.77 | 176.56 | 176.67 |
| 23 | 176.47 | 176.54 | 176.57 | 176.78 | 176.70 | 176.94 | 176.83 | 176.99 | 176.80 | 176.76 | 176.64 | 176.61 |
| 24 | 176.44 | 176.58 | 176.59 | 176.70 | 176.68 | 176.87 | 176.90 | 176.92 | 176.81 | 176.72 | 176.65 | 176.79 |
| 25 | 176.44 | 176.56 | 176.67 | 176.69 | 176.76 | 176.87 | 176.92 | 176.86* | 176.84 | 176.70 | 176.70 | 176.50 |
| 26 | 176.47 | 176.60 | 176.64 | 176.75 | 176.79 | 176.85 | 176.93 | / | 176.81 | 176.77 | 176.70 | 176.57 |
| 27 | 176.50 | 176.83 | 176.68 | 176.74 | 176.81 | 176.86 | 176.95 | / | 176.80 | 176.69 | 176.70 | 176.70 |
| 28 | 176.38 | 177.03 | 176.78 | 176.66 | 176.99 | 176.85 | 176.94 | / | 176.83 | 176.73 | 176.65 | 176.58 |
| 29 | 176.55 | 176.74 | 176.73 | 176.70 | 176.80 | 176.93 | 176.91 | 176.71 | 176.82 | 176.78 | 176.65 | 176.70 |
| 30 | 176.57 | | 176.62 | 176.53 | 176.73 | 176.93 | 176.88 | 176.86* | 176.80 | 176.75 | 176.76 | 176.73 |
| 31 | 176.49 | | 176.58 | | 176.72 | | 176.84 | 176.83 | | 176.76 | | 176.89 |
| MEAN | 176.50 | 176.58 | 176.61 | 176.71 | 176.74 | 176.85 | 176.88 | 176.89 | 176.83 | 176.78 | 176.74 | 176.68 |
| MAX. | 176.75 | 177.14 | 176.93 | 177.00 | 177.18 | 177.03 | 177.18 | 177.13 | 177.13 | 177.00 | 177.29 | 177.06 |
| MIN. | 1000/14 | 1000/28 | 0200/16 | 0500/22 | 1300/28 | 1600/20 | 2300/10 | 0500/30 | 0600/03 | 0700/17 | 2300/10 | 2400/31 |
| | 176.19 | 176.40 | 176.27 | 176.20 | 176.34 | 176.56 | 176.60 | 176.66 | 176.54 | 176.54 | 176.45 | 176.29 |
| | 1500/03 | 0900/01 | 2000/10 | 0800/30 | 0100/25 | 1100/08 | 0900/09 | 2100/29 | 0700/07 | 0100/03 | 1900/22 | 1200/25 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.73

ANNUAL SUMMARY OF LEVELS, 1984
Station 7057: Milwaukee, Wisconsin on Lake Michigan

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST

Monthly mean elevation: 176.89 Aug
Daily mean elevation: 176.95 3 Sep
Instant/hourly elevation: 177.08 1900/2 Sep

LOWEST

Monthly mean elevation: 176.53 Jan
Daily mean elevation: 176.43 3 Jan
Instant/hourly elevation: 176.36 1300/3 Jan

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.64 | 13 Jan |
| 176.81 | 28 Feb |
| 176.70 | 28 Mar |
| 176.82 | 22 Apr |
| 176.88 | 28 May |
| 176.93 | 23 Jun |
| 176.93 | 27 Jul |
| 176.95 | 19 Aug |
| 176.95 | 3 Sep |
| 176.88 | 15 Oct |
| 176.93 | 10 Nov |
| 176.84 | 14 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.43 | 3 Jan |
| 176.50 | 8 Feb |
| 176.47 | 11 Mar |
| 176.59 | 2 Apr |
| 176.63 | 1 May |
| 176.77 | 3 Jun |
| 176.81 | 7 Jul |
| 176.82 | 31 Aug |
| 176.76 | 26 Sep |
| 176.68 | 20 Oct |
| 176.60 | 17 Nov |
| 176.54 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.90        |     |     |     |     |     | 4   | 3   | 9   | 2   |     | 2   |     | 176.90        | 20                         |
| 176.85        |     |     |     |     | 1   | 11  | 26  | 18  | 9   | 2   |     |     | 176.85        | 87                         |
| 176.80        |     | 1   |     | 2   | 1   | 11  | 2   | 4   | 11  | 11  | 1   | 2   | 176.80        | 133                        |
| 176.75        |     |     |     | 3   | 12  | 4   |     |     | 8   | 8   | 12  | 2   | 176.75        | 182                        |
| 176.70        |     |     |     | 8   | 14  |     |     |     |     | 8   | 7   | 5   | 176.70        | 224                        |
| 176.65        |     | 1   | 4   | 10  | 2   |     |     |     |     | 2   | 3   | 10  | 176.65        | 256                        |
| 176.60        | 3   | 2   | 10  | 5   | 1   |     |     |     |     |     | 3   | 8   | 176.60        | 288                        |
| 176.55        | 5   | 14  | 8   | 2   |     |     |     |     |     |     | 2   | 3   | 176.55        | 322                        |
| 176.50        | 13  | 10  | 7   |     |     |     |     |     |     |     |     | 1   | 176.50        | 353                        |
| 176.45        | 9   | 1   | 2   |     |     |     |     |     |     |     |     |     | 176.45        | 365                        |
| 176.40        | 1   |     |     |     |     |     |     |     |     |     |     |     | 176.40        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7057: Milwaukee, Wisconsin on Lake Michigan

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.55  | 176.54  | 176.53  | 176.59  | 176.63  | 176.84  | 176.88  | 176.88  | 176.87  | 176.80  | 176.79  | 176.69  |
| 2    | 176.53  | 176.57  | 176.55  | 176.59  | 176.71  | 176.85  | 176.88  | 176.90  | 176.95  | 176.73  | 176.65  | 176.74  |
| 3    | 176.43  | 176.51  | 176.55  | 176.63  | 176.80  | 176.77  | 176.88  | 176.90  | 176.95  | 176.70  | 176.72  | 176.68  |
| 4    | 176.49  | 176.55  | 176.58  | 176.67  | 176.75  | 176.79  | 176.88  | 176.90  | 176.89  | 176.75  | 176.77  | 176.60  |
| 5    | 176.51  | 176.59  | 176.58  | 176.64  | 176.74  | 176.83  | 176.88  | 176.89  | 176.90  | 176.85  | 176.72  | 176.65  |
| 6    | 176.56  | 176.55  | 176.55  | 176.61  | 176.77  | 176.82  | 176.86  | 176.89  | 176.87  | 176.85  | 176.73  | 176.70  |
| 7    | 176.54  | 176.53  | 176.58  | 176.61  | 176.78  | 176.84  | 176.81  | 176.90  | 176.85  | 176.85  | 176.78  | 176.57  |
| 8    | 176.53  | 176.50  | 176.62  | 176.66  | 176.69  | 176.81  | 176.88  | 176.90  | 176.82  | 176.84  | 176.77  | 176.60  |
| 9    | 176.56  | 176.53  | 176.54  | 176.70  | 176.72  | 176.80  | 176.89  | 176.89  | 176.82  | 176.83  | 176.80  | 176.70  |
| 10   | 176.58  | 176.56  | 176.49  | 176.67  | 176.74  | 176.84  | 176.90  | 176.90  | 176.83  | 176.82  | 176.93  | 176.72  |
| 11   | 176.57  | 176.53  | 176.47  | 176.65  | 176.77  | 176.80  | 176.91  | 176.95  | 176.85  | 176.82  | 176.91  | 176.65  |
| 12   | 176.64  | 176.57  | 176.53  | 176.70  | 176.70  | 176.86  | 176.88  | 176.93  | 176.87  | 176.83  | 176.81  | 176.73  |
| 13   | 176.64  | 176.58  | 176.58  | 176.74  | 176.76  | 176.84  | 176.89  | 176.92  | 176.88  | 176.82  | 176.78  | 176.79  |
| 14   | 176.63  | 176.54  | 176.54  | 176.74  | 176.74  | 176.83  | 176.89  | 176.91  | 176.87  | 176.84  | 176.78  | 176.84  |
| 15   | 176.57  | 176.56  | 176.61  | 176.73  | 176.72  | 176.87  | 176.88  | 176.87  | 176.88  | 176.88  | 176.72  | 176.78  |
| 16   | 176.51  | 176.61  | 176.63  | 176.76  | 176.73  | 176.89  | 176.86  | 176.91  | 176.81  | 176.86  | 176.60  | 176.67  |
| 17   | 176.51  | 176.59  | 176.67  | 176.72  | 176.74  | 176.89  | 176.88  | 176.93  | 176.80  | 176.77  | 176.60  | 176.65  |
| 18   | 176.50  | 176.58  | 176.66  | 176.73  | 176.75  | 176.88  | 176.88  | 176.91  | 176.77  | 176.81  | 176.75  | 176.68  |
| 19   | 176.47  | 176.60  | 176.63  | 176.70  | 176.71  | 176.87  | 176.86  | 176.95  | 176.78  | 176.79  | 176.80  | 176.65  |
| 20   | 176.47  | 176.54  | 176.66  | 176.69  | 176.76  | 176.91  | 176.90  | 176.90  | 176.80  | 176.68  | 176.77  | 176.61  |
| 21   | 176.46  | 176.56  | 176.61  | 176.75  | 176.78  | 176.92  | 176.91  | 176.86  | 176.84  | 176.77  | 176.76  | 176.71  |
| 22   | 176.49  | 176.56  | 176.63  | 176.82  | 176.75  | 176.93  | 176.90  | 176.87  | 176.86  | 176.76  | 176.65  | 176.64  |
| 23   | 176.52  | 176.56  | 176.56  | 176.81  | 176.72  | 176.93  | 176.87  | 176.91  | 176.81  | 176.74  | 176.65  | 176.64  |
| 24   | 176.50  | 176.56  | 176.60  | 176.71  | 176.73  | 176.85  | 176.88  | 176.89  | 176.85  | 176.73  | 176.68  | 176.70  |
| 25   | 176.47  | 176.54  | 176.64  | 176.70  | 176.78  | 176.87  | 176.89  | 176.88  | 176.80  | 176.73  | 176.71  | 176.54  |
| 26   | 176.52  | 176.57  | 176.63  | 176.78  | 176.78  | 176.89  | 176.90  | 176.83  | 176.76  | 176.79  | 176.75  | 176.63  |
| 27   | 176.51  | 176.69  | 176.65  | 176.79  | 176.78  | 176.89  | 176.93  | 176.82  | 176.81  | 176.75  | 176.76  | 176.73  |
| 28   | 176.49  | 176.81  | 176.70  | 176.69  | 176.88  | 176.84  | 176.90  | 176.84  | 176.81  | 176.72  | 176.69  | 176.68  |
| 29   | 176.55  | 176.62  | 176.65  | 176.72  | 176.81  | 176.88  | 176.90  | 176.87  | 176.80  | 176.77  | 176.70  | 176.67  |
| 30   | 176.55  |         | 176.59  | 176.67  | 176.79  | 176.90  | 176.88  | 176.86  | 176.79  | 176.75  | 176.77  | 176.70  |
| 31   | 176.52  |         | 176.59  |         | 176.80  |         | 176.85  | 176.82  |         | 176.78  |         | 176.82  |
| MEAN | 176.53  | 176.57  | 176.59  | 176.70  | 176.75  | 176.86  | 176.88  | 176.89  | 176.84  | 176.79  | 176.74  | 176.68  |
| MAX. | 176.77  | 176.89  | 176.82  | 176.92  | 177.00  | 176.99  | 177.04  | 176.99  | 177.08  | 176.94  | 177.04  | 176.92  |
| MIN. | 2100/12 | 2400/27 | 2400/15 | 0300/22 | 1400/25 | 0200/23 | 0600/10 | 0800/19 | 1900/02 | 2000/18 | 2300/10 | 2100/31 |
|      | 176.36  | 176.46  | 176.40  | 176.52  | 176.57  | 176.70  | 176.71  | 176.72  | 176.67  | 176.62  | 176.54  | 176.43  |
|      | 1300/03 | 2100/08 | 1600/11 | 1000/30 | 0800/01 | 1700/09 | 0300/10 | 2200/30 | 0100/26 | 1200/20 | 0200/17 | 1300/25 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 176.74

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7068: Kewaunee, Wisconsin on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.86 Aug  
Daily mean elevation: 176.93 2 Sep  
Instant/hourly elevation: 177.05 1000/9 Jul

LOWEST  
Monthly mean elevation: 176.51 Jan  
Daily mean elevation: 176.41 11 Mar  
Instant/hourly elevation: 176.35 1000/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.54 | 24 Jan |
| 176.58 | 19 Feb |
| 176.62 | 18 Mar |
| 176.77 | 30 Apr |
| 176.80 | 28 May |
| 176.90 | 23 Jun |
| 176.90 | 22 Jul |
| 176.93 | 11 Aug |
| 176.93 | 2 Sep  |
| 176.89 | 16 Oct |
| 176.84 | 11 Nov |
| 176.82 | 14 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.44 | 4 Jan  |
| 176.50 | 8 Feb  |
| 176.41 | 11 Mar |
| 176.56 | 6 Apr  |
| 176.62 | 1 May  |
| 176.77 | 9 Jun  |
| 176.80 | 7 Jul  |
| 176.78 | 31 Aug |
| 176.74 | 26 Sep |
| 176.68 | 3 Oct  |
| 176.60 | 16 Nov |
| 176.58 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.90 | | | | | | | | 3 | 2 | | | | 176.90 | 5 |
| 176.85 | | | | | | 7 | 22 | 17 | 8 | 2 | | | 176.85 | 61 |
| 176.80 | | | | | | 18 | 8 | 9 | 7 | 11 | 3 | 1 | 176.80 | 118 |
| 176.75 | | | | 3 | 9 | 5 | 1 | 2 | 12 | 8 | 10 | 2 | 176.75 | 170 |
| 176.70 | | | | 3 | 16 | | | | 1 | 7 | 9 | 8 | 176.70 | 214 |
| 176.65 | | | | 10 | 5 | | | | | 3 | 4 | 10 | 176.65 | 246 |
| 176.60 | | | 3 | 8 | 1 | | | | | | 3 | 5 | 176.60 | 266 |
| 176.55 | | 7 | 15 | 6 | | | | | | | 1 | 5 | 176.55 | 300 |
| 176.50 | 9 | 21 | 8 | | | | | | | | | | 176.50 | 338 |
| 176.45 | 3 | 1 | 4 | | | | | | | | | | 176.45 | 346 |
| 176.40 | 1 | | 1 | | | | | | | | | | 176.40 | 348 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7068: Kewaunee, Wisconsin on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | / | 176.53 | 176.49 | 176.57 | 176.62 | 176.81 | 176.86 | 176.85 | 176.86 | 176.78 | 176.80 | 176.69 |
| 2 | / | 176.57 | 176.49 | 176.57 | 176.68 | 176.83 | 176.87 | 176.88 | 176.93 | 176.76 | 176.65 | 176.76 |
| 3 | 176.46* | 176.52 | 176.51 | 176.59 | 176.74 | 176.78 | 176.85 | 176.87 | 176.91 | 176.68 | 176.77 | 176.70 |
| 4 | 176.44* | 176.51 | 176.56 | 176.62 | 176.71 | 176.78 | 176.84 | 176.88 | 176.87* | 176.73 | 176.77 | 176.58 |
| 5 | / | 176.51 | 176.58 | 176.59 | 176.72 | 176.83 | 176.87 | 176.89 | 176.85* | 176.82 | 176.71 | 176.66 |
| 6 | / | 176.52 | 176.51 | 176.56 | 176.74 | 176.82 | 176.84 | 176.88 | 176.85 | 176.83 | 176.72 | 176.68 |
| 7 | / | 176.51 | 176.53 | 176.57 | 176.77 | 176.83 | 176.80 | 176.88 | 176.88 | 176.83 | 176.81 | 176.65 |
| 8 | / | 176.50 | 176.56 | 176.61 | 176.71 | 176.81 | 176.87 | 176.93 | 176.84 | 176.82 | 176.80 | 176.60 |
| 9 | 176.54* | 176.51 | 176.52 | 176.65 | 176.70 | 176.77 | 176.88 | 176.89 | 176.80 | 176.81 | 176.78 | 176.71 |
| 10 | 176.52 | 176.54 | 176.50 | 176.63 | 176.72 | 176.85 | 176.84 | 176.87 | 176.81 | 176.80 | 176.84 | 176.70 |
| 11 | 176.52* | 176.54 | 176.41 | 176.61 | 176.75 | 176.78 | 176.88 | 176.93 | 176.84 | 176.80 | 176.84 | 176.71 |
| 12 | / | 176.55 | 176.50 | 176.68 | 176.69 | 176.85 | 176.87 | 176.92 | 176.87 | 176.81 | 176.78 | 176.68 |
| 13 | / | 176.58 | 176.55 | 176.71 | 176.74 | 176.83 | 176.89 | 176.90 | 176.87 | 176.81 | 176.76 | 176.72 |
| 14 | / | 176.53 | 176.54 | 176.69 | 176.72 | 176.78 | 176.88 | 176.89 | 176.82 | 176.81 | 176.80 | 176.82 |
| 15 | / | 176.53 | 176.54 | 176.64 | 176.70 | 176.85 | 176.88 | 176.86 | 176.86 | 176.87 | 176.74 | 176.77 |
| 16 | / | 176.56 | 176.53 | 176.67 | 176.71 | 176.85 | 176.85 | 176.87 | 176.80 | 176.89 | 176.60 | 176.72 |
| 17 | / | 176.57 | 176.61 | 176.65 | 176.74 | 176.87 | 176.87 | 176.90 | 176.80 | 176.85 | 176.62 | 176.63 |
| 18 | / | 176.53 | 176.62 | 176.68 | 176.75 | 176.85 | 176.87 | 176.90 | 176.77 | 176.81 | 176.71 | 176.65 |
| 19 | / | 176.58 | 176.57 | 176.67 | 176.70 | 176.84 | 176.86 | 176.90 | 176.77 | 176.85 | 176.75 | 176.69 |
| 20 | / | 176.54 | 176.61 | 176.65 | 176.72 | 176.87 | 176.86 | 176.88 | 176.77 | 176.69 | 176.74 | 176.59 |
| 21 | / | 176.54 | 176.58 | 176.68 | 176.76 | 176.88 | 176.88 | 176.84 | 176.81 | 176.74 | 176.74 | 176.74 |
| 22 | / | 176.56 | 176.60 | 176.72 | 176.76 | 176.90 | 176.90 | 176.82 | 176.87 | 176.75 | 176.69 | 176.63 |
| 23 | 176.54* | 176.55 | 176.56 | 176.76 | 176.73 | 176.90 | 176.85 | 176.84* | 176.80 | 176.74 | 176.63 | 176.61 |
| 24 | 176.54* | 176.53 | 176.57 | 176.69 | 176.76 | 176.84 | 176.84 | 176.86* | 176.86 | 176.74 | 176.69 | 176.67 |
| 25 | / | 176.52 | 176.58 | 176.68 | 176.76 | 176.84 | 176.87 | 176.84 | 176.76 | 176.73 | 176.71 | 176.58 |
| 26 | 176.51* | 176.53 | 176.59 | 176.74 | 176.75 | 176.88 | 176.89 | 176.82 | 176.74 | 176.80 | 176.78 | 176.59 |
| 27 | 176.49 | 176.53 | 176.60 | 176.77 | 176.75 | 176.85 | 176.88 | 176.81 | 176.80 | 176.79 | 176.76 | 176.75 |
| 28 | 176.51 | 176.57 | 176.60 | 176.70 | 176.80 | 176.82 | 176.88 | 176.82 | 176.78 | 176.70 | 176.70 | 176.72 |
| 29 | 176.51 | 176.53 | 176.58 | 176.68 | 176.79 | 176.85 | 176.87 | 176.81 | 176.78 | 176.76 | 176.66 | 176.66 |
| 30 | 176.50 | | 176.56 | 176.77 | 176.78 | 176.88 | 176.86 | 176.79 | 176.78 | 176.75 | 176.74 | 176.68 |
| 31 | 176.51 | | 176.56 | | 176.79 | | 176.84 | 176.78 | | 176.78 | | 176.75 |
| MEAN | 176.51 | 176.54 | 176.55 | 176.66 | 176.73 | 176.84 | 176.86 | 176.86 | 176.82 | 176.78 | 176.74 | 176.68 |
| MAX. | 176.60 | 176.72 | 176.70 | 176.97 | 176.96 | 176.99 | 177.05 | 177.01 | 177.04 | 177.04 | 176.97 | 176.93 |
| MIN. | 1800/26 | 1200/13 | 1600/17 | 2400/29 | 0100/26 | 0700/18 | 1000/09 | 1000/08 | 1200/02 | 0100/19 | 0600/01 | 2000/14 |
| | 176.39 | 176.43 | 176.35 | 176.49 | 176.57 | 176.67 | 176.73 | 176.51 | 176.59 | 176.61 | 176.54 | 176.46 |
| | 0400/04 | 1900/18 | 1000/11 | 1700/07 | 1100/25 | 1500/09 | 0800/07 | 0300/30 | 1200/25 | 2000/28 | 0700/17 | 1100/26 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.71

ANNUAL SUMMARY OF LEVELS, 1984
Station 7072: Sturgeon Bay Canal, Wisconsin on Lake Michigan

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.87 Jul
Daily mean elevation: 176.93 2 Sep
Instant/hourly elevation: 177.03 1900/10 Jul

LOWEST
Monthly mean elevation: 176.50 Jan
Daily mean elevation: 176.40 11 Mar
Instant/hourly elevation: 176.34 0300/11 Mar

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.60 | 13 Jan |
| 176.58 | 13 Feb |
| 176.61 | 18 Mar |
| 176.77 | 30 Apr |
| 176.78 | 29 May |
| 176.90 | 23 Jun |
| 176.90 | 22 Jul |
| 176.92 | 11 Aug |
| 176.93 | 2 Sep |
| 176.86 | 16 Oct |
| 176.82 | 11 Nov |
| 176.81 | 14 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.43 | 25 Jan |
| 176.49 | 8 Feb |
| 176.40 | 11 Mar |
| 176.55 | 7 Apr |
| 176.60 | 1 May |
| 176.76 | 11 Jun |
| 176.80 | 7 Jul |
| 176.79 | 31 Aug |
| 176.74 | 26 Sep |
| 176.67 | 20 Oct |
| 176.60 | 16 Nov |
| 176.54 | 25 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 176.90 | | | | | | | | 2 | 2 | | | | 176.90 | 4 |
| 176.85 | | | | | | 9 | 22 | 15 | 5 | 2 | | | 176.85 | 57 |
| 176.80 | | | | | | 12 | 8 | 12 | 12 | 9 | 3 | 1 | 176.80 | 114 |
| 176.75 | | | | 2 | 5 | 9 | 1 | 2 | 10 | 8 | 8 | 1 | 176.75 | 160 |
| 176.70 | | | | 4 | 14 | | | | 1 | 8 | 10 | 6 | 176.70 | 203 |
| 176.65 | | | | 6 | 11 | | | | | 4 | 5 | 11 | 176.65 | 240 |
| 176.60 | | | | 11 | | | | | | | 3 | 6 | 176.60 | 262 |
| 176.55 | 2 | 5 | 10 | 5 | 1 | | | | | | 1 | 5 | 176.55 | 291 |
| 176.50 | 12 | 19 | 13 | 2 | | | | | | | | 1 | 176.50 | 338 |
| 176.45 | 15 | 5 | 5 | | | | | | | | | | 176.45 | 363 |
| 176.40 | 2 | | | | | | | | | | | | 176.40 | 365 |
| 176.35 | | | 1 | | | | | | | | | | 176.35 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7072: Sturgeon Bay Canal, Wisconsin on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.53 | 176.52 | 176.47 | 176.56 | 176.60 | 176.79 | 176.86 | 176.85 | 176.84 | 176.77 | 176.81 | 176.69 |
| 2 | 176.53 | 176.56 | 176.48 | 176.55 | 176.67 | 176.82 | 176.86 | 176.88 | 176.93 | 176.75 | 176.63 | 176.73 |
| 3 | 176.50 | 176.51 | 176.51 | 176.57 | 176.71 | 176.77 | 176.85 | 176.87 | 176.92 | 176.68 | 176.74 | 176.70 |
| 4 | 176.47 | 176.50 | 176.54 | 176.60 | 176.71 | 176.77 | 176.85 | 176.89 | 176.87 | 176.73 | 176.77 | 176.57 |
| 5 | 176.53 | 176.49 | 176.56 | 176.56 | 176.70 | 176.81 | 176.86 | 176.89 | 176.85 | 176.82 | 176.71 | 176.64 |
| 6 | 176.48 | 176.51 | 176.48 | 176.56 | 176.74 | 176.80 | 176.84 | 176.88 | 176.84 | 176.83 | 176.72 | 176.65 |
| 7 | 176.54 | 176.50 | 176.52 | 176.55 | 176.76 | 176.80 | 176.80 | 176.89 | 176.85 | 176.84 | 176.77 | 176.63 |
| 8 | 176.49 | 176.49 | 176.54 | 176.61 | 176.69 | 176.80 | 176.85 | 176.91 | 176.83 | 176.82 | 176.79 | 176.60 |
| 9 | 176.49 | 176.50 | 176.52 | 176.64 | 176.70 | 176.76 | 176.90 | 176.88 | 176.80 | 176.80 | 176.77 | 176.70 |
| 10 | 176.50 | 176.53 | 176.51 | 176.63 | 176.70 | 176.83 | 176.90 | 176.88 | 176.82 | 176.80 | 176.81 | 176.68 |
| 11 | 176.52 | 176.52 | 176.40 | 176.61 | 176.73 | 176.76 | 176.86 | 176.92 | 176.82 | 176.80 | 176.82 | 176.67 |
| 12 | 176.59 | 176.54 | 176.49 | 176.64 | 176.67 | 176.84 | 176.87 | 176.90 | 176.87 | 176.81 | 176.76 | 176.67 |
| 13 | 176.60 | 176.58 | 176.55 | 176.71 | 176.72 | 176.82 | 176.88 | 176.89 | 176.85 | 176.81 | 176.75 | 176.72 |
| 14 | 176.55 | 176.52 | 176.52 | 176.68 | 176.70 | 176.79 | 176.88 | 176.88 | 176.84 | 176.81 | 176.77 | 176.81 |
| 15 | 176.54 | 176.52 | 176.54 | 176.63 | 176.68 | 176.83 | 176.84 | 176.85 | 176.86 | 176.86 | 176.74 | 176.77 |
| 16 | 176.50 | 176.56 | 176.50 | 176.65 | 176.69 | 176.84 | 176.85 | 176.86 | 176.80 | 176.86 | 176.60 | 176.68 |
| 17 | 176.48 | 176.56 | 176.61 | 176.64 | 176.72 | 176.87 | 176.88 | 176.89 | 176.79 | 176.81 | 176.61 | 176.61 |
| 18 | 176.47 | 176.52 | 176.61 | 176.67 | 176.74 | 176.86 | 176.88 | 176.88 | 176.77 | 176.79 | 176.71 | 176.65 |
| 19 | 176.47 | 176.56 | 176.56 | 176.65 | 176.69 | 176.84 | 176.86 | 176.89 | 176.79 | 176.84 | 176.74 | 176.67 |
| 20 | 176.43 | 176.53 | 176.59 | 176.64 | 176.72 | 176.86 | 176.88 | 176.85 | 176.77 | 176.67 | 176.73 | 176.57 |
| 21 | 176.48 | 176.53 | 176.57 | 176.67 | 176.75 | 176.88 | 176.88 | 176.82 | 176.81 | 176.74 | 176.73 | 176.73 |
| 22 | 176.49 | 176.55 | 176.57 | 176.71 | 176.75 | 176.89 | 176.90 | 176.82 | 176.86 | 176.74 | 176.66 | 176.62 |
| 23 | 176.52 | 176.54 | 176.53 | 176.74 | 176.71 | 176.90 | 176.87 | 176.84 | 176.81 | 176.73 | 176.62 | 176.59 |
| 24 | 176.52 | 176.52 | 176.55 | 176.68 | 176.72 | 176.85 | 176.84 | 176.85 | 176.86 | 176.72 | 176.67 | 176.66 |
| 25 | 176.43 | 176.52 | 176.57 | 176.67 | 176.70 | 176.85 | 176.86 | 176.84 | 176.81 | 176.69 | 176.70 | 176.54 |
| 26 | 176.46 | 176.52 | 176.57 | 176.73 | 176.73 | 176.88 | 176.88 | 176.81 | 176.74 | 176.79 | 176.77 | 176.58 |
| 27 | 176.48 | 176.52 | 176.59 | 176.76 | 176.75 | 176.85 | 176.89 | 176.80 | 176.79 | 176.77 | 176.77 | 176.73 |
| 28 | 176.52 | 176.52 | 176.58 | 176.68 | 176.78 | 176.81 | 176.88 | 176.82 | 176.78 | 176.68 | 176.69 | 176.73 |
| 29 | 176.51 | 176.51 | 176.56 | 176.64 | 176.78 | 176.86 | 176.88 | 176.82 | 176.78 | 176.75 | 176.66 | 176.66 |
| 30 | 176.49 | | 176.54 | 176.77 | 176.76 | 176.87 | 176.86 | 176.81 | 176.77 | 176.73 | 176.74 | 176.66 |
| 31 | 176.51 | | 176.55 | | 176.77 | | 176.83 | 176.79 | | 176.78 | | 176.72 |
| MEAN | 176.50 | 176.53 | 176.54 | 176.65 | 176.72 | 176.83 | 176.87 | 176.86 | 176.82 | 176.77 | 176.73 | 176.67 |
| MAX. | 176.64 | 176.65 | 176.65 | 176.99 | 176.85 | 176.94 | 177.03 | 176.96 | 177.00 | 177.01 | 176.93 | 176.86 |
| MIN. | 1600/13 | 1000/13 | 2000/17 | 1000/30 | 1400/07 | 0100/23 | 1900/10 | 0800/08 | 1800/02 | 0600/19 | 0700/01 | 2200/14 |
| | 176.36 | 176.45 | 176.34 | 176.50 | 176.52 | 176.68 | 176.75 | 176.70 | 176.66 | 176.59 | 176.53 | 176.43 |
| | 0100/26 | 1400/05 | 0300/11 | 0200/03 | 1100/25 | 1300/11 | 0800/07 | 2200/29 | 0600/26 | 0200/25 | 0400/17 | 2200/25 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 176.71

ANNUAL SUMMARY OF LEVELS, 1984
Station 7079: Green Bay, Wisconsin on Lake Michigan

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 176.84 Aug
Daily mean elevation: 177.12 10 Nov
Instant/hourly elevation: 177.37 2100/10 Nov

LOWEST
Monthly mean elevation: 176.49 Jan
Daily mean elevation: 176.36 11 Mar
Instant/hourly elevation: 175.93 1700/30 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.59 | 13 Jan |
| 176.59 | 13 Feb |
| 176.65 | 17 Mar |
| 176.87 | 22 Apr |
| 176.95 | 28 May |
| 176.91 | 29 Jun |
| 176.91 | 10 Jul |
| 176.95 | 11 Aug |
| 177.05 | 2 Sep |
| 176.87 | 8 Oct |
| 177.12 | 10 Nov |
| 176.87 | 14 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 176.41 | 20 Jan |
| 176.45 | 29 Feb |
| 176.36 | 11 Mar |
| 176.49 | 28 Apr |
| 176.56 | 1 May |
| 176.68 | 8 Jun |
| 176.76 | 31 Jul |
| 176.74 | 27 Aug |
| 176.67 | 18 Sep |
| 176.56 | 20 Oct |
| 176.47 | 16 Nov |
| 176.44 | 25 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 177.10        |     |     |     |     |     |     |     |     |     |     | 1   |     | 177.10        | 1                          |
| 177.05        |     |     |     |     |     |     |     |     |     |     |     |     | 177.05        | 1                          |
| 177.00        |     |     |     |     |     |     |     |     | 1   |     |     |     | 177.00        | 2                          |
| 176.95        |     |     |     |     |     |     |     |     |     |     |     |     | 176.95        | 2                          |
| 176.90        |     |     |     |     | 1   | 1   | 1   | 3   | 1   |     | 2   |     | 176.90        | 11                         |
| 176.85        |     |     |     | 1   |     | 7   | 9   | 12  | 6   | 2   |     | 1   | 176.85        | 49                         |
| 176.80        |     |     |     | 1   |     | 12  | 17  | 9   | 5   | 7   |     |     | 176.80        | 100                        |
| 176.75        |     |     |     | 3   | 4   | 6   | 4   | 4   | 8   | 6   | 2   | 1   | 176.75        | 138                        |
| 176.70        |     |     |     | 5   | 13  | 3   |     | 3   | 6   | 5   | 10  | 6   | 176.70        | 189                        |
| 176.65        |     |     |     | 6   | 10  | 1   |     |     | 3   | 6   | 5   | 5   | 176.65        | 225                        |
| 176.60        |     |     | 2   | 6   | 1   |     |     |     |     | 3   | 2   | 5   | 176.60        | 244                        |
| 176.55        | 2   | 4   | 9   | 6   | 2   |     |     |     |     | 2   | 4   | 5   | 176.55        | 278                        |
| 176.50        | 9   | 13  | 10  | 1   |     |     |     |     |     |     | 3   | 3   | 176.50        | 317                        |
| 176.45        | 13  | 10  | 6   | 1   |     |     |     |     |     |     | 1   | 3   | 176.45        | 351                        |
| 176.40        | 7   | 2   | 3   |     |     |     |     |     |     |     |     | 2   | 176.40        | 365                        |
| 176.35        |     |     | 1   |     |     |     |     |     |     |     |     |     | 176.35        | 366                        |



INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7079: Green Bay, Wisconsin on Lake Michigan

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 176.54  | 176.52  | 176.45  | 176.56  | 176.56  | 176.80  | 176.83  | 176.83  | 176.86  | 176.74  | 176.73  | 176.65  |
| 2    | 176.52  | 176.57  | 176.45  | 176.55  | 176.67  | 176.83  | 176.83  | 176.89  | 177.05  | 176.63  | 176.52  | 176.72  |
| 3    | 176.49  | 176.51  | 176.49  | 176.58  | 176.75  | 176.74  | 176.81  | 176.88  | 176.95  | 176.67  | 176.62  | 176.51  |
| 4    | 176.48  | 176.49  | 176.54  | 176.62  | 176.71  | 176.73  | 176.83  | 176.88  | 176.87  | 176.72  | 176.72  | 176.48  |
| 5    | 176.52  | 176.45  | 176.57  | 176.57  | 176.69  | 176.79  | 176.81  | 176.85  | 176.84  | 176.85  | 176.69  | 176.55  |
| 6    | 176.48  | 176.49  | 176.45  | 176.56  | 176.73  | 176.77  | 176.83  | 176.85  | 176.78  | 176.84  | 176.69  | 176.68  |
| 7    | 176.54  | 176.47  | 176.50  | 176.56  | 176.69  | 176.80  | 176.77  | 176.88  | 176.77  | 176.85  | 176.72  | 176.45  |
| 8    | 176.45  | 176.49  | 176.52  | 176.62  | 176.60  | 176.68  | 176.78  | 176.89  | 176.76  | 176.87  | 176.74  | 176.58  |
| 9    | 176.49  | 176.50  | 176.51  | 176.70  | 176.71  | 176.75  | 176.88  | 176.83  | 176.76  | 176.83  | 176.95  | 176.68  |
| 10   | 176.47  | 176.52  | 176.48  | 176.64  | 176.69  | 176.76  | 176.91  | 176.90  | 176.81  | 176.80  | 177.12  | 176.67  |
| 11   | 176.50  | 176.50  | 176.36  | 176.61  | 176.72  | 176.76  | 176.87  | 176.95  | 176.84  | 176.80  | 176.92  | 176.64  |
| 12   | 176.57  | 176.56  | 176.48  | 176.68  | 176.66  | 176.83  | 176.83  | 176.92  | 176.86  | 176.80  | 176.76  | 176.70  |
| 13   | 176.59  | 176.59  | 176.53  | 176.75  | 176.76  | 176.81  | 176.85  | 176.87  | 176.89  | 176.79  | 176.71  | 176.80  |
| 14   | 176.52  | 176.51  | 176.53  | 176.77  | 176.71  | 176.83  | 176.82  | 176.84  | 176.87  | 176.81  | 176.68  | 176.87  |
| 15   | 176.52  | 176.52  | 176.55  | 176.70  | 176.68  | 176.83  | 176.81  | 176.81  | 176.84  | 176.86  | 176.60  | 176.73  |
| 16   | 176.49  | 176.56  | 176.48  | 176.79  | 176.68  | 176.83  | 176.81  | 176.89  | 176.74  | 176.83  | 176.47  | 176.49  |
| 17   | 176.47  | 176.55  | 176.65  | 176.75  | 176.69  | 176.87  | 176.86  | 176.88  | 176.70  | 176.71  | 176.56  | 176.64  |
| 18   | 176.45  | 176.51  | 176.61  | 176.70  | 176.71  | 176.84  | 176.85  | 176.93  | 176.67  | 176.84  | 176.75  | 176.57  |
| 19   | 176.45  | 176.53  | 176.54  | 176.66  | 176.68  | 176.86  | 176.79  | 176.87  | 176.75  | 176.57  | 176.78  | 176.56  |
| 20   | 176.41  | 176.52  | 176.59  | 176.63  | 176.75  | 176.88  | 176.86  | 176.80  | 176.78  | 176.56  | 176.73  | 176.53  |
| 21   | 176.47  | 176.52  | 176.56  | 176.78  | 176.74  | 176.89  | 176.87  | 176.76  | 176.82  | 176.70  | 176.68  | 176.71  |
| 22   | 176.49  | 176.55  | 176.52  | 176.87  | 176.72  | 176.88  | 176.84  | 176.84  | 176.77  | 176.69  | 176.51  | 176.50  |
| 23   | 176.52  | 176.53  | 176.49  | 176.82  | 176.69  | 176.89  | 176.83  | 176.86  | 176.80  | 176.68  | 176.59  | 176.58  |
| 24   | 176.52  | 176.50  | 176.56  | 176.67  | 176.64  | 176.81  | 176.86  | 176.83  | 176.86  | 176.61  | 176.59  | 176.60  |
| 25   | 176.43  | 176.50  | 176.57  | 176.64  | 176.79  | 176.82  | 176.84  | 176.79  | 176.74  | 176.68  | 176.67  | 176.44  |
| 26   | 176.44  | 176.49  | 176.57  | 176.74  | 176.73  | 176.83  | 176.90  | 176.74  | 176.70  | 176.76  | 176.73  | 176.63  |
| 27   | 176.45  | 176.51  | 176.60  | 176.72  | 176.76  | 176.83  | 176.90  | 176.74  | 176.75  | 176.68  | 176.73  | 176.73  |
| 28   | 176.54  | 176.49  | 176.59  | 176.49  | 176.95  | 176.81  | 176.87  | 176.81  | 176.78  | 176.63  | 176.55  | 176.71  |
| 29   | 176.49  | 176.45  | 176.56  | 176.74  | 176.80  | 176.91  | 176.84  | 176.86  | 176.74  | 176.72  | 176.63  | 176.66  |
| 30   | 176.47  |         | 176.52  | 176.59  | 176.74  | 176.88  | 176.82  | 176.77  | 176.71  | 176.71  | 176.73  | 176.63  |
| 31   | 176.50  |         | 176.53  |         | 176.73  |         | 176.76  | 176.75  |         | 176.77  |         | 176.75  |
| MEAN | 176.49  | 176.51  | 176.53  | 176.67  | 176.71  | 176.82  | 176.84  | 176.84  | 176.80  | 176.74  | 176.70  | 176.63  |
| MAX. | 176.72  | 176.71  | 176.82  | 177.15  | 177.10  | 177.11  | 177.29  | 177.14  | 177.22  | 177.16  | 177.37  | 177.05  |
| MIN. | 1200/23 | 2100/17 | 2100/17 | 2400/29 | 1000/28 | 1700/28 | 1900/10 | 2200/18 | 1800/02 | 0400/19 | 2100/10 | 0200/06 |
|      | 176.16  | 176.12  | 176.17  | 175.93  | 176.22  | 176.44  | 176.63  | 176.53  | 176.55  | 176.25  | 176.24  | 175.97  |
|      | 0600/06 | 2300/29 | 0100/12 | 1700/30 | 0500/01 | 1500/08 | 0600/19 | 0300/27 | 0200/26 | 1000/19 | 0200/02 | 2100/16 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 176.69

ANNUAL SUMMARY OF LEVELS, 1984  
Station 7096: Port Inland, Michigan on Lake Michigan

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 176.84 Jul  
Daily mean elevation: 176.99 19 Oct  
Instant/hourly elevation: 177.19 1200/19 Oct

LOWEST  
Monthly mean elevation: 176.48 Mar  
Daily mean elevation: 176.35 11 Mar  
Instant/hourly elevation: 176.24 0500/11 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.58 | 3 Jan  |
| 176.54 | 22 Feb |
| 176.53 | 10 Mar |
| 176.82 | 30 Apr |
| 176.77 | 31 May |
| 176.88 | 26 Jun |
| 176.90 | 22 Jul |
| 176.90 | 8 Aug  |
| 176.94 | 7 Sep  |
| 176.99 | 19 Oct |
| 176.85 | 8 Nov  |
| 176.80 | 16 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 176.42 | 26 Jan |
| 176.36 | 28 Feb |
| 176.35 | 11 Mar |
| 176.46 | 6 Apr  |
| 176.60 | 1 May  |
| 176.74 | 4 Jun  |
| 176.76 | 7 Jul  |
| 176.75 | 31 Aug |
| 176.70 | 26 Sep |
| 176.66 | 3 Oct  |
| 176.59 | 17 Nov |
| 176.54 | 26 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 176.95 | | | | | | | | | | 1 | | | 176.95 | 1 |
| 176.90 | | | | | | | | | 2 | | | | 176.90 | 3 |
| 176.85 | | | | | | 3 | 7 | 5 | 5 | | | | 176.85 | 23 |
| 176.80 | | | | 1 | | 12 | 21 | 20 | 9 | 3 | 4 | | 176.80 | 93 |
| 176.75 | | | | | 1 | 11 | 3 | 4 | 12 | 11 | 5 | 2 | 176.75 | 142 |
| 176.70 | | | | 2 | 13 | 4 | | 2 | 1 | 13 | 4 | 6 | 176.70 | 187 |
| 176.65 | | | | 2 | 12 | | | | 1 | 3 | 10 | 4 | 176.65 | 219 |
| 176.60 | | | | 6 | 4 | | | | | | 6 | 10 | 176.60 | 245 |
| 176.55 | 1 | | | 7 | 1 | | | | | | 1 | 6 | 176.55 | 261 |
| 176.50 | 12 | 6 | 11 | 8 | | | | | | | | 1 | 176.50 | 299 |
| 176.45 | 11 | 16 | 13 | 4 | | | | | | | | | 176.45 | 343 |
| 176.40 | 7 | 5 | 5 | | | | | | | | | | 176.40 | 360 |
| 176.35 | | 2 | 1 | | | | | | | | | | 176.35 | 363 |
| 176.30 | | | 1 | | | | | | | | | | 176.30 | 364 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 7096: Port Inland, Michigan on Lake Michigan

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 176.53 | 176.51 | 176.42 | 176.52 | 176.60 | 176.77 | 176.82 | 176.83 | 176.79 | 176.78 | 176.80 | 176.64 |
| 2 | 176.51 | 176.52 | 176.42 | 176.52 | 176.64 | 176.79 | 176.84* | 176.85 | 176.88 | 176.83 | 176.64 | 176.68* |
| 3 | 176.58 | 176.52 | 176.47 | 176.50 | 176.67 | 176.76 | 176.80* | 176.84 | 176.83 | 176.66 | 176.83 | 176.68* |
| 4 | 176.46 | 176.44 | 176.50 | 176.51 | 176.67 | 176.74 | 176.81 | 176.84 | 176.78 | 176.72 | 176.81 | 176.58 |
| 5 | 176.55 | 176.41 | 176.52 | 176.49 | 176.67 | 176.79 | 176.82 | 176.86 | 176.79 | 176.80 | 176.67 | 176.71 |
| 6 | 176.43 | 176.45 | 176.43 | 176.46 | 176.70 | 176.78 | 176.79 | 176.86 | 176.81 | 176.79 | 176.68 | 176.58 |
| 7 | 176.55 | 176.46 | 176.45 | 176.50 | 176.74 | 176.76 | 176.76 | 176.85 | 176.94 | 176.78 | 176.78 | 176.71 |
| 8 | 176.45 | 176.48 | 176.47 | 176.54 | 176.69 | 176.84 | 176.82 | 176.90 | 176.91 | 176.76 | 176.85 | 176.59 |
| 9 | 176.48 | 176.47 | 176.48 | 176.57 | 176.65 | 176.75 | 176.84 | 176.88 | 176.82 | 176.75 | 176.71 | 176.69* |
| 10 | 176.46 | 176.49 | 176.53 | 176.56 | 176.67 | 176.83 | 176.82 | 176.83 | 176.81 | 176.75 | 176.68 | / |
| 11 | 176.49 | 176.48 | 176.35 | 176.55 | 176.72 | 176.75 | 176.84 | 176.86 | 176.82 | 176.74 | 176.67 | 176.78* |
| 12 | 176.51 | 176.47 | 176.45 | 176.58 | 176.64 | 176.82 | 176.84 | 176.85 | 176.88 | 176.76 | 176.67 | 176.63 |
| 13 | 176.52 | 176.54 | 176.50 | 176.64 | 176.66 | 176.80 | 176.87 | 176.84 | 176.86 | 176.75 | 176.71 | 176.62 |
| 14 | 176.47 | 176.50 | 176.49 | 176.59 | 176.66 | 176.75 | 176.88 | 176.84 | 176.77 | 176.75 | 176.82 | 176.72 |
| 15 | 176.52 | 176.46 | 176.51 | 176.55 | 176.65 | 176.80 | 176.85 | 176.83 | 176.81 | 176.79 | 176.80 | 176.73 |
| 16 | 176.53 | 176.49 | 176.37 | 176.55 | 176.67 | 176.82 | 176.83 | 176.80 | 176.79 | 176.80 | 176.61 | 176.80* |
| 17 | 176.49 | 176.50 | 176.46 | 176.53 | 176.71 | 176.84 | 176.86 | 176.84 | 176.82 | 176.81 | 176.59 | 176.59* |
| 18 | 176.48 | 176.47 | 176.51 | 176.60 | 176.74 | 176.84 | 176.84 | 176.81 | 176.84 | 176.72 | 176.64 | 176.63 |
| 19 | 176.49 | 176.49 | 176.49 | 176.61 | 176.67 | 176.80 | 176.86 | 176.81 | 176.81 | 176.99 | 176.67 | 176.67* |
| 20 | 176.44 | 176.50 | 176.52 | 176.60 | 176.68 | 176.83 | 176.85 | 176.81 | 176.75 | 176.73 | 176.65 | 176.56 |
| 21 | 176.52 | 176.50 | 176.52 | 176.59 | 176.73 | 176.83 | 176.86 | 176.83 | 176.79 | 176.74 | 176.70 | / |
| 22 | 176.49 | 176.54 | 176.49 | 176.63 | 176.73 | 176.84 | 176.90 | 176.79 | 176.88 | 176.74 | 176.77 | 176.62* |
| 23 | 176.52 | 176.53 | 176.48 | 176.67 | 176.69 | 176.87 | 176.84 | 176.75 | 176.77 | 176.71 | 176.63 | 176.57* |
| 24 | 176.55 | 176.45 | 176.52 | 176.64 | 176.74 | 176.81 | 176.81 | 176.78 | 176.86 | 176.76 | 176.70 | 176.63 |
| 25 | 176.43 | 176.46 | 176.52 | 176.64 | 176.74 | 176.79 | 176.84 | 176.79 | 176.77 | 176.68 | 176.69 | 176.61* |
| 26 | 176.42 | 176.47 | 176.52 | 176.68 | 176.72 | 176.88 | 176.84 | 176.81 | 176.70 | 176.78 | 176.75 | 176.54 |
| 27 | 176.45 | 176.44 | 176.52 | 176.74 | 176.72 | 176.87 | 176.84 | 176.82 | 176.79 | 176.82 | 176.76 | 176.74 |
| 28 | 176.52 | 176.36 | 176.49 | 176.72 | 176.73 | 176.77 | 176.84 | 176.81 | 176.76 | 176.70 | 176.74 | 176.72 |
| 29 | 176.48 | 176.40 | 176.49 | 176.63 | 176.73 | 176.81 | 176.85 | 176.83 | 176.76 | 176.77 | 176.65 | 176.62 |
| 30 | 176.44 | | 176.49 | 176.82 | 176.74 | 176.81 | 176.86 | 176.81 | 176.78 | 176.72 | 176.69 | 176.62* |
| 31 | 176.47 | | 176.52 | | 176.77 | | 176.85 | 176.75 | | 176.75 | | 176.62* |
| MEAN | 176.49 | 176.48 | 176.48 | 176.59 | 176.69 | 176.80 | 176.84 | 176.83 | 176.81 | 176.76 | 176.71 | 176.65 |
| MAX. | 176.72 | 176.68 | 176.65 | 177.09 | 176.87 | 177.04 | 176.96 | 176.94 | 177.05 | 177.19 | 176.96 | 177.00 |
| | 1200/03 | 0800/13 | 1800/10 | 1100/30 | 1600/25 | 0300/27 | 1800/22 | 0800/09 | 2400/12 | 1200/19 | 2400/14 | 1400/16 |
| MIN. | 176.32 | 176.30 | 176.24 | 176.39 | 176.52 | 176.67 | 176.63 | 176.69 | 176.65 | 176.56 | 176.50 | 176.36 |
| | 2200/25 | 0100/28 | 0500/11 | 1600/06 | 1500/01 | 0100/11 | 0300/15 | 0900/23 | 0500/26 | 1700/30 | 0800/17 | 0500/26 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 176.68

ANNUAL SUMMARY OF LEVELS, 1984
Station 9004: Pt. Iroquois, Brimley, Michigan on Lake Superior (Whitefish Bay

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 183.28 Aug
Daily mean elevation: 183.40 16 Nov
Instant/hourly elevation: 183.64 0600/2 Nov

LOWEST
Monthly mean elevation: 183.02 Apr
Daily mean elevation: 182.94 14 Mar
Instant/hourly elevation: 182.77 1600/27 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.26 | 8 Jan |
| 183.14 | 29 Feb |
| 183.12 | 22 Mar |
| 183.16 | 30 Apr |
| 183.17 | 25 May |
| 183.31 | 27 Jun |
| 183.36 | 6 Jul |
| 183.32 | 31 Aug |
| 183.36 | 25 Sep |
| 183.36 | 3 Oct |
| 183.40 | 16 Nov |
| 183.36 | 22 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.02 | 28 Jan |
| 183.00 | 13 Feb |
| 182.94 | 14 Mar |
| 182.96 | 27 Apr |
| 183.04 | 17 May |
| 183.08 | 1 Jun |
| 183.24 | 22 Jul |
| 183.23 | 26 Aug |
| 183.11 | 7 Sep |
| 183.14 | 31 Oct |
| 183.09 | 26 Nov |
| 183.05 | 27 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 183.35 | | | | | | | 1 | | 1 | 1 | 3 | 1 | 183.35 | 7 |
| 183.30 | | | | | | 1 | 5 | 8 | 1 | 1 | 1 | 1 | 183.30 | 25 |
| 183.25 | 1 | | | | | 4 | 17 | 18 | 14 | 2 | 4 | 5 | 183.25 | 90 |
| 183.20 | 1 | | | | | 9 | 8 | 5 | 10 | 13 | 8 | 8 | 183.20 | 152 |
| 183.15 | 5 | | | 1 | 5 | 8 | | | 2 | 9 | 9 | 6 | 183.15 | 197 |
| 183.10 | 14 | 5 | 1 | | 17 | 6 | | | 2 | 5 | 3 | 6 | 183.10 | 256 |
| 183.05 | 7 | 12 | 9 | 4 | 8 | 2 | | | | | 2 | 3 | 183.05 | 303 |
| 183.00 | 3 | 8 | 12 | 16 | 1 | | | | | | | 1 | 183.00 | 344 |
| 182.95 | | 4 | 8 | 9 | | | | | | | | | 182.95 | 365 |
| 182.90 | | | 1 | | | | | | | | | | 182.90 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9004: Pt. Iroquois, Brimley, Michigan on Lake Superior (Whitefish Bay)

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 183.11 | 183.04 | 183.10 | 183.01 | 183.17 | 183.08 | 183.25 | 183.28 | 183.28 | 183.24 | 183.39 | 183.24 |
| 2 | 183.15 | 183.00 | 183.10 | 183.02 | 183.11 | 183.11 | 183.24 | 183.28 | 183.27 | 183.21 | 183.36 | 183.14 |
| 3 | 183.13 | 183.10 | 183.03 | 183.00 | 183.09 | 183.14 | 183.25 | 183.28 | 183.29 | 183.36 | 183.11 | 183.32 |
| 4 | 183.18 | 183.09 | 183.00 | 183.02 | 183.11 | 183.13 | 183.26 | 183.27 | 183.28 | 183.26 | 183.24 | 183.29 |
| 5 | 183.13 | 183.11 | 183.06 | 183.06 | 183.08 | 183.09 | 183.26 | 183.25 | 183.28 | 183.17 | 183.33 | 183.19 |
| 6 | 183.20 | 183.08 | 183.08 | 183.08 | 183.07 | 183.13 | 183.36 | 183.27 | 183.22 | 183.17 | 183.26 | 183.27 |
| 7 | 183.08 | 183.08 | 183.02 | 183.01 | 183.06 | 183.13 | 183.31 | 183.27 | 183.11 | 183.20 | 183.17 | 183.18 |
| 8 | 183.26 | 183.06 | 183.03 | 182.97 | 183.11 | 183.12 | 183.24 | 183.26 | 183.20 | 183.24 | 183.16 | 183.21 |
| 9 | 183.15 | 183.00 | 183.02 | 182.97 | 183.17 | 183.19 | 183.24 | 183.28 | 183.23 | 183.22 | 183.25 | 183.12 |
| 10 | 183.17 | 183.01 | 183.05 | 182.98 | 183.09 | 183.21 | 183.27 | 183.32 | 183.25 | 183.22 | 183.26 | 183.19 |
| 11 | 183.12 | 183.03 | 183.09 | 182.98 | 183.11 | 183.20 | 183.28 | 183.31 | 183.26 | 183.21 | 183.25 | 183.08 |
| 12 | 183.08 | 183.00 | 182.99 | 182.96 | 183.16 | 183.19 | 183.26 | 183.30 | 183.18 | 183.19 | 183.23 | 183.22 |
| 13 | 183.10 | 183.00 | 182.98 | 182.96 | 183.12 | 183.22 | 183.26 | 183.29 | 183.29 | 183.18 | 183.18 | 183.17 |
| 14 | 183.13 | 183.05 | 182.94 | 183.02 | 183.16 | 183.25 | 183.25 | 183.28 | 183.29 | 183.18 | 183.10 | 183.13 |
| 15 | 183.09 | 183.04 | 183.01 | 183.05 | 183.15 | 183.20 | 183.28 | 183.29 | 183.28 | 183.15 | 183.23 | 183.10 |
| 16 | 183.13 | 183.02 | 183.07 | 183.09 | 183.11 | 183.19 | 183.30 | 183.31 | 183.27 | 183.15 | 183.40 | 183.12 |
| 17 | 183.15 | 183.06 | 182.98 | 183.09 | 183.04 | 183.22 | 183.31 | 183.27 | 183.23 | 183.18 | 183.29 | 183.22 |
| 18 | 183.14 | 183.07 | 183.00 | 183.05 | 183.10 | 183.24 | 183.32 | 183.31 | 183.24 | 183.18 | 183.27 | 183.24 |
| 19 | 183.15 | 183.11 | 183.00 | 183.03 | 183.14 | 183.25 | 183.29 | 183.29 | 183.24 | 183.14 | 183.25 | 183.21 |
| 20 | 183.17 | 183.08 | 183.00 | 183.05 | 183.12 | 183.23 | 183.29 | 183.26 | 183.30 | 183.23 | 183.22 | 183.27 |
| 21 | 183.11 | 183.04 | 183.08 | 183.03 | 183.06 | 183.22 | 183.27 | 183.25 | 183.21 | 183.23 | 183.16 | 183.08 |
| 22 | 183.11 | 183.04 | 183.12 | 183.02 | 183.12 | 183.19 | 183.24 | 183.32 | 183.15 | 183.24 | 183.20 | 183.36 |
| 23 | 183.05 | 183.07 | 183.06 | 183.03 | 183.14 | 183.20 | 183.31 | 183.32 | 183.25 | 183.25 | 183.19 | 183.25 |
| 24 | 183.09 | 183.11 | 183.01 | 183.02 | 183.08 | 183.28 | 183.31 | 183.27 | 183.22 | 183.22 | 183.16 | 183.26 |
| 25 | 183.24 | 183.10 | 183.03 | 183.01 | 183.17 | 183.24 | 183.28 | 183.24 | 183.36 | 183.21 | 183.15 | 183.27 |
| 26 | 183.09 | 183.09 | 183.00 | 182.98 | 183.15 | 183.18 | 183.29 | 183.23 | 183.34 | 183.18 | 183.09 | 183.14 |
| 27 | 183.16 | 183.07 | 183.01 | 182.96 | 183.14 | 183.31 | 183.29 | 183.25 | 183.29 | 183.14 | 183.11 | 183.05 |
| 28 | 183.02 | 183.11 | 183.03 | 183.02 | 183.15 | 183.30 | 183.28 | 183.26 | 183.30 | 183.32 | 183.19 | 183.14 |
| 29 | 183.12 | 183.14 | 183.05 | 183.04 | 183.15 | 183.29 | 183.26 | 183.27 | 183.27 | 183.21 | 183.20 | 183.25 |
| 30 | 183.10 | | 183.06 | 183.16 | 183.15 | 183.27 | 183.25 | 183.32 | 183.24 | 183.29 | 183.22 | 183.20 |
| 31 | 183.04 | | 183.03 | | 183.11 | | 183.26 | 183.32 | | 183.14 | | 183.18 |
| MEAN | 183.13 | 183.06 | 183.03 | 183.02 | 183.12 | 183.20 | 183.28 | 183.28 | 183.25 | 183.21 | 183.22 | 183.20 |
| MAX. | 183.42 | 183.19 | 183.45 | 183.44 | 183.28 | 183.41 | 183.43 | 183.42 | 183.52 | 183.50 | 183.64 | 183.48 |
| | 0500/25 | 2100/29 | 2300/10 | 1900/30 | 0100/01 | 0800/27 | 1900/06 | 0300/31 | 2200/25 | 0400/28 | 0600/02 | 1300/03 |
| MIN. | 182.90 | 182.88 | 182.85 | 182.77 | 182.94 | 182.95 | 183.04 | 183.15 | 183.03 | 182.96 | 182.94 | 182.95 |
| | 0600/28 | 1400/02 | 2300/14 | 1600/27 | 1200/24 | 1000/08 | 1200/13 | 1600/26 | 1800/12 | 2100/31 | 1100/03 | 0100/27 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 183.17

ANNUAL SUMMARY OF LEVELS, 1984
 Station 9018: Marquette Coast Guard, Marquette, Michigan on Lake Superior

INTERNATIONAL
 GREAT LAKES
 DATUM (1955)

HIGHEST
 Monthly mean elevation: 183.31 Aug
 Daily mean elevation: 183.35 11 Aug
 Instant/hourly elevation: 183.48 2000/25 Sep

LOWEST
 Monthly mean elevation: 183.05 Apr
 Daily mean elevation: 183.01 14 Mar
 Instant/hourly elevation: 182.85 1500/27 Apr

HIGHEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.21 | 6 Jan |
| 183.17 | 5 Feb |
| 183.15 | 22 Mar |
| 183.16 | 30 Apr |
| 183.18 | 25 May |
| 183.30 | 29 Jun |
| 183.33 | 17 Jul |
| 183.35 | 11 Aug |
| 183.34 | 25 Sep |
| 183.29 | 4 Oct |
| 183.31 | 10 Nov |
| 183.27 | 3 Dec |

LOWEST DAILY MEAN
 FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.09 | 31 Jan |
| 183.07 | 12 Feb |
| 183.01 | 14 Mar |
| 183.02 | 11 Apr |
| 183.11 | 4 May |
| 183.15 | 1 Jun |
| 183.28 | 2 Jul |
| 183.28 | 26 Aug |
| 183.23 | 22 Sep |
| 183.22 | 19 Oct |
| 183.19 | 26 Nov |
| 183.15 | 11 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 183.30 | | | | | | | 15 | 21 | 7 | | 1 | | 183.30 | 44 |
| 183.25 | | | | | | 14 | 16 | 10 | 21 | 11 | 11 | 2 | 183.25 | 129 |
| 183.20 | 1 | | | | | 8 | | | 2 | 20 | 13 | 16 | 183.20 | 189 |
| 183.15 | 13 | 1 | | 1 | 10 | 7 | | | | | 5 | 12 | 183.15 | 238 |
| 183.10 | 16 | 7 | 3 | | 21 | 1 | | | | | | 1 | 183.10 | 287 |
| 183.05 | 1 | 21 | 12 | 11 | | | | | | | | | 183.05 | 332 |
| 183.00 | | | 16 | 18 | | | | | | | | | 183.00 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9018: Marquette Coast Guard, Marquette, Michigan on Lake Superior

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 183.18 | 183.10 | 183.10 | 183.03 | 183.14 | 183.15 | 183.28 | 183.32 | 183.32 | 183.28 | 183.30 | 183.24 |
| 2 | 183.18 | 183.08 | 183.09 | 183.03 | 183.12 | 183.17 | 183.28 | 183.32 | 183.32 | 183.26 | 183.29 | 183.24 |
| 3 | 183.17 | 183.11 | 183.06 | 183.03 | 183.11 | 183.18 | 183.29 | 183.30 | 183.31 | 183.29 | 183.22 | 183.27 |
| 4 | 183.19 | 183.13 | 183.05 | 183.04 | 183.11 | 183.18 | 183.30 | 183.30 | 183.30 | 183.29 | 183.27 | 183.24 |
| 5 | 183.17 | 183.17 | 183.09 | 183.05 | 183.12 | 183.17 | 183.30 | 183.30 | 183.29 | 183.26 | 183.29 | 183.20 |
| 6 | 183.21 | 183.12 | 183.11 | 183.05 | 183.12 | 183.19 | 183.32 | 183.30 | 183.28 | 183.24 | 183.27 | 183.26 |
| 7 | 183.17 | 183.09 | 183.07 | 183.02 | 183.13 | 183.18 | 183.31 | 183.30 | 183.25 | 183.26 | 183.24 | 183.21 |
| 8 | 183.20 | 183.07 | 183.06 | 183.02 | 183.15 | 183.19 | 183.30 | 183.31 | 183.27 | 183.27 | 183.25 | 183.20 |
| 9 | 183.18 | 183.07 | 183.04 | 183.03 | 183.17 | 183.22 | 183.30 | 183.32 | 183.28 | 183.26 | 183.28 | 183.19 |
| 10 | 183.18 | 183.07 | 183.05 | 183.02 | 183.15 | 183.25 | 183.29 | 183.34 | 183.29 | 183.25 | 183.31 | 183.21 |
| 11 | 183.17 | 183.08 | 183.10 | 183.02 | 183.15 | 183.24 | 183.30 | 183.35 | 183.30 | 183.25 | 183.29 | 183.15 |
| 12 | 183.15 | 183.07 | 183.04 | 183.03 | 183.16 | 183.25 | 183.29 | 183.32 | 183.28 | 183.25 | 183.25 | 183.23 |
| 13 | 183.16 | 183.08 | 183.03 | 183.05 | 183.15 | 183.27 | 183.29 | 183.32 | 183.29 | 183.25 | 183.22 | 183.22 |
| 14 | 183.18 | 183.08 | 183.01 | 183.05 | 183.15 | 183.26 | 183.30 | 183.31 | 183.32 | 183.25 | 183.21 | 183.19 |
| 15 | 183.13 | 183.08 | 183.05 | 183.07 | 183.15 | 183.25 | 183.31 | 183.31 | 183.30 | 183.24 | 183.24 | 183.16 |
| 16 | 183.12 | 183.08 | 183.10 | 183.08 | 183.14 | 183.25 | 183.31 | 183.33 | 183.29 | 183.24 | 183.27 | 183.17 |
| 17 | 183.15 | 183.10 | 183.04 | 183.09 | 183.14 | 183.26 | 183.33 | 183.32 | 183.26 | 183.25 | 183.27 | 183.24 |
| 18 | 183.14 | 183.10 | 183.03 | 183.06 | 183.15 | 183.26 | 183.32 | 183.33 | 183.26 | 183.24 | 183.27 | 183.22 |
| 19 | 183.15 | 183.13 | 183.03 | 183.05 | 183.14 | 183.26 | 183.32 | 183.32 | 183.28 | 183.22 | 183.27 | 183.21 |
| 20 | 183.16 | 183.10 | 183.05 | 183.06 | 183.14 | 183.26 | 183.32 | 183.29 | 183.29 | 183.25 | 183.25 | 183.22 |
| 21 | 183.11 | 183.09 | 183.11 | 183.06 | 183.15 | 183.26 | 183.31 | 183.29 | 183.26 | 183.26 | 183.21 | 183.20 |
| 22 | 183.11 | 183.08 | 183.15 | 183.06 | 183.16 | 183.25 | 183.29 | 183.34 | 183.23 | 183.25 | 183.20 | 183.23 |
| 23 | 183.12 | 183.10 | 183.07 | 183.06 | 183.17 | 183.26 | 183.32 | 183.33 | 183.26 | 183.25 | 183.21 | 183.22 |
| 24 | 183.12 | 183.11 | 183.05 | 183.05 | 183.15 | 183.26 | 183.31 | 183.30 | 183.31 | 183.24 | 183.20 | 183.21 |
| 25 | 183.15 | 183.10 | 183.04 | 183.05 | 183.18 | 183.25 | 183.31 | 183.29 | 183.34 | 183.25 | 183.20 | 183.18 |
| 26 | 183.13 | 183.09 | 183.05 | 183.06 | 183.16 | 183.26 | 183.32 | 183.28 | 183.32 | 183.23 | 183.19 | 183.20 |
| 27 | 183.14 | 183.09 | 183.05 | 183.04 | 183.16 | 183.30 | 183.32 | 183.31 | 183.30 | 183.23 | 183.23 | 183.17 |
| 28 | 183.11 | 183.13 | 183.07 | 183.06 | 183.17 | 183.29 | 183.31 | 183.31 | 183.30 | 183.27 | 183.20 | 183.18 |
| 29 | 183.14 | 183.13 | 183.07 | 183.07 | 183.17 | 183.30 | 183.30 | 183.31 | 183.29 | 183.25 | 183.21 | 183.22 |
| 30 | 183.13 | | 183.06 | 183.16 | 183.16 | 183.29 | 183.29 | 183.33 | 183.29 | 183.28 | 183.24 | 183.20 |
| 31 | 183.09 | | 183.04 | | 183.15 | | 183.30 | 183.32 | | 183.25 | | 183.21 |
| MEAN | 183.15 | 183.10 | 183.06 | 183.05 | 183.15 | 183.24 | 183.30 | 183.31 | 183.29 | 183.25 | 183.24 | 183.21 |
| MAX. | 183.28 | 183.22 | 183.22 | 183.24 | 183.26 | 183.37 | 183.41 | 183.40 | 183.48 | 183.38 | 183.36 | 183.35 |
| | 0200/06 | 0900/05 | 2400/21 | 1100/30 | 1500/25 | 1100/27 | 0300/15 | 0200/30 | 2000/25 | 0100/28 | 1300/01 | 0100/06 |
| MIN. | 183.04 | 183.00 | 182.94 | 182.85 | 183.02 | 183.11 | 183.19 | 183.23 | 183.19 | 183.13 | 183.10 | 183.05 |
| | 0100/28 | 1100/02 | 1700/14 | 1500/27 | 1300/24 | 1400/05 | 1700/14 | 0700/26 | 1000/07 | 1900/19 | 0400/03 | 1500/16 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 183.20

ANNUAL SUMMARY OF LEVELS, 1984
Station 9044: Ontonagon, Michigan on Lake Superior

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 183.33 Aug
Daily mean elevation: 183.36 1 Sep
Instant/hourly elevation: 183.49 0400/19 Oct

LOWEST
Monthly mean elevation: 183.08 Mar
Daily mean elevation: 183.04 11 Mar
Instant/hourly elevation: 182.94 1200/27 Apr

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.20 | 12 Jan |
| 183.16 | 2 Feb |
| 183.11 | 28 Mar |
| 183.13 | 30 Apr |
| 183.21 | 24 May |
| 183.32 | 30 Jun |
| 183.35 | 21 Jul |
| 183.35 | 28 Aug |
| 183.36 | 1 Sep |
| 183.32 | 31 Oct |
| 183.32 | 3 Nov |
| 183.27 | 2 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.11 | 15 Jan |
| 183.08 | 29 Feb |
| 183.04 | 11 Mar |
| 183.06 | 17 Apr |
| 183.13 | 1 May |
| 183.19 | 3 Jun |
| 183.31 | 30 Jul |
| 183.30 | 18 Aug |
| 183.27 | 20 Sep |
| 183.25 | 28 Oct |
| 183.21 | 23 Nov |
| 183.18 | 7 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ | | | | | | | | | | | | | Elev.
(m.) | No. of days
above elev. |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | |
| 183.35 | | | | | | | | | 1 | | | | 183.35 | 1 |
| 183.30 | | | | | | 4 | 31 | 30 | 9 | 2 | 1 | | 183.30 | 78 |
| 183.25 | | | | | | 15 | | 1 | 20 | 28 | 10 | | 183.25 | 153 |
| 183.20 | | | | | 1 | 9 | | | | 1 | 19 | 25 | 183.20 | 208 |
| 183.15 | 15 | 1 | | | 25 | 2 | | | | | | 5 | 183.15 | 256 |
| 183.10 | 16 | 23 | 4 | 5 | 5 | | | | | | | | 183.10 | 309 |
| 183.05 | | 5 | 25 | 25 | | | | | | | | | 183.05 | 364 |
| 183.00 | | | 2 | | | | | | | | | | 183.00 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9044: Ontonagon, Michigan on Lake Superior

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 183.20 | 183.13 | 183.07 | 183.08 | 183.13 | 183.21 | 183.31 | 183.34 | 183.36 | 183.29 | 183.24 | 183.23 |
| 2 | 183.20 | 183.16 | 183.07 | 183.08 | 183.15 | 183.20 | 183.32 | 183.32 | 183.31 | 183.28 | 183.26 | 183.27 |
| 3 | 183.17 | 183.13 | 183.08 | 183.08 | 183.15 | 183.19 | 183.32 | 183.31 | 183.29 | 183.26 | 183.32 | 183.23 |
| 4 | 183.19 | 183.13 | 183.09 | 183.08 | 183.15 | 183.21 | 183.32 | 183.31 | 183.30 | 183.29 | 183.29 | 183.22 |
| 5 | 183.20 | 183.14 | 183.09 | 183.06 | 183.15 | 183.23 | 183.32 | 183.32 | 183.29 | 183.30 | 183.27 | 183.24 |
| 6 | 183.19 | 183.11 | 183.07 | 183.06 | 183.16 | 183.25 | 183.31 | 183.31 | 183.31 | 183.29 | 183.27 | 183.21 |
| 7 | 183.19 | 183.09 | 183.08 | 183.08 | 183.17 | 183.23 | 183.32 | 183.33 | 183.34 | 183.29 | 183.30 | 183.18 |
| 8 | 183.19 | 183.09 | 183.07 | 183.10 | 183.17 | 183.22 | 183.34 | 183.34 | 183.32 | 183.27 | 183.29 | 183.21 |
| 9 | 183.18 | 183.11 | 183.06 | 183.10 | 183.17 | 183.25 | 183.33 | 183.33 | 183.30 | 183.27 | 183.27 | 183.22 |
| 10 | 183.18 | 183.11 | 183.05 | 183.09 | 183.20 | 183.25 | 183.32 | 183.34 | 183.31 | 183.27 | 183.25 | 183.21 |
| 11 | 183.19 | 183.09 | 183.04 | 183.10 | 183.17 | 183.25 | 183.32 | 183.34 | 183.31 | 183.28 | 183.24 | 183.23 |
| 12 | 183.20 | 183.15 | 183.07 | 183.11 | 183.16 | 183.29 | 183.32 | 183.33 | 183.33 | 183.28 | 183.25 | 183.22 |
| 13 | 183.19 | 183.13 | 183.08 | 183.12 | 183.18 | 183.28 | 183.32 | 183.33 | 183.30 | 183.28 | 183.26 | 183.22 |
| 14 | 183.16 | 183.11 | 183.08 | 183.09 | 183.16 | 183.29 | 183.35 | 183.32 | 183.31 | 183.29 | 183.28 | 183.21 |
| 15 | 183.11 | 183.14 | 183.08 | 183.08 | 183.17 | 183.30 | 183.32 | 183.32 | 183.28 | 183.30 | 183.25 | 183.20 |
| 16 | 183.15 | 183.15 | 183.06 | 183.07 | 183.18 | 183.30 | 183.33 | 183.32 | 183.29 | 183.29 | 183.24 | 183.22 |
| 17 | 183.15 | 183.13 | 183.10 | 183.06 | 183.20 | 183.30 | 183.33 | 183.33 | 183.30 | 183.27 | 183.26 | 183.25 |
| 18 | 183.15 | 183.12 | 183.08 | 183.07 | 183.17 | 183.28 | 183.33 | 183.30 | 183.29 | 183.30 | 183.25 | 183.22 |
| 19 | 183.16 | 183.12 | 183.08 | 183.08 | 183.17 | 183.29 | 183.33 | 183.31 | 183.30 | 183.31 | 183.25 | 183.22 |
| 20 | 183.15 | 183.12 | 183.08 | 183.07 | 183.18 | 183.29 | 183.33 | 183.31 | 183.27 | 183.27 | 183.23 | 183.24 |
| 21 | 183.13 | 183.13 | 183.08 | 183.09 | 183.18 | 183.30 | 183.35 | 183.32 | 183.30 | 183.28 | 183.24 | 183.25 |
| 22 | 183.15 | 183.13 | 183.06 | 183.09 | 183.19 | 183.31 | 183.34 | 183.33 | 183.29 | 183.26 | 183.21 | 183.19 |
| 23 | 183.15 | 183.13 | 183.07 | 183.07 | 183.18 | 183.29 | 183.32 | 183.31 | 183.28 | 183.26 | 183.21 | 183.23 |
| 24 | 183.13 | 183.12 | 183.09 | 183.08 | 183.21 | 183.27 | 183.32 | 183.32 | 183.32 | 183.27 | 183.22 | 183.21 |
| 25 | 183.13 | 183.11 | 183.11 | 183.08 | 183.18 | 183.29 | 183.32 | 183.32 | 183.30 | 183.29 | 183.23 | 183.20 |
| 26 | 183.14 | 183.10 | 183.11 | 183.13 | 183.18 | 183.31 | 183.32 | 183.33 | 183.29 | 183.28 | 183.25 | 183.24 |
| 27 | 183.13 | 183.11 | 183.11 | 183.12 | 183.18 | 183.30 | 183.32 | 183.35 | 183.30 | 183.29 | 183.25 | 183.23 |
| 28 | 183.15 | 183.11 | 183.11 | 183.08 | 183.18 | 183.30 | 183.31 | 183.35 | 183.29 | 183.25 | 183.22 | 183.22 |
| 29 | 183.13 | 183.08 | 183.09 | 183.10 | 183.17 | 183.31 | 183.31 | 183.34 | 183.29 | 183.29 | 183.24 | 183.21 |
| 30 | 183.12 | | 183.08 | 183.13 | 183.17 | 183.32 | 183.31 | 183.32 | 183.29 | 183.28 | 183.25 | 183.20 |
| 31 | 183.13 | | 183.08 | | 183.19 | | 183.32 | 183.34 | | 183.32 | | 183.21 |
| MEAN | 183.16 | 183.12 | 183.08 | 183.09 | 183.17 | 183.27 | 183.32 | 183.33 | 183.30 | 183.28 | 183.25 | 183.22 |
| MAX. | 183.29 | 183.20 | 183.12 | 183.40 | 183.27 | 183.39 | 183.47 | 183.42 | 183.43 | 183.49 | 183.39 | 183.34 |
| | 1800/05 | 1200/02 | 0300/28 | 1600/27 | 1300/24 | 2000/26 | 1900/14 | 1300/29 | 0200/24 | 0400/19 | 0300/03 | 2300/02 |
| MIN. | 183.04 | 183.06 | 183.02 | 182.94 | 183.07 | 183.13 | 183.22 | 183.18 | 183.20 | 183.07 | 183.12 | 183.07 |
| | 2100/15 | 2000/29 | 0800/11 | 1200/27 | 0900/01 | 0700/08 | 1600/13 | 0300/30 | 2000/23 | 0200/28 | 0400/28 | 1200/07 |

* Indicates Less than 90% of the Hourly Data Available.
/ Indicates No Data.

ANNUAL MEAN: 183.22

ANNUAL SUMMARY OF LEVELS, 1984
Station 9064: Duluth, Minnesota on Lake Superior

INTERNATIONAL
GREAT LAKES
DATUM (1955)

HIGHEST
Monthly mean elevation: 183.37 Aug
Daily mean elevation: 183.43 18 Oct
Instant/hourly elevation: 183.76 0300/19 Oct

LOWEST
Monthly mean elevation: 183.10 Mar
Daily mean elevation: 183.00 10 Mar
Instant/hourly elevation: 182.90 2200/10 Mar

HIGHEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.27 | 12 Jan |
| 183.23 | 12 Feb |
| 183.16 | 17 Mar |
| 183.21 | 26 Apr |
| 183.24 | 27 May |
| 183.36 | 22 Jun |
| 183.40 | 21 Jul |
| 183.42 | 13 Aug |
| 183.43 | 24 Sep |
| 183.43 | 18 Oct |
| 183.38 | 7 Nov |
| 183.32 | 26 Dec |

LOWEST DAILY MEAN
FOR EACH MONTH

| Elev. | Date |
|--------|--------|
| 183.09 | 25 Jan |
| 183.08 | 29 Feb |
| 183.00 | 10 Mar |
| 183.07 | 30 Apr |
| 183.12 | 8 May |
| 183.22 | 3 Jun |
| 183.30 | 15 Jul |
| 183.30 | 30 Aug |
| 183.28 | 20 Sep |
| 183.25 | 28 Oct |
| 183.15 | 1 Nov |
| 183.14 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.<br>(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 183.40        |     |     |     |     |     |     |     | 3   | 2   | 2   |     |     | 183.40        | 7                          |
| 183.35        |     |     |     |     |     | 2   | 16  | 23  | 5   | 10  | 3   |     | 183.35        | 66                         |
| 183.30        |     |     |     |     |     | 16  | 13  | 4   | 15  | 10  | 7   | 2   | 183.30        | 133                        |
| 183.25        | 1   |     |     |     |     | 8   | 2   | 1   | 8   | 8   | 13  | 8   | 183.25        | 182                        |
| 183.20        | 4   | 3   |     | 1   | 13  | 4   |     |     |     | 1   | 3   | 11  | 183.20        | 222                        |
| 183.15        | 11  | 7   | 1   | 4   | 16  |     |     |     |     |     | 3   | 8   | 183.15        | 272                        |
| 183.10        | 13  | 17  | 14  | 13  | 2   |     |     |     |     |     | 1   | 2   | 183.10        | 334                        |
| 183.05        | 2   | 2   | 13  | 12  |     |     |     |     |     |     |     |     | 183.05        | 363                        |
| 183.00        |     |     | 2   |     |     |     |     |     |     |     |     |     | 183.00        | 365                        |
| 182.95        |     |     | 1   |     |     |     |     |     |     |     |     |     | 182.95        | 366                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9064: Duluth, Minnesota on Lake Superior

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 183.24  | 183.16  | 183.09  | 183.08  | 183.14  | 183.25  | 183.35  | 183.39  | 183.42  | 183.33  | 183.15  | 183.25  |
| 2    | 183.19  | 183.20  | 183.09  | 183.10  | 183.19  | 183.22  | 183.36  | 183.38  | 183.38  | 183.29  | 183.26  | 183.31  |
| 3    | 183.15  | 183.13  | 183.12  | 183.10  | 183.19  | 183.22  | 183.34  | 183.36  | 183.34  | 183.27  | 183.38  | 183.16  |
| 4    | 183.20  | 183.16  | 183.14  | 183.09  | 183.19  | 183.27  | 183.33  | 183.37  | 183.34  | 183.36  | 183.27  | 183.19  |
| 5    | 183.20  | 183.14  | 183.10  | 183.07  | 183.19  | 183.28  | 183.34  | 183.38  | 183.34  | 183.38  | 183.26  | 183.24  |
| 6    | 183.23  | 183.12  | 183.09  | 183.07  | 183.22  | 183.30  | 183.30  | 183.36  | 183.39  | 183.36  | 183.31  | 183.21  |
| 7    | 183.18  | 183.11  | 183.13  | 183.12  | 183.17  | 183.31  | 183.34  | 183.39  | 183.40  | 183.36  | 183.38  | 183.17  |
| 8    | 183.18  | 183.10  | 183.10  | 183.13  | 183.12  | 183.24  | 183.39  | 183.38  | 183.35  | 183.34  | 183.32  | 183.23  |
| 9    | 183.17  | 183.15  | 183.08  | 183.15  | 183.18  | 183.31  | 183.37  | 183.35  | 183.32  | 183.32  | 183.33  | 183.25  |
| 10   | 183.18  | 183.14  | 183.00  | 183.14  | 183.24  | 183.29  | 183.35  | 183.38  | 183.33  | 183.33  | 183.31  | 183.24  |
| 11   | 183.23  | 183.13  | 183.04  | 183.15  | 183.17  | 183.31  | 183.33  | 183.41  | 183.32  | 183.35  | 183.30  | 183.28  |
| 12   | 183.27  | 183.23  | 183.12  | 183.20  | 183.20  | 183.35  | 183.35  | 183.41  | 183.40  | 183.34  | 183.31  | 183.22  |
| 13   | 183.24  | 183.17  | 183.11  | 183.17  | 183.21  | 183.30  | 183.36  | 183.42  | 183.29  | 183.34  | 183.34  | 183.28  |
| 14   | 183.20  | 183.13  | 183.14  | 183.11  | 183.19  | 183.33  | 183.37  | 183.40  | 183.32  | 183.36  | 183.37  | 183.27  |
| 15   | 183.10  | 183.22  | 183.09  | 183.09  | 183.21  | 183.35  | 183.30  | 183.37  | 183.29  | 183.42  | 183.19  | 183.26  |
| 16   | 183.12  | 183.21  | 183.12  | 183.09  | 183.22  | 183.34  | 183.33  | 183.40  | 183.31  | 183.40  | 183.17  | 183.22  |
| 17   | 183.12  | 183.16  | 183.16  | 183.07  | 183.23  | 183.33  | 183.32  | 183.40  | 183.32  | 183.30  | 183.28  | 183.27  |
| 18   | 183.12  | 183.16  | 183.11  | 183.10  | 183.18  | 183.29  | 183.35  | 183.37  | 183.28  | 183.43  | 183.26  | 183.20  |
| 19   | 183.13  | 183.14  | 183.10  | 183.11  | 183.20  | 183.33  | 183.35  | 183.38  | 183.31  | 183.39  | 183.25  | 183.18  |
| 20   | 183.11  | 183.12  | 183.09  | 183.11  | 183.24  | 183.34  | 183.36  | 183.38  | 183.28  | 183.28  | 183.28  | 183.25  |
| 21   | 183.11  | 183.17  | 183.07  | 183.15  | 183.24  | 183.36  | 183.40  | 183.36  | 183.38  | 183.30  | 183.28  | 183.26  |
| 22   | 183.19  | 183.15  | 183.05  | 183.14  | 183.20  | 183.36  | 183.38  | 183.33  | 183.33  | 183.28  | 183.22  | 183.14  |
| 23   | 183.19  | 183.13  | 183.11  | 183.11  | 183.19  | 183.31  | 183.33  | 183.36  | 183.30  | 183.27  | 183.24  | 183.21  |
| 24   | 183.11  | 183.13  | 183.13  | 183.12  | 183.23  | 183.28  | 183.36  | 183.37  | 183.43  | 183.31  | 183.28  | 183.15  |
| 25   | 183.09  | 183.13  | 183.14  | 183.12  | 183.22  | 183.32  | 183.36  | 183.37  | 183.29  | 183.36  | 183.30  | 183.16  |
| 26   | 183.14  | 183.12  | 183.15  | 183.21  | 183.20  | 183.34  | 183.36  | 183.38  | 183.29  | 183.36  | 183.33  | 183.32  |
| 27   | 183.14  | 183.14  | 183.13  | 183.20  | 183.24  | 183.29  | 183.37  | 183.38  | 183.33  | 183.32  | 183.29  | 183.28  |
| 28   | 183.15  | 183.13  | 183.13  | 183.08  | 183.22  | 183.33  | 183.37  | 183.38  | 183.29  | 183.25  | 183.18  | 183.28  |
| 29   | 183.15  | 183.08  | 183.08  | 183.16  | 183.20  | 183.33  | 183.36  | 183.34  | 183.32  | 183.33  | 183.26  | 183.17  |
| 30   | 183.13  |         | 183.07  | 183.07  | 183.20  | 183.35  | 183.36  | 183.30  | 183.32  | 183.27  | 183.26  | 183.20  |
| 31   | 183.17  |         | 183.09  |         | 183.23  |         | 183.36  | 183.33  |         | 183.39  |         | 183.25  |
| MEAN | 183.17  | 183.15  | 183.10  | 183.12  | 183.20  | 183.31  | 183.35  | 183.37  | 183.33  | 183.34  | 183.28  | 183.23  |
| MAX. | 183.34  | 183.32  | 183.26  | 183.32  | 183.32  | 183.50  | 183.54  | 183.49  | 183.57  | 183.76  | 183.50  | 183.47  |
|      | 0900/12 | 0900/12 | 1300/17 | 0800/27 | 1500/31 | 1200/26 | 1900/13 | 2000/08 | 0400/24 | 0300/19 | 0100/03 | 1700/26 |
| MIN. | 182.93  | 183.01  | 182.90  | 182.92  | 182.97  | 183.11  | 183.23  | 183.18  | 183.20  | 182.97  | 183.04  | 182.93  |
|      | 0300/25 | 2300/02 | 2200/10 | 1000/28 | 0900/01 | 2200/08 | 2300/16 | 1100/30 | 2200/25 | 0200/28 | 0500/02 | 1900/16 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 183.25

ANNUAL SUMMARY OF LEVELS, 1984  
Station 9070: Two Harbors, Minnesota on Lake Superior

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 183.35 Aug  
Daily mean elevation: 183.39 13 Aug  
Instant/hourly elevation: 183.58 0300/19 Oct

LOWEST  
Monthly mean elevation: 183.08 Mar  
Daily mean elevation: 183.00 10 Mar  
Instant/hourly elevation: 182.91 2100/10 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 183.25 | 12 Jan |
| 183.18 | 16 Feb |
| 183.14 | 17 Mar |
| 183.18 | 27 Apr |
| 183.22 | 31 May |
| 183.33 | 22 Jun |
| 183.37 | 21 Jul |
| 183.39 | 13 Aug |
| 183.38 | 7 Sep  |
| 183.37 | 18 Oct |
| 183.36 | 3 Nov  |
| 183.29 | 26 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 183.07 | 25 Jan |
| 183.06 | 29 Feb |
| 183.00 | 10 Mar |
| 183.04 | 6 Apr  |
| 183.12 | 8 May  |
| 183.23 | 1 Jun  |
| 183.29 | 15 Jul |
| 183.29 | 30 Aug |
| 183.27 | 25 Sep |
| 183.23 | 28 Oct |
| 183.15 | 1 Nov  |
| 183.13 | 22 Dec |

| ~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~ |     |     |     |     |     |     |     |     |     |     |     |     | Elev.<br>(m.) | No. of days<br>above elev. |
|---------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| Elev.<br>(m.)                                           | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |               |                            |
| 183.35                                                  |     |     |     |     |     |     | 3   | 13  | 5   | 4   | 1   |     | 183.35        | 26                         |
| 183.30                                                  |     |     |     |     |     | 9   | 26  | 17  | 11  | 14  | 4   |     | 183.30        | 107                        |
| 183.25                                                  |     |     |     |     |     | 15  | 2   | 1   | 14  | 12  | 11  | 5   | 183.25        | 167                        |
| 183.20                                                  | 5   |     |     |     | 6   | 3   |     |     |     | 1   | 10  | 14  | 183.20        | 206                        |
| 183.15                                                  | 10  | 4   |     | 3   | 23  |     |     |     |     |     | 3   | 9   | 183.15        | 258                        |
| 183.10                                                  | 11  | 20  | 9   | 9   | 2   |     |     |     |     |     | 1   | 3   | 183.10        | 313                        |
| 183.05                                                  | 5   | 5   | 17  | 15  |     |     |     |     |     |     |     |     | 183.05        | 355                        |
| 183.00                                                  |     |     | 4   | 3   |     |     |     |     |     |     |     |     | 183.00        | 362                        |
| 182.95                                                  |     |     | 1   |     |     |     |     |     |     |     |     |     | 182.95        | 363                        |

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9070: Two Harbors, Minnesota on Lake Superior

| Day  | Jan     | Feb     | Mar     | Apr     | May     | Jun     | Jul     | Aug     | Sep     | Oct     | Nov     | Dec     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1    | 183.22  | 183.14  | 183.07  | 183.07  | 183.12  | 183.23* | 183.32  | 183.36  | 183.37  | 183.31  | 183.15  | 183.23  |
| 2    | 183.18  | 183.18  | 183.07  | 183.08  | 183.16  | /       | 183.34  | 183.34  | 183.34  | 183.28  | 183.25  | 183.29  |
| 3    | 183.15  | 183.11  | 183.10  | 183.08  | 183.17  | /       | 183.32  | 183.34  | 183.32  | 183.26  | 183.36  | 183.16  |
| 4    | 183.19  | 183.14  | 183.12  | 183.07  | 183.17  | /       | 183.31  | 183.34  | 183.32  | 183.32  | 183.26  | 183.18  |
| 5    | 183.19  | 183.12  | 183.08  | 183.05  | 183.18  | 183.25* | 183.32  | 183.35  | 183.32  | 183.34  | 183.25  | 183.22  |
| 6    | 183.21  | 183.11  | 183.08  | 183.04  | 183.19  | 183.27  | 183.29  | 183.34  | 183.36  | 183.33  | 183.29  | 183.20  |
| 7    | 183.17  | 183.10  | 183.11  | 183.09  | 183.16  | 183.27  | 183.32  | 183.36  | 183.38  | 183.33  | 183.35  | 183.18  |
| 8    | 183.16  | 183.09  | 183.08  | 183.11  | 183.12  | 183.25  | 183.36  | 183.36  | 183.33  | 183.30  | 183.31  | 183.22  |
| 9    | 183.16  | 183.13  | 183.06  | 183.12  | 183.16  | 183.27  | 183.34  | 183.34  | 183.31  | 183.29  | 183.30  | 183.24  |
| 10   | 183.17  | 183.12  | 183.00  | 183.11  | 183.22  | 183.26  | 183.33  | 183.36  | 183.32  | 183.31  | 183.29  | 183.23  |
| 11   | 183.21  | 183.11  | 183.02  | 183.12  | 183.17  | 183.28  | 183.31  | 183.38  | 183.31  | 183.32  | 183.27  | 183.26  |
| 12   | 183.25  | 183.18  | 183.10  | 183.16  | 183.18  | 183.31  | 183.32  | 183.38  | 183.37  | 183.32  | 183.29  | 183.21  |
| 13   | 183.22  | 183.15  | 183.09  | 183.14  | 183.19  | 183.28  | 183.34  | 183.39  | 183.29  | 183.31  | 183.32  | 183.25  |
| 14   | 183.18  | 183.11  | 183.12  | 183.08  | 183.18  | 183.30  | 183.35  | 183.38  | 183.30  | 183.33  | 183.34  | 183.26  |
| 15   | 183.10  | 183.18  | 183.08  | 183.07  | 183.19  | 183.32  | 183.29  | 183.35  | 183.28  | 183.37  | 183.20  | 183.25  |
| 16   | 183.11  | 183.18  | 183.09  | 183.07  | 183.20  | 183.32  | 183.32  | 183.37  | 183.29  | 183.35  | 183.17  | 183.22  |
| 17   | 183.11  | 183.14  | 183.14  | 183.05  | 183.21  | 183.30* | 183.31  | 183.37  | 183.30  | 183.29  | 183.26  | 183.26  |
| 18   | 183.11  | 183.14  | 183.08  | 183.08  | 183.18  | 183.28* | 183.33  | 183.35  | 183.27  | 183.37  | 183.24  | 183.20  |
| 19   | 183.12  | 183.12  | 183.08  | 183.09  | 183.18  | 183.30  | 183.33  | 183.35  | 183.29  | 183.36  | 183.24  | 183.18  |
| 20   | 183.10  | 183.11  | 183.07  | 183.09  | 183.20  | 183.31  | 183.34  | 183.36  | 183.27  | 183.27  | 183.25  | 183.24  |
| 21   | 183.10  | 183.15  | 183.05  | 183.12  | 183.22  | 183.32  | 183.37  | 183.34* | 183.35  | 183.28  | 183.27  | 183.25  |
| 22   | 183.17  | 183.13  | 183.04  | 183.11  | 183.19  | 183.33  | 183.36  | 183.31  | 183.32  | 183.26  | 183.21  | 183.13  |
| 23   | 183.18  | 183.12  | 183.09  | 183.09  | 183.18  | 183.29  | 183.32  | 183.33  | 183.27  | 183.26  | 183.22  | 183.19  |
| 24   | 183.10  | 183.11  | 183.11  | 183.11  | 183.22  | 183.26  | 183.33  | 183.35  | 183.37  | 183.29  | 183.25  | 183.15  |
| 25   | 183.07  | 183.11  | 183.12  | 183.10  | 183.20  | 183.30  | 183.33  | 183.34  | 183.27  | 183.32  | 183.28  | 183.15  |
| 26   | 183.14  | 183.10  | 183.12  | 183.17  | 183.19  | 183.32  | 183.33  | 183.35  | 183.28  | 183.32  | 183.30  | 183.29  |
| 27   | 183.12  | 183.11* | 183.11  | 183.18  | 183.21  | 183.29  | 183.34  | 183.36  | 183.31  | 183.30  | 183.27  | 183.25  |
| 28   | 183.13  | 183.08* | 183.11  | 183.09  | 183.20  | 183.30  | 183.34  | 183.36  | 183.28  | 183.23  | 183.18  | 183.25  |
| 29   | 183.13  | 183.06  | 183.06  | 183.13  | 183.18  | 183.31  | 183.33  | 183.32  | 183.30  | 183.31  | 183.24  | 183.16  |
| 30   | 183.11  |         | 183.05  | 183.07  | 183.19  | 183.32  | 183.34  | 183.29  | 183.30  | 183.26  | 183.24  | 183.18  |
| 31   | 183.15  |         | 183.07  |         | 183.22  |         | 183.34  | 183.31  |         | 183.36  |         | 183.23  |
| MEAN | 183.15  | 183.13  | 183.08  | 183.10  | 183.18  | 183.29  | 183.33  | 183.35  | 183.31  | 183.31  | 183.26  | 183.22  |
| MAX. | 183.31  | 183.27  | 183.20  | 183.25  | 183.27  | 183.39  | 183.45  | 183.44  | 183.46  | 183.58  | 183.46  | 183.41  |
|      | 0800/12 | 0500/02 | 1300/17 | 1500/27 | 1100/24 | 0200/08 | 0300/14 | 1400/27 | 1000/12 | 0300/19 | 0100/03 | 1700/26 |
| MIN. | 182.94  | 183.02  | 182.91  | 182.98  | 183.04  | 183.15  | 183.24  | 183.22  | 183.20  | 182.97  | 183.06  | 182.97  |
|      | 0200/25 | 2000/29 | 2100/10 | 1700/30 | 0900/01 | 2200/08 | 0300/23 | 1000/30 | 0700/23 | 0200/28 | 0500/02 | 1900/16 |

\* Indicates Less than 90% of the Hourly Data Available.  
/ Indicates No Data.

ANNUAL MEAN: 183.23

ANNUAL SUMMARY OF LEVELS, 1984  
Station 9090: Grand Marais, Minnesota on Lake Superior

INTERNATIONAL  
GREAT LAKES  
DATUM (1955)

HIGHEST  
Monthly mean elevation: 183.30 Aug  
Daily mean elevation: 183.33 7 Sep  
Instant/hourly elevation: 183.57 2400/16 Oct

LOWEST  
Monthly mean elevation: 183.04 Mar  
Daily mean elevation: 183.00 10 Mar  
Instant/hourly elevation: 182.91 2100/10 Mar

HIGHEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 183.19 | 1 Jan  |
| 183.12 | 16 Feb |
| 183.07 | 26 Mar |
| 183.14 | 27 Apr |
| 183.18 | 24 May |
| 183.28 | 30 Jun |
| 183.32 | 22 Jul |
| 183.32 | 28 Aug |
| 183.33 | 7 Sep  |
| 183.32 | 31 Oct |
| 183.32 | 3 Nov  |
| 183.23 | 11 Dec |

LOWEST DAILY MEAN  
FOR EACH MONTH

| Elev.  | Date   |
|--------|--------|
| 183.06 | 25 Jan |
| 183.03 | 29 Feb |
| 183.00 | 10 Mar |
| 183.01 | 6 Apr  |
| 183.10 | 1 May  |
| 183.18 | 4 Jun  |
| 183.26 | 6 Jul  |
| 183.27 | 30 Aug |
| 183.24 | 20 Sep |
| 183.22 | 28 Oct |
| 183.17 | 16 Nov |
| 183.11 | 22 Dec |

~~~~~ FREQUENCY DISTRIBUTION OF DAILY MEAN LEVELS ~~~~~

| Elev.
(m.) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Elev.
(m.) | No. of days
above elev. |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------------------|
| 183.30 | | | | | | | 2 | 15 | 4 | 2 | 1 | | 183.30 | 24 |
| 183.25 | | | | | | 12 | 29 | 16 | 21 | 19 | 4 | | 183.25 | 125 |
| 183.20 | | | | | | 13 | | | 5 | 10 | 18 | 8 | 183.20 | 179 |
| 183.15 | 7 | | | | 8 | 5 | | | | | 7 | 18 | 183.15 | 224 |
| 183.10 | 11 | 5 | | 1 | 22 | | | | | | | 5 | 183.10 | 268 |
| 183.05 | 13 | 23 | 9 | 8 | 1 | | | | | | | | 183.05 | 322 |
| 183.00 | | 1 | 21 | 21 | | | | | | | | | 183.00 | 365 |
| 182.95 | | | 1 | | | | | | | | | | 182.95 | 366 |

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1984

Station 9090: Grand Marais, Minnesota on Lake Superior

| Day | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1 | 183.19 | 183.10 | 183.04 | 183.04 | 183.10 | 183.18 | 183.28 | 183.30 | 183.31 | 183.27 | 183.18 | 183.19 |
| 2 | 183.17 | 183.12 | 183.03 | 183.03 | 183.12 | 183.18 | 183.29 | 183.30 | 183.29 | 183.26 | 183.24 | 183.23 |
| 3 | 183.14 | 183.08 | 183.06 | 183.03 | 183.12 | 183.18 | 183.29 | 183.29 | 183.28 | 183.23 | 183.32 | 183.17 |
| 4 | 183.16 | 183.09 | 183.07 | 183.02 | 183.12 | 183.18 | 183.29 | 183.29 | 183.28 | 183.27 | 183.25 | 183.18 |
| 5 | 183.17 | 183.07 | 183.04 | 183.01 | 183.13 | 183.20 | 183.29 | 183.30 | 183.28 | 183.29 | 183.23 | 183.20 |
| 6 | 183.16 | 183.07 | 183.04 | 183.01 | 183.13 | 183.21 | 183.26 | 183.29 | 183.31 | 183.28 | 183.25 | 183.18 |
| 7 | 183.15 | 183.07 | 183.06 | 183.03 | 183.13 | 183.22 | 183.29 | 183.30 | 183.33 | 183.27 | 183.28 | 183.16 |
| 8 | 183.13 | 183.07 | 183.04 | 183.04 | 183.12 | 183.22 | 183.30 | 183.32 | 183.30 | 183.25 | 183.26 | 183.18 |
| 9 | 183.14 | 183.09 | 183.04 | 183.05 | 183.13 | 183.22 | 183.30 | 183.32 | 183.29 | 183.25 | 183.25 | 183.20 |
| 10 | 183.14 | 183.08 | 183.00 | 183.04 | 183.17 | 183.22 | 183.29 | 183.31 | 183.28 | 183.26 | 183.23 | 183.19 |
| 11 | 183.15 | 183.07 | 183.01 | 183.05 | 183.14 | 183.24 | 183.28 | 183.32 | 183.28 | 183.26 | 183.23 | 183.23 |
| 12 | 183.18 | 183.11 | 183.05 | 183.06 | 183.14 | 183.25 | 183.29 | 183.32 | 183.31 | 183.27 | 183.24 | 183.18 |
| 13 | 183.16 | 183.11 | 183.05 | 183.05 | 183.15 | 183.24 | 183.29 | 183.32 | 183.26 | 183.27 | 183.26 | 183.19 |
| 14 | 183.13 | 183.09 | 183.07 | 183.03 | 183.13 | 183.25 | 183.29 | 183.32 | 183.26 | 183.27 | 183.29 | 183.21 |
| 15 | 183.11 | 183.11 | 183.04 | 183.03 | 183.14 | 183.27 | 183.27 | 183.31 | 183.25 | 183.29 | 183.22 | 183.21 |
| 16 | 183.10 | 183.12 | 183.04 | 183.03 | 183.15 | 183.27 | 183.29 | 183.31 | 183.27 | 183.30 | 183.17 | 183.19 |
| 17 | 183.10 | 183.09 | 183.06 | 183.02 | 183.17 | 183.26 | 183.29 | 183.31 | 183.28 | 183.28 | 183.22 | 183.20 |
| 18 | 183.10 | 183.09 | 183.04 | 183.04 | 183.15 | 183.25 | 183.30 | 183.30 | 183.25 | 183.29 | 183.20 | 183.18 |
| 19 | 183.10 | 183.08 | 183.04 | 183.05 | 183.14 | 183.25 | 183.30 | 183.31 | 183.26 | 183.32 | 183.20 | 183.17 |
| 20 | 183.09 | 183.08 | 183.03 | 183.04 | 183.15 | 183.26 | 183.30 | 183.31 | 183.24 | 183.25 | 183.22 | 183.21 |
| 21 | 183.10 | 183.10 | 183.01 | 183.06 | 183.17 | 183.27 | 183.32 | 183.31 | 183.29 | 183.25 | 183.24 | 183.22 |
| 22 | 183.12 | 183.10 | 183.02 | 183.06 | 183.17 | 183.28 | 183.32 | 183.28 | 183.29 | 183.24 | 183.18 | 183.11 |
| 23 | 183.13 | 183.09 | 183.05 | 183.05 | 183.15 | 183.26 | 183.28 | 183.29 | 183.25 | 183.23 | 183.20 | 183.16 |
| 24 | 183.09 | 183.08 | 183.06 | 183.06 | 183.18 | 183.23 | 183.29 | 183.30 | 183.26 | 183.25 | 183.22 | 183.15 |
| 25 | 183.06 | 183.07 | 183.06 | 183.06 | 183.15 | 183.26 | 183.29 | 183.30 | 183.25 | 183.26 | 183.23 | 183.13 |
| 26 | 183.09 | 183.06 | 183.07 | 183.10 | 183.16 | 183.28 | 183.29 | 183.30 | 183.26 | 183.27 | 183.25 | 183.21 |
| 27 | 183.08 | 183.07 | 183.06 | 183.14 | 183.16 | 183.25 | 183.29 | 183.31 | 183.27 | 183.30 | 183.24 | 183.22 |
| 28 | 183.10 | 183.06 | 183.05 | 183.08 | 183.15 | 183.26 | 183.30 | 183.32 | 183.26 | 183.22 | 183.18 | 183.19 |
| 29 | 183.09 | 183.03 | 183.02 | 183.08 | 183.14 | 183.27 | 183.29 | 183.29 | 183.27 | 183.27 | 183.21 | 183.15 |
| 30 | 183.08 | | 183.02 | 183.05 | 183.15 | 183.28 | 183.30 | 183.27 | 183.27 | 183.23 | 183.21 | 183.15 |
| 31 | 183.11 | | 183.03 | | 183.17 | | 183.30 | 183.29 | | 183.32 | | 183.17 |
| MEAN | 183.12 | 183.08 | 183.04 | 183.05 | 183.14 | 183.24 | 183.29 | 183.30 | 183.28 | 183.27 | 183.23 | 183.18 |
| MAX. | 183.27 | 183.24 | 183.12 | 183.33 | 183.25 | 183.35 | 183.42 | 183.41 | 183.41 | 183.57 | 183.44 | 183.35 |
| MIN. | 0100/05 | 0900/02 | 0500/17 | 1200/27 | 2400/12 | 0100/08 | 1200/22 | 1400/29 | 0600/25 | 2400/16 | 0900/03 | 0800/27 |
| | 182.95 | 183.00 | 182.91 | 182.95 | 183.04 | 183.15 | 183.22 | 183.20 | 183.11 | 183.04 | 183.09 | 183.01 |
| | 0400/25 | 2000/29 | 2100/10 | 0800/30 | 0900/01 | 0400/06 | 0100/23 | 0200/30 | 0200/24 | 0100/28 | 2100/01 | 0300/30 |

* Indicates Less than 90% of the Hourly Data Available.

/ Indicates No Data.

ANNUAL MEAN: 183.18

Monthly Water Level Stages - Lake Ontario at Oswego

1900 thru Dec 1984

NOAA/NOS
WSC-1 N/DMA12
Great Lakes Water Levels
Rockville, Maryland 20852

Levels in Meters above
IGLD (1955)
~~~~~  
Chart Datum 74.0

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1946	1952	1952	1973	1952	1952	1947	1947	1947	1945	1945	1945
HIGH	75.01	75.12	75.22	75.50	75.58	75.61	75.51	75.42	75.26	75.08	75.04	75.04
MEAN	74.38	74.41	74.49	74.70	74.82	74.86	74.83	74.73	74.59	74.48	74.40	74.37
	1935	1936	1935	1935	1935	1935	1934	1934	1934	1934	1934	1934
LOW	73.66	73.64	73.79	73.88	73.97	74.04	73.99	73.84	73.74	73.68	73.59	73.60

1900 thru 1984 mean 74.59



# Monthly Water Level Stages - Lake Erie at Cleveland

1900 thru Dec 1984

NOAA/NOS  
WSC-1 N/DMA12  
Great Lakes Water Levels  
Rockville, Maryland 20852

Levels in Meters above  
IGLD (1955)  
~~~~~  
Chart Datum 173.3

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1973 | 1972 | 1972 |
| HIGH | 174.46 | 174.51 | 174.61 | 174.74 | 174.73 | 174.81 | 174.75 | 174.66 | 174.50 | 174.39 | 174.40 | 174.45 |
| MEAN | 173.70 | 173.70 | 173.77 | 173.94 | 174.03 | 174.07 | 174.06 | 174.00 | 173.91 | 173.82 | 173.73 | 173.71 |
| | 1935 | 1936 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 | 1934 |
| LOW | 173.01 | 172.97 | 173.02 | 173.19 | 173.26 | 173.27 | 173.27 | 173.24 | 173.20 | 173.11 | 173.00 | 172.98 |

1900 thru 1984 mean 173.87

Monthly Water Level Stages - Lake St. Clair at St. Clair Shores

1900 thru Dec 1984

NOAA/NOS
WSC-1 N/DMA12
Great Lakes Water Levels
Rockville, Maryland 20852

Levels in Meters above
IGLD (1955)
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Chart Datum 174.2

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1974	1974	1973	1973	1974	1973	1973	1973	1973	1973	1972	1972
HIGH	175.37	175.38	175.49	175.54	175.58	175.63	175.63	175.57	175.47	175.37	175.31	175.32
MEAN	174.56	174.48	174.61	174.78	174.87	174.93	174.95	174.91	174.85	174.76	174.67	174.67
	1936	1926	1934	1901	1934	1934	1934	1934	1934	1934	1934	1925
LOW	173.69	173.70	173.86	174.07	174.24	174.27	174.31	174.22	174.15	174.08	173.99	174.06

1900 thru 1984 mean 174.75

# Monthly Water Level Stages - Lake Huron-Michigan at Harbor Beach

1900 thru Dec 1984

NOAA/NOS  
WSC-1 N/DMA12  
Great Lakes Water Levels  
Rockville, Maryland 20852

Levels in Meters above  
IGLD (1955)  
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Chart Datum 175.8

| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 1973 | 1952 | 1973 | 1973 | 1973 | 1973 | 1974 | 1973 | 1952 | 1973 | 1973 | 1973 |
| HIGH | 176.76 | 176.76 | 176.78 | 176.88 | 176.97 | 177.06 | 177.10 | 177.09 | 177.02 | 176.92 | 176.84 | 176.77 |
| MEAN | 176.12 | 176.11 | 176.13 | 176.21 | 176.30 | 176.37 | 176.41 | 176.40 | 176.35 | 176.29 | 176.22 | 176.17 |
| | 1965 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 | 1964 |
| LOW | 175.38 | 175.39 | 175.37 | 175.37 | 175.50 | 175.53 | 175.55 | 175.56 | 175.55 | 175.49 | 175.43 | 175.38 |

1900 thru 1984 mean 176.26

Monthly Water Level Stages - Lake Superior at Marquette

1900 thru Dec 1984

NOAA/NOS
WSC-1 N/QMA12
Great Lakes Water Levels
Rockville, Maryland 20852

Levels in Meters above
IGLD (1955)
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Chart Datum 182.9

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	1975	1975	1975	1951	1951	1951	1950	1950	1916	1951	1974	1974
HIGH	183.29	183.24	183.18	183.23	183.35	183.38	183.46	183.50	183.47	183.47	183.43	183.35
MEAN	182.99	182.93	182.89	182.90	183.00	183.09	183.16	183.19	183.20	183.18	183.14	183.07
	1926	1926	1926	1926	1926	1926	1926	1926	1926	1925	1925	1925
LOW	182.45	182.38	182.37	182.34	182.36	182.46	182.57	182.62	182.72	182.72	182.63	182.56

1900 thru 1984 mean 183.06