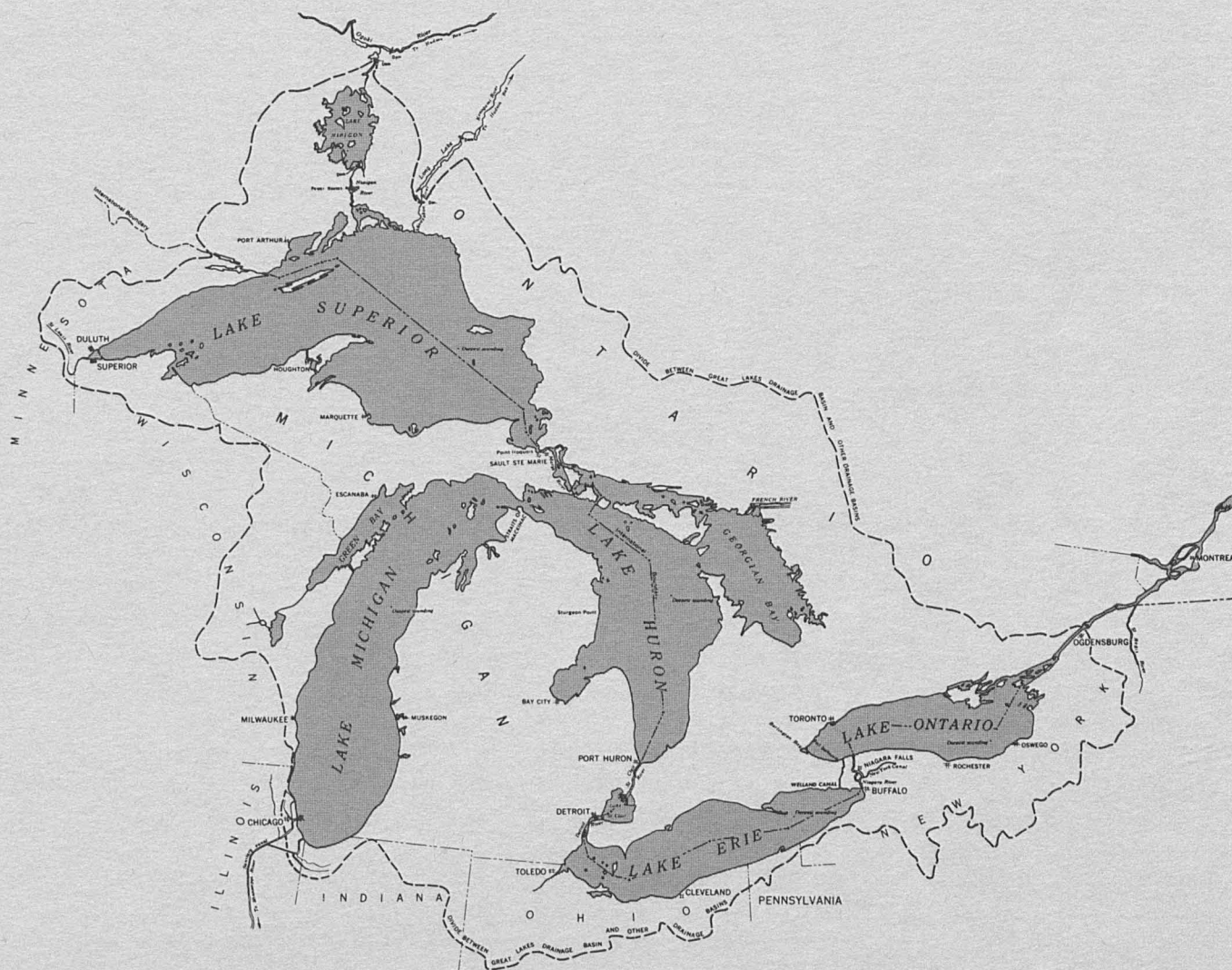




Great Lakes Water Levels, 1977

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



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

GENERAL: This annual publication contains Great Lakes water level gage records. It shows for the calendar year, in tabular form, daily and monthly average levels for each gage in the network, the highest and lowest daily average level for each month, and a frequency distribution of daily average levels showing the number of times each month the recorded levels were at, or above, a specific elevation. The gages record water levels in either analog or digital form on strip charts retained by the National Ocean Survey. Recorded hourly values are used to compute the daily averages, and the monthly values are derived from the daily averages. 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, 1860-1975). A hydrograph depicting master control gage data for each lake is available free of charge by writing: Distribution Division, C44, National Ocean Survey, Riverdale, Maryland 20840.

DATUM OF REFERENCE: All tabulated elevations, in feet, are referred to the International Great Lakes Datum (1955). An explanation of the datum can be obtained by writing the National Ocean Survey, Tides and Water Levels Branch, C3314, 6001 Executive Boulevard, Rockville, Maryland 20852.

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STATION NUMBER AND LOCATION		LATITUDE NORTH			LONGITUDE WEST			PAGE NUMBER
<u>ST. LAWRENCE RIVER</u>		°	'	"	°	'	"	
1030	Ogdensburg, New York	44	42	10	75	29	40	1
2000	Cape Vincent, New York	44	07	45	76	20	15	3
<u>LAKE ONTARIO (CHART DATUM 242.8)</u>								
2030	OSWEGO, NEW YORK	43	27	51	76	30	42	5
2058	Rochester, New York	43	16	10	77	37	34	7
2076	Olcott, New York	43	20	17	78	43	39	9
<u>NIAGARA RIVER</u>								
3007	Ashland Avenue, Niagara Falls, New York	43	06	00	79	03	35	11
3009	American Falls, Niagara Falls, New York	43	04	54	79	03	42	13
3012	Niagara Intake, Niagara Falls, New York	43	04	40	79	00	55	15
3117	Ontario Street, Buffalo, New York	42	56	35	78	54	37	17
<u>LAKE ERIE (CHART DATUM 568.6)</u>								
3020	Buffalo, New York	42	52	39	78	53	27	19
3028	Sturgeon Point, New York	42	41	27	79	02	52	21
3032	Barcelona, New York	42	20	35	79	35	50	23
3038	Erie, Pennsylvania	42	09	15	80	04	32	25
3053	Fairport, Ohio	41	45	00	81	17	00	27
3063	CLEVELAND, OHIO	41	32	27	81	38	08	29
3079	Marblehead, Ohio	41	32	40	82	43	53	31
3085	Toledo, Ohio	41	41	36	83	28	20	33
3087	Monroe, Michigan	41	53	54	83	21	42	35
3090	Fermi Power Plant, Stony Point, Michigan	41	57	35	83	15	30	37
<u>DETROIT RIVER</u>								
4020	Gibraltar, Michigan	42	05	30	83	11	10	39
4030	Wyandotte, Michigan	42	12	12	83	08	50	41
4036	Fort Wayne, Detroit, Michigan	42	17	53	83	05	34	43
4049	Windmill Point, Detroit, Michigan	42	21	26	82	55	45	45
<u>LAKE ST. CLAIR (CHART DATUM 571.7)</u>								
4052	ST. CLAIR SHORES, MICHIGAN	42	28	24	82	52	45	47

NOTE: Locations shown in CAPITAL letters are master gages

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STATION NUMBER AND LOCATION		LATITUDE NORTH			LONGITUDE WEST			PAGE NUMBER
<u>ST. CLAIR RIVER</u>		°	'	"	°	'	"	
4070	Algonac, Michigan	42	37	15	82	31	37	49
4080	St. Clair S.P., St. Clair, Michigan	42	48	45	82	29	09	51
4084	Marysville, Michigan	42	54	22	82	27	58	53
4087	Dry Dock, Port Huron, Michigan	42	56	43	82	26	37	55
4090	Mouth of the Black River, Port Huron, MI	42	58	25	82	25	16	57
4096	Dunn Paper Company, Port Huron, MI	43	00	12	82	25	20	59
4098	Fort Gratiot, Port Huron, MI	43	00	23	82	25	21	61
<u>LAKE HURON (CHART DATUM 576.8)</u>								
5002	Lakeport, Michigan	43	08	30	82	29	35	63
5014	HARBOR BEACH, MICHIGAN	43	50	45	82	38	38	65
5034	Essexville, Michigan	43	38	29	83	50	48	67
5059	Harrisville, Michigan	44	39	34	83	17	11	69
5080	Mackinaw City, Michigan	45	46	40	84	43	10	71
5098	DeTour, Michigan	46	01	00	83	55	15	73
<u>ST. MARY'S RIVER</u>								
6050	Frechette Point, Michigan	46	27	40	84	17	10	75
6060	U.S. Slip below locks, Sault Ste. Marie, MI	46	30	03	84	20	24	77
6070	S.W. Pier above locks, Sault Ste. Marie, MI	46	30	05	84	22	21	79
<u>LAKE MICHIGAN (CHART DATUM 576.8)</u>								
7023	Ludington, Michigan	43	56	48	86	26	30	81
7031	Holland, Michigan	42	46	05	86	12	06	83
7044	Calumet Harbor, S. Chicago, Illinois	41	43	48	87	32	18	85
7057	Milwaukee, Wisconsin	43	00	05	87	53	13	87
7068	Kewaunee, Wisconsin	44	27	48	87	30	00	89
7072	Sturgeon Bay Canal, Wisconsin	44	47	40	87	18	48	91
7078	Green Bay, Wisconsin	44	32	27	88	00	30	93
7096	Port Inland, Michigan	45	58	10	85	52	20	95
<u>LAKE SUPERIOR (CHART DATUM 600.0)</u>								
9004	POINT IROQUOIS, MICHIGAN	46	29	06	84	37	52	97
9016	Marquette, Michigan	46	32	29	87	23	26	99
9044	Ontonagon, Michigan	46	52	40	89	19	15	101
9064	Duluth, Minnesota	46	46	32	92	05	34	103
9070	Two Harbors, Minnesota	47	01	03	91	40	30	105
9090	Grand Marais, Minnesota	47	44	53	90	20	30	107

ANNUAL SUMMARY OF LEVELS, 1977
Station 1030: Ogdensburg, New York on St. Lawrence River

HIGHEST		
Monthly mean elevation:	244.39	Jul 1977
Daily mean elevation:	245.22	25 Dec 1977
Instant/hourly Elevation:	246.12	1000/25 Dec 1977

Monthly mean elevation: 242.92 Feb 1977
Daily mean elevation: 242.52 24 Feb 1977
Instant/hourly Elevation: 242.25 2100/5 Dec 1977

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
242.92	10 Jan
242.52	24 Feb
242.61	4 Mar
243.87	4 Apr
243.82	9 May
243.95	9 Jun
244.19	7 Jul
244.08	30 Aug
243.43	20 Sep
243.52	30 Oct
242.97	7 Nov
243.09	6 Dec

Elev. (ft.)	FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977	Elev. (ft.)	No. of days above elev.
	Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec		
245.20		1	1
245.00		3	4
244.80		4	8
244.60		1	13
244.40		2	49
244.20		4	125
244.00		5	189
243.80		3	239
243.60		5	267
243.40		1	288
243.20		2	305
243.00		2	339
242.80		1	360
242.60			363
242.40			365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

		Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.
1-10 Jan			243.44	243.35	243.24	243.24	243.13	243.06	243.17	243.08	243.08	242.92			
11-20 Jan			243.38	243.27	243.15	243.06	243.18	243.33	243.23	243.24	243.21	243.21			
21-31 Jan	243.19		243.11	243.11	243.11	243.05	243.01	243.05	243.21	243.07	243.37	243.38	243.45	0100/11	243.81 1000/10 242.56
1-10 Feb			243.17	242.97	243.02	243.00	243.06	243.18	243.13	243.00	242.92	242.87			
11-20 Feb			242.89	242.86	242.92	243.05	242.98	242.91	242.88	242.78	242.84	242.91			
21-28 Feb	242.92		243.00	242.78	242.55	242.52	242.83	242.87	242.87	243.06				0800/1	243.34 0900/24 242.35
1-10 Mar			243.00	243.02	242.86	242.61	243.02	243.15	243.10	243.06	243.03	243.08			
11-20 Mar			243.14	243.14	243.26	243.55	243.55	243.89	244.00	243.33	243.81	243.71			
21-31 Mar	243.49		243.95	243.47	243.82	244.11	244.00	243.96	243.85	243.79	243.91	244.00	244.15	0900/24	244.32 1800/4 242.43
1-10 Apr			244.10	243.93	244.48	243.87	244.30	244.80	244.31	244.50	244.41	244.23			
11-20 Apr			244.18	244.20	244.23	244.20	244.21	244.20	244.15	244.13	244.09	244.08			
21-30 Apr	244.24		244.10	244.11	243.94	243.99	244.16	244.33	244.44	244.45	244.63	244.52		0900/3	245.36 2200/4 243.41
1-10 May			244.40	244.49	244.34	244.27	244.31	244.50	244.33	244.22	243.82	244.20			
11-20 May			244.34	244.47	244.34	244.28	244.31	244.38	244.44	244.35	244.29	244.29			
21-31 May	244.27		244.25	244.25	244.24	244.25	244.25	244.18	244.24	244.10	244.01	244.10	244.09	1600/6	244.80 0200/9 243.32
1-10 Jun			244.18	244.23	244.21	244.25	244.17	244.09	244.09	244.18	243.95	244.00			
11-20 Jun			244.08	244.10	244.08	244.01	244.00	244.02	244.15	244.10	244.28	244.23			
21-30 Jun	244.17		244.20	244.16	244.16	244.11	244.17	244.25	244.24	244.23	244.55	244.51		1700/29	244.85 2100/9 243.88
1-10 Jul			244.68	244.59	244.41	244.45	244.34	244.21	244.19	244.41	244.40	244.27			
11-20 Jul			244.25	244.34	244.50	244.42	244.44	244.41	244.50	244.43	244.47	244.51			
21-31 Jul	244.39		244.44	244.21	244.40	244.51	244.45	244.28	244.37	244.30	244.34	244.32	244.20	1100/1	244.96 2100/30 244.08
1-10 Aug			244.35	244.32	244.27	244.33	244.33	244.40	244.36	244.42	244.30	244.24			
11-20 Aug			244.34	244.46	244.40	244.40	244.40	244.17	244.48	244.60	244.46	244.52			
21-31 Aug	244.36		244.35	244.69	244.56	244.39	244.31	244.28	244.33	244.33	244.32	244.08	244.09	0700/22	245.00 0700/30 243.51
1-10 Sep			244.28	244.23	244.13	244.07	244.12	244.05	243.92	243.86	244.04	244.31			
11-20 Sep			243.95	243.93	243.87	243.98	243.85	243.92	243.98	243.94	243.83	243.43			
21-30 Sep	243.96		243.79	243.80	243.77	243.58	243.76	244.00	244.29	244.08	244.04	244.08		1200/27	244.50 1100/20 243.22
1-10 Oct			243.56	243.85	243.97	244.07	244.18	244.20	243.87	243.87	244.16	244.17			
11-20 Oct			244.03	244.28	243.97	243.84	243.89	243.81	243.70	243.84	243.83	243.83			
21-31 Oct	243.88		244.02	243.95	243.73	243.76	243.78	243.88	243.77	243.74	243.57	243.52	243.57	2300/11	244.69 2000/1 243.14
1-10 Nov			243.71	243.61	243.53	243.52	243.14	243.26	242.97	243.30	243.46	243.64			
11-20 Nov			244.20	243.81	243.54	243.67	243.71	243.78	243.76	244.04	243.91	243.59			
21-30 Nov	243.64		243.97	243.77	243.47	243.98	243.56	243.78	243.74	243.59	243.61	243.45		2300/11	244.66 0900/7 242.80
1-10 Dec			243.72	244.40	244.04	243.89	243.12	243.09	243.65	243.57	244.19	243.80			
11-20 Dec			243.76	243.89	243.80	244.06	244.26	244.32	244.03	243.89	244.14	244.21			
21-31 Dec	244.25		244.56	244.96	245.09	244.82	245.22	245.15	245.01	245.00	244.87	244.75	244.53	1000/25	246.12 2100/5 242.25

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 2000: Cape Vincent, New York on St. Lawrence River

1977 YEARLY MEAN ELEVATION: 244.78 FEET

HIGHEST
Monthly mean elevation: 245.09 Aug 1977
Daily mean elevation: 245.28 22 Aug 1977
Instant/hourly Elevation: 245.61 2300/19 Aug 1977

LOWEST
Monthly mean elevation: 244.46 Mar 1977
Daily mean elevation: 244.08 15 Mar 1977
Instant/hourly Elevation: 243.60 2100/5 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
	Feb
244.81	31 Mar
245.10	8 Apr
	May
	Jun
245.13	21 Jul
245.28	22 Aug
245.07	30 Sep
244.94	15 Oct
244.96	11 Nov
244.89	1 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
	Feb
244.08	15 Mar
244.63	4 Apr
	May
	Jun
244.93	31 Jul
244.97	30 Aug
244.64	24 Sep
244.59	30 Oct
244.32	7 Nov
244.13	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
245.20								3					245.20	3
245.00				3			11	23	4				245.00	44
244.80				8			2	5	16	10	1	1	244.80	88
244.60			1	3					10	7	6	1	244.60	119
244.40			5							2	17	3	244.40	146
244.20			5								5		244.20	156
244.00			2									1	244.00	159

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 2000: Cape Vincent, New York on St. Lawrence River

		Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			/	/	/	/	/	/	/	/	/	/	/					
11-20 Jan			/	/	/	/	/	/	/	/	/	/	/					
21-31 Jan			/	/	/	/	/	/	/	/	/	/	/			/		
1-10 Feb			/	/	/	/	/	/	/	/	/	/	/					
11-20 Feb			/	/	/	/	/	/	/	/	/	/	/					
21-28 Feb			/	/	/	/	/	/	/	/	/	/	/					
1-10 Mar			/	/	/	/	/	/	/	/	/	/	/					
11-20 Mar			/	/	/	/	244.08	244.29	244.33	244.14	244.38	244.38						
21-31 Mar	244.46		244.43	244.26	244.60	244.72	244.62	244.58	244.50	244.51	244.61	244.62	244.81	1400/31	244.99	1000/18	243.82	
1-10 Apr			244.71	244.71	244.93	244.63	245.06	245.02	244.90	245.10	245.00	244.90						
11-20 Apr			244.88		/	/	/	/	/	/	244.95	244.93						
21-30 Apr	244.90		244.95	/	/	/	/	/	/	/	/	/		0600/3	245.49	1800/4	244.34	
1-10 May			/	/	/	/	/	/	/	/	/	/	/					
11-20 May			/	/	/	/	/	/	/	/	/	/	/					
21-31 May			/	/	/	/	/	/	/	/	/	/	/			/		
1-10 Jun			/	/	/	/	/	/	/	/	/	/	/					
11-20 Jun			/	/	/	/	/	/	/	/	/	/	/					
21-30 Jun			/	/	/	/	/	/	/	/	/	/	/					
1-10 Jul			/	/	/	/	/	/	/	/	/	/	/					
11-20 Jul			/	/	/	/	/	/	/	/	245.10	245.12						
21-31 Jul	245.05		245.13	245.01	245.07	245.09	245.12	245.04	245.07	244.99	245.02	245.01	244.93	1100/21	245.26	0300/31	244.85	
1-10 Aug			245.04	244.98	244.98	245.00	245.02	245.07	245.04	245.09	245.03	245.06						
11-20 Aug			245.10	245.12	245.08	245.14	245.11	245.03	245.24	245.25	245.20	245.18						
21-31 Aug	245.09		245.10	245.28	245.17	245.13	245.10	245.07	245.07	245.04	245.04	244.97	244.97	2300/19	245.61	1500/16	244.80	
1-10 Sep			245.03	245.00	244.99	244.93	244.95	244.92	244.82	244.79	244.86	244.96						
11-20 Sep			244.77	244.77	244.73	244.82	244.75	244.84	244.85	244.81	244.76	244.70						
21-30 Sep	244.86		244.81	244.78	244.74	244.64	244.88	244.98	245.02	245.01	244.96	245.07		2400/1	245.20	1900/24	244.47	
1-10 Oct			244.85	/	/	/	/	/	/	/	/	/	/					
11-20 Oct			/	/	/	244.93	244.94	244.90	244.89	244.86	244.90	244.90						
21-31 Oct	244.81		244.93	244.89	244.77	244.79	244.79	244.79	244.75	244.70	244.62	244.59	244.59	0600/16	245.07	1700/31	244.50	
1-10 Nov			244.60	244.56	244.53	244.55	244.41	244.42	244.32	244.49	244.54	244.67						
11-20 Nov			244.96	244.61	244.38	244.39	244.44	244.43	244.48	244.67	244.50	244.38						
21-30 Nov	244.52		244.66	244.45	244.65	244.53	244.59	244.45	244.47	244.36	244.62	/		0500/29	245.34	2400/28	244.16	
1-10 Dec			244.89	244.79	244.56	244.51	244.13	244.50	/	/	/	/	/					
11-20 Dec			/	/	/	/	/	/	/	/	/	/	/					
21-31 Dec	244.56		/	/	/	/	/	/	/	/	/	/	/		2200/1	245.35	2100/5	243.60

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 2030: Oswego, New York on Lake Ontario

1977 YEARLY MEAN ELEVATION: 244.78 FEET

HIGHEST
Monthly mean elevation: 245.21 May 1977
Daily mean elevation: 245.60 26 Dec 1977
Instant/hourly Elevation: 245.77 1100/25 Dec 1977

LOWEST
Monthly mean elevation: 243.77 Feb 1977
Daily mean elevation: 243.56 24 Feb 1977
Instant/hourly Elevation: 243.43 1200/27 Feb 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
244.33	11 Jan
244.04	1 Feb
244.91	31 Mar
245.35	28 Apr
245.39	9 May
245.08	3 Jun
245.23	21 Jul
245.32	18 Aug
245.09	29 Sep
245.27	17 Oct
244.97	26 Nov
245.60	26 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
243.85	24 Jan
243.56	24 Feb
243.69	4 Mar
244.74	2 Apr
245.00	31 May
244.88	17 Jun
244.97	31 Jul
245.01	4 Aug
244.72	24 Sep
244.62	31 Oct
244.53	7 Nov
244.61	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
245.40												7	245.40	7
245.20				7	16		1	4		3		4	245.20	42
245.00				20	14	12	27	27	11	17		2	245.00	172
244.80			2	2	1	18	3		14	8	6	12	244.80	238
244.60			8	1					5	3	21	6	244.60	282
244.40			6								3		244.40	291
244.20	1		2										244.20	294
244.00	18	1	1										244.00	314
243.80	12	9	10										243.80	345
243.60		17	2										243.60	364
243.40		1											243.40	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 2030: Oswego, New York on Lake Ontario

		Monthly means	----- Daily Means -----										HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.
1-10 Jan			244.19	244.09	244.01	244.05	244.02	243.92	244.10	243.98	243.98	243.98	
11-20 Jan			244.33	244.12	243.99	243.93	244.04	244.09	244.11	244.12	244.07	244.06	
21-31 Jan	244.03		244.01	244.03	243.90	243.85	243.93	243.92	244.04	243.94	244.07	244.04	243.97 2200/10 244.54 0800/28 243.54
1-10 Feb			244.04	243.79	243.85	243.82	243.92	243.96	243.88	243.76	243.72	243.71	
11-20 Feb			243.70	243.69	243.76	243.81	243.83	243.81	243.76	243.67	243.72	243.77	
21-28 Feb	243.77		243.79	243.69	243.61	243.56	243.75	243.75	243.69	243.83			1100/1 244.18 1200/27 243.43
1-10 Mar			243.86	243.84	243.75	243.69	243.87	243.90	243.93	243.92	243.89	243.95	
11-20 Mar			244.00	243.98	244.11	244.25	244.27	244.46	244.51	244.42	244.51	244.46	
21-31 Mar	244.31		244.58	244.65	244.77	244.86	244.80	244.70	244.66	244.62	244.70	244.76	244.91 2300/30 245.26 1600/4 243.53
1-10 Apr			244.87	244.74	245.01	244.81	245.01	245.19	245.03	245.27	245.10	245.02	
11-20 Apr			245.02	245.05	245.08	245.10	245.09	245.09	245.06	245.05	245.05	245.01	
21-30 Apr	245.09		245.03	245.07	245.17	245.24	245.26	245.24	245.18	245.35	245.32	245.26	0600/28 245.51 1500/2 244.37
1-10 May			245.24	245.32	245.29	245.26	245.26	245.29	245.30	245.33	245.39	245.32	
11-20 May			245.27	245.26	245.28	245.24	245.22	245.20	245.20	245.18	245.21	245.18	
21-31 May	245.21		245.17	245.13	245.15	245.15	245.15	245.13	245.13	245.14	245.10	245.05	245.00 0100/9 245.54 1600/31 244.90
1-10 Jun			245.02	245.07	245.08	245.04	245.07	245.08	245.08	245.01	245.01	245.01	
11-20 Jun			244.99	244.99	244.95	244.93	244.93	244.90	244.88	244.91	244.94	244.94	
21-30 Jun	244.98		245.02	244.98	244.96	244.93	244.94	244.99	244.96	244.93	245.02	244.97	1000/6 245.27 0700/1 244.72
1-10 Jul			245.03	245.06	245.00	245.01	245.02	245.02	245.05	245.10	245.11	245.08	
11-20 Jul			245.02	245.03	245.12	245.14	245.13	245.14	245.14	245.16	245.14	245.13	
21-31 Jul	245.09		245.23	245.18	245.16	245.04	245.18	245.19	245.09	245.01	244.98	245.03	244.97 2100/14 245.32 2300/31 244.76
1-10 Aug			245.05	245.05	245.02	245.01	245.04	245.12	245.10	245.12	245.10	245.05	
11-20 Aug			245.11	245.14	245.12	245.24	245.19	245.13	245.31	245.32	245.19	245.24	
21-31 Aug	245.12		245.08	245.19	245.15	245.20	245.18	245.07	245.05	245.03	245.03	245.07	245.03 1100/18 245.45 0300/1 244.80
1-10 Sep			245.02	245.05	245.06	245.03	245.05	245.01	244.95	244.88	244.78	244.96	
11-20 Sep			244.90	244.84	244.79	245.02	244.86	244.80	244.88	244.87	244.84	244.85	
21-30 Sep	244.92		244.88	244.88	244.85	244.72	244.75	244.90	245.02	245.08	245.09	245.07	1200/2 245.21 1000/13 244.54
1-10 Oct			245.14	245.20	245.26	245.23	245.09	245.19	245.11	244.91	245.14	245.19	
11-20 Oct			245.07	245.15	245.12	245.11	245.07	245.16	245.27	245.01	245.01	245.05	
21-31 Oct	245.03		245.00	245.01	244.92	244.87	244.85	244.86	244.85	244.85	244.80	244.74	244.62 0700/17 245.46 1700/5 244.38
1-10 Nov			244.61	244.62	244.60	244.68	244.65	244.58	244.53	244.65	244.69	244.73	
11-20 Nov			244.78	244.84	244.83	244.73	244.65	244.67	244.75	244.94	244.87	244.66	
21-30 Nov	244.72		244.73	244.80	244.67	244.84	244.68	244.97	244.80	244.78	244.70	244.62	2300/26 245.25 1300/23 244.40
1-10 Dec			244.70	244.86	244.81	244.82	244.61	244.91	244.94	244.73	244.97	244.95	
11-20 Dec			244.78	244.69	244.73	244.85	244.93	244.98	244.99	244.96	245.06	245.02	
21-31 Dec	245.08		245.26	245.34	245.30	245.29	245.55	245.60	245.51	245.52	245.58	245.57	245.57 1100/25 245.77 0500/1 244.33

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 2058: Rochester, New York on Lake Ontario

1977 YEARLY MEAN ELEVATION: 244.79 FEET

HIGHEST
Monthly mean elevation: 245.24 May 1977
Daily mean elevation: 245.65 31 Dec 1977
Instant/hourly Elevation: 245.76 0700/31 Dec 1977

LOWEST
Monthly mean elevation: 243.78 Feb 1977
Daily mean elevation: 243.67 24 Feb 1977
Instant/hourly Elevation: 243.41 1800/27 Feb 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
244.15	1 Jan
243.90	1 Feb
244.84	30 Mar
245.32	29 Apr
245.36	9 May
245.09	2 Jun
245.22	21 Jul
245.24	18 Aug
245.20	28 Sep
245.20	3 Oct
244.87	12 Nov
245.65	31 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
243.76	31 Jan
243.67	24 Feb
243.80	1 Mar
244.87	2 Apr
245.07	31 May
244.91	17 Jun
244.97	29 Jul
245.02	4 Aug
244.79	16 Sep
244.72	31 Oct
244.67	7 Nov
244.72	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
245.60												2	245.60	2
245.40												5	245.40	7
245.20				7	21		1	3				4	245.20	43
245.00				18	10	18	29	28	10	21		6	245.00	183
244.80			2	5		12	1		18	8	5	6	244.80	240
244.60			8						2	2	25	8	244.60	285
244.40			5										244.40	290
244.20			3										244.20	293
244.00	13		3										244.00	309
243.80	15	8	8										243.80	340
243.60	3	20	2										243.60	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 2058: Rochester, New York on Lake Ontario

		Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			244.15	244.06	244.03	244.01	244.01	244.01	244.02	244.02	244.01	243.96						
11-20 Jan			244.06	244.00	243.99	243.99	243.98	243.94	244.01	244.00	244.01	243.97						
21-31 Jan	243.96		243.96	244.01	243.93	243.90	243.89	243.88	243.83	243.77	243.79	243.81	243.76		1300/1	244.24	1500/28	243.61
1-10 Feb			243.90	243.85	243.78	243.82	243.85	243.82	243.83	243.76	243.75	243.77						
11-20 Feb			243.75	243.76	243.75	243.79	243.81	243.82	243.78	243.73	243.75	243.77						
21-28 Feb	243.78		243.76	243.73	243.74	243.67	243.73	243.73	243.77	243.79					0200/27	244.03	1800/27	243.41
1-10 Mar			243.80	243.80	243.82	243.81	243.85	243.91	243.92	243.92	243.96	243.99						
11-20 Mar			244.04	244.06	244.17	244.25	244.31	244.39	244.45	244.56	244.51	244.49						
21-31 Mar	244.33		244.58	244.70	244.72	244.77	244.77	244.75	244.74	244.73	244.75	244.84	244.83		2400/30	245.20	2300/4	243.57
1-10 Apr			244.88	244.87	244.92	244.94	244.96	245.10	245.07	245.14	245.09	245.08						
11-20 Apr			245.06	245.08	245.08	245.10	245.11	245.10	245.08	245.08	245.09	245.08						
21-30 Apr	245.11		245.06	245.09	245.19	245.26	245.28	245.28	245.28	245.31	245.32	245.31			2100/28	245.43	2400/2	244.64
1-10 May			245.31	245.31	245.31	245.32	245.30	245.30	245.31	245.30	245.36	245.32						
11-20 May			245.28	245.26	245.27	245.26	245.25	245.23	245.21	245.23	245.25	245.22						
21-31 May	245.24		245.21	245.20	245.18	245.17	245.17	245.17	245.16	245.16	245.14	245.10	245.07		2300/8	245.54	2400/31	244.98
1-10 Jun			245.07	245.09	245.08	245.09	245.06	245.09	245.08	245.06	245.06	245.03						
11-20 Jun			245.02	245.00	244.98	244.97	244.95	244.92	244.91	244.96	244.98	245.02						
21-30 Jun	245.01		245.03	245.01	244.99	244.96	244.98	245.01	245.01	244.98	245.01	245.04			1700/20	245.31	0800/17	244.68
1-10 Jul			245.05	245.10	245.06	245.02	245.06	245.10	245.09	245.11	245.13	245.11						
11-20 Jul			245.09	245.09	245.12	245.13	245.13	245.18	245.18	245.16	245.16	245.17						
21-31 Jul	245.11		245.22	245.20	245.16	245.11	245.14	245.17	245.08	245.03	244.97	245.03	245.03		1900/6	245.41	1700/31	244.83
1-10 Aug			245.06	245.08	245.03	245.02	245.07	245.12	245.10	245.10	245.11	245.09						
11-20 Aug			245.14	245.19	245.17	245.21	245.17	245.14	245.21	245.24	245.18	245.16						
21-31 Aug	245.12		245.08	245.14	245.17	245.16	245.14	245.11	245.04	245.06	245.09	245.14	245.07		0900/14	245.57	1000/5	244.73
1-10 Sep			245.03	245.05	245.09	245.07	245.03	245.01	244.99	244.87	244.80	244.83						
11-20 Sep			244.93	244.85	244.83	244.94	244.89	244.79	244.86	244.86	244.92	244.91						
21-30 Sep	244.95		244.92	244.91	244.89	244.88	244.89	244.99	245.09	245.20	245.17	245.10			0900/26	245.32	2000/13	244.53
1-10 Oct			245.19	245.15	245.20	245.18	245.14	245.19	245.15	244.98	245.06	245.13						
11-20 Oct			245.19	245.11	245.16	245.14	245.11	245.14	245.16	245.06	245.04	245.03						
21-31 Oct	245.05		245.01	245.05	245.00	244.94	244.91	244.88	244.88	244.88	244.85	244.80	244.72		0300/17	245.37	2000/27	244.63
1-10 Nov			244.70	244.71	244.69	244.73	244.69	244.70	244.67	244.74	244.74	244.76						
11-20 Nov			244.71	244.87	244.86	244.79	244.71	244.72	244.78	244.77	244.85	244.79						
21-30 Nov	244.76		244.73	244.79	244.73	244.78	244.75	244.84	244.84	244.75	244.74	244.75			0500/20	245.00	0400/11	244.46
1-10 Dec			244.72	244.76	244.80	244.79	244.87	244.87	244.88	244.79	244.74	244.88						
11-20 Dec			244.80	244.76	244.81	244.92	245.03	245.06	245.04	245.07	245.13	245.14						
21-31 Dec	245.09		245.26	245.31	245.34	245.39	245.45	245.47	245.49	245.54	245.57	245.61	245.65		0700/31	245.76	1600/9	244.54

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 2076: Olcott, New York on Lake Ontario

1977 YEARLY MEAN ELEVATION: 244.79 FEET

HIGHEST
Monthly mean elevation: 245.19 May 1977
Daily mean elevation: 245.70 31 Dec 1977
Instant/hourly Elevation: 245.80 0800/31 Dec 1977

LOWEST
Monthly mean elevation: 243.77 Feb 1977
Daily mean elevation: 243.60 31 Jan 1977
Instant/hourly Elevation: 242.93 1400/2 Mar 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
244.06	6 Jan
243.85	24 Feb
244.83	30 Mar
245.26	26 Apr
245.31	4 May
245.10	1 Jun
245.14	14 Jul
245.14	28 Aug
245.18	29 Sep
245.22	5 Oct
244.91	20 Nov
245.70	31 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
243.60	31 Jan
243.71	6 Feb
243.62	2 Mar
244.90	3 Apr
245.06	30 May
244.91	17 Jun
244.95	29 Jul
245.00	2 Aug
244.85	12 Sep
244.84	30 Oct
244.73	18 Nov
244.70	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
245.60												2	245.60	2
245.40												7	245.40	9
245.20					6	12				2		5	245.20	34
245.00				8	19	10	26	29	15	21		4	245.00	166
244.80			2	5		20	5	2	15	8	15	7	244.80	245
244.60			9								15	6	244.60	275
244.40			3										244.40	278
244.20			5										244.20	283
244.00	11		3										244.00	297
243.80	15	8	7										243.80	327
243.60	4	20	2										243.60	353
243.40	1												243.40	354

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 2076: Olcott, New York on Lake Ontario

		Monthly means	----- Daily Means -----										HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			244.04	244.03	244.05	244.01	244.05	244.06	244.00	244.04	244.05	244.05					
11-20 Jan			243.91	243.96	244.02	244.04	243.99	243.90	243.98	243.92	243.96	243.89					
21-31 Jan	243.93		243.92	243.92	243.93	243.93	243.90	243.90	243.69	243.74	243.63	243.66	243.60	0800/10	244.39	1600/28	243.14
1-10 Feb			243.74	243.83	243.76	243.82	243.75	243.71	243.72	243.76	243.76	243.81					
11-20 Feb			243.77	243.84	243.77	243.74	243.77	243.78	243.77	243.81	243.77	243.76					
21-28 Feb	243.77		243.71	243.78	243.83	243.85	243.73	243.78	243.81	243.75				1200/27	244.21	0700/28	243.49
1-10 Mar			243.71	243.62	243.82	243.94	243.85	243.91	243.91	243.96	244.00	244.04					
11-20 Mar			244.09	244.18	244.23	244.24	244.36	244.30	244.39	244.56	244.50	244.57					
21-31 Mar	244.33		244.62	244.72	244.67	244.63	244.68	244.74	244.77	244.76	244.79	244.83	244.82	0300/31	245.12	1400/2	242.93
1-10 Apr			244.92	245.01	244.90	245.16	245.00	244.99	245.10	245.00	245.06	245.10					
11-20 Apr			245.11	245.10	245.08	/	/	/	/	/	/	/					
21-30 Apr	245.11		/	/	/	/	245.25	245.26	245.26	245.22	245.23	245.26		1600/2	245.37	0500/3	244.64
1-10 May			245.28	245.26	245.28	245.31	245.30	245.25	245.26	245.24	245.25	245.22					
11-20 May			245.23	245.19	245.19	245.22	245.20	245.20	245.17	245.20	245.19	245.19					
21-31 May	245.19		245.20	245.20	245.17	245.15	245.13	245.14	245.09	245.12	245.09	245.06	245.06	1600/5	245.44	2400/31	244.92
1-10 Jun			245.10	245.07	245.06	245.07	245.03	245.02	245.01	245.03	245.03	244.97					
11-20 Jun			244.95	244.96	244.96	244.93	244.94	244.93	244.91	244.96	244.98	244.98					
21-30 Jun	244.99		244.96	244.97	244.96	244.95	244.99	244.95	244.99	245.00	245.00	245.07		0600/1	245.27	0800/17	244.74
1-10 Jul			245.03	245.04	245.03	245.02	245.04	245.06	245.06	245.04	245.10	245.09					
11-20 Jul			245.10	245.12	245.11	245.14	245.11	245.13	245.13	245.12	245.13	245.10					
21-31 Jul	245.07		245.11	245.09	245.05	245.09	245.05	245.05	244.99	245.00	244.95	244.98	244.99	1700/6	245.48	1100/6	244.82
1-10 Aug			245.02	245.00	245.00	245.01	245.01	245.05	245.02	245.03	245.05	245.08					
11-20 Aug			245.10	245.11	245.12	245.12	245.07	245.13	245.08	245.10	245.10	245.06					
21-31 Aug	245.07		245.08	245.07	245.09	245.04	245.06	245.09	245.10	245.14	245.12	245.11	245.08	2000/16	245.33	0800/5	244.81
1-10 Sep			245.06	245.09	245.06	245.07	245.06	245.00	245.02	244.94	244.94	244.91					
11-20 Sep			244.92	244.85	244.89	244.87	244.90	244.87	244.91	244.95	244.97	244.98					
21-30 Sep	245.01		244.96	245.03	245.03	245.06	245.12	245.17	245.16	245.17	245.18	245.14		0400/26	245.32	0700/14	244.73
1-10 Oct			245.20	245.10	245.14	245.19	245.22	245.19	245.21	245.20	245.16	245.18					
11-20 Oct			245.18	245.17	245.19	245.14	245.12	245.11	245.04	245.13	245.07	245.03					
21-31 Oct	245.07		245.02	245.01	245.04	244.96	244.94	244.92	244.93	244.90	244.89	244.84	244.85	0300/12	245.41	2400/31	244.74
1-10 Nov			244.81	244.79	244.79	244.76	244.81	244.77	244.86	244.86	244.84	244.85					
11-20 Nov			244.76	244.88	244.82	244.78	244.79	244.79	244.76	244.73	244.81	244.91					
21-30 Nov	244.80		244.77	244.82	244.85	244.73	244.86	244.73	244.84	244.73	244.79	244.85		0600/10	245.09	0500/28	244.01
1-10 Dec			244.76	244.70	244.78	244.77	244.97	244.82	244.80	244.91	244.70	244.84					
11-20 Dec			244.85	244.86	244.96	245.02	245.05	245.13	245.20	245.29	245.30	245.42					
21-31 Dec	245.15		245.35	245.34	245.41	245.52	245.38	245.43	245.51	245.55	245.57	245.67	245.70	0800/31	245.80	1600/9	244.42

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3007: Ashland Avenue, Niagara Falls, New York on Niagara River

1977 YEARLY MEAN ELEVATION: 320.84 FEET

HIGHEST
Monthly mean elevation: 323.42 May 1977
Daily mean elevation: 325.94 9 Dec 1977
Instant/hourly Elevation: 334.92 1600/9 Dec 1977

LOWEST
Monthly mean elevation: 317.36 Feb 1977
Daily mean elevation: 315.49 12 Feb 1977
Instant/hourly Elevation: 314.99 0900/18 Mar 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
323.49	29 Jan
322.14	1 Feb
319.95	31 Mar
324.07	5 Apr
324.19	11 May
323.81	2 Jun
324.28	1 Jul
322.85	17 Aug
325.30	27 Sep
324.70	12 Oct
323.81	11 Nov
325.94	9 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
316.72	21 Jan
315.49	12 Feb
315.63	27 Mar
321.51	21 Apr
321.75	29 May
321.67	17 Jun
321.45	22 Jul
321.48	31 Aug
321.18	24 Sep
320.83	23 Oct
315.78	5 Nov
315.59	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
325.50												1	325.50	1
325.00									1				325.00	2
324.50									1	1			324.50	4
324.00				1	2		1		1			1	324.00	10
323.50				2	12	2			1	2	1	1	323.50	31
323.00	2				13	11			4	2			323.00	64
322.50				5	2	3	5	3	3	3	1	1	322.50	90
322.00	1	1		9	1	9	5	8	4	1		1	322.00	130
321.50	1			13	1	5	18	19	13	2		4	321.50	206
321.00	4						1	1	2	17	1	2	321.00	234
320.50	1									3	1	3	320.50	242
320.00	1	1									3	4	320.00	251
319.50	1	1	1								4	3	319.50	261
319.00		2									1	2	319.00	268
318.50	3		5								3	2	318.50	281
318.00	3	1	5								2	1	318.00	293
317.50	2	4	7								2	3	317.50	311
317.00	8	5	3								3	1	317.00	331
316.50	4	4	3								6		316.50	348
316.00		3	4								1		316.00	356
315.50		5	1								1	1	315.50	364
315.00		1											315.00	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

	Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.
1-10 Jan		321.01	318.82	316.73	317.43	317.46	317.37	318.10	316.91	317.16	319.97		
11-20 Jan		321.28	318.99	316.97	318.51	317.79	317.68	321.45	320.90	320.07	317.06		
21-31 Jan	318.97	316.72	318.11	318.26	317.11	317.18	317.09	321.17	321.91	323.49	322.42	323.02	2100/28 325.91 0700/5 315.38
1-10 Feb		322.14	320.32	317.62	317.85	319.26	319.90	319.18	317.84	317.14	317.22		
11-20 Feb		315.78	315.49	315.73	316.70	316.28	317.97	318.02	317.16	316.19	316.68		
21-28 Feb	317.36	316.64	316.05	315.51	315.63	317.34	315.94	316.97	317.48				0900/3 325.52 0200/24 315.24
1-10 Mar		317.33	317.52	316.54	316.41	316.34	316.06	317.70	317.53	317.74	318.22		
11-20 Mar		318.03	316.72	318.56	318.41	318.10	318.58	316.86	316.28	317.37	317.56		
21-31 Mar	317.73	317.87	317.22	318.36	318.95	319.03	317.57	315.63	318.99	319.36	318.82	319.95	1400/31 322.20 0900/18 314.99
1-10 Apr		322.84	321.83	323.59	321.85	324.07	323.58	322.02	322.00	321.66	321.68		
11-20 Apr		322.31	322.28	322.43	322.15	322.33	321.93	321.79	321.96	321.86	321.89		
21-30 Apr	322.30	321.51	322.05	321.95	322.30	322.58	322.31	321.80	323.00	322.77	322.74		2200/5 328.84 0100/27 315.23
1-10 May		323.17	323.46	323.49	322.82	323.64	324.15	323.28	323.98	323.36	323.89		
11-20 May		324.19	323.98	323.83	323.73	323.53	323.72	323.53	323.63	323.58	323.58		
21-31 May	323.42	323.41	323.31	323.35	323.36	323.24	323.14	323.30	323.32	321.75	322.40	322.97	1600/8 328.64 2400/29 315.50
1-10 Jun		323.79	323.81	323.38	323.27	323.08	322.93	323.32	323.49	322.81	323.09		
11-20 Jun		323.37	323.33	323.07	322.27	321.89	321.82	321.67	321.76	322.30	322.27		
21-30 Jun	322.72	323.02	322.57	322.40	322.10	322.34	322.47	322.42	322.31	323.34	321.86		2100/1 327.79 0100/17 315.18
1-10 Jul		324.28	323.09	322.88	322.84	322.98	322.94	322.52	322.48	322.15	321.54		
11-20 Jul		321.55	321.89	322.32	321.89	321.72	321.55	322.02	321.77	321.86	321.81		
21-31 Jul	322.09	321.74	321.45	321.52	321.57	322.12	321.73	321.61	321.73	321.82	321.80	321.70	1900/1 328.33 0100/27 315.22
1-10 Aug		322.21	321.59	321.61	321.59	321.60	321.82	322.15	322.48	321.86	321.96		
11-20 Aug		322.30	322.37	321.79	322.44	322.25	321.94	322.85	321.98	321.86	321.86		
21-31 Aug	321.99	322.10	322.72	322.61	321.84	321.82	321.67	321.65	321.81	321.83	321.56	321.48	2100/7 327.35 2400/26 315.21
1-10 Sep		321.71	321.86	321.82	321.63	321.94	321.98	321.83	321.89	321.91	322.29		
11-20 Sep		321.86	321.91	322.46	322.71	321.76	321.42	322.67	322.48	322.74	323.39		
21-30 Sep	322.53	323.40	322.19	321.97	321.18	323.45	324.67	325.30	324.45	323.87	323.27		1700/26 329.04 0200/16 315.29
1-10 Oct		321.45	322.04	322.75	323.13	323.61	322.73	321.98	321.48	323.66	323.44		
11-20 Oct		322.91	324.70	321.95	321.12	321.49	321.47	321.47	321.39	321.32	321.24		
21-31 Oct	321.86	321.18	321.01	320.83	320.93	321.03	321.14	321.43	321.36	321.07	320.93	321.35	1900/11 328.59 2400/7 315.22
1-10 Nov		317.31	316.90	316.61	318.61	315.78	316.62	317.01	316.99	317.13	319.92		
11-20 Nov		323.81	319.72	316.82	318.05	319.01	320.13	319.79	322.52	320.26	316.27		
21-30 Nov	318.66	319.80	318.91	317.94	320.40	318.45	320.93	317.62	321.06	318.86	316.72		1600/11 325.37 0400/20 315.03
1-10 Dec		320.98	324.16	319.97	317.77	315.59	317.73	321.27	319.14	325.94	320.76		
11-20 Dec		317.80	319.52	319.07	318.59	320.48	319.96	317.06	318.19	320.86	320.04		
21-31 Dec	320.40	321.48	323.84	321.99	320.45	322.85	322.44	321.96	321.75	321.53	320.26	319.00	1600/9 334.92 0100/6 315.28

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3009: American Falls, Niagara Falls, New York on Niagara River

1977 YEARLY MEAN ELEVATION: 558.63 FEET

HIGHEST
Monthly mean elevation: 558.85 Sep 1977
Daily mean elevation: 559.71 11 Nov 1977
Instant/hourly Elevation: 560.25 1100/2 Dec 1977

LOWEST
Monthly mean elevation: 557.83 Jan 1977
Daily mean elevation: 557.30 13 Jan 1977
Instant/hourly Elevation: 557.21 0200/13 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
558.43	1 Jan
558.82	4 Feb
558.77	13 Mar
558.82	15 Apr
558.97	2 May
558.88	1 Jun
558.98	17 Jul
558.94	22 Aug
559.37	26 Sep
559.03	12 Oct
559.71	11 Nov
559.69	2 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
557.30	13 Jan
557.76	9 Feb
558.13	17 Mar
558.14	6 Apr
558.51	29 May
558.54	27 Jun
558.58	22 Jul
558.49	30 Aug
558.65	23 Sep
558.52	7 Oct
557.84	30 Nov
558.06	6 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
559.60											1	2	559.60	3
559.40											1	2	559.40	6
559.20									2			3	559.20	11
559.00									2	1		2	559.00	16
558.80			1	1	5	3	18	8	11	6	7	6	558.80	82
558.60		3	15	17	22	25	12	20	15	22	14	8	558.60	255
558.40	1	10	13	8	4	2	1	3		2	5	4	558.40	308
558.20	3	6	2	3							1	1	558.20	324
558.00	5	3	1	1								3	558.00	337
557.80	5	4									1		557.80	347
557.60	12	1											557.60	360
557.40	4												557.40	364
557.20	1												557.20	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 3009: American Falls, Niagara Falls, New York on Niagara River

	Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		558.43	558.24	558.06	558.11	558.15	558.24	558.27	557.71	557.83	558.03				
11-20 Jan		557.98	557.49	557.30	557.55	557.64	557.56	557.63	557.43	557.69	557.77				
21-31 Jan	557.83	557.72	557.65	557.75	557.64	557.98	557.99	558.05	557.63	557.69	557.93	557.73	2100/10	559.02	0200/13 557.21
1-10 Feb		557.92	558.28	558.71	558.82	558.50	558.29	557.83	557.83	557.76	557.97				
11-20 Feb		558.17	558.17	558.48	558.44	558.40	558.42	558.19	558.24	558.44	558.49				
21-28 Feb	558.34	558.34	558.40	558.53	558.45	558.61	558.58	558.63	558.54				0800/4	559.00	1100/7 557.38
1-10 Mar		558.56	558.51	558.59	558.72	558.69	558.69	558.56	558.44	558.41	558.57				
11-20 Mar		558.67	558.72	558.77	558.70	558.68	558.58	558.13	558.34	558.37	558.42				
21-31 Mar	558.59	558.54	558.54	558.56	558.70	558.69	558.74	558.75	558.69	558.71	558.68	558.56	2000/20	559.17	0700/17 557.73
1-10 Apr		558.58	558.70	558.77	558.76	558.78	558.14	558.22	558.48	558.34	558.64				
11-20 Apr		558.64	558.74	558.74	558.76	558.82	558.71	558.65	558.54	558.50	558.46				
21-30 Apr	558.60	558.55	558.51	558.71	558.80	558.72	558.61	558.57	558.63	558.37	558.66		0900/21	559.47	2200/22 557.32
1-10 May		558.93	558.97	558.85	558.59	558.71	558.78	558.68	558.66	558.72	558.76				
11-20 May		558.66	558.72	558.86	558.69	558.67	558.60	558.60	558.75	558.85	558.74				
21-31 May	558.73	558.72	558.70	558.72	558.71	558.73	558.77	558.72	558.70	558.51	558.79	558.71	0700/2	559.52	2100/16 557.62
1-10 Jun		558.88	558.79	558.69	558.69	558.71	558.59	558.78	558.83	558.61	558.72				
11-20 Jun		558.77	558.80	558.68	558.70	558.71	558.66	558.67	558.69	558.79	558.68				
21-30 Jun	558.71	558.65	558.68	558.63	558.68	558.78	558.68	558.54	558.61	558.83	558.72		0700/1	559.35	2100/27 557.88
1-10 Jul		558.88	558.83	558.79	558.83	558.79	558.81	558.78	558.81	558.80	558.70				
11-20 Jul		558.72	558.85	558.86	558.77	558.90	558.91	558.98	558.87	558.92	558.85				
21-31 Jul	558.81	558.81	558.58	558.70	558.78	558.78	558.81	558.76	558.84	558.89	558.85	558.75	0700/1	559.43	2100/22 558.00
1-10 Aug		558.84	558.73	558.72	558.68	558.78	558.85	558.88	558.93	558.77	558.82				
11-20 Aug		558.77	558.77	558.78	558.84	558.75	558.68	558.74	558.80	558.75	558.69				
21-31 Aug	558.74	558.73	558.94	558.83	558.71	558.71	558.64	558.68	558.60	558.64	558.49	558.51	0700/22	559.47	2100/30 557.55
1-10 Sep		558.78	558.82	558.75	558.74	558.85	558.77	558.72	558.74	558.86	558.91				
11-20 Sep		558.68	558.66	558.89	558.87	558.69	558.84	558.99	558.98	558.91	559.14				
21-30 Sep	558.85	558.66	558.74	558.65	558.73	559.06	559.37	559.30	558.93	558.78	558.69		1800/26	559.82	1900/23 557.73
1-10 Oct		558.73	558.82	558.96	558.99	558.82	558.63	558.52	558.56	558.90	558.73				
11-20 Oct		558.70	559.03	558.63	558.61	558.68	558.62	558.64	558.67	558.63	558.69				
21-31 Oct	558.73	558.68	558.76	558.65	558.69	558.74	558.75	558.84	558.76	558.70	558.67	558.73	0700/27	559.48	1900/1 557.61
1-10 Nov		558.73	558.73	558.71	558.75	558.57	558.74	558.64	558.71	558.72	558.88				
11-20 Nov		559.71	558.85	558.64	558.64	558.65	558.55	558.84	559.45	558.87	558.51				
21-30 Nov	558.74	558.69	558.59	558.60	558.79	558.65	558.89	558.81	558.96	558.40	557.84		1400/11	559.88	0900/30 557.57
1-10 Dec		558.74	559.69	558.87	558.54	558.13	558.06	558.97	558.66	559.52	558.93				
11-20 Dec		558.56	558.64	558.65	558.68	558.82	558.67	558.57	558.56	558.88	558.70				
21-31 Dec	558.85	559.08	559.67	559.28	558.74	559.55	559.38	559.24	559.18	558.88	558.36	558.06	1100/2	560.25	1900/5 557.44

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3012: Niagara Intake, Niagara Falls, New York on Niagara River

1977 YEARLY MEAN ELEVATION: 561.49 FEET

HIGHEST
Monthly mean elevation: 561.66 Sep 1977
Daily mean elevation: 562.69 2 Dec 1977
Instant/hourly Elevation: 563.77 1458/9 Dec 1977

LOWEST
Monthly mean elevation: 561.25 Mar 1977
Daily mean elevation: 560.19 30 Nov 1977
Instant/hourly Elevation: 559.68 1810/5 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
562.08	30 Jan
562.09	4 Feb
561.55	21 Mar
562.06	27 Apr
561.81	2 May
561.72	1 Jun
561.83	1 Jul
561.86	22 Aug
562.32	26 Sep
562.02	12 Oct
562.67	11 Nov
562.69	2 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
560.99	9 Jan
561.03	23 Feb
560.91	18 Mar
561.36	19 Apr
561.21	29 May
561.29	27 Jun
561.34	10 Jul
561.25	30 Aug
561.39	23 Sep
561.26	7 Oct
560.19	30 Nov
560.49	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
562.60											1	3	562.60	4
562.40												1	562.40	5
562.20									2		1	1	562.20	9
562.00	2	2		1						1		2	562.00	17
561.80	2			1	1		1	1	4	3		3	561.80	33
561.60	2	1		7	7		13	15	9	3	2	1	561.60	97
561.40	14	3	4	19	21	20	14	13	14	15	5	5	561.40	244
561.20	6	14	19	2	2	6	3	2	1	9	11	8	561.20	327
561.00	4	8	5								7	4	561.00	355
560.80	1		3								2		560.80	361
560.60												1	560.60	362
560.40												2	560.40	364
560.20													560.20	364
560.00											1		560.00	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 3012: Niagara Intake, Niagara Falls, New York on Niagara River

		Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			561.95	561.64	561.45	561.44	561.42	561.41	561.54	561.06	560.99	561.51						
11-20 Jan			561.96	561.33	561.02	561.28	561.37	561.18	561.52	561.19	561.37	561.38						
21-31 Jan	561.47		561.55	561.51	561.47	561.44	561.46	561.42	561.68	561.40	562.06	562.08	561.51	2050/10	563.08	1715/28	560.38	
1-10 Feb			561.51	561.55	562.07	562.09	561.63	561.37	561.53	561.25	561.12	561.04						
11-20 Feb			561.24	561.32	561.39	561.36	561.32	561.30	561.17	561.26	561.27	561.26						
21-28 Feb	561.33		561.04	561.24	561.03	561.09	561.25	561.19	561.23	561.17				0400/3	562.50	1845/21	560.82	
1-10 Mar			561.20	561.26	561.24	561.30	561.27	561.19	561.05	560.94	560.92	561.12						
11-20 Mar			561.22	561.25	561.29	561.29	561.22	561.22	561.26	560.91	561.10	561.46						
21-31 Mar	561.25		561.55	561.30	561.38	561.38	561.42	561.29	561.25	561.26	561.34	561.27	561.51	1400/21	561.96	2000/18	560.51	
1-10 Apr			561.48	561.43	561.58	561.48	561.70	561.38	561.48	561.80	561.48	561.47						
11-20 Apr			561.41	561.49	561.52	561.63	561.58	561.46	561.47	561.47	561.36	561.48						
21-30 Apr	561.57		561.57	561.58	561.48	561.57	561.69	561.68	562.06	561.81	561.75	561.73		0700/27	562.84	2210/19	560.48	
1-10 May			561.80	561.81	561.67	561.51	561.76	561.74	561.45	561.49	561.51	561.58						
11-20 May			561.43	561.47	561.64	561.46	561.44	561.39	561.41	561.61	561.69	561.57						
21-31 May	561.54		561.53	561.51	561.52	561.50	561.52	561.55	561.50	561.49	561.21	561.58	561.50	0700/5	562.56	2110/29	560.37	
1-10 Jun			561.72	561.60	561.46	561.46	561.49	561.34	561.58	561.62	561.34	561.50						
11-20 Jun			561.55	561.57	561.40	561.43	561.42	561.38	561.42	561.44	561.61	561.45						
21-30 Jun	561.48		561.46	561.48	561.41	561.46	561.59	561.45	561.29	561.38	561.66	561.45		0715/25	562.44	2120/27	560.34	
1-10 Jul			561.83	561.64	561.57	561.62	561.55	561.55	561.49	561.50	561.49	561.34						
11-20 Jul			561.40	561.57	561.59	561.48	561.63	561.64	561.75	561.63	561.68	561.61						
21-31 Jul	561.59		561.59	561.35	561.49	561.59	561.64	561.65	561.60	561.69	561.77	561.69	561.58	0705/1	562.64	2115/8	560.45	
1-10 Aug			561.69	561.55	561.52	561.47	561.60	561.69	561.73	561.80	561.62	561.67						
11-20 Aug			561.65	561.65	561.64	561.76	561.62	561.55	561.63	561.69	561.62	561.53						
21-31 Aug	561.59		561.60	561.86	561.71	561.55	561.54	561.44	561.49	561.41	561.45	561.25	561.26	0700/22	562.68	2045/30	560.33	
1-10 Sep			561.55	561.59	561.53	561.51	561.64	561.54	561.50	561.51	561.66	561.72						
11-20 Sep			561.45	561.42	561.68	561.68	561.45	561.64	561.82	561.79	561.73	561.98						
21-30 Sep	561.66		561.50	561.49	561.39	561.46	561.92	562.32	562.26	561.83	561.63	561.51		1638/26	563.06	2108/12	560.46	
1-10 Oct			561.50	561.64	561.83	561.87	561.70	561.42	561.26	561.30	561.82	561.61						
11-20 Oct			561.54	562.02	561.39	561.35	561.45	561.39	561.44	561.41	561.37	561.44						
21-31 Oct	561.51		561.43	561.50	561.35	561.42	561.47	561.49	561.60	561.49	561.40	561.36	561.45	0702/12	562.62	1908/29	560.36	
1-10 Nov			561.28	561.28	561.24	561.34	561.04	561.27	561.14	561.22	561.25	561.55						
11-20 Nov			562.67	561.49	561.16	561.19	561.24	561.13	561.48	562.35	561.52	560.97						
21-30 Nov	561.33		561.32	561.15	561.15	561.45	561.21	561.64	561.37	561.70	560.91	560.19		1430/11	562.99	1330/30	559.94	
1-10 Dec			561.55	562.69	561.53	561.08	560.49	560.56	561.74	561.25	562.66	561.59						
11-20 Dec			561.07	561.25	561.22	561.23	561.46	561.27	561.07	561.13	561.58	561.33						
21-31 Dec	561.56		561.86	562.66	562.13	561.38	562.57	562.26	562.07	561.98	561.87	561.25	560.73	1458/9	563.77	1810/5	559.68	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3117: Ontario St., Buffalo, New York on Niagara River

1977 YEARLY MEAN ELEVATION: 565.17 FEET

HIGHEST
Monthly mean elevation: 565.43 May 1977
Daily mean elevation: 567.05 9 Dec 1977
Instant/hourly Elevation: 568.66 1415/9 Dec 1977

LOWEST
Monthly mean elevation: 564.53 Feb 1977
Daily mean elevation: 563.60 5 Dec 1977
Instant/hourly Elevation: 562.64 1630/5 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
565.96	1 Jan
565.01	8 Feb
565.29	31 Mar
565.85	5 Apr
565.68	8 May
565.56	1 Jun
565.46	13 Jul
565.68	22 Aug
566.15	26 Sep
565.96	12 Oct
566.53	11 Nov
567.05	9 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
564.28	9 Jan
564.16	23 Feb
564.50	1 Mar
564.31	4 Apr
564.33	29 May
565.16	9 Jun
565.05	10 Jul
565.07	31 Aug
564.95	15 Sep
564.59	30 Oct
564.24	5 Nov
563.60	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
567.00												1	567.00	1
566.80													566.80	1
566.60													566.60	1
566.40											1	2	566.40	4
566.20												1	566.20	5
566.00									2		1	1	566.00	3
565.80	2			1						2			565.80	14
565.60	1			1	2			2	2	3	1	4	565.60	30
565.40	1			4	16	5	5	13	5	5	2	3	565.40	89
565.20	4		1	5	12	17	13	13	12	2	3	1	565.20	172
565.00	8	1	3	13		4	5	3	7	10	3	6	565.00	235
564.80	4	2	4	6	1				2	6	10	7	564.80	277
564.60	5		3							2	6	1	564.60	294
564.40	1	16	3							1	1	1	564.40	317
564.20	1	2									2		564.20	322
564.00		1											564.00	323
563.80													563.80	323
563.60													563.60	323
563.40												1	563.40	324

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3117: Ontario St., Buffalo, New York on Niagara River

		Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LOW		Hrs/day Elev. Hrs/day Elev.	
1-10 Jan			565.96	565.36	564.98	564.91	564.86	564.71	564.76	564.55	564.28	565.24				
11-20 Jan			565.83	565.33	565.19	565.09	565.01	565.18	565.55	/	564.80	564.97				
21-31 Jan	565.08		565.20	565.09	565.02	565.07	564.73	564.68	565.26	565.66	/	/	/	1755/10	567.01	0125/10 563.46
1-10 Feb			/	/	/	/	/	/	564.94	565.01	564.92	564.52				
11-20 Feb			564.47	564.42	564.55	564.49	564.57	564.58	564.40	564.51	564.41	564.46				
21-28 Feb	564.53		564.44	564.47	564.16	564.28	564.57	564.42	564.55	564.59			1715/27	565.38	0114/24 563.90	
1-10 Mar			564.50	/	/	/	/	/	/	/	/	/				
11-20 Mar			564.52	564.50	/	/	/	/	/	/	/	/				
21-31 Mar	564.87		564.87	564.72	565.13	565.16	565.09	564.91	564.79	564.80	564.96	564.92	565.29	0900/31	566.22	0655/22 563.92
1-10 Apr			565.01	564.97	565.34	564.81	565.85	565.63	565.32	565.39	565.19	565.01				
11-20 Apr			565.12	565.11	565.15	565.12	565.10	565.02	564.92	564.98	564.98	565.03				
21-30 Apr	565.20		565.08	565.11	564.89	565.18	565.30	565.36	565.50	565.55	565.50	565.46	2231/5	566.65	2250/1 564.35	
1-10 May			565.48	565.55	565.35	565.24	565.52	565.65	565.47	565.68	565.54	565.59				
11-20 May			565.51	565.60	565.60	565.44	565.39	565.37	565.40	565.50	565.49	565.43				
21-31 May	565.43		565.39	565.39	565.41	565.41	565.42	565.37	565.36	565.32	564.83	565.24	565.26	1405/8	566.47	0130/29 564.38
1-10 Jun			565.56	565.56	565.39	565.34	565.37	565.20	565.44	565.43	565.16	565.32				
11-20 Jun			565.36	565.34	565.25	565.27	565.23	565.20	565.31	565.35	565.50	565.37				
21-30 Jun	565.33		565.31	565.28	565.17	565.21	565.34	565.31	/	/	/	/	1443/1	566.21	1215/6 564.72	
1-10 Jul			/	/	/	/	/	/	/	/	565.25	565.05				
11-20 Jul			565.15	565.34	565.46	565.26	565.31	565.31	565.38	565.31	565.42	565.45				
21-31 Jul	565.29		565.42	565.07	565.25	565.28	565.41	565.30	565.16	565.19	565.33	565.34	565.27	1035/19	566.06	2230/10 564.65
1-10 Aug			565.44	565.23	565.23	565.24	565.36	565.44	565.49	565.58	565.30	565.55				
11-20 Aug			565.51	565.51	565.45	565.57	565.32	565.41	565.63	565.53	565.49	565.27				
21-31 Aug	565.37		565.37	565.68	565.43	565.21	565.25	565.16	565.26	565.21	565.29	565.10	565.07	0300/22	566.17	2152/20 564.71
1-10 Sep			565.23	565.28	565.23	565.11	565.28	565.14	565.02	564.99	565.22	565.52				
11-20 Sep			565.12	565.09	565.33	565.31	564.95	565.23	565.41	565.43	565.29	565.73				
21-30 Sep	565.34		565.37	565.23	565.10	565.12	565.54	566.15	566.09	565.73	565.46	565.39	1405/26	567.44	2155/15 564.60	
1-10 Oct			565.18	565.41	565.62	565.66	565.72	565.41	564.94	565.15	565.88	565.47				
11-20 Oct			565.58	565.96	565.10	565.08	565.30	565.16	565.42	565.23	565.06	565.17				
21-31 Oct	565.22		565.18	565.16	564.65	564.99	565.00	564.99	565.08	564.95	564.76	564.59	564.85	1125/12	566.66	2105/30 564.03
1-10 Nov			564.88	564.83	564.81	564.80	564.24	564.66	564.56	564.78	564.81	565.53				
11-20 Nov			566.53	565.14	564.89	564.86	565.03	564.97	565.36	566.11	565.21	564.64				
21-30 Nov	565.02		565.19	564.81	564.80	565.24	564.83	565.69	564.90	565.57	564.67	564.29	1408/11	567.05	1250/30 563.90	
1-10 Dec			565.70	566.54	565.16	564.92	563.60	564.88	565.57	564.83	567.05	565.29				
11-20 Dec			/	/	564.84	564.92	565.13	564.92	564.56	564.87	565.17	565.08				
21-31 Dec	565.37		565.60	566.40	565.77	565.15	566.58	566.10	565.75	565.76	565.60	565.14	564.71	1415/9	568.66	1630/5 562.64

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3020: Buffalo Harbor, Buffalo, New York on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.29 FEET

HIGHEST
Monthly mean elevation: 571.79 May 1977
Daily mean elevation: 575.65 9 Dec 1977
Instant/hourly Elevation: 578.16 1100/9 Dec 1977

LOWEST
Monthly mean elevation: 570.18 Feb 1977
Daily mean elevation: 569.23 5 Dec 1977
Instant/hourly Elevation: 567.53 1600/5 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
571.45	1 Jan
570.45	28 Feb
571.59	31 Mar
572.49	5 Apr
572.17	8 May
572.24	29 Jun
572.64	1 Jul
571.95	17 Aug
572.45	26 Sep
572.34	9 Oct
572.98	11 Nov
575.65	9 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.01	9 Jan
569.82	23 Feb
570.16	3 Mar
570.81	4 Apr
570.96	29 May
571.46	9 Jun
571.36	10 Jul
571.32	26 Aug
571.02	15 Sep
570.44	30 Oct
570.05	5 Nov
569.23	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
575.50												1	575.50	1
575.25													575.25	1
575.00													575.00	1
574.75													574.75	1
574.50													574.50	1
574.25													574.25	1
574.00													574.00	1
573.75												1	573.75	2
573.50												1	573.50	3
573.25													573.25	3
573.00												1	573.00	4
572.75											1	1	572.75	6
572.50							1						572.50	7
572.25				1					2	2	1	1	572.25	14
572.00					3	1				1	2	3	572.00	24
571.75				5	17	7	7	13	3	2	1	3	571.75	82
571.50			1	5	9	18	19	9	9	6	2	3	571.50	163
571.25	1			12	1	4	4	9	11	5	3	2	571.25	215
571.00	1		7	5						10	5	9	571.00	257
570.75	2		5	2	1					2	11	3	570.75	283
570.50	7		6							1	2		570.50	299
570.25	16	7	10							2	1	1	570.25	336
570.00	4	20	2								1		570.00	363
569.75		1											569.75	364
569.50													569.50	364
569.25													569.25	364
569.00												1	569.00	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

	Monthly means	----- Daily Means -----											HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		571.45	570.82	570.49	570.53	570.39	570.44	570.62	570.46	570.01	570.85					
11-20 Jan		571.12	570.62	570.34	570.36	570.41	570.60	570.75	570.36	570.36	570.33					
21-31 Jan	570.49	570.33	570.34	570.22	570.20	570.26	570.23	570.55	570.71	570.43	570.35	570.35	1800/10	573.14	0200/10	568.86
1-10 Feb		570.35	570.32	570.30	570.17	570.30	570.24	570.22	570.12	570.12	570.10					
11-20 Feb		570.13	570.05	570.23	570.15	570.17	570.16	570.10	570.05	570.10	570.12					
21-28 Feb	570.18	570.14	570.03	569.82	570.12	570.34	570.14	570.40	570.45				1600/27	571.58	2400/23	569.56
1-10 Mar		570.37	570.39	570.16	570.37	570.53	570.45	570.49	570.44	570.46	570.46					
11-20 Mar		570.40	570.36	570.62	570.70	570.61	571.16	570.67	570.21	570.84	571.24					
21-31 Mar	570.73	570.80	570.62	571.24	571.24	571.09	570.98	570.93	570.92	571.22	571.18	571.59	0900/31	573.20	0700/22	569.43
1-10 Apr		571.06	571.16	571.60	570.81	572.49	571.72	571.44	571.53	571.34	571.17					
11-20 Apr		571.47	571.42	571.44	571.29	571.28	571.29	571.24	571.22	571.26	571.26					
21-30 Apr	571.45	571.27	571.33	571.00	571.58	571.69	571.77	571.88	571.90	571.90	571.82		2200/5	573.82	1300/23	570.30
1-10 May		571.82	571.95	571.64	571.63	571.98	572.11	571.92	572.17	571.91	572.00					
11-20 May		571.99	572.12	571.99	571.84	571.76	571.80	571.84	571.90	571.83	571.76					
21-31 May	571.79	571.72	571.75	571.76	571.74	571.76	571.61	571.67	571.61	570.96	571.45	571.53	1400/8	573.18	0500/29	570.29
1-10 Jun		571.90	571.94	571.77	571.69	571.70	571.50	571.76	571.74	571.46	571.65					
11-20 Jun		571.69	571.63	571.55	571.61	571.55	571.52	571.72	571.76	571.95	571.79					
21-30 Jun	571.68	571.71	571.62	571.50	571.54	571.69	571.63	571.49	571.56	572.24	571.67		1300/29	573.15	1100/6	570.68
1-10 Jul		572.64	571.86	571.64	571.75	571.68	571.75	571.68	571.79	571.70	571.36					
11-20 Jul		571.52	571.73	571.95	571.69	571.70	571.71	571.74	571.73	571.84	571.93					
21-31 Jul	571.72	571.84	571.44	571.67	571.69	571.84	571.63	571.48	571.46	571.67	571.66	571.67	0400/1	573.35	0900/22	570.97
1-10 Aug		571.83	571.59	571.58	571.62	571.80	571.80	571.84	571.89	571.45	571.89					
11-20 Aug		571.80	571.80	571.76	571.86	571.50	571.71	571.95	571.74	571.77	571.42					
21-31 Aug	571.65	571.62	571.93	571.62	571.33	571.42	571.32	571.52	571.50	571.60	571.36	571.36	0300/22	572.70	0600/24	570.84
1-10 Sep		571.50	571.52	571.47	571.33	571.52	571.31	571.19	571.15	571.49	571.87					
11-20 Sep		571.38	571.38	571.59	571.49	571.02	571.45	571.58	571.59	571.33	571.91					
21-30 Sep	571.53	571.56	571.36	571.18	571.22	571.58	572.45	572.28	571.93	571.62	571.60		1300/26	574.73	0100/24	570.76
1-10 Oct		571.26	571.54	571.73	571.78	572.07	571.67	571.03	571.46	572.34	571.66					
11-20 Oct		571.98	572.32	571.20	571.20	571.55	571.24	571.67	571.48	571.16	571.32					
21-31 Oct	571.35	571.35	571.25	570.48	571.07	571.05	571.05	571.15	570.93	570.68	570.44	570.88	1800/11	574.23	2100/30	569.90
1-10 Nov		571.00	570.91	570.91	570.82	570.05	570.66	570.48	570.84	570.90	571.97					
11-20 Nov		572.98	571.14	571.00	571.03	571.34	571.22	571.69	572.47	571.29	570.80					
21-30 Nov	571.21	571.58	570.92	571.03	571.49	571.01	572.13	570.96	572.01	570.87	570.70		1000/11	573.70	0900/5	569.50
1-10 Dec		573.14	573.85	571.23	571.19	569.23	571.52	571.89	570.94	575.65	571.38					
11-20 Dec		571.15	571.54	571.05	571.02	571.23	570.91	570.44	570.95	571.20	571.19					
21-31 Dec	571.73	571.84	572.76	572.04	571.40	573.73	572.45	572.02	572.19	571.91	571.52	571.04	1100/9	578.16	1600/5	567.53

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3028: Sturgeon Point, New York on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.26 FEET

HIGHEST
Monthly mean elevation: 571.77 May 1977
Daily mean elevation: 573.55 9 Dec 1977
Instant/hourly Elevation: 575.92 1500/1 Dec 1977

LOWEST
Monthly mean elevation: 570.16 Feb 1977
Daily mean elevation: 569.44 5 Dec 1977
Instant/hourly Elevation: 567.69 1600/5 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
571.45	1 Jan
570.40	27 Feb
571.60	31 Mar
572.53	5 Apr
572.13	8 May
572.07	29 Jun
572.40	1 Jul
571.84	17 Aug
572.30	26 Sep
572.24	9 Oct
572.61	11 Nov
573.55	9 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.01	9 Jan
569.85	23 Feb
570.16	3 Mar
570.87	4 Apr
571.02	29 May
571.46	27 Jun
571.37	10 Jul
571.30	26 Aug
571.02	15 Sep
570.51	30 Oct
570.15	5 Nov
569.44	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
573.40												1	573.40	1
573.20													573.20	1
573.00													573.00	1
572.80												1	572.80	2
572.60											1		572.60	3
572.40				1								2	572.40	6
572.20							1		1	1	1	1	572.20	11
572.00					3	1			1	1	1	2	572.00	20
571.80				4	11	3	2	4	2	2	2	4	571.80	54
571.60				4	12	14	17	11	1	4	1	1	571.60	119
571.40	1		1	7	4	12	10	9	13	4	1	3	571.40	184
571.20			4	11			1	7	8	8	3	3	571.20	229
571.00	2		3	2	1				4	6	6	8	571.00	261
570.80	1		5	1						2	10	3	570.80	283
570.60	5		5							1	2		570.60	296
570.40	8		6							2	1	1	570.40	314
570.20	12	9	6										570.20	341
570.00	1	18	1								1		570.00	362
569.80		1											569.80	363
569.60													569.60	363
569.40												1	569.40	364

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3028: Sturgeon Point, New York on Lake Erie

	Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		571.45	570.83	570.52	570.57	570.43	570.49	570.66	570.49	570.01	571.05						
11-20 Jan		571.13	570.62	570.36	570.39	570.42	570.64	570.74	570.37	570.37	570.34						
21-31 Jan	570.52	570.33	570.34	/	570.25	570.28	570.26	570.54	570.74	570.42	570.34	570.34		1600/10	573.31	0200/10	568.91
1-10 Feb		570.32	570.19	570.21	570.16	570.28	570.22	570.21	570.12	570.12	570.10						
11-20 Feb		570.13	570.06	570.23	570.14	570.16	570.14	570.09	570.05	570.10	570.14						
21-28 Feb	570.16	570.12	570.04	569.85	570.11	570.33	570.16	570.40	570.40					1700/27	571.68	0100/27	569.52
1-10 Mar		570.35	570.37	570.16	570.39	570.48	570.42	570.47	570.43	570.44	570.44						
11-20 Mar		570.39	570.35	570.61	570.69	570.61	571.14	570.68	570.32	570.83	571.25						
21-31 Mar	570.74	570.82	570.71	571.28	571.26	571.11	570.99	570.96	570.94	571.26	571.20	571.60		0900/31	573.27	0600/22	569.44
1-10 Apr		571.10	571.25	571.59	570.87	572.53	571.77	571.51	571.57	571.42	571.28						
11-20 Apr		571.54	571.47	571.48	571.34	571.32	571.33	571.27	571.25	571.29	571.28						
21-30 Apr	571.49	571.30	571.38	571.13	571.61	571.68	571.76	571.87	571.92	571.87	571.82			2200/5	573.90	0400/4	570.38
1-10 May		571.79	571.92	571.64	571.64	571.95	572.08	571.90	572.13	571.95	571.98						
11-20 May		571.96	572.05	571.96	571.83	571.74	571.78	571.82	571.89	571.81	571.74						
21-31 May	571.77	571.71	571.72	571.73	571.73	571.73	571.60	571.64	571.60	571.02	571.44	571.52		1400/8	573.08	0100/29	570.39
1-10 Jun		571.86	571.86	571.72	571.65	571.69	571.50	571.75	571.67	571.48	571.63						
11-20 Jun		571.65	571.61	571.54	571.60	571.53	571.50	571.68	571.72	571.84	571.75						
21-30 Jun	571.65	571.66	571.58	571.48	571.50	571.65	571.60	571.46	571.52	572.07	571.64			1600/29	572.79	1100/6	570.81
1-10 Jul		572.40	571.76	571.60	571.69	571.61	571.74	571.68	571.74	571.67	571.37						
11-20 Jul		571.48	571.67	571.85	571.65	571.66	571.67	571.69	571.68	571.77	571.84						
21-31 Jul	571.67	571.78	571.44	571.60	571.61	571.79	571.60	571.43	571.42	571.58	571.60	571.59		0400/1	573.07	0900/22	571.07
1-10 Aug		571.73	571.53	571.54	571.50	571.70	571.70	571.78	571.81	571.40	571.83						
11-20 Aug		571.72	571.73	571.70	571.79	571.47	571.67	571.84	571.68	571.72	571.38						
21-31 Aug	571.59	571.57	571.84	571.56	571.34	571.39	571.30	571.48	571.47	571.53	571.33	571.33		0300/22	572.83	0500/24	570.91
1-10 Sep		571.44	571.50	571.44	571.33	571.47	571.31	571.18	571.15	571.45	571.75						
11-20 Sep		571.36	571.30	571.52	571.45	571.02	571.40	571.52	571.57	571.31	571.86						
21-30 Sep	571.49	571.57	571.35	571.20	571.29	571.53	572.30	572.13	571.88	571.59	571.56			1300/26	574.45	2100/15	570.70
1-10 Oct		571.29	571.58	571.75	571.77	571.92	571.68	571.09	571.37	572.24	571.60						
11-20 Oct		571.92	572.07	571.21	571.23	571.55	571.29	571.65	571.47	571.17	571.31						
21-31 Oct	571.34	571.30	571.23	570.56	571.09	571.05	571.05	571.16	570.96	570.73	570.51	570.89		1800/11	573.72	2100/30	570.00
1-10 Nov		570.98	570.91	570.92	570.84	570.15	570.70	570.58	570.88	570.93	571.90						
11-20 Nov		572.61	571.15	571.04	571.02	571.26	571.15	571.68	572.24	571.23	570.81						
21-30 Nov	571.18	571.50	570.90	571.11	571.39	571.04	572.08	570.92	571.88	570.85	570.74			1400/11	573.22	0700/5	569.60
1-10 Dec		572.12	572.57	571.15	571.16	569.44	571.57	571.86	570.94	573.55	571.36						
11-20 Dec		571.15	571.44	571.00	571.02	571.20	570.94	570.56	571.02	571.22	571.19						
21-31 Dec	571.54	571.83	572.45	571.89	571.36	572.94	572.31	571.92	572.08	571.79	571.49	571.07		1500/1	575.92	1600/5	567.69

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3032: Barcelona, New York on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.14 FEET

HIGHEST
Monthly mean elevation: 571.72 May 1977
Daily mean elevation: 572.05 11 Nov 1977
Instant/hourly Elevation: 573.26 1400/26 Sep 1977

LOWEST
Monthly mean elevation: 570.13 Feb 1977
Daily mean elevation: 569.58 5 Dec 1977
Instant/hourly Elevation: 568.85 1600/5 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
571.27	1 Jan
570.28	25 Feb
571.19	24 Mar
571.82	27 Apr
571.92	8 May
571.77	29 Jun
571.93	1 Jul
571.79	17 Aug
572.01	26 Sep
571.85	9 Oct
572.05	11 Nov
571.76	9 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.14	9 Jan
569.91	23 Feb
570.25	3 Mar
570.83	4 Apr
570.88	29 May
571.33	6 Jun
571.40	10 Jul
571.31	26 Aug
571.04	15 Sep
570.54	23 Oct
570.19	5 Nov
569.58	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.00									1		1		572.00	2
571.80				1	9		1		1	1			571.80	15
571.60				5	18	14	16	13	2	4	1	1	571.60	89
571.40				6	2	15	13	12	11	6	1		571.40	155
571.20	1			14	1	1	1	6	10	3	1	2	571.20	195
571.00	1		6	1					5	11	10	5	571.00	234
570.80			5	3	1					3	10	5	570.80	261
570.60	3		4							1	3		570.60	272
570.40	9		9							2	2		570.40	294
570.20	16	4	7										570.20	321
570.00	1	22									1	1	570.00	346
569.80		2											569.80	348
569.60													569.60	348
569.40												1	569.40	349

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3032: Barcelona, New York on Lake Erie

	Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		571.27	570.80	570.55	570.54	570.44	570.49	570.58	570.44	570.14	570.39						
11-20 Jan		571.02	570.65	570.37	570.36	570.42	570.48	570.66	570.36	570.34	570.30						
21-31 Jan	570.44	570.29	570.30	570.24	570.23	570.25	570.23	570.31	570.43	570.34	570.29	570.27	2000/10	571.67	0200/10	569.29	
1-10 Feb		570.26	570.18	570.18	570.16	570.23	570.19	570.17	570.12	570.11	570.10						
11-20 Feb		570.10	570.08	570.14	570.13	570.14	570.12	570.10	570.07	570.10	570.11						
21-28 Feb	570.13	570.12	570.06	569.91	569.96	570.28	570.12	570.14	570.28				2000/27	570.69	0100/24	569.68	
1-10 Mar		570.29	570.35	570.25	570.27	570.42	570.42	570.45	570.44	570.45	570.46						
11-20 Mar		570.44	570.40	570.54	570.68	570.63	570.84	570.55	570.27	570.73	570.83						
21-31 Mar	570.66	570.74	570.35	570.98	571.19	571.08	571.03	571.00	570.93	571.10	571.11	571.16	1300/31	571.69	0600/22	569.90	
1-10 Apr		571.00	571.00	571.27	570.83	571.57	571.56	571.37	571.37	571.28	571.32						
11-20 Apr		571.42	571.44	571.41	571.30	571.30	571.30	571.28	571.23	571.27	571.24						
21-30 Apr	571.38	571.25	571.33	571.15	571.53	571.66	571.76	571.82	571.77	571.71	571.79		0100/6	572.28	0700/4	570.67	
1-10 May		571.78	571.82	571.63	571.62	571.82	571.91	571.88	571.92	571.74	571.82						
11-20 May		571.88	571.92	571.85	571.79	571.77	571.77	571.79	571.79	571.79	571.73						
21-31 May	571.72	571.72	571.71	571.74	571.74	571.74	571.57	571.63	571.61	570.88	571.35	571.48	1700/8	572.29	0400/29	570.52	
1-10 Jun		571.70	571.73	571.65	571.63	571.61	571.33	571.60	571.65	571.46	571.61						
11-20 Jun		571.61	571.62	571.54	571.54	571.55	571.52	571.55	571.63	571.72	571.62						
21-30 Jun	571.59	571.61	571.60	571.50	571.48	571.60	571.56	571.49	571.50	571.77	571.59		1700/29	572.13	1100/6	570.98	
1-10 Jul		571.93	571.51	571.55	571.57	571.56	571.63	571.54	571.67	571.63	571.40						
11-20 Jul		571.47	571.62	571.74	571.61	571.61	571.61	571.67	571.65	571.69	571.80						
21-31 Jul	571.60	571.75	571.45	571.57	571.62	571.68	571.64	571.48	571.44	571.49	571.60	571.54	0900/1	572.17	1000/22	571.27	
1-10 Aug		571.65	571.56	571.54	571.51	571.55	571.63	571.67	571.70	571.47	571.62						
11-20 Aug		571.72	571.72	571.67	571.74	571.50	571.56	571.79	571.69	571.67	571.39						
21-31 Aug	571.55	571.51	571.67	571.51	571.34	571.39	571.31	571.44	571.46	571.48	571.36	571.34	1800/17	571.96	0600/24	571.02	
1-10 Sep		571.42	571.47	571.43	571.33	571.43	571.30	571.18	571.16	571.34	571.56						
11-20 Sep		571.25	571.15	571.20	571.36	571.04	571.30	571.46	571.50	571.30	571.72						
21-30 Sep	571.42	571.58	571.35	571.26	571.23	571.51	572.01	571.88	571.77	571.54	571.53		1400/26	573.26	2100/15	570.88	
1-10 Oct		571.29	571.58	571.72	571.69	571.65	571.46	571.09	571.12	571.85	571.49						
11-20 Oct		571.56	571.66	571.15	571.20	571.41	571.29	571.56	571.29	571.10	571.19						
21-31 Oct	571.23	571.20	571.08	570.54	570.94	571.02	571.01	571.07	570.97	570.81	570.58	570.68	1200/12	572.26	2200/30	570.26	
1-10 Nov		570.88	570.89	570.88	570.86	570.19	570.60	570.58	570.85	570.93	571.35						
11-20 Nov		572.05	571.16	571.02	570.99	571.05	571.03	571.14	571.77	571.17	570.77						
21-30 Nov	571.00	571.20	570.97	570.68	571.06	570.86	571.42	571.02	571.03	570.89	570.74		1600/11	572.32	0900/5	569.85	
1-10 Dec		571.04	571.37	571.00	570.98	569.58	570.07	571.15	570.92	571.76	571.29						
11-20 Dec		571.08	571.06	570.95	570.95	571.14	/	/	/	/	/						
21-31 Dec	570.96	/	/	/	/	/	/	/	/	/	/	/	2200/9	572.42	1600/5	568.85	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3038: Erie, Pennsylvania on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.28 FEET

HIGHEST
Monthly mean elevation: 571.85 May 1977
Daily mean elevation: 572.61 5 Apr 1977
Instant/hourly Elevation: 573.63 1620/1 Dec 1977

LOWEST
Monthly mean elevation: 570.22 Feb 1977
Daily mean elevation: 569.94 23 Feb 1977
Instant/hourly Elevation: 568.82 1455/5 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
571.09	1 Jan
570.44	27 Feb
571.46	31 Mar
572.61	5 Apr
572.08	8 May
571.88	29 Jun
572.04	1 Jul
571.84	17 Aug
572.05	26 Sep
571.98	9 Oct
571.98	11 Nov
572.44	9 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.15	9 Jan
569.94	23 Feb
570.24	3 Mar
570.96	2 Apr
571.29	29 May
571.56	23 Jun
571.47	28 Jul
571.42	26 Aug
571.22	15 Sep
570.76	30 Oct
570.54	5 Nov
570.01	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.60				1									572.60	1
572.40												1	572.40	2
572.20												1	572.20	3
572.00					4		1		2				572.00	10
571.80				5	19	3	2	1	2	3	3	3	571.80	51
571.60				2	6	22	20	13	6	5		4	571.60	129
571.40			1	10	1	5	8	16	17	5	3	3	571.40	198
571.20			3	8	1				3	8	2	6	571.20	229
571.00	1		7	1						6	8	7	571.00	259
570.80	2		3	1						2	13	3	570.80	283
570.60	7		5							2			570.60	297
570.40	10	2	9								1		570.40	319
570.20	10	11	3										570.20	343
570.00	1	14										1	570.00	359
569.80		1											569.80	360

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3038: Erie, Pennsylvania on Lake Erie

	Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		571.09	570.71	570.59	570.65	570.48	570.54	570.66	570.55	570.15	570.93					
11-20 Jan		570.97	570.61	570.42	570.46	570.49	570.64	570.65	570.38	570.39	570.38					
21-31 Jan	570.53	570.38	570.39	570.34	570.34	570.35	570.41	570.46	570.75	570.45	570.35	570.34	1535/10	572.32	0115/10	569.47
1-10 Feb		570.33	570.26	570.28	570.27	570.29	570.24	570.24	570.21	570.19	570.19					
11-20 Feb		570.17	570.15	570.24	570.19	570.18	570.18	570.17	570.15	570.16	570.17					
21-28 Feb	570.22	570.14	570.11	569.94	570.21	570.34	570.20	570.44	570.42				1350/27	571.23	0135/27	569.57
1-10 Mar		570.37	570.36	570.24	570.44	570.48	570.46	570.50	570.50	570.51	570.52					
11-20 Mar		570.49	570.50	570.69	570.72	570.72	571.01	570.75	570.66	570.90	571.12					
21-31 Mar	570.79	570.92	570.94	571.24	571.20	571.12	571.07	571.07	571.05	571.26	571.25	571.46	1010/31	572.50	0455/22	570.04
1-10 Apr		571.15	570.96	/	/	572.61	571.60	571.46	571.54	571.41	571.36					
11-20 Apr		571.47	571.43	571.45	571.41	571.40	571.36	571.31	571.29	571.35	571.33					
21-30 Apr	571.54	571.38	571.43	571.44	571.71	571.78	571.84	571.91	571.98	571.92	571.89		2000/5	573.14	2035/1	570.71
1-10 May		571.90	571.96	571.72	571.78	571.97	572.02	571.97	572.08	572.06	572.03					
11-20 May		571.96	571.99	571.94	571.89	571.82	571.86	571.87	571.88	571.89	571.84					
21-31 May	571.85	571.81	571.81	571.82	571.81	571.82	571.72	571.72	571.72	571.29	571.60	571.66	1555/8	572.70	0300/29	570.65
1-10 Jun		571.85	571.82	571.71	571.68	571.70	571.65	571.80	571.64	571.62	571.67					
11-20 Jun		571.67	571.64	571.61	571.64	571.61	571.58	571.65	571.67	571.73	571.72					
21-30 Jun	571.67	571.67	571.63	571.56	571.57	571.66	571.63	571.56	571.60	571.88	571.64		1845/6	572.44	0947/6	570.89
1-10 Jul		572.04	571.63	571.55	571.63	571.61	571.78	571.70	571.73	571.71	571.58					
11-20 Jul		571.61	571.74	571.78	571.65	571.69	571.73	571.75	571.73	571.77	571.81					
21-31 Jul	571.68	571.81	571.58	571.67	571.64	571.76	571.70	571.53	571.47	571.55	571.58	571.56	0410/1	572.63	0355/5	571.03
1-10 Aug		571.66	571.52	571.51	571.52	571.59	571.65	571.69	571.71	571.50	571.73					
11-20 Aug		571.71	571.74	571.68	571.77	571.56	571.66	571.84	571.65	571.67	571.45					
21-31 Aug	571.59	571.49	571.68	571.52	571.47	571.49	571.42	571.50	571.46	571.51	571.44		0622/5	572.24	0540/24	571.02
1-10 Sep		571.55	571.57	571.59	571.54	571.58	571.49	571.41	571.37	571.45	571.70					
11-20 Sep		571.44	571.34	571.41	571.55	571.22	571.47	571.58	571.63	571.55	571.88					
21-30 Sep	571.58	571.72	571.52	571.44	571.57	571.66	572.05	572.01	571.89	571.69	571.66		1425/15	573.08	1855/13	570.93
1-10 Oct		571.58	571.80	571.92	571.84	571.72	571.62	571.28	571.23	571.98	571.57					
11-20 Oct		571.68	571.74	571.29	571.31	571.49	571.42	571.58	571.34	571.20	571.29					
21-31 Oct	571.36	571.24	571.21	570.79	571.15	571.12	571.11	571.16	571.06	570.92	570.76	570.90	1935/11	572.73	2050/30	570.40
1-10 Nov		570.92	570.93	570.99	570.98	570.54	570.87	570.87	571.02	571.03	571.58					
11-20 Nov		571.98	571.24	571.10	571.02	571.10	570.99	571.47	571.86	571.13	570.83					
21-30 Nov	571.13	571.24	570.94	571.04	571.18	571.00	571.88	570.90	571.42	570.89	570.86		1120/11	572.58	0843/5	570.14
1-10 Dec		571.62	571.81	571.06	571.10	570.01		571.52	570.90	572.44	571.34					
11-20 Dec		571.13	571.13	570.92	571.07	571.20	571.05	570.89	/	571.29	571.24					
21-31 Dec	571.38	571.63	571.91	571.56	571.33	572.35	571.91	571.66	571.73	571.51	571.39	571.26	1620/1	573.63	1455/5	568.82

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3053: Fairport Harbor, Ohio on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.38 FEET

HIGHEST
Monthly mean elevation: 571.95 May 1977
Daily mean elevation: 572.18 9 May 1977
Instant/hourly Elevation: 573.09 1805/8 May 1977

LOWEST
Monthly mean elevation: 570.32 Feb 1977
Daily mean elevation: 570.24 21 Feb 1977
Instant/hourly Elevation: 569.87 1605/1 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
570.50	28 Feb
571.35	22 Mar
572.00	28 Apr
572.18	9 May
571.88	6 Jun
571.84	14 Jul
571.79	11 Aug
571.77	24 Sep
571.91	2 Oct
571.37	12 Nov
571.53	25 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
570.24	21 Feb
570.44	2 Mar
571.34	1 Apr
571.79	31 May
571.63	17 Jun
571.59	29 Jul
571.53	21 Aug
571.27	12 Sep
571.04	31 Oct
570.93	27 Nov
570.73	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.00					7								572.00	7
571.80				7	23	5	4			3			571.80	49
571.60				1	1	25	26	21	12	2			571.60	137
571.40				19			1	10	14	8		11	571.40	200
571.20			7	3					4	16	4	7	571.20	241
571.00			6							2	21	6	571.00	276
570.80			3								5	6	570.80	290
570.60			5									1	570.60	296
570.40		2	10										570.40	308
570.20		10											570.20	318

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3053: Fairport Harbor, Ohio on Lake Erie

	Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		/	/	/	/	/	/	/	/	/	/	/	/				
11-20 Jan		/	/	/	/	/	/	/	/	/	/	/	/				
21-31 Jan		/	/	/	/	/	/	/	/	/	/	/	/				
1-10 Feb		/	/	/	/	/	/	/	/	/	/	/	/				
11-20 Feb		/	/	/	/	/	/	/	/	/	/	/	/				
21-28 Feb	570.32	570.24	570.25	570.28	570.30	570.36	570.34	570.46	570.50	570.27	570.27	570.26	570.25	1250/27	570.71	2110/24	570.02
1-10 Mar		570.47	570.44	570.47	570.49	570.58	570.56	570.59	570.58	570.58	570.58	570.60					
11-20 Mar		570.62	570.63	570.77	570.77	570.85	570.79	570.86	571.09	570.97	571.04						
21-31 Mar	570.88	571.06	571.35	571.22	571.20	571.14	571.16	571.21	571.22	571.27	571.33	571.31	1105/22	571.96	2000/4	570.29	
1-10 Apr		571.34	571.37	571.38	571.52	571.58	571.58	571.50	571.56	571.47	571.50						
11-20 Apr		571.46	571.47	571.50	571.51	571.51	571.49	571.47	571.43	571.45	571.44						
21-30 Apr	571.59	571.49	571.51	571.82	571.80	571.85	571.92	571.93	572.00	571.96	571.95	1135/28	572.28	2220/5	570.99		
1-10 May		571.97	571.96	571.96	572.04	572.05	572.06	572.09	572.16	572.18	572.07						
11-20 May		571.98	571.98	571.99	571.99	571.96	571.92	571.88	571.85	571.93	571.91						
21-31 May	571.95	571.92	571.91	571.89	571.91	571.91	571.90	571.85	571.83	571.83	571.81	571.79	1805/8	573.09	2055/31	571.30	
1-10 Jun		571.84	571.83	571.76	571.71	571.71	571.88	571.84	571.74	571.87	571.78						
11-20 Jun		571.75	571.75	571.76	571.75	571.73	571.68	571.63	571.69	571.67	571.74						
21-30 Jun	571.74	571.74	571.72	571.72	571.68	571.74	571.72	571.72	571.69	571.67	571.71	2050/30	572.45	1610/30	571.33		
1-10 Jul		571.65	571.74	571.73	571.72	571.78	571.74	571.77	571.75	571.83	571.82						
11-20 Jul		571.79	571.79	571.80	571.84	571.82	571.80	571.78	571.77	571.76	571.73						
21-31 Jul	571.74	571.79	571.79	571.73	571.68	571.75	571.70	571.63	571.61	571.59	571.66	571.61	1715/7	572.36	2135/7	571.31	
1-10 Aug		571.64	571.57	571.55	571.55	571.57	571.64	571.67	571.68	571.70	571.71						
11-20 Aug		571.79	571.79	571.72	571.72	571.74	571.68	571.78	571.69	571.64	571.62						
21-31 Aug	571.64	571.53	571.64	571.61	571.70	571.61	571.60	571.54	571.54	571.55	571.62	571.60	1950/11	572.50	1900/21	571.25	
1-10 Sep		571.54	571.56	571.57	571.57	571.54	571.55	571.51	571.47	571.40	571.42						
11-20 Sep		571.37	571.27	571.28	571.49	571.41	571.44	571.50	571.50	571.66	571.70						
21-30 Sep	571.57	571.73	571.70	571.71	571.77	571.72	571.76	571.76	571.76	571.71	571.67	1655/24	572.29	0240/13	570.87		
1-10 Oct		571.83	571.91	571.86	571.66	571.51	571.59	571.54	571.31	571.54	571.44						
11-20 Oct		571.36	571.38	571.45	571.41	571.41	571.61	571.35	571.24	571.32	571.30						
21-31 Oct	571.40	571.21	571.25	571.27	571.23	571.23	571.22	571.20	571.23	571.23	571.23	571.04	0212/3	572.25	1946/11	570.84	
1-10 Nov		571.02	571.05	571.08	571.13	571.22	571.16	571.23	571.19	571.17	571.10						
11-20 Nov		571.11	571.37	571.19	571.04	570.95	570.96	571.10	571.10	571.07	571.05						
21-30 Nov	571.09	571.03	571.06	571.06	571.03	571.08	571.26	570.93	570.93	570.99	571.02	0506/10	571.70	1049/28	570.60		
1-10 Dec		570.87	570.73	570.97	571.01	571.36	571.35	571.20	570.95	570.90	571.06						
11-20 Dec		571.04	570.86	570.92	571.15	571.20	571.29	571.42	571.46	571.42	571.46						
21-31 Dec	571.23	571.41	571.29	571.29	571.43	571.53	571.49	571.50	571.38	571.37	571.41	571.45	2200/5	572.29	1605/1	569.87	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3063: Cleveland, Ohio on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.24 FEET

HIGHEST
Monthly mean elevation: 571.94 May 1977
Daily mean elevation: 572.14 8 May 1977
Instant/hourly Elevation: 572.94 1900/5 Dec 1977

LOWEST
Monthly mean elevation: 570.22 Feb 1977
Daily mean elevation: 570.13 2 Feb 1977
Instant/hourly Elevation: 569.47 1600/1 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.74	9 Jan
570.42	28 Feb
571.49	22 Mar
572.02	28 Apr
572.14	8 May
571.98	6 Jun
571.86	7 Jul
571.72	24 Aug
571.75	23 Sep
571.93	2 Oct
571.43	5 Nov
571.72	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.17	17 Jan
570.13	2 Feb
570.36	4 Mar
571.30	5 Apr
571.77	31 May
571.59	30 Jun
571.41	31 Jul
571.36	4 Aug
571.19	12 Sep
570.95	31 Oct
570.71	28 Nov
570.37	9 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.00				1	9								572.00	10
571.80				6	19	3	5			3			571.80	46
571.60				1	3	24	21	6	12	1		1	571.60	115
571.40			1	14		3	5	22	12	4	1	4	571.40	181
571.20			3	8				3	5	14	2	10	571.20	226
571.00			8						1	8	14	4	571.00	261
570.80			4							1	11	8	570.80	285
570.60	1		4								2	1	570.60	293
570.40	12	1	10									2	570.40	318
570.20	17	17	1									1	570.20	354
570.00	1	10											570.00	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3063: Cleveland, Ohio on Lake Erie

		Monthly means	----- Daily Means -----										HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			570.41	570.49	570.58	570.56	570.60	570.51	570.51	570.49	570.74	570.50					
11-20 Jan			570.22	570.40	570.43	570.46	570.43	570.36	570.17	570.39	570.36	570.34					
21-31 Jan	570.40		570.33	570.33	570.35	570.35	570.33	570.31	570.27	570.24	570.26	570.30	570.28	0100/10	571.19	1500/28	569.70
1-10 Feb			570.18	570.13	570.22	570.27	570.24	570.24	570.22	570.23	570.22	570.21					
11-20 Feb			570.19	570.22	570.18	570.21	570.21	570.21	570.18	570.21	570.19	570.18					
21-28 Feb	570.22		570.17	570.18	570.32	570.18	570.21	570.30	570.34	570.42				1000/24	570.82	2100/24	569.75
1-10 Mar			570.49	570.42	570.46	570.36	570.45	570.50	570.54	570.50	570.49	570.55					
11-20 Mar			570.62	570.57	570.71	570.73	570.81	570.70	570.84	571.14	570.98	570.99					
21-31 Mar	570.85		571.09	571.49	571.18	571.19	571.14	571.18	571.18	571.24	571.20	571.27	571.29	1100/22	572.17	2000/4	570.04
1-10 Apr			571.35	571.36	571.36	571.56	571.30	571.60	571.42	571.50	571.40	571.45					
11-20 Apr			571.34	571.38	571.37	571.47	571.45	571.45	571.44	571.44	571.43	571.44					
21-30 Apr	571.55		571.46	571.44	571.88	571.79	571.86	571.90	571.87	572.02	571.93	571.92		1100/28	572.33	1900/22	570.75
1-10 May			571.92	571.91	572.01	572.06	572.01	572.01	572.08	572.14	572.14	572.02					
11-20 May			571.95	571.93	571.95	571.98	571.98	571.91	571.88	571.88	571.90	571.91					
21-31 May	571.94		571.88	571.85	571.91	571.94	571.94	571.91	571.85	571.80	572.01	571.78	571.77	2100/8	572.92	2200/31	571.44
1-10 Jun			571.79	571.80	571.73	571.72	571.73	571.98	571.84	571.74	571.92	571.74					
11-20 Jun			571.71	571.72	571.73	571.69	571.71	571.67	571.60	571.65	571.61	571.68					
21-30 Jun	571.70		571.69	571.66	571.66	571.62	571.61	571.66	571.67	571.62	571.60	571.59		1100/6	572.55	1400/29	571.22
1-10 Jul			571.53	571.68	571.64	571.64	571.77	571.71	571.86	571.81	571.81	571.83					
11-20 Jul			571.77	571.73	571.74	571.75	571.71	571.74	571.73	571.71	571.76	571.71					
21-31 Jul	571.70		571.80	571.83	571.70	571.62	571.72	571.67	571.62	571.57	571.51	571.58	571.41	1800/18	572.34	0400/1	571.18
1-10 Aug			571.47	571.44	571.40	571.36	571.38	571.47	571.45	571.48	571.60	571.53					
11-20 Aug			571.64	571.67	571.55	571.58	571.63	571.51	571.65	571.56	571.53	571.61					
21-31 Aug	571.53		571.45	571.56	571.55	571.72	571.57	571.56	571.46	571.47	571.47	571.54	571.48	2200/17	572.16	0900/4	571.05
1-10 Sep			571.42	571.50	571.53	571.53	571.50	571.49	571.50	571.48	571.29	571.37					
11-20 Sep			571.33	571.19	571.22	571.43	571.42	571.35	571.43	571.45	571.64	571.65					
21-30 Sep	571.52		571.68	571.72	571.75	571.72	571.66	571.61	571.65	571.70	571.66	571.65		2400/19	572.21	1200/13	570.75
1-10 Oct			571.86	571.93	571.88	571.54	571.37	571.53	571.58	571.17	571.37	571.40					
11-20 Oct			571.17	571.15	571.45	571.38	571.36	571.70	571.22	571.12	571.33	571.25					
21-31 Oct	571.36		571.14	571.24	571.39	571.20	571.19	571.21	571.17	571.23	571.27	571.33	570.95	0200/3	572.16	2400/4	570.59
1-10 Nov			570.97	571.06	571.08	571.16	571.43	571.20	571.28	571.20	571.15	570.87					
11-20 Nov			570.83	571.39	571.17	570.97	570.77	570.84	570.87	570.83	571.02	570.95					
21-30 Nov	571.03		570.96	571.04	571.02	570.94	571.01	571.20	570.87	570.71	571.02	571.07		0700/5	571.64	2400/10	570.28
1-10 Dec			570.52	570.42	570.93	570.94	571.72	571.27	570.92	570.86	570.37	570.92					
11-20 Dec			570.94	570.62	570.82	571.11	571.11	571.30	571.55	571.48	571.42	571.39					
21-31 Dec	571.11		571.23	570.97	571.10	571.39	571.29	571.26	571.39	571.12	571.24	571.33	571.48	1900/5	572.94	1600/1	569.47

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3079: Marblehead, Ohio on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.27 FEET

HIGHEST
Monthly mean elevation: 572.01 May 1977
Daily mean elevation: 572.34 29 May 1977
Instant/hourly Elevation: 573.83 2240/8 May 1977

LOWEST
Monthly mean elevation: 570.20 Feb 1977
Daily mean elevation: 568.78 9 Dec 1977
Instant/hourly Elevation: 567.36 1315/9 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
571.73	10 Jan
570.49	23 Feb
571.54	22 Mar
572.16	23 Apr
572.34	29 May
572.10	6 Jun
572.07	10 Jul
571.83	15 Aug
571.92	23 Sep
571.96	1 Oct
571.81	5 Nov
572.24	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.43	1 Jan
569.87	25 Feb
570.15	5 Mar
570.36	5 Apr
571.89	12 May
571.36	29 Jun
571.16	1 Jul
571.34	5 Aug
571.13	10 Sep
570.63	9 Oct
569.96	11 Nov
568.78	9 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.20					3							1	572.20	4
572.00				2	10	2	1						572.00	19
571.80				7	18	3	7	1	2	2	1	1	571.80	61
571.60	1					17	19	10	11	3			571.60	122
571.40			1	14		7	2	14	8	5	2	6	571.40	181
571.20	1		6	6		1		4	8	9	3	1	571.20	220
571.00	1		6				1		1	8	9	5	571.00	251
570.80	3		2							1	6	8	570.80	271
570.60	3		6							3	3	2	570.60	288
570.40	1	1	6								1	2	570.40	299
570.20		11	2	1							3	1	570.20	317
570.00		8	2								1	1	570.00	329
569.80		1									1	1	569.80	332
569.60												1	569.60	333
569.40													569.40	333
569.20													569.20	333
569.00													569.00	333
568.80													568.80	333
568.60												1	568.60	334

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3079: Marblehead, Ohio on Lake Erie

	Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW			
													Hrs/day	Elev.	Hrs/day	Elev.
1-10 Jan		570.43	570.74	570.93	570.90	571.01	570.82	570.65	570.80	571.35	571.73					
11-20 Jan		/	/	/	/	/	/	/	/	/	/					
21-31 Jan	570.94	/	/	/	/	/	/	/	/	/	/	/	2300/9	572.15	1330/7	570.32
1-10 Feb		/	/	/	/	/	/	/	570.27	570.23	570.24					
11-20 Feb		570.21	570.25	570.02	570.20	570.18	570.22	570.23	570.24	570.23	570.20					
21-28 Feb	570.20	570.19	570.23	570.49	570.14	569.87	570.37	570.08	570.13				0230/27	571.02	1725/27	569.17
1-10 Mar		570.20	570.30	570.58	570.31	570.15	570.46	570.46	570.52	570.49	570.61					
11-20 Mar		570.75	570.79	570.71	570.77	570.86	570.52	570.98	571.34	571.06	570.79					
21-31 Mar	570.85	571.27	571.54	571.01	571.15	571.18	571.27	571.28	571.39	571.18	571.27	571.02	0600/22	572.61	1914/4	569.57
1-10 Apr		571.44	571.38	571.32	571.82	570.36	571.23	571.38	571.42	571.46	571.51					
11-20 Apr		571.35	571.43	571.39	571.54	571.52	571.52	571.55	571.55	571.51	571.53					
21-30 Apr	571.57	571.52	571.56	572.16	571.83	571.95	571.94	571.85	572.08	572.00	571.99		1035/23	572.77	2235/5	569.48
1-10 May		571.97	571.90	572.22	572.21	572.05	572.01	572.15	572.07	572.18	572.00					
11-20 May		571.98	571.89	572.00	572.04	572.06	572.01	571.94	571.91	571.96	572.01					
21-31 May	572.01	571.97	571.89	571.92	571.92	571.92	572.04	571.94	571.91	572.34	571.97	571.91	2240/8	573.83	0448/6	571.45
1-10 Jun		571.55	571.77	571.85	571.77	571.78	572.10	571.85	571.88	572.02	571.76					
11-20 Jun		571.70	571.78	571.80	571.73	571.77	571.76	571.60	571.65	571.60	571.58					
21-30 Jun	571.72	571.67	571.70	571.76	571.64	571.60	571.72	571.77	571.60	571.36	571.58		1145/6	572.82	0945/29	570.66
1-10 Jul		571.16	571.70	571.64	571.54	571.71	571.67	571.84	571.88	571.90	572.07					
11-20 Jul		571.91	571.72	571.70	571.81	571.72	571.71	571.70	571.71	571.63	571.67					
21-31 Jul	571.71	571.81	571.98	571.72	571.61	571.69	571.72	571.72	571.64	571.54	571.62	/	0210/10	572.33	0450/1	570.45
1-10 Aug		/	/	571.51	571.39	571.34	571.40	571.38	571.44	571.80	571.51					
11-20 Aug		571.71	571.73	571.64	571.62	571.83	571.55	571.54	571.64	571.44	571.74					
21-31 Aug	571.56	571.41	571.44	571.58	571.78	571.68	571.67	571.46	571.46	571.42	571.58	571.56	0745/24	572.30	0225/6	570.87
1-10 Sep		571.42	571.42	571.61	571.59	571.51	571.60	571.63	571.63	571.29	571.13					
11-20 Sep		571.33	571.22	571.21	571.41	571.64	571.39	571.41	571.40	571.69	571.40					
21-30 Sep	571.52	571.64	571.87	571.92	571.80	571.64	571.32	571.46	571.62	571.71	571.71		2330/23	572.20	1345/26	570.19
1-10 Oct		571.96	571.88	571.63	571.50	571.18	571.37	571.71	571.17	570.63	571.09					
11-20 Oct		570.76	570.80	571.48	571.40	571.21	571.55	571.03	570.89	571.28	571.20					
21-31 Oct	571.29	571.10	571.25	571.74	571.23	571.21	571.21	571.14	571.30	571.43	571.58	571.16	1915/1	572.19	0927/12	569.87
1-10 Nov		571.12	571.14	571.12	571.26	571.81	571.42	571.50	571.31	571.24	570.29					
11-20 Nov		569.96	571.11	571.09	571.00	570.66	570.88	570.44	570.13	570.94	571.06					
21-30 Nov	570.92	570.67	571.14	570.96	570.72	570.84	570.38	570.91	570.33	571.03	571.15		0800/5	572.32	1910/17	569.51
1-10 Dec		569.96	569.73	570.82	570.88	572.24	570.65	570.14	571.01	568.78	570.61					
11-20 Dec		570.88	570.54	570.87	571.07	571.14	571.43	571.87	571.58	571.49	571.41					
21-31 Dec	570.91	570.93	570.45	570.92	571.45	570.33	570.86	571.16	570.89	571.16	571.30	571.59	1720/5	573.79	1315/9	567.36

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3085: Toledo, Ohio on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.20 FEET

HIGHEST
Monthly mean elevation: 572.06 May 1977
Daily mean elevation: 573.26 5 Dec 1977
Instant/hourly Elevation: 575.23 1400/5 Dec 1977

LOWEST
Monthly mean elevation: 570.25 Feb 1977
Daily mean elevation: 567.32 9 Dec 1977
Instant/hourly Elevation: 564.99 1400/9 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.97	9 Jan
570.57	23 Feb
571.63	18 Mar
572.57	23 Apr
573.12	29 May
572.24	6 Jun
572.23	10 Jul
572.04	15 Aug
572.07	23 Sep
572.25	23 Oct
572.16	5 Nov
573.26	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
569.37	28 Jan
569.89	25 Feb
570.21	16 Mar
569.28	5 Apr
571.78	12 May
570.85	29 Jun
570.50	1 Jul
571.23	17 Aug
570.84	10 Sep
570.21	9 Oct
568.81	11 Nov
567.32	9 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
573.25												1	573.25	1
573.00					1								573.00	2
572.75													572.75	2
572.50				1	1								572.50	4
572.25					2							1	572.25	7
572.00				5	10	1	2	1	2	3	1		572.00	32
571.75				3	17	11	7	3	3	1	1		571.75	78
571.50			3	10		13	17	11	11	2	3	3	571.50	151
571.25			3	7		3	4	15	7	14	7	4	571.25	215
571.00			6	2		1		1	5	5	4	4	571.00	243
570.75	1		6	1		1			2	2	5	6	570.75	267
570.50	5	1	8							2	3	3	570.50	289
570.25	14	15	3				1			1	1	1	570.25	325
570.00	5	11	2							1	1	2	570.00	347
569.75	5	1											569.75	353
569.50											4		569.50	357
569.25	1			1								2	569.25	361
569.00												2	569.00	363
568.75											1		568.75	364
568.50													568.50	364
568.25													568.25	364
568.00													568.00	364
567.75													567.75	364
567.50													567.50	364
567.25												1	567.25	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3085: Toledo, Ohio on Lake Erie

	Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.
1-10 Jan		569.97	570.47	570.65	570.58	570.71	570.54	570.38	570.49	570.97	570.08		
11-20 Jan		569.84	570.20	570.57	570.48	570.38	570.15	569.94	570.39	570.38	570.44		
21-31 Jan	570.30	570.40	570.38	570.47	570.44	570.38	570.36	569.94	569.37	569.82	570.08	570.03	0100/10 571.89 1800/28 567.49
1-10 Feb		570.14	570.32	570.22	570.33	570.20	570.28	570.28	570.32	570.30	570.30		
11-20 Feb		570.27	570.32	570.11	570.25	570.22	570.26	570.31	570.31	570.27	570.23		
21-28 Feb	570.25	570.25	570.30	570.57	570.23	569.89	570.43	570.07	570.14				0400/27 571.20 1800/27 568.60
1-10 Mar		570.30	570.36	570.67	570.35	570.25	570.53	570.51	570.59	570.51	570.64		
11-20 Mar		570.84	570.91	570.69	570.79	570.81	570.21	571.17	571.63	571.14	570.69		
21-31 Mar	570.88	571.43	571.54	570.83	571.12	571.25	571.41	571.38	571.52	571.08	571.16	570.85	0600/22 573.93 1800/16 569.15
1-10 Apr		571.73	571.32	571.30	572.13	569.28	570.84	571.23	571.38	571.50	571.52		
11-20 Apr		571.22	571.39	571.30	571.61	571.58	571.59	571.64	571.62	571.51	571.59		
21-30 Apr	571.56	571.45	571.64	572.57	571.94	572.08	571.93	571.77	572.22	572.01	572.03		0900/23 573.37 2100/5 568.59
1-10 May		571.95	571.88	572.58	572.44	572.01	571.94	572.32	572.04	572.12	571.95		
11-20 May		571.99	571.78	571.89	572.12	572.17	572.01	571.89	571.83	571.97	572.02		
21-31 May	572.06	572.00	571.90	571.88	571.91	571.97	572.15	571.98	571.86	573.12	572.06	572.06	0300/29 574.93 1400/8 570.99
1-10 Jun		571.13	571.63	571.95	571.69	571.81	572.24	571.75	572.00	572.00	571.79		
11-20 Jun		571.71	571.83	571.86	571.73	571.81	571.82	571.51	571.48	571.41	571.32		
21-30 Jun	571.68	571.66	571.71	571.83	571.62	571.54	571.74	571.86	571.54	570.85	571.56		1000/6 573.98 1000/29 570.07
1-10 Jul		570.50	571.65	571.60	571.58	571.60	571.43	571.76	571.96	571.96	572.23		
11-20 Jul		571.96	571.54	571.59	571.83	571.67	571.64	571.66	571.62	571.48	571.59		
21-31 Jul	571.66	571.80	572.11	571.70	571.54	571.57	571.70	571.84	571.71	571.49	571.66	571.39	1100/22 572.95 0700/1 569.74
1-10 Aug		571.39	571.51	571.47	571.41	571.30	571.35	571.29	571.31	571.94	571.37		
11-20 Aug		571.64	571.61	571.64	571.60	572.04	571.50	571.23	571.64	571.40	571.88		
21-31 Aug	571.53	571.34	571.34	571.59	571.86	571.74	571.74	571.42	571.40	571.36	571.59	571.54	1700/23 572.87 0500/5 570.60
1-10 Sep		571.38	571.34	571.65	571.59	571.53	571.67	571.65	571.70	571.14	570.84		
11-20 Sep		571.27	571.19	571.14	571.34	571.90	571.41	571.33	571.29	571.65	571.07		
21-30 Sep	571.48	571.62	572.05	572.07	571.88	571.67	570.95	571.18	571.52	571.71	571.76		2300/23 572.64 1300/26 569.66
1-10 Oct		572.05	571.68	571.33	571.34	571.07	571.32	572.12	571.43	570.21	571.20		
11-20 Oct		570.54	570.41	571.49	571.37	571.00	571.27	570.85	570.65	571.27	571.20		
21-31 Oct	571.29	571.10	571.38	572.25	571.31	571.29	571.32	571.13	571.38	571.62	571.94	571.37	0500/23 573.01 0900/12 568.96
1-10 Nov		571.28	571.29	571.24	571.52	572.16	571.58	571.69	571.43	571.34	569.51		
11-20 Nov		568.81	570.83	571.00	571.03	570.53	570.90	570.05	569.54	570.94	571.34		
21-30 Nov	570.83	570.41	571.33	570.92	570.52	570.74	569.59	571.11	569.73	571.15	571.33		1000/5 572.90 0800/28 567.62
1-10 Dec		569.39	569.15	570.79	570.96	573.26	570.04	569.46	571.33	567.32	570.45		
11-20 Dec		570.96	570.65	570.94	571.10	571.20	571.59	572.29	571.83	571.69	571.46		
21-31 Dec	570.82	570.66	570.11	570.84	571.47	569.24	570.60	571.19	570.97	571.25	571.42	571.66	1400/5 575.23 1400/9 564.99

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3087: Monroe, Michigan on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.14 FEET

HIGHEST
Monthly mean elevation: 572.03 May 1977
Daily mean elevation: 572.64 5 Dec 1977
Instant/hourly Elevation: 574.02 1400/5 Dec 1977

LOWEST
Monthly mean elevation: 570.22 Dec 1977
Daily mean elevation: 568.93 27 Dec 1977
Instant/hourly Elevation: 567.24 0800/2 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.93	9 Jan
570.55	23 Feb
571.49	28 Mar
572.23	23 Apr
572.41	3 May
571.88	27 Jun
572.13	10 Jul
571.99	15 Aug
571.96	22 Sep
572.05	7 Oct
571.97	5 Nov
572.64	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
569.35	28 Jan
570.00	25 Feb
570.27	5 Mar
569.61	5 Apr
571.80	12 May
570.97	29 Jun
570.78	1 Jul
571.23	17 Aug
570.91	10 Sep
570.40	9 Oct
569.12	11 Nov
568.93	27 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.60												1	572.60	1
572.40					1								572.40	2
572.20				1	2								572.20	5
572.00				4	2		1			2			572.00	14
571.80				4	8	3	6	3	3		1		571.80	42
571.60				2	1	9	16	7	7	3			571.60	87
571.40			2	12		4	7	15	6	3	3		571.40	139
571.20			5	4		1		6	7	8	7		571.20	177
571.00			5	1					2	6	3	1	571.00	195
570.80	1		4	1		1			1	2	5	1	570.80	211
570.60	2		7				1			2	3	3	570.60	229
570.40	9	1	3							1	2	2	570.40	247
570.20	10	19	5							1	1		570.20	283
570.00	2	5										3	570.00	293
569.80	3	1									1	2	569.80	300
569.60				1							1	2	569.60	304
569.40	2										2		569.40	308
569.20	1											3	569.20	312
569.00											1		569.00	313
568.80												1	568.80	314

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 3087: Monroe, Michigan on Lake Erie

	Monthly means	----- Daily Means -----											HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		569.96	570.45	570.63	570.58	570.68	570.53	570.38	570.48	570.93	570.10					
11-20 Jan		569.85	570.21	570.57	570.47	570.37	570.38	569.50	570.37	570.38	570.43					
21-31 Jan	570.28	570.39	570.37	570.46	570.42	570.36	570.32	569.96	569.35	569.60	570.02	/	0100/10	571.82	1800/28	567.58
1-10 Feb		570.23	570.30	570.19	570.31	570.19	570.24	/	/	570.26	570.28					
11-20 Feb		570.26	570.31	570.10	570.24	570.21	570.25	570.29	570.30	570.25	570.22					
21-28 Feb	570.24	570.24	570.28	570.55	570.23	570.00	570.40	570.07	570.13				0200/27	571.17	1700/27	568.79
1-10 Mar		570.30	570.35	570.61	570.36	570.27	570.49	570.49	570.61	570.60	570.64					
11-20 Mar		570.78	570.88	570.74	570.79	570.83	570.30	571.07	571.42	571.09	570.71					
21-31 Mar	570.85	571.35	571.11	570.82	571.05	571.20	571.34	571.37	571.49	571.23	571.28	570.90	0600/22	572.60	1800/16	569.20
1-10 Apr		571.67	571.41	571.19	572.11	569.61	570.93	571.29	571.34	571.50	571.54					
11-20 Apr		571.32	571.43	571.36	571.53	571.55	571.56	571.60	571.61	571.48	571.55					
21-30 Apr	571.55	571.52	571.55	572.23	571.84	571.97	571.91	571.88	572.07	572.03	572.03		1000/23	572.86	2000/5	568.69
1-10 May		571.99	571.90	572.41	572.34	572.10	571.84	572.24	571.90	571.92	571.90					
11-20 May		572.00	571.80	571.90	572.14	/	/	/	/	/	/					
21-31 May	572.03	/	/	/	/	/	/	/	/	/	/	/	2200/8	573.39	1400/8	570.95
1-10 Jun		/	/	/	/	/	/	/	/	/	/					
11-20 Jun		/	/	571.77	571.70	571.78	571.84	571.58	571.53	571.48	571.40					
21-30 Jun	571.64	571.64	571.71	571.83	571.66	571.58	571.77	571.88	571.61	570.97	571.70		1600/30	572.38	1200/29	570.34
1-10 Jul		570.78	571.66	571.66	571.60	571.73	571.48	571.66	571.89	571.89	572.13					
11-20 Jul		571.96	571.66	571.59	571.87	571.73	571.66	571.76	571.71	571.57	571.66					
21-31 Jul	571.68	571.71	571.98	571.74	571.62	571.47	571.69	571.87	571.74	571.57	571.69	571.49	1100/22	572.79	1900/1	570.09
1-10 Aug		571.43	571.53	571.53	571.49	571.33	571.44	571.40	571.37	571.96	571.54					
11-20 Aug		571.65	571.66	571.68	571.58	571.99	571.58	571.23	571.64	571.43	571.82					
21-31 Aug	571.57	571.38	571.38	571.58	571.80	571.75	571.74	571.52	571.50	571.41	571.60	571.59	1600/23	572.50	0900/10	570.56
1-10 Sep		571.45	571.45	571.64	571.61	571.49	571.64	571.68	571.66	571.25	570.91					
11-20 Sep		571.27	571.28	571.19	571.28	571.89	571.47	571.37	571.32	571.71	571.18					
21-30 Sep	571.49	571.60	571.96	571.86	/	/	571.30	571.44	/	/	571.78		1900/22	572.39	1400/13	570.23
1-10 Oct		/	/	571.28	571.69	/	571.20	572.05	571.61	570.40	571.23					
11-20 Oct		570.65	570.56	571.44	571.35	570.94	571.13	570.86	570.74	571.19	571.18					
21-31 Oct	571.25	571.13	571.28	572.03	571.31	571.29	571.27	571.15	571.36	571.48	571.80	571.42	0100/8	572.74	0800/12	569.35
1-10 Nov		571.28	571.28	571.20	571.29	571.97	571.47	571.59	571.39	571.34	569.54					
11-20 Nov		569.12	570.70	570.96	571.06	570.70	570.92	570.22	569.69	570.95	571.43					
21-30 Nov	570.83	570.50	571.24	570.94	570.57	570.74	569.56	571.18	569.90	571.00	571.21		0900/5	572.62	0700/28	568.20
1-10 Dec		569.83	569.37	570.74	570.93	572.64	570.10	569.24	/	569.79	/					
11-20 Dec		/	/	/	569.78	/	/	569.91	570.17	570.43	570.65					
21-31 Dec	570.22	570.51	570.04	570.70	571.20	569.29	/	568.93	/	/	/	/	1400/5	574.02	0800/2	567.24

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 3090: Fermi Power Plant, Stony Point, Michigan on Lake Erie

1977 YEARLY MEAN ELEVATION: 571.18 FEET

HIGHEST
Monthly mean elevation: 571.99 May 1977
Daily mean elevation: 572.74 29 May 1977
Instant/hourly Elevation: 574.18 0300/29 May 1977

LOWEST
Monthly mean elevation: 570.23 Feb 1977
Daily mean elevation: 568.17 9 Dec 1977
Instant/hourly Elevation: 566.36 1400/9 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.88	9 Jan
570.47	23 Feb
571.51	28 Mar
572.11	23 Apr
572.74	29 May
571.88	8 Jun
572.04	10 Jul
571.90	15 Aug
571.96	23 Sep
571.96	7 Oct
571.86	5 Nov
572.41	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
569.43	28 Jan
569.98	25 Feb
570.29	1 Mar
569.89	5 Apr
571.81	28 May
570.98	29 Jun
570.80	1 Jul
571.19	17 Aug
570.84	10 Sep
570.43	9 Oct
569.17	11 Nov
568.17	9 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.60					1								572.60	1
572.40												1	572.40	2
572.20					2								572.20	4
572.00				4	5		1						572.00	15
571.80				4	23	2	3	2	4	3	1		571.80	57
571.60				1		16	16	5	4	2		1	571.60	102
571.40			2	14		5	10	14	9	2	1	5	571.40	164
571.20			5	5		1		9	8	11	7	3	571.20	213
571.00			5					1	3	7	6	4	571.00	239
570.80	1		3	1		1			2	2	4	5	570.80	258
570.60	1		1				1			2	3	3	570.60	269
570.40	8	1	4							2	2	2	570.40	288
570.20	10	17	4										570.20	320
570.00	4	9									1		570.00	334
569.80	5	1		1							2	2	569.80	345
569.60	1										1		569.60	347
569.40	1										1	2	569.40	351
569.20													569.20	351
569.00											1		569.00	352
568.80													568.80	352
568.60													568.60	352
568.40													568.40	352
568.20													568.20	352
568.00												1	568.00	353

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 3090: Fermi Power Plant, Stony Point, Michigan on Lake Erie

		Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			569.96	570.43	570.60	570.55	570.65	570.50	570.34	570.45	570.88	570.15					
11-20 Jan			569.84	570.17	570.52	570.44	570.35	570.15	569.94	570.36	570.36	570.39					
21-31 Jan	570.27		570.37	570.34	570.42	570.39	570.34	570.35	569.93	569.43	569.80	570.04	570.00	0200/10	571.74	1800/28	567.64
1-10 Feb			570.10	570.27	570.19	570.28	570.16	570.23	570.23	570.27	570.26	570.26					
11-20 Feb			570.22	570.27	570.10	570.23	570.17	570.22	570.26	570.28	570.22	570.20					
21-28 Feb	570.23		570.20	570.25	570.47	570.32	569.98	570.37	570.17	570.20				0400/27	571.00	1800/27	569.05
1-10 Mar			570.29	570.30	570.57	570.44	570.29	570.46	570.45	/	/	/					
11-20 Mar			/	/	/	/	570.86	570.38	571.07	571.41	571.04	570.74					
21-31 Mar	570.89		571.29	571.12	570.86	571.00	571.17	571.30	571.34	571.51	571.26	571.29	571.03	0800/18	572.44	1600/20	569.48
1-10 Apr			571.60	571.49	571.21	572.05	569.89	570.92	571.31	571.33	571.49	571.55					
11-20 Apr			571.34	571.41	571.35	571.52	571.50	571.50	571.54	571.58	571.50	571.57					
21-30 Apr	571.54		571.54	571.53	572.11	571.80	571.91	571.87	571.87	571.97	572.05	572.01		1000/23	572.68	2200/5	568.85
1-10 May			571.97	571.88	572.33	572.28	572.08	571.96	572.14	571.93	571.92	571.92					
11-20 May			571.97	571.82	571.90	572.03	572.09	571.97	571.90	571.86	571.93	571.97					
21-31 May	571.99		571.97	571.94	571.89	571.90	571.89	572.06	571.92	571.81	572.74	571.93	571.85	0300/29	574.18	1500/8	571.04
1-10 Jun			/	/	/	/	/	571.84	571.64	571.88	571.76	571.72					
11-20 Jun			571.71	571.75	571.77	571.63	571.73	571.77	571.54	571.54	571.46	571.38					
21-30 Jun	571.63		571.61	571.64	571.75	571.62	571.52	571.66	571.76	571.56	570.98	571.62		1000/6	572.70	0900/29	570.42
1-10 Jul			570.80	571.60	571.64	571.50	571.68	571.49	571.74	571.83	571.76	572.04					
11-20 Jul			571.86	571.63	571.58	571.79	571.69	571.66	571.66	571.66	571.53	571.59					
21-31 Jul	571.64		571.68	571.89	571.68	571.60	571.48	571.61	571.80	571.68	571.47	571.61	571.49	1100/22	572.65	1900/1	570.12
1-10 Aug			571.34	571.52	571.49	571.44	571.34	571.38	571.35	571.35	571.83	571.42					
11-20 Aug			571.57	571.58	571.64	571.53	571.90	571.54	571.19	571.55	571.37	571.76					
21-31 Aug	571.51		571.37	571.35	571.52	571.72	571.67	571.69	571.48	571.48	571.37	571.54	571.53	1600/23	572.43	0900/10	570.72
1-10 Sep			571.37	571.35	571.51	571.55	571.44	571.54	571.60	571.59	571.25	570.84					
11-20 Sep			571.24	571.22	571.13	571.26	571.81	571.43	571.35	571.33	571.76	571.13					
21-30 Sep	571.45		571.54	571.89	571.96	571.84	571.69	570.94	571.19	571.46	571.64	571.67		2300/23	572.31	1200/26	570.00
1-10 Oct			571.84	571.50	571.22	571.32	571.14	571.27	571.96	571.66	570.43	571.28					
11-20 Oct			570.77	570.56	571.43	571.34	570.96	571.09	570.90	570.79	571.18	571.15					
21-31 Oct	571.25		571.13	571.18	571.94	571.26	571.25	571.23	571.10	571.26	571.38	571.72	571.40	0300/8	572.56	0800/12	569.43
1-10 Nov			571.26	571.22	571.18	571.18	571.86	571.38	571.52	571.35	571.31	569.95					
11-20 Nov			569.17	570.70	570.94	571.06	570.74	570.92	570.23	569.77	570.92	571.38					
21-30 Nov	570.83		570.52	571.18	570.91	570.58	570.75	569.57	571.15	569.95	571.06	571.21		1000/5	572.45	0700/28	568.33
1-10 Dec			569.89	569.48	570.77	570.90	572.41	570.16	569.84	571.36	568.17	570.59					
11-20 Dec			570.91	570.65	570.91	571.03	571.15	571.47	572.03	571.65	571.50	571.58					
21-31 Dec	570.87		570.96	570.49	571.06	571.46	569.58	570.75	571.16	570.94	571.21	571.34	571.58	1400/5	573.67	1400/9	566.36

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4020: Gibraltar, Michigan on Detroit River

1977 YEARLY MEAN ELEVATION: 571.39 FEET

HIGHEST
Monthly mean elevation: 572.11 May 1977
Daily mean elevation: 572.84 29 May 1977
Instant/hourly Elevation: 574.40 0300/29 May 1977

LOWEST
Monthly mean elevation: 570.57 Feb 1977
Daily mean elevation: 568.95 9 Dec 1977
Instant/hourly Elevation: 567.59 1400/9 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
571.13	9 Jan
570.79	23 Feb
571.69	28 Mar
572.17	4 Apr
572.84	29 May
572.06	6 Jun
572.19	10 Jul
572.08	15 Aug
572.10	23 Sep
572.10	7 Oct
571.93	5 Nov
572.32	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
570.13	28 Jan
570.28	25 Feb
570.50	16 Mar
570.23	5 Apr
571.93	8 May
571.24	29 Jun
571.10	1 Jul
571.39	17 Aug
571.07	10 Sep
570.77	9 Oct
569.60	11 Nov
568.95	9 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
572.80					1								572.80	1
572.60													572.60	1
572.40													572.40	1
572.20					4							1	572.20	6
572.00				8	19	3	4	2	3	3		1	572.00	49
571.80				1	7	16	16	5	5	2	1	4	571.80	106
571.60			1	13		9	10	17	9	10	5	1	571.60	172
571.40			6	5		1		6	9	9	6	7	571.40	215
571.20			2	1		1		1	3	9	6	7	571.20	245
571.00	1		5	1			1		1	5	6	3	571.00	268
570.80	4		7							1	1	3	570.80	284
570.60	15	12	6							1	3		570.60	321
570.40	5	14	4								2	1	570.40	347
570.20	5	2		1							1	1	570.20	357
570.00	1											2	570.00	360
569.80													569.80	362
569.60											1		569.60	363
569.40											1		569.40	364
569.20													569.20	364
569.00													569.00	364
568.80												1	568.80	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 4020: Gibraltar, Michigan on Detroit River

		Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			570.44	570.76	570.90	570.84	570.91	570.79	570.65	570.77	571.13	570.54					
11-20 Jan			570.23	570.57	570.82	570.76	570.68	570.54	570.29	570.67	570.69	570.76					
21-31 Jan	570.64		570.80	570.74	570.79	570.74	570.68	570.67	570.38	570.13	570.30	570.45	570.38	0200/10	571.89	1800/28	569.08
1-10 Feb			570.46	570.62	570.55	570.65	570.56	570.63	570.63	570.66	570.67	570.63					
11-20 Feb			570.60	570.64	570.48	570.59	570.54	570.58	570.62	570.61	570.55	570.55					
21-28 Feb	570.57		570.56	570.59	570.79	570.60	570.28	570.62	570.37	570.43				0200/27	571.23	1800/27	569.31
1-10 Mar			570.52	570.57	570.82	570.64	570.51	570.65	570.65	570.77	570.78	570.79					
11-20 Mar			570.93	571.08	570.92	570.97	570.99	570.50	571.20	571.50	571.21	570.91					
21-31 Mar	571.02		571.41	571.08	570.96	571.14	571.32	571.44	571.49	571.69	571.44	571.45	571.16	0800/18	572.67	1800/16	569.51
1-10 Apr			571.74	571.66	571.32	572.17	570.23	571.06	571.49	571.46	571.65	571.71					
11-20 Apr			571.51	571.57	571.50	571.63	571.64	571.65	571.68	571.71	571.63	571.71					
21-30 Apr	571.68		571.68	571.62	572.16	571.93	572.04	572.01	572.06	572.02	572.16	572.14		1000/23	572.71	2200/5	569.21
1-10 May			572.10	572.00	572.40	572.36	572.20	572.02	572.22	571.93	571.95	572.02					
11-20 May			572.12	571.95	572.01	572.16	572.22	572.12	572.03	571.99	572.06	572.11					
21-31 May	572.11		572.12	572.11	572.05	572.04	571.99	572.11	572.03	571.96	572.84	572.09	572.13	0300/29	574.40	1500/8	570.95
1-10 Jun			571.61	571.76	572.03	571.92	571.89	572.06	571.79	572.03	571.86	571.88					
11-20 Jun			571.90	571.89	571.94	571.82	571.89	571.96	571.74	571.73	571.65	571.57					
21-30 Jun	571.82		571.78	571.83	571.92	571.83	571.69	571.85	571.93	571.76	571.24	571.90		0400/6	573.13	1000/29	570.64
1-10 Jul			571.10	571.80	571.86	571.80	571.82	571.69	571.94	572.00	571.94	572.19					
11-20 Jul			572.05	571.85	571.77	571.99	571.90	571.86	571.86	571.90	571.77	571.80					
21-31 Jul	571.85		571.87	572.05	571.90	571.82	571.68	571.80	572.01	571.91	571.70	571.82	571.76	1100/22	572.80	1900/1	570.41
1-10 Aug			571.57	571.75	571.71	571.68	571.59	571.63	571.59	571.57	572.04	571.70					
11-20 Aug			571.77	571.78	571.88	571.72	572.08	571.80	571.39	571.73	571.58	571.94					
21-31 Aug	571.73		571.63	571.60	571.72	571.87	571.86	571.90	571.71	571.71	571.61	571.73	571.75	0300/20	572.58	0300/17	570.98
1-10 Sep			571.60	571.57	571.69	571.75	571.63	571.73	571.78	571.77	571.54	571.07					
11-20 Sep			571.45	571.49	571.38	571.44	571.99	571.66	571.55	571.54	571.84	571.33					
21-30 Sep	571.65		571.70	572.01	572.10	572.02	571.84	571.41	571.40	571.64	571.81	571.84		0400/26	572.81	1200/26	570.38
1-10 Oct			571.94	571.60	571.37	571.50	571.38	571.44	572.10	572.03	570.77	571.49					
11-20 Oct			571.14	570.84	571.56	571.51	571.14	571.20	571.13	571.04	571.33	571.32					
21-31 Oct	571.43		571.32	571.29	572.02	571.41	571.41	571.39	571.27	571.40	571.48	571.82	571.60	0400/8	573.15	0800/12	569.70
1-10 Nov			571.46	571.39	571.33	571.26	571.93	571.49	571.63	571.51	571.49	570.41					
11-20 Nov			569.60	570.80	571.06	571.26	571.04	571.08	570.51	570.08	571.07	571.62					
21-30 Nov	571.03		570.74	571.28	571.13	570.77	570.99	569.77	571.42	570.35	571.19	571.35		1000/5	572.55	1200/11	568.89
1-10 Dec			570.39	569.94	570.94	571.06	572.32	570.41	570.20	571.66	568.95	570.97					
11-20 Dec			571.30	571.14	571.31	571.32	571.36	571.66	572.13	571.81	571.66	571.95					
21-31 Dec	571.20		571.32	570.88	571.35	571.69	569.98	571.10	571.48	571.36	571.67	571.83	571.93	1400/5	573.39	1400/9	567.59

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4030: Wyandotte, Michigan on Detroit River

1977 YEARLY MEAN ELEVATION: 572.63 FEET

HIGHEST
Monthly mean elevation: 572.98 Jul 1977
Daily mean elevation: 573.80 30 Dec 1977
Instant/hourly Elevation: 573.98 1500/5 Dec 1977

LOWEST
Monthly mean elevation: 572.10 Jan 1977
Daily mean elevation: 571.26 9 Dec 1977
Instant/hourly Elevation: 570.52 1400/9 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
572.41	23 Jan
572.66	23 Feb
572.92	18 Mar
	Apr
	May
573.24	6 Jun
573.24	10 Jul
573.14	15 Aug
573.17	23 Sep
573.22	1 Oct
572.91	5 Nov
573.80	30 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
571.66	29 Jan
571.81	1 Feb
571.91	5 Mar
	Apr
	May
572.56	29 Jun
572.36	1 Jul
572.72	17 Aug
572.48	10 Sep
572.28	12 Oct
571.46	11 Nov
571.26	9 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
573.60												2	573.60	2
573.40												1	573.40	3
573.20						1	1			1		5	573.20	11
573.00						12	11	4	6	3		6	573.00	53
572.80						14	18	23	15	4	2	3	572.80	133
572.60			1			2		4	8	15	4	3	572.60	178
572.40	1	9	6			1			1	6	10	2	572.40	214
572.20	13	6	5				1				5	4	572.20	250
572.00	7	9	10								4		572.00	280
571.80	5	3	1								2	3	571.80	294
571.60	5										2	1	571.60	302
571.40											1		571.40	303
571.20												1	571.20	304

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 4030: Wyandotte, Michigan on Detroit River

		Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			571.93	572.15	572.24	572.23	572.35	572.32	572.29	572.32	572.37	571.93					
11-20 Jan			571.69	571.83	572.03	572.04	572.06	571.97	571.76	572.05	572.10	572.23					
21-31 Jan	572.10		572.32	572.38	572.41	572.35	572.36	572.40	572.18	571.88	571.66	571.71	571.71	0200/10	572.66	2200/10	571.31
1-10 Feb			571.81	572.02	572.01	572.20	572.13	572.08	572.06	572.16	572.24	572.27					
11-20 Feb			572.39	572.43	572.32	572.48	572.45	572.42	572.38	572.36	572.51	572.53					
21-28 Feb	572.27		572.52	572.55	572.66	572.43	571.98	572.16	572.05	571.99				1000/23	572.72	1900/27	571.57
1-10 Mar			572.02	572.01	572.15	572.02	571.91	572.06	572.06	572.11	572.09	572.15					
11-20 Mar			572.24	572.33	572.29	572.38	572.43	572.11	572.61	572.92	572.61	572.49					
21-31 Mar	572.37		572.66	572.57	572.36	572.54	572.60	572.63	572.64	572.78	572.63	572.61	572.56	0800/18	573.64	2200/4	571.58
1-10 Apr			/	/	/	/	/	/	/	/	/	/					
11-20 Apr			/	/	/	/	/	/	/	/	/	/					
21-30 Apr			/	/	/	/	/	/	/	/	/	/					
1-10 May			/	/	/	/	/	/	/	/	/	/					
11-20 May			/	/	/	/	/	/	/	/	/	/					
21-31 May			/	/	/	/	/	/	/	/	/	/	/				
1-10 Jun			572.96	572.97	573.10	573.01	573.02	573.24	573.00	573.11	573.06	573.02					
11-20 Jun			573.00	573.01	573.06	573.01	573.01	573.02	572.90	572.87	572.79	572.79					
21-30 Jun	572.97		572.93	572.95	573.00	572.95	572.88	572.99	573.01	572.90	572.56	572.95		1000/6	573.55	1200/29	572.28
1-10 Jul			572.36	572.90	572.93	572.90	572.94	572.85	573.03	573.10	573.10	573.24					
11-20 Jul			573.15	573.00	572.94	573.07	573.00	572.99	572.97	573.01	572.94	572.97					
21-31 Jul	572.98		573.04	573.15	573.01	572.94	572.96	572.99	573.09	573.02	572.90	572.95	572.88	1200/22	573.51	1800/1	572.05
1-10 Aug			572.77	572.86	572.85	572.91	572.79	572.86	572.82	572.80	573.10	572.88					
11-20 Aug			572.94	572.95	572.99	572.97	573.14	572.97	572.72	572.91	572.85	573.04					
21-31 Aug	572.91		572.86	572.82	572.93	573.03	573.00	573.00	572.86	572.84	572.82	572.94	572.94	1700/23	573.35	0700/1	572.49
1-10 Sep			572.83	572.84	572.89	572.95	572.86	572.94	572.95	572.95	572.73	572.48					
11-20 Sep			572.75	572.70	572.71	572.74	573.06	572.87	572.81	572.82	573.00	572.65					
21-30 Sep	572.88		572.87	573.08	573.17	573.13	572.97	572.74	572.80	572.94	573.03	573.06		2400/23	573.34	0200/10	572.25
1-10 Oct			573.22	572.98	572.84	572.86	572.73	572.80	573.16	573.09	572.37	572.73					
11-20 Oct			572.51	572.28	572.78	572.76	572.58	572.62	572.53	572.47	572.63	572.62					
21-31 Oct	572.72		572.58	572.65	573.07	572.68	572.66	572.62	572.56	572.65	572.71	572.89	572.73	0500/8	573.71	1100/12	571.79
1-10 Nov			572.60	572.56	572.53	572.57	572.91	572.70	572.81	572.71	572.68	571.96					
11-20 Nov			571.46	572.20	572.39	572.51	572.37	572.40	572.09	571.77	572.32	572.68					
21-30 Nov	572.37		572.14	572.50	572.50	572.20	572.37	571.72	572.55	572.00	572.46	572.57		1100/5	573.26	1300/11	571.15
1-10 Dec			571.95	571.61	572.30	572.42	573.36	572.22	572.00	572.73	571.26	572.40					
11-20 Dec			572.89	573.06	573.29	573.22	573.01	573.06	573.25	573.03	572.96	573.09					
21-31 Dec	572.76		572.65	572.40	572.63	572.86	571.84	572.48	573.08	573.36	573.57	573.80	573.79	1500/5	573.98	1400/9	570.52

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4036: Fort Wayne, Detroit, Michigan on Detroit River

1977 YEARLY MEAN ELEVATION: 573.19 FEET

HIGHEST
Monthly mean elevation: 573.55 May 1977
Daily mean elevation: 574.16 30 Dec 1977
Instant/hourly Elevation: 574.26 1100/31 Dec 1977

LOWEST
Monthly mean elevation: 572.80 Nov 1977
Daily mean elevation: 572.01 11 Nov 1977
Instant/hourly Elevation: 571.38 1300/9 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
573.20	20 Jan
573.33	12 Feb
573.40	18 Mar
573.78	26 Apr
573.74	4 May
573.62	6 Jun
573.60	9 Jul
573.50	15 Aug
573.53	23 Sep
573.64	1 Oct
573.21	5 Nov
574.16	30 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
572.61	29 Jan
572.47	28 Feb
572.39	5 Mar
572.52	5 Apr
573.45	12 May
573.00	29 Jun
572.82	1 Jul
573.16	17 Aug
572.94	10 Sep
572.74	12 Oct
572.01	11 Nov
572.01	9 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
574.00												2	574.00	2
573.80												1	573.80	3
573.60				7	5	1					1	5	573.60	22
573.40				2	24	10	10	3	5	3		6	573.40	85
573.20		12	1	12		17	20	25	14	5	1	3	573.20	195
573.00	17	8	12	7		1		3	6	15	5	3	573.00	272
572.80	10	4	4	1		1	1		1	6	11	4	572.80	315
572.60	4	1	5							1	6	2	572.60	334
572.40		3	8	1							4	3	572.40	353
572.20			1								2		572.20	356
572.00											1	2	572.00	359

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 4036: Fort Wayne, Detroit, Michigan on Detroit River

		Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LOW				
													Hrs/day	Elev.	Hrs/day	Elev.	
1-10 Jan			572.71	572.86	572.98	572.99	573.07	573.05	572.99	573.07	573.11	572.82					
11-20 Jan			572.95	573.14	573.16	573.15	573.16	573.06	572.75	572.99	573.16	573.20					
21-31 Jan	573.00		573.16	573.14	573.13	573.07	573.03	573.02	572.92	572.91	572.61	572.68	1700/14	573.27	1700/10	572.22	
1-10 Feb			572.96	573.13	573.15	573.28	573.29	573.25	573.23	573.25	573.31	573.32					
11-20 Feb			573.30	573.33	573.15	573.23	573.24	573.25	573.15	572.98	573.02	573.02					
21-28 Feb	573.07		573.02	573.00	573.07	572.87	572.49	572.63	572.55	572.47			1600/7	573.46	1900/27	572.20	
1-10 Mar			572.47	572.47	572.57	572.49	572.39	572.53	572.56	572.59	572.58	572.63					
11-20 Mar			572.72	572.80	572.78	572.89	572.92	572.70	573.12	573.40	573.13	573.01					
21-31 Mar	572.86		573.13	573.12	572.88	573.00	573.07	573.07	573.06	573.18	573.11	573.11	0600/18	573.97	2300/4	572.12	
1-10 Apr			573.31	573.30	573.17	573.65	572.52	572.91	573.09	573.22	573.26	573.27					
11-20 Apr			573.12	573.17	573.12	573.24	573.23	573.21	573.23	573.24	573.20	573.23					
21-30 Apr	573.32		573.20	573.27	573.60	573.59	573.75	573.78	573.70	573.76	573.72	573.66	1200/28	573.97	1900/5	572.24	
1-10 May			573.61	573.59	573.71	573.74	573.62	573.59	573.70	573.53	573.59	573.57					
11-20 May			573.57	573.45	573.52	573.60	573.59	573.53	573.47	573.48	573.53	573.53					
21-31 May	573.55		573.53	573.51	573.48	573.49	573.50	573.54	573.47	573.46	/	/	573.59	2300/8	574.08	1400/8	573.14
1-10 Jun			573.24	573.38	573.49	573.42	573.42	573.62	573.41	573.49	573.47	573.41					
11-20 Jun			573.38	573.42	573.44	573.40	573.42	573.40	573.30	573.28	573.19	573.21					
21-30 Jun	573.36		573.32	573.33	573.38	573.33	573.29	573.37	573.38	573.30	573.00	573.33	0500/6	573.96	1100/29	572.74	
1-10 Jul			572.82	573.29	573.31	573.31	573.35	573.27	573.43	573.47	573.60	573.55					
11-20 Jul			573.51	573.40	573.35	573.44	573.39	573.38	573.39	573.40	573.35	573.39					
21-31 Jul	573.38		573.44	573.54	573.39	573.36	573.39	573.41	573.48	573.40	573.31	573.34	573.27	1200/22	573.83	1600/1	572.50
1-10 Aug			573.20	573.26	573.26	573.23	573.22	573.27	573.23	573.20	573.44	573.28					
11-20 Aug			573.34	573.34	573.39	573.38	573.50	573.35	573.16	573.29	573.27	573.40					
21-31 Aug	573.30		573.27	573.23	573.32	573.42	573.40	573.38	573.25	573.22	573.23	573.33	573.32	2100/15	573.65	0700/1	572.94
1-10 Sep			573.25	573.25	573.32	573.32	573.27	573.33	573.34	573.34	573.12	572.94					
11-20 Sep			573.17	573.09	573.10	573.23	/	/	/	/	573.36	573.09					
21-30 Sep	573.28		573.28	573.44	573.53	573.49	573.34	573.18	573.26	573.37	573.44	573.48	2200/30	573.68	0300/10	572.78	
1-10 Oct			573.64	573.42	573.30	573.32	573.18	573.24	573.53	573.44	572.90	573.14					
11-20 Oct			572.95	572.74	573.17	573.17	573.02	573.06	572.98	572.93	573.04	573.03					
21-31 Oct	573.13		572.98	573.06	573.40	573.07	573.04	573.02	572.96	573.04	573.08	573.23	573.10	0700/8	573.94	0900/12	572.32
1-10 Nov			572.97	572.93	572.91	572.96	573.21	573.08	573.16	573.09	573.06	572.44					
11-20 Nov			572.01	572.63	572.80	572.89	572.79	572.80	572.58	572.31	572.76	573.03					
21-30 Nov	572.80		572.59	572.92	572.91	572.66	572.82	572.31	572.95	572.53	572.87	572.99	0800/5	573.49	1300/11	571.73	
1-10 Dec			572.41	572.14	572.74	572.87	573.68	572.73	572.56	573.12	572.01	572.86					
11-20 Dec			573.35	573.51	573.67	573.66	573.48	573.52	573.63	573.44	573.39	573.49					
21-31 Dec	573.21		573.10	572.91	573.08	573.26	572.41	572.96	573.45	573.75	573.96	574.16	574.16	1100/31	574.26	1300/9	571.38

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4049: Windmill Point, Detroit, Michigan on Detroit River

1977 YEARLY MEAN ELEVATION: 573.94 FEET

HIGHEST
Monthly mean elevation: 574.28 May 1977
Daily mean elevation: 574.79 31 Dec 1977
Instant/hourly Elevation: 574.99 1600/8 May 1977

LOWEST
Monthly mean elevation: 573.62 Nov 1977
Daily mean elevation: 573.10 11 Nov 1977
Instant/hourly Elevation: 572.69 0200/2 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
573.79	19 Jan
574.07	7 Feb
574.29	18 Mar
574.63	28 Apr
574.44	4 May
574.36	6 Jun
574.27	9 Jul
574.14	15 Aug
574.23	30 Sep
574.40	1 Oct
573.91	7 Nov
574.79	31 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
573.28	1 Jan
573.40	28 Feb
573.27	5 Mar
573.51	5 Apr
574.17	23 May
573.84	29 Jun
573.67	1 Jul
573.91	28 Aug
573.79	10 Sep
573.61	12 Oct
573.10	11 Nov
573.11	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
574.60				1								2	574.60	3
574.40				5	3							1	574.40	12
574.20			1	3	21	3	5		1	2		10	574.20	58
574.00		3	3	8	7	23	23	15	14	6		2	574.00	162
573.80		13	12	12		4	2	16	14	15	5	5	573.80	260
573.60	23	8	4				1		1	8	14	7	573.60	326
573.40	6	3	5	1								8	573.40	350
573.20	2	1	6									2	573.20	362
573.00											1	2	573.00	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 4049: Windmill Point, Detroit, Michigan on Detroit River

		Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			573.28	573.36	573.42	573.48	573.54	573.54	573.54	573.59	573.64	573.72					
11-20 Jan			573.69	573.68	573.72	573.70	573.69	573.70	573.75	573.77	573.79	573.79					
21-31 Jan	573.66		573.77	573.77	573.75	573.69	573.69	573.70	573.66	573.69	573.73	573.74	573.73	0800/20	573.81	0200/1	573.23
1-10 Feb			573.79	573.85	573.84	573.87	573.92	574.02	574.07	574.06	573.99	574.00					
11-20 Feb			573.95	573.96	573.87	573.91	573.93	573.91	573.84	573.76	573.71	573.71					
21-28 Feb	573.81		573.71	573.70	573.73	573.66	573.44	573.51	573.50	573.40				1700/7	574.12	0900/25	573.32
1-10 Mar			573.38	573.35	573.38	573.32	573.27	573.38	573.42	573.43	573.41	573.48					
11-20 Mar			573.55	573.62	573.71	573.86	573.89	573.72	574.02	574.29	574.04	573.99					
21-31 Mar	573.72		573.95	574.08	573.80	573.89	573.90	573.87	573.81	573.89	573.88	573.92	573.96	0700/18	574.78	1700/4	573.15
1-10 Apr			574.11	574.04	574.08	574.33	573.51	573.83	573.88	574.06	574.05	574.06					
11-20 Apr			573.92	573.97	573.93	574.01	574.00	573.99	573.98	573.99	573.96	573.97					
21-30 Apr	574.12		573.93	574.05	574.30	574.36	574.53	574.60	574.50	574.63	574.46	574.42		2400/27	574.78	1700/5	573.22
1-10 May			574.35	574.37	574.39	574.44	574.34	574.36	574.42	574.35	574.43	574.32					
11-20 May			574.30	574.22	574.27	574.30	574.26	574.25	574.19	574.20	574.23	574.23					
21-31 May	574.28		574.22	574.19	574.17	574.18	574.23	574.23	574.20	574.18	574.39	574.28	574.25	1600/8	574.99	2300/17	573.89
1-10 Jun			574.02	574.16	574.18	574.13	574.16	574.36	574.19	574.22	574.22	574.13					
11-20 Jun			574.11	574.15	574.16	574.15	574.12	574.10	574.04	574.01	573.96	574.00					
21-30 Jun	574.09		574.05	574.07	574.08	574.02	574.05	574.05	574.07	574.02	573.84	573.99		0700/6	574.67	1100/29	573.68
1-10 Jul			573.67	574.01	574.00	574.03	574.08	574.03	574.12	574.16	574.27	574.27					
11-20 Jul			574.22	574.12	574.11	574.14	574.11	574.10	574.12	574.07	574.12	574.15					
21-31 Jul	574.10		574.22	574.24	574.11	574.08	574.16	574.17	574.16	574.10	574.05	574.05	573.96	2100/8	574.63	1500/1	573.32
1-10 Aug			573.97	573.94	573.94	573.95	573.93	574.01	573.96	573.97	574.10	573.99					
11-20 Aug			574.06	574.03	574.02	574.12	574.14	574.04	573.97	574.00	574.03	574.07					
21-31 Aug	574.01		573.99	573.95	574.04	574.11	574.08	574.03	573.93	573.91	573.93	574.04	573.98	2300/15	574.25	0500/22	573.32
1-10 Sep			573.97	573.99	574.07	574.02	574.00	574.05	574.02	574.02	573.81	573.79					
11-20 Sep			573.93	573.81	573.90	573.96	574.07	573.99	573.97	573.99	574.05	573.88					
21-30 Sep	574.01		574.00	574.10	574.19	574.15	574.01	573.94	574.08	574.16	574.20	574.23		2200/30	574.42	1300/9	573.51
1-10 Oct			574.40	574.26	574.18	574.14	574.00	574.05	574.19	574.05	573.77	573.89					
11-20 Oct			573.72	573.61	573.93	573.93	573.88	573.93	573.82	573.76	573.84	573.83					
21-31 Oct	573.92		573.77	573.88	574.03	573.84	573.82	573.78	573.76	573.81	573.85	573.90	573.79	1200/1	574.56	0100/12	573.26
1-10 Nov			573.68	573.65	573.66	573.77	573.85	573.84	573.91	573.85	573.81	573.30					
11-20 Nov			573.10	573.52	573.63	573.66	573.59	573.61	573.48	573.27	573.57	573.70					
21-30 Nov	573.62		573.44	573.71	573.71	573.54	573.65	573.42	573.71	573.49	573.69	573.77		0500/23	573.98	1300/11	572.91
1-10 Dec			573.30	573.11	573.62	573.72	574.33	573.73	573.61	573.80	573.20	573.66					
11-20 Dec			573.93	574.09	574.23	574.37	574.32	574.34	574.39	574.31	574.28	574.22					
21-31 Dec	574.00		573.93	573.80	573.89	574.00	573.51	573.86	574.18	574.36	574.55	574.71	574.79	2400/31	574.81	0200/2	572.69

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4052: St. Clair Shores, Michigan on Lake St. Clair

1977 YEARLY MEAN ELEVATION: 574.15 FEET

HIGHEST
Monthly mean elevation: 574.45 May 1977
Daily mean elevation: 574.92 31 Dec 1977
Instant/hourly Elevation: 574.97 1700/31 Dec 1977

LOWEST
Monthly mean elevation: 573.83 Nov 1977
Daily mean elevation: 573.46 11 Nov 1977
Instant/hourly Elevation: 573.07 0200/2 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
573.99	20 Jan
574.26	8 Feb
574.44	18 Mar
574.81	26 Apr
574.57	4 May
574.44	6 Jun
574.44	10 Jul
574.32	15 Aug
574.41	30 Sep
574.50	1 Oct
574.06	7 Nov
574.92	31 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
573.48	1 Jan
573.72	28 Feb
573.60	3 Mar
573.92	5 Apr
574.35	27 May
574.08	29 Jun
573.97	1 Jul
574.14	5 Aug
573.99	10 Sep
573.88	12 Oct
573.46	11 Nov
573.49	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
574.80				1								2	574.80	3
574.60				5								2	574.60	10
574.40			1	3	20	1	2		1	1		7	574.40	46
574.20		3	3	8	11	26	28	18	13	7		5	574.20	168
574.00		13	14	12		3		13	15	13	3	6	574.00	260
573.80	22	9	2	1			1		1	10	17	6	573.80	329
573.60	6	3	10								7	2	573.60	357
573.40	3		1								3	1	573.40	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 4052: St. Clair Shores, Michigan on Lake St. Clair

		Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			573.48	573.54	573.58	573.63	573.69	573.73	573.73	573.78	573.76	573.89						
11-20 Jan			573.90	573.86	573.88	573.86	573.87	573.89	573.93	573.96	573.98	573.99						
21-31 Jan	573.85		573.97	573.98	573.97	573.91	573.92	573.96	573.93	573.95	573.94	573.94	573.94		1200/28	574.00	0100/1	573.44
1-10 Feb			573.98	574.05	574.04	574.06	574.14	574.21	574.25	574.26	574.20	574.20						
11-20 Feb			574.18	574.17	574.14	574.14	574.16	574.12	574.05	573.96	573.93	573.94						
21-28 Feb	574.04		573.96	573.93	573.95	573.94	573.83	573.77	573.79	573.72					1200/8	574.29	2400/28	573.70
1-10 Mar			573.67	573.63	573.60	573.63	573.62	573.66	573.69	573.71	573.71	573.73						
11-20 Mar			573.78	573.88	574.01	574.10	574.14	573.98	574.24	574.44	574.29	574.22						
21-31 Mar	573.97		574.16	574.12	574.03	574.05	574.11	574.08	574.03	574.11	574.17	574.18	574.20		0700/18	574.84	1400/16	573.53
1-10 Apr			574.34	574.30	574.28	574.55	573.92	574.05	574.13	574.26	574.28	574.28						
11-20 Apr			574.17	574.20	574.16	574.21	574.20	574.18	574.18	574.18	574.19	574.17						
21-30 Apr	574.33		574.14	574.22	574.44	574.55	574.70	574.81	574.77	574.75	574.68	574.63			1900/26	574.89	1700/5	573.58
1-10 May			574.56	574.55	574.54	574.57	574.50	574.49	574.52	574.42	574.49	574.51						
11-20 May			574.50	574.43	574.46	574.46	574.44	574.43	574.40	574.40	574.42	574.40						
21-31 May	574.45		574.40	574.39	574.37	574.37	574.39	574.38	574.35	574.35	574.49	574.46	574.44		1500/8	574.93	2200/17	574.12
1-10 Jun			574.29	574.35	574.38	574.34	574.36	574.44	574.35	574.39	574.35	574.33						
11-20 Jun			574.31	574.34	574.33	574.34	574.30	574.30	574.26	574.24	574.18	574.20						
21-30 Jun	574.29		574.23	574.26	574.26	574.24	574.25	574.23	574.25	574.23	574.08	574.23			0500/6	574.68	1100/29	573.93
1-10 Jul			573.97	574.21	574.24	574.24	574.28	574.24	574.30	574.36	574.43	574.44						
11-20 Jul			574.40	574.34	574.31	574.32	574.31	574.31	574.31	574.32	574.35	574.35						
21-31 Jul	574.31		574.37	574.39	574.34	574.30	574.36	574.36	574.38	574.33	574.27	574.26	574.22		2000/8	574.74	1700/1	573.68
1-10 Aug			574.16	574.18	574.18	574.16	574.14	574.21	574.18	574.17	574.28	574.25						
11-20 Aug			574.23	574.26	574.28	574.31	574.32	574.28	574.14	574.22	574.23	574.26						
21-31 Aug	574.22		574.22	574.19	574.23	574.25	574.27	574.23	574.18	574.15	574.16	574.21	574.20		2200/9	574.45	1900/17	573.98
1-10 Sep			574.16	574.18	574.22	574.22	574.19	574.21	574.20	574.19	574.07	573.99						
11-20 Sep			574.13	574.04	574.09	574.13	574.26	574.19	574.16	574.19	574.23	574.10						
21-30 Sep	574.21		574.17	574.27	574.34	574.33	574.22	574.22	574.30	574.36	574.39	574.41			2200/30	574.51	2200/9	573.87
1-10 Oct			574.50	574.37	574.32	574.35	574.26	574.23	574.35	574.35	574.06	574.12						
11-20 Oct			574.03	573.88	574.09	574.11	574.03	574.00	574.03	573.99	573.99	574.01						
21-31 Oct	574.10		573.98	574.02	574.15	574.03	573.98	573.96	573.95	573.96	573.99	574.05	574.01		0600/1	574.57	2400/11	573.75
1-10 Nov			573.89	573.83	573.81	573.88	573.96	573.98	574.06	574.02	574.01	573.68						
11-20 Nov			573.46	573.65	573.81	573.89	573.86	573.82	573.72	573.54	573.78	573.94						
21-30 Nov	573.83		573.68	573.87	573.91	573.79	573.84	573.57	573.92	573.78	573.88	573.96			1800/27	574.15	1300/11	573.28
1-10 Dec			573.70	573.49	573.82	573.92	574.22	573.91	573.89	574.04	573.63	573.88						
11-20 Dec			574.10	574.29	574.40	574.53	574.53	574.53	574.63	574.56	574.52	574.55						
21-31 Dec	574.24		574.29	574.18	574.18	574.20	573.85	574.15	574.38	574.55	574.70	574.84	574.92		1700/31	574.97	0200/2	573.07

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4070: Algonac, Michigan on St. Clair River

1977 YEARLY MEAN ELEVATION: 574.74 FEET

HIGHEST
Monthly mean elevation: 574.88 May 1977
Daily mean elevation: 575.30 31 Dec 1977
Instant/hourly Elevation: 575.48 2300/27 Apr 1977

LOWEST
Monthly mean elevation: 574.44 Nov 1977
Daily mean elevation: 574.16 3 Mar 1977
Instant/hourly Elevation: 574.08 0600/4 Mar 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
574.92	19 Jan
575.21	16 Feb
574.81	31 Mar
575.23	27 Apr
574.99	1 May
574.96	1 Jun
574.94	1 Jul
574.89	13 Aug
574.94	28 Sep
574.91	8 Oct
574.71	10 Nov
575.30	31 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
574.60	13 Jan
574.37	28 Feb
574.16	3 Mar
574.64	15 Apr
574.79	25 May
574.68	27 Jun
574.76	29 Jul
574.63	20 Aug
574.60	11 Sep
574.42	30 Oct
574.33	20 Nov
574.46	5 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
575.20		1		1								2	575.20	4
575.00		9		5								5	575.00	23
574.80	6	9	1	3	25	17	25	7	5	6		11	574.80	138
574.60	12	3	9	21	2	13	6	24	19	9	1	8	574.60	265
574.40	1	4	9						1	13	18	4	574.40	315
574.20		1	10								11		574.20	337
574.00			2										574.00	339

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 4070: Algonac, Michigan on St. Clair River

	Monthly means	----- Daily Means -----												HIGH----Instant/hourly----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		574.83	574.73	574.73	574.78	574.83	574.78	574.90	574.76	574.69	574.77						
11-20 Jan		574.71	574.64	574.60	574.63	574.70	574.78	574.88	574.87	574.92	/						
21-31 Jan	574.76	/	/	/	/	/	/	/	/	/	/	/	/	1535/19	574.98	2145/13	574.51
1-10 Feb		/	574.79	574.87	575.03	575.20	575.12	575.09	575.00	575.01	575.08						
11-20 Feb		575.01	574.93	574.83	574.85	575.10	575.21	575.05	574.95	574.98	574.96						
21-28 Feb	574.87	574.92	574.80	574.61	574.46	574.46	574.41	574.45	574.37					0200/16	575.30	0600/28	574.33
1-10 Mar		574.30	574.23	574.16	574.16	574.22	574.22	574.24	574.23	574.22	574.24						
11-20 Mar		574.25	574.32	574.49	574.57	574.60	574.77	574.76	574.76	574.79	574.72						
21-31 Mar	574.48	574.64	574.51	574.61	574.59	574.56	574.49	574.45	574.54	574.74	574.80	574.81	1418/14	575.22	0600/4	574.08	
1-10 Apr		574.74	574.78	574.80	574.78	575.00	574.73	574.78	574.74	574.78	574.72						
11-20 Apr		574.72	574.69	574.70	574.66	574.64	574.66	574.65	574.64	574.64	574.65						
21-30 Apr	574.81	574.65	574.66	574.81	574.98	575.09	575.20	575.23	575.06	575.10	575.04			2300/27	575.48	2000/13	574.46
1-10 May		574.99	574.94	574.93	574.96	574.97	574.95	574.89	574.93	574.91	574.90						
11-20 May		574.92	574.92	574.92	574.86	574.85	574.85	574.87	574.87	574.85	574.84						
21-31 May	574.88	574.83	574.83	574.83	574.82	574.79	574.80	574.82	/	/	/	/	2210/17	575.28	1720/8	574.52	
1-10 Jun		574.96	574.84	574.82	574.78	574.74	574.70	574.82	574.87	574.82	574.84						
11-20 Jun		574.84	574.82	574.83	574.81	574.82	574.81	574.85	574.87	574.88	574.82						
21-30 Jun	574.79	574.77	574.75	574.72	574.72	574.71	574.69	574.68	574.69	574.78	574.78			1905/17	575.15	0955/6	574.56
1-10 Jul		574.94	574.84	574.81	574.79	574.79	574.81	574.79	574.81	574.84	574.84						
11-20 Jul		574.83	574.86	574.84	574.81	574.82	574.84	574.83	574.86	574.91	574.88						
21-31 Jul	574.84	574.86	574.84	574.88	574.86	574.87	574.85	574.85	574.82	574.76	574.76	574.80	1605/1	575.24	2105/8	574.59	
1-10 Aug		574.77	574.77	574.75	574.76	574.79	574.78	574.79	574.79	574.78	574.85						
11-20 Aug		574.82	574.87	574.89	574.81	574.82	574.82	574.73	574.72	574.65	574.63						
21-31 Aug	574.76	574.63	574.74	574.77	574.73	574.77	574.74	574.74	574.74	574.76	574.72	574.72	1100/10	575.01	2020/19	574.50	
1-10 Sep		574.76	574.77	574.71	574.74	574.72	574.70	574.68	574.66	574.73	574.68						
11-20 Sep		574.60	574.61	574.64	574.67	574.70	574.73	/	/	/	/						
21-30 Sep	574.74	/	574.74	574.74	574.72	574.72	574.91	574.93	574.94	574.90	574.88			1025/26	575.15	1935/12	574.45
1-10 Oct		574.86	/	/	/	574.89	574.85	574.77	574.91	574.85	574.78						
11-20 Oct		574.86	574.75	574.62	574.65	574.66	574.67	574.67	574.63	574.54	574.55						
21-31 Oct	574.63	574.57	574.51	574.46	574.47	574.45	574.46	574.47	574.44	574.43	574.42	574.43	0930/8	575.16	2140/27	574.27	
1-10 Nov		574.40	574.37	574.37	574.37	574.43	574.49	574.49	574.50	574.48	574.71						
11-20 Nov		574.56	574.34	574.35	574.39	574.41	574.42	574.53	574.47	574.36	574.33						
21-30 Nov	574.44	574.44	574.42	574.43	574.43	574.49	574.50	574.48	574.49	574.36	574.40			1300/10	574.86	1500/20	574.23
1-10 Dec		574.76	574.77	574.56	574.56	574.46	574.69	574.65	574.64	574.86	574.59						
11-20 Dec		574.67	574.79	574.86	574.97	575.03	574.96	574.86	574.89	574.92	575.10						
21-31 Dec	574.86	575.12	/	574.82	574.77	574.93	574.91	574.93	575.05	575.15	575.25	575.30	2120/20	575.44	1125/5	574.30	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4080: St. Clair S.P., St. Clair, Michigan on St. Clair River

1977 YEARLY MEAN ELEVATION: 576.14 FEET

HIGHEST
Monthly mean elevation: 576.79 Jan 1977
Daily mean elevation: 577.38 1 Jan 1977
Instant/hourly Elevation: 577.58 1100/1 Jan 1977

LOWEST
Monthly mean elevation: 575.80 Mar 1977
Daily mean elevation: 575.44 4 Mar 1977
Instant/hourly Elevation: 575.28 1400/20 Nov 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.38	1 Jan
576.86	1 Feb
576.13	31 Mar
576.49	26 Apr
576.45	8 May
576.26	2 Jun
576.32	25 Jul
576.25	18 Aug
576.30	28 Sep
576.39	3 Oct
576.22	26 Nov
576.40	31 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
576.04	26 Jan
575.56	24 Feb
575.44	4 Mar
576.00	2 Apr
576.11	22 May
576.07	16 Jun
576.05	31 Jul
576.02	26 Aug
575.90	24 Sep
575.64	31 Oct
575.57	20 Nov
575.77	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
577.20	2												577.20	2
577.00	6												577.00	8
576.80	10	1											576.80	19
576.60	5												576.60	24
576.40	3	6		4	1								576.40	38
576.20	4	6		7	13	4	13	5	4	5	1	5	576.20	105
576.00	1	5	7	16	17	26	15	26	21	10	3	16	576.00	268
575.80		4	10	3					5	14	20	9	575.80	333
575.60		5	8							2	5	1	575.60	354
575.40		1	6								1		575.40	362

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 4080: St. Clair S.P., St. Clair, Michigan on St. Clair River

		Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			577.38	577.12	576.94	576.97	576.95	576.59	576.82	576.69	577.07	577.22					
11-20 Jan			577.16	577.04	576.84	576.89	576.80	576.91	577.06	577.02	576.98	576.72					
21-31 Jan	576.79		576.71	576.60	576.27	576.30	576.28	576.04	576.22	576.50	576.78	576.82	576.85	1100/1	577.58	0600/27	575.67
1-10 Feb			576.86	576.44	576.42	576.49	576.46	576.56	576.55	576.33	576.32	576.22					
11-20 Feb			576.07	576.00	575.94	576.10	576.27	576.38	576.22	576.04	576.11	576.07					
21-28 Feb	576.14		575.99	575.88	575.75	575.56	575.64	575.74	575.78	575.70				0900/1	577.00	0500/24	575.43
1-10 Mar			575.64	575.60	575.53	575.44	575.52	575.65	575.64	575.58	575.54	575.62					
11-20 Mar			575.62	575.62	575.76	575.88	575.85	576.01	576.04	576.02	575.97	575.97					
21-31 Mar	575.80		575.95	576.02	575.98	576.10	575.90	575.81	575.69	575.81	575.90	576.07	576.13	0900/18	576.41	0300/5	575.29
1-10 Apr			576.07	576.00	576.19	576.03	576.12	576.22	576.21	576.27	576.17	576.03					
11-20 Apr			576.03	576.08	576.08	576.08	576.04	576.04	576.04	576.00	576.03	576.02					
21-30 Apr	576.17		576.00	576.13	576.26	576.37	576.44	576.49	576.46	576.45	576.40	576.35		2400/27	576.89	0500/5	575.73
1-10 May			576.27	576.27	576.28	576.25	576.27	576.34	576.30	576.45	576.40	576.28					
11-20 May			576.27	576.26	576.22	576.16	576.19	576.13	576.17	576.21	576.20	576.15					
21-31 May	576.22		576.15	576.11	576.11	576.18	576.17	576.17	576.15	576.19	576.13	576.18	576.20	1500/8	577.06	0100/14	575.88
1-10 Jun			576.24	576.26	576.19	576.17	576.19	576.24	576.26	576.18	576.18	576.15					
11-20 Jun			576.11	576.17	576.16	576.15	576.14	576.07	576.10	576.11	576.19	576.16					
21-30 Jun	576.15		576.13	576.14	576.07	576.07	576.13	576.11	576.08	576.08	576.18	576.13		2000/30	576.52	1700/30	575.82
1-10 Jul			576.22	576.22	/	/	/	576.18	576.19	576.18	576.26	576.22					
11-20 Jul			576.19	576.16	576.22	576.16	576.17	576.19	576.18	576.18	576.23	576.23					
21-31 Jul	576.20		576.31	576.22	576.21	576.20	576.32	576.26	576.23	576.14	576.08	576.13	576.05	2300/25	576.61	0500/15	575.86
1-10 Aug			576.16	576.09	576.08	576.08	576.11	576.15	576.15	576.17	576.18	576.15					
11-20 Aug			576.17	576.23	576.22	576.21	576.18	576.13	576.24	576.25	576.16	576.14					
21-31 Aug	576.14		576.09	576.17	576.17	576.12	576.14	576.02	576.02	576.06	576.13	576.10	576.03	2000/17	576.58	0400/5	575.86
1-10 Sep			576.14	576.14	576.16	576.10	576.16	576.12	576.10	576.07	576.03	576.24					
11-20 Sep			576.11	575.98	576.08	576.13	576.01	575.98	576.03	576.10	576.00	576.04					
21-30 Sep	576.10		576.14	576.06	576.03	575.90	575.92	576.19	576.27	576.30	576.20	576.22		1000/26	576.59	1700/24	575.69
1-10 Oct			576.34	576.37	576.39	576.25	576.18	576.26	576.07	575.92	576.08	576.10					
11-20 Oct			575.99	576.13	576.06	576.00	576.15	576.17	576.05	575.97	575.99	575.96					
21-31 Oct	576.03		575.94	576.01	575.85	575.82	575.82	575.92	575.90	575.92	575.86	575.79	575.64	0200/3	576.55	2400/31	575.47
1-10 Nov			575.63	575.67	575.72	575.91	575.84	575.88	575.86	575.85	575.81	575.92					
11-20 Nov			576.07	576.06	575.92	575.87	575.80	575.84	575.93	575.93	575.92	575.57					
21-30 Nov	575.87		575.85	575.95	575.83	575.88	576.03	576.22	575.94	575.87	575.83	575.79		0100/26	576.57	1400/20	575.28
1-10 Dec			575.77	576.05	575.99	575.95	575.98	576.08	576.08	575.87	576.04	576.01					
11-20 Dec			576.00	575.94	576.02	576.20	576.18	576.10	575.90	575.90	576.05	576.09					
21-31 Dec	576.08		576.08	576.11	576.09	575.98	576.18	576.23	576.21	576.18	576.35	576.39	576.40	1700/29	576.49	2100/1	575.49

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4084: Marysville, Michigan on St. Clair River

1977 YEARLY MEAN ELEVATION: 576.82 FEET

HIGHEST
Monthly mean elevation: 577.19 Jan 1977
Daily mean elevation: 577.69 1 Jan 1977
Instant/hourly Elevation: 578.06 1404/8 May 1977

LOWEST
Monthly mean elevation: 576.50 Mar 1977
Daily mean elevation: 576.08 4 Mar 1977
Instant/hourly Elevation: 575.82 2115/4 Mar 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.69	1 Jan
577.33	1 Feb
576.90	24 Mar
577.17	28 Apr
577.28	8 May
577.05	6 Jun
577.13	25 Jul
577.03	18 Aug
577.05	10 Sep
577.14	3 Oct
577.07	26 Nov
577.00	30 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
576.59	26 Jan
576.14	24 Feb
576.08	4 Mar
576.67	2 Apr
576.81	22 May
576.77	16 Jun
576.76	3 Jul
576.72	27 Aug
576.56	24 Sep
576.28	31 Oct
576.20	20 Nov
576.33	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
577.60	1												577.60	1
577.40	5												577.40	6
577.20	12	1			1								577.20	20
577.00	6	2		8	6	3	3	2	2	4	1		577.00	57
576.80	3	6	3	8	24	22	26	25	16	7	3	11	576.80	211
576.60	3	7	9	14		5	2	4	10	14	12	13	576.60	304
576.40	1	9	5						2	5	11	6	576.40	343
576.20		2	12							1	2	1	576.20	361
576.00		1	2								1		576.00	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 4084: Marysville, Michigan on St. Clair River

		Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			577.69	577.43	577.27	577.32	577.32	576.99	577.26	577.14	577.44	577.54						
11-20 Jan			577.50	577.40	577.18	577.21	577.09	577.25	577.43	577.35	577.37	577.13						
21-31 Jan	577.19		577.15	577.07	576.74	576.78	576.81	576.59	576.80	577.00	577.21	577.24	577.30	1040/1	577.93	0610/27	576.13	
1-10 Feb			577.33	576.92	576.88	577.02	576.99	577.05	577.00	576.78	576.80	576.72						
11-20 Feb			576.60	576.55	576.51	576.77	576.85	576.88	576.70	576.55	576.70	576.67						
21-28 Feb	576.70		576.57	576.48	576.38	576.14	576.29	576.48	576.51	576.43				0400/1	577.47	0445/24	575.99	
1-10 Mar			576.39	576.34	576.27	576.08	576.18	576.38	576.36	576.28	576.22	576.35						
11-20 Mar			576.34	576.32	576.40	576.55	576.49	576.67	576.75	576.76	576.62	576.65						
21-31 Mar	576.50		576.65	576.86	576.72	576.90	576.63	576.48	576.36	576.49	576.49	576.73	576.84	1129/22	577.25	2115/4	575.82	
1-10 Apr			576.76	576.67	576.89	576.71	576.70	576.98	576.93	577.05	576.87	576.68						
11-20 Apr			576.69	576.81	576.79	576.83	576.76	576.77	576.79	576.74	576.78	576.74						
21-30 Apr	576.87		576.74	576.92	576.99	577.04	577.12	577.13	577.10	577.17	577.06	577.01		2247/27	577.75	0450/5	576.26	
1-10 May			576.93	577.01	577.00	576.93	576.93	577.05	577.02	577.28	577.16	577.01						
11-20 May			577.00	576.94	577.01	576.90	576.87	576.83	576.90	576.93	576.90	576.87						
21-31 May	576.94		576.82	576.81	576.82	576.88	576.93	576.91	576.89	576.93	576.85	576.90	576.90	1404/8	578.06	0840/23	576.61	
1-10 Jun			576.92	577.02	576.92	576.88	576.95	577.05	577.05	576.94	576.96	576.89						
11-20 Jun			576.83	576.93	576.91	576.90	576.88	576.77	576.84	576.84	576.92	576.89						
21-30 Jun	576.89		576.90	576.88	576.81	576.80	576.88	576.86	576.79	576.79	576.91	576.80		0950/6	577.35	1550/30	576.43	
1-10 Jul			576.90	576.93	576.76	576.82	576.87	576.92	576.93	576.90	576.98	576.91						
11-20 Jul			576.84	576.84	576.94	576.85	576.88	576.93	576.89	576.89	576.94	576.95						
21-31 Jul	576.91		577.06	576.99	576.94	576.92	577.13	577.06	576.95	576.84	576.81	576.89	576.77	2250/25	577.52	1105/5	576.38	
1-10 Aug			576.91	576.81	576.83	576.81	576.83	576.90	576.85	576.90	576.92	576.83						
11-20 Aug			576.89	576.93	576.91	576.93	576.91	576.81	577.01	577.03	576.92	576.89						
21-31 Aug	576.87		576.81	576.91	576.94	576.87	576.87	576.73	576.72	576.74	576.92	576.86	576.72	1945/17	577.48	0250/5	576.44	
1-10 Sep			576.90	576.91	576.95	576.83	576.93	576.89	576.83	576.78	576.72	577.05						
11-20 Sep			576.85	576.71	576.82	576.91	576.74	576.70	576.78	576.81	576.75	576.74						
21-30 Sep	576.82		576.89	576.77	576.72	576.56	576.56	576.81	576.98	577.03	576.88	576.93		0930/26	577.27	1125/9	576.29	
1-10 Oct			577.07	577.11	577.14	576.96	576.86	577.02	576.79	576.47	576.72	576.82						
11-20 Oct			576.61	576.87	576.82	576.72	576.94	576.99	576.78	576.69	576.75	576.72						
21-31 Oct	576.76		576.70	576.79	576.57	576.53	576.54	576.64	576.67	576.69	576.63	576.56	576.28	1831/15	577.41	2355/31	576.05	
1-10 Nov			576.28	576.39	576.46	576.74	576.62	576.65	576.62	576.59	576.54	576.54						
11-20 Nov			576.85	576.97	576.74	576.62	576.49	576.60	576.69	576.70	576.71	576.20						
21-30 Nov	576.63		576.57	576.77	576.55	576.65	576.83	577.07	576.68	576.56	576.59	576.57		0020/26	577.58	1620/20	575.85	
1-10 Dec			576.33	576.72	576.82	576.74	576.84	576.87	576.88	576.54	576.68	576.78						
11-20 Dec			576.72	576.54	576.67	576.85	576.80	576.73	576.45	576.43	576.65	576.60						
21-31 Dec	576.73		576.55	576.67	576.70	576.62	576.81	576.91	576.89	576.77	576.96	577.00	576.99	1600/5	577.27	1355/1	575.87	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4087: Dry Dock, Port Huron, Michigan on St. Clair River

1977 YEARLY MEAN ELEVATION: 577.22 FEET

HIGHEST
Monthly mean elevation: 577.42 Jan 1977
Daily mean elevation: 577.90 1 Jan 1977
Instant/hourly Elevation: 578.57 1400/8 May 1977

LOWEST
Monthly mean elevation: 576.92 Mar 1977
Daily mean elevation: 576.46 4 Mar 1977
Instant/hourly Elevation: 576.13 1400/1 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.90	1 Jan
577.57	1 Feb
577.38	24 Mar
577.66	28 Apr
577.74	8 May
577.50	6 Jun
577.61	25 Jul
577.49	18 Aug
577.52	10 Sep
577.61	3 Oct
577.59	26 Nov
577.37	26 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
576.89	26 Jan
576.47	24 Feb
576.46	4 Mar
577.04	5 Apr
577.22	22 May
577.19	16 Jun
577.18	31 Jul
577.10	27 Aug
576.90	24 Sep
576.78	8 Oct
576.56	20 Nov
576.66	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
577.80	1												577.80	1
577.60	5			1	2		1			1			577.60	11
577.40	11	1		9	7	4	5		2	4	2		577.40	58
577.20	9	4	3	9	22	23	23	24	15	7	4	12	577.20	213
577.00	3	10	9	11		3	2	5	10	10	13	13	577.00	302
576.80	2	10	7						2	4	8	3	576.80	338
576.60		2	10							1	2	3	576.60	356
576.40		1	2								1		576.40	360

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

		Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			577.90	577.61	577.47	577.54	577.55	577.22	577.53	577.39	577.66	577.76						
11-20 Jan			577.71	577.60	577.35	577.43	577.39	577.54	577.66	577.54	577.59	577.36						
21-31 Jan	577.42		577.42	577.35	576.98	577.05	577.12	576.89	577.12	577.28	577.23	577.38	577.52	1000/1	578.11	0600/27	576.42	
1-10 Feb			577.57	577.14	577.13	577.30	577.30	577.31	577.26	577.02	577.06	576.99						
11-20 Feb			576.89	576.84	576.83	577.13	577.19	577.19	577.01	576.85	577.05	577.03						
21-28 Feb	577.01		576.89	576.82	576.73	576.47	576.67	576.89	576.94	576.85				0500/1	577.70	1300/24	576.34	
1-10 Mar			576.82	576.78	576.73	576.46	576.59	576.83	576.80	576.70	576.61	576.77						
11-20 Mar			576.75	576.68	576.78	576.95	576.87	577.08	577.17	577.19	577.02	577.08						
21-31 Mar	576.92		577.08	577.34	577.16	577.38	577.03	576.87	576.74	576.88	576.87	577.09	577.27	1100/22	577.78	2200/4	576.14	
1-10 Apr			577.16	577.05	577.34	577.10	577.04	577.45	577.37	577.53	577.29	577.09						
11-20 Apr			577.10	577.24	577.22	577.28	577.20	577.21	577.20	577.16	577.21	577.14						
21-30 Apr	577.30		577.15	577.39	577.44	577.46	577.54	577.55	577.51	577.66	577.48	577.43		2200/27	578.18	1000/5	576.60	
1-10 May			577.35	577.45	577.42	577.33	577.34	577.46	577.45	577.74	577.63	577.45						
11-20 May			577.43	577.37	577.50	577.34	577.29	577.25	577.29	577.32	577.33	577.29						
21-31 May	577.36		577.23	577.22	577.24	577.30	577.36	577.34	577.31	577.35	577.25	577.32	577.31	1400/8	578.57	0300/23	577.04	
1-10 Jun			577.30	577.46	577.33	577.28	577.35	577.50	577.49	577.36	577.41	577.33						
11-20 Jun			577.25	577.38	577.34	577.34	577.31	577.19	577.25	577.24	577.34	577.31						
21-30 Jun	577.31		577.34	577.30	577.23	577.23	577.32	577.28	577.20	577.22	577.35	577.19		1000/6	577.79	1700/30	576.79	
1-10 Jul			577.29	577.38	577.20	577.28	577.31	577.31	577.36	577.36	577.47	577.38						
11-20 Jul			577.29	577.28	577.38	577.26	577.30	577.36	577.28	577.32	577.34	577.42						
21-31 Jul	577.35		577.54	577.43	577.37	577.34	577.61	577.50	577.39	577.25	577.24	577.31	577.18	2300/25	577.97	0700/31	576.87	
1-10 Aug			577.36	577.27	577.29	577.23	577.29	577.35	577.27	577.34	577.38	577.30						
11-20 Aug			577.36	577.38	577.34	577.38	577.36	577.20	577.45	577.49	577.38	577.31						
21-31 Aug	577.30		577.23	577.34	577.38	577.30	577.30	577.12	577.10	577.13	577.35	577.29	577.11	2000/17	577.96	1500/16	576.79	
1-10 Sep			577.32	577.32	577.39	577.22	577.37	577.35	577.17	/	577.14	577.52						
11-20 Sep			577.30	577.10	577.25	577.34	577.15	577.06	577.16	577.25	577.09	577.14						
21-30 Sep	577.24		577.32	577.20	577.13	576.90	576.93	577.25	577.40	577.44	577.27	577.34		1600/10	577.71	1600/24	576.63	
1-10 Oct			577.57	577.60	577.61	577.39	577.27	577.46	577.18	576.78	577.10	577.22						
11-20 Oct			576.95	577.29	577.27	577.15	577.40	577.46	577.20	577.09	577.19	577.12						
21-31 Oct	577.21		577.06	577.26	577.00	576.94	576.95	577.06	577.17	/	/	/	/	1800/15	577.92	0800/8	576.51	
1-10 Nov			576.74	576.78	576.88	577.22	577.05	577.04	577.02	576.99	576.91	576.90						
11-20 Nov			577.25	577.48	577.20	577.18	576.94	577.03	577.11	577.14	577.19	576.56						
21-30 Nov	577.07		577.01	577.26	576.94	577.09	577.35	577.59	577.14	576.96	577.06	576.99		2400/25	578.15	2000/20	576.19	
1-10 Dec			576.66	577.11	577.28	577.19	577.34	577.34	577.36	576.92	577.04	577.24						
11-20 Dec			577.18	577.05	577.04	577.26	577.19	577.10	576.78	576.74	577.03	576.91						
21-31 Dec	577.12		576.86	577.05	577.09	577.02	577.22	577.37	577.23	577.12	577.35	577.35	577.35	1600/5	577.84	1400/1	576.13	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4090: Mouth of Black River, Port Huron, Michigan on St. Clair River

1977 YEARLY MEAN ELEVATION: 577.59 FEET

HIGHEST
Monthly mean elevation: 577.78 Jan 1977
Daily mean elevation: 578.22 1 Jan 1977
Instant/hourly Elevation: 579.17 1537/8 May 1977

LOWEST
Monthly mean elevation: 577.31 Mar 1977
Daily mean elevation: 576.83 20 Nov 1977
Instant/hourly Elevation: 575.80 0555/27 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.22	1 Jan
577.92	1 Feb
577.78	24 Mar
578.03	28 Apr
578.10	8 May
577.90	6 Jun
578.01	25 Jul
577.90	18 Aug
577.94	10 Sep
578.01	3 Oct
577.97	26 Nov
577.75	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.29	26 Jan
576.87	24 Feb
576.90	4 Mar
577.36	5 Apr
577.60	21 May
577.53	16 Jun
577.54	31 Jul
577.47	27 Aug
577.27	24 Sep
576.92	31 Oct
576.83	20 Nov
576.92	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
578.20	1												578.20	1
578.00	2			1	2		1			1			578.00	8
577.80	13	1		8	6	3	5	2	2	4	2		577.80	54
577.60	9	5	3	12	22	19	22	24	14	6	3	11	577.60	204
577.40	4	6	8	7	1	8	3	5	12	11	9	7	577.40	285
577.20	2	13	9	2					2	7	12	8	577.20	340
577.00		2	9							1	2	4	577.00	358
576.80		1	2							1	2	1	576.80	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

		Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			578.22	577.93	577.81	577.88	577.89	577.58	577.92	577.76	577.96	578.06					
11-20 Jan			578.02	577.92	577.70	577.77	577.75	577.88	577.99	577.91	577.93	577.70					
21-31 Jan	577.78		577.77	577.71	577.35	577.43	577.52	577.29	577.52	577.67	577.81	577.80	577.87	1530/28	578.30	0555/27	575.80
1-10 Feb			577.92	577.49	577.48	577.68	577.69	577.68	577.63	577.37	577.40	577.37					
11-20 Feb			577.29	577.24	577.23	577.58	577.61	577.57	577.37	577.21	577.47	577.46					
21-28 Feb	577.41		577.30	577.24	577.17	576.87	577.10	577.38	577.40	577.32				2353/4	578.04	1300/24	576.72
1-10 Mar			577.28	577.26	577.18	576.90	577.02	577.29	577.26	577.14	576.94	577.15					
11-20 Mar			577.13	577.04	577.14	577.32	577.23	577.46	577.55	577.58	577.38	577.45					
21-31 Mar	577.31		577.44	577.76	577.54	577.78	577.41	577.24	577.09	577.23	577.20	577.46	577.65	1120/22	578.27	2145/4	576.54
1-10 Apr			577.51	577.40	577.73	577.46	577.36	577.84	577.75	577.92	577.66	577.45					
11-20 Apr			577.47	577.64	577.63	577.67	577.61	577.62	577.61	577.54	577.61	577.54					
21-30 Apr	577.68		577.54	577.80	577.82	577.84	577.89	577.90	577.83	578.03	577.83	577.76		0340/8	578.67	0732/5	576.76
1-10 May			577.70	577.82	577.79	577.68	577.68	577.84	577.83	578.10	578.05	577.83					
11-20 May			577.81	577.73	577.87	577.73	577.67	577.61	577.65	577.73	577.73	577.67					
21-31 May	577.74		577.60	577.61	577.61	577.70	577.77	577.72	577.70	577.76	577.63	577.71	577.70	1537/8	579.17	2340/13	577.20
1-10 Jun			577.70	577.85	577.71	577.70	577.75	577.90	577.90	577.75	577.80	577.73					
11-20 Jun			577.64	577.78	577.74	577.73	577.70	577.53	577.59	577.59	577.70	577.69					
21-30 Jun	577.70		577.72	577.67	577.59	577.60	577.71	577.68	577.57	577.56	577.72	577.57		0930/6	578.35	1255/30	577.05
1-10 Jul			577.69	577.81	577.57	577.68	577.69	577.69	577.75	577.74	577.85	577.75					
11-20 Jul			577.69	577.61	577.75	577.64	577.69	577.74	577.65	577.68	577.70	577.76					
21-31 Jul	577.72		577.93	577.83	577.74	577.69	578.01	577.90	577.76	577.61	577.59	577.70	577.54	2225/25	578.46	1050/5	577.12
1-10 Aug			577.74	577.65	577.65	577.61	577.65	577.73	577.67	577.71	577.75	577.65					
11-20 Aug			577.75	577.76	577.74	577.77	577.74	577.60	577.84	577.90	577.78	577.71					
21-31 Aug	577.69		577.62	577.73	577.80	577.71	577.69	577.49	577.47	577.48	577.74	577.68	577.51	1940/17	578.44	1430/27	577.18
1-10 Sep			577.76	577.76	577.79	577.60	577.79	577.74	577.63	577.59	577.49	577.94					
11-20 Sep			577.71	577.50	577.65	577.78	577.55	577.44	577.53	577.61	577.52	577.51					
21-30 Sep	577.63		577.72	577.57	577.50	577.27	577.28	577.54	577.78	577.84	577.65	577.75		1650/10	578.19	1125/9	576.91
1-10 Oct			577.93	577.99	578.01	577.76	577.63	577.85	577.57	577.08	577.44	577.58					
11-20 Oct			577.28	577.65	577.62	577.48	577.77	577.84	577.53	577.41	577.54	577.47					
21-31 Oct	577.53		577.43	577.63	577.33	577.26	577.26	577.40	577.45	577.48	577.40	577.29	576.92	1800/15	578.35	2400/31	576.66
1-10 Nov			576.97	577.15	577.23	577.62	577.44	577.44	577.39	577.35	577.27	577.21					
11-20 Nov			577.65	577.89	577.56	577.37	577.18	577.35	577.45	577.47	577.54	576.83					
21-30 Nov	577.40		577.33	577.60	577.28	577.42	577.70	577.97	577.45	577.26	577.37	577.33		0027/26	578.64	1600/20	576.45
1-10 Dec			576.92	577.46	577.68	577.59	577.75	577.71	577.74	577.25	577.38	577.68					
11-20 Dec			577.55	577.23	577.40	577.63	577.54	577.45	577.09	577.02	577.34	577.19					
21-31 Dec	577.45		577.11	577.34	577.40	577.34	577.55	577.67	577.66	577.43	577.66	577.65	577.63	1600/5	578.24	1400/1	576.42

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4096: Dunn Paper Co., Port Huron, Michigan on St. Clair River

1977 YEARLY MEAN ELEVATION: 577.95 FEET

HIGHEST
Monthly mean elevation: 578.18 Jul 1977
Daily mean elevation: 578.59 8 May 1977
Instant/hourly Elevation: 579.73 1350/8 May 1977

LOWEST
Monthly mean elevation: 577.64 Feb 1977
Daily mean elevation: 577.13 24 Feb 1977
Instant/hourly Elevation: 576.58 2007/1 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.33	1 Jan
578.05	1 Feb
578.22	24 Mar
578.37	28 Apr
578.59	8 May
578.28	6 Jun
578.58	21 Jul
578.29	18 Aug
578.35	10 Sep
578.42	3 Oct
578.52	26 Nov
578.23	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.49	26 Jan
577.13	24 Feb
577.19	4 Mar
577.64	5 Apr
577.99	22 May
577.96	16 Jun
577.90	31 Jul
577.82	27 Aug
577.60	24 Sep
577.36	8 Oct
577.22	20 Nov
577.25	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
578.40					2		3			1	2		578.40	8
578.20	2			8	6	3	7	2	3	4		2	578.20	46
578.00	9	1	2	11	22	19	17	23	12	5	6	9	578.00	182
577.80	12	5	7	8	1	5	4	6	12	14	11	6	577.80	273
577.60	6	9	7	3					2	4	8	8	577.60	320
577.40	2	11	11						1	1	2	4	577.40	352
577.20		1	2							2	1	2	577.20	360
577.00		1	1										577.00	362

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 4096: Dunn Paper Co., Port Huron, Michigan on St. Clair River

		Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LDW Hrs/day Elev. Hrs/day Elev.		
1-10 Jan			578.33	578.03	577.92	578.01	578.03	577.73	578.10	577.92	578.12	578.21			
11-20 Jan			578.12	578.02	577.79	577.87	577.87	578.00	578.11	577.97	578.06	577.84			
21-31 Jan	577.92		577.95	577.90	577.51	577.62	577.74	577.49	577.70	577.80	577.90	577.86	577.95	1015/1	578.63 0545/27 576.90
1-10 Feb			578.05	577.65	577.67	577.88	577.91	577.86	577.80	577.54	577.58	577.56			
11-20 Feb			577.50	577.46	577.47	577.85	577.85	577.78	577.58	577.46	577.73	577.72			
21-28 Feb	577.64		577.54	577.50	577.47	577.13	577.37	577.69	577.70	577.65				2325/4	578.31 1305/24 576.92
1-10 Mar			577.62	577.55	577.52	577.19	577.31	577.61	577.59	577.47	577.36	577.56			
11-20 Mar			577.54	577.43	577.51	577.69	577.60	577.80	577.91	577.88	577.76	577.82			
21-31 Mar	577.68		577.85	578.16	577.98	578.22	577.83	577.66	577.50	577.65	577.53	577.83	578.04	1110/22	578.73 2210/4 576.72
1-10 Apr			577.93	577.76	578.09	577.79	577.64	578.26	578.16	578.33	578.08	577.85			
11-20 Apr			577.85	578.04	577.99	578.08	578.01	578.03	578.00	577.96	578.02	577.95			
21-30 Apr	578.06		577.95	578.20	578.22	578.22	578.26	578.27	578.18	578.37	578.21	578.17		0340/8	579.22 0752/5 577.00
1-10 May			578.10	578.22	578.19	578.08	578.08	578.25	578.23	578.59	578.42	578.23			
11-20 May			578.23	578.17	578.32	578.09	578.08	578.04	578.08	578.14	578.13	578.08			
21-31 May	578.15		578.05	577.99	578.01	578.13	578.17	578.13	578.11	578.18	578.03	578.10	578.14	1350/8	579.73 1840/13 577.50
1-10 Jun			578.05	578.26	578.11	578.09	578.13	578.28	578.28	578.17	578.18	578.11			
11-20 Jun			578.04	578.17	578.13	578.14	578.10	577.96	578.00	578.00	578.13	578.11			
21-30 Jun	578.10		578.14	578.10	578.01	577.99	578.11	578.07	577.96	/	/	/		0940/6	578.82 0200/17 577.50
1-10 Jul			578.15	578.21	577.98	578.07	578.12	578.11	578.17	578.16	578.28	578.18			
11-20 Jul			578.07	578.05	578.17	578.04	578.08	578.15	578.05	578.08	578.25	578.38			
21-31 Jul	578.18		578.58	578.49	578.35	578.39	578.50	578.29	578.14	578.00	577.99	578.08	577.90	2230/25	578.95 1915/3 577.45
1-10 Aug			578.14	578.05	578.04	578.01	578.04	578.14	578.09	578.11	578.15	578.02			
11-20 Aug			578.14	578.16	578.12	578.17	578.12	577.98	578.25	578.29	578.17	578.08			
21-31 Aug	578.07		577.97	578.09	578.17	578.09	578.06	577.88	577.82	577.88	578.12	578.06	577.86	1844/17	578.93 1407/27 577.50
1-10 Sep			578.14	578.14	578.22	578.01	578.17	578.16	578.04	577.99	577.86	578.35			
11-20 Sep			578.10	577.87	578.06	578.18	577.93	577.82	577.94	577.99	577.79	577.86			
21-30 Sep	578.00		578.09	577.95	577.87	577.60	577.62	577.92	578.15	578.21	578.00	578.10		1605/10	578.71 1045/9 577.14
1-10 Oct			578.36	578.38	578.42	578.14	577.99	578.24	577.93	577.36	577.81	577.96			
11-20 Oct			577.57	578.03	578.06	577.91	578.20	578.31	577.96	577.84	577.97	577.90			
21-31 Oct	577.94		577.83	578.08	577.76	577.68	577.69	577.85	577.90	577.92	577.85	577.77	577.36	1832/15	578.87 0940/8 576.87
1-10 Nov			577.43	577.62	577.71	578.14	577.89	577.90	577.84	577.79	577.69	577.56			
11-20 Nov			578.11	578.41	578.06	577.85	577.64	577.83	577.92	577.93	578.02	577.22			
21-30 Nov	577.87		577.74	578.10	577.77	577.90	578.14	578.52	577.96	577.72	577.88	577.83		0039/26	579.26 1600/20 576.62
1-10 Dec			577.25	577.84	578.12	578.04	578.23	578.19	578.21	577.67	577.74	578.07			
11-20 Dec			577.95	577.59	577.77	577.99	577.88	577.80	577.44	577.35	577.73	577.48			
21-31 Dec	577.84		577.42	577.69	577.76	577.77	577.97	578.11	578.10	577.83	578.09	578.05	578.06	1547/5	578.84 2007/1 576.58

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 4098: Fort Gratiot, Port Huron, Michigan on St. Clair River

1977 YEARLY MEAN ELEVATION: 578.38 FEET

HIGHEST
Monthly mean elevation: 578.74 Dec 1977
Daily mean elevation: 579.20 26 Nov 1977
Instant/hourly Elevation: 579.97 1300/8 May 1977

LOWEST
Monthly mean elevation: 577.93 Feb 1977
Daily mean elevation: 577.43 24 Feb 1977
Instant/hourly Elevation: 576.94 2100/20 Nov 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.51	1 Jan
578.28	1 Feb
578.70	24 Mar
578.88	28 Apr
578.98	8 May
578.85	7 Jun
578.73	26 Jul
578.87	18 Aug
578.79	10 Sep
578.99	3 Oct
579.20	26 Nov
579.07	7 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.76	26 Jan
577.43	24 Feb
577.54	4 Mar
577.95	5 Apr
578.35	22 May
578.36	18 Jun
578.18	1 Jul
578.34	4 Aug
577.97	24 Sep
577.62	8 Oct
577.53	20 Nov
578.28	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00											2	1	579.00	3
578.80				2	2	1		1		2	2	3	578.80	16
578.60			2	7	5	3	5	7	3	4	4	1	578.60	57
578.40	2		1	12	20	21	17	15	13	5	5	1	578.40	169
578.20	9	2	7	7	4	5	8	8	10	12	7	1	578.20	249
578.00	14	11	6	1			1		2	5	5		578.00	294
577.80	4	6	11	1					2	1	3		577.80	322
577.60	2	8	3							2	1		577.60	338
577.40		1	1								1		577.40	341

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 4098: Fort Gratiot, Port Huron, Michigan on St. Clair River

		Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			578.51	578.21	578.09	578.20	578.24	577.93	578.34	578.16	578.32	578.41						
11-20 Jan			578.30	578.19	577.96	578.06	578.08	578.22	578.31	578.15	578.29	578.09						
21-31 Jan	578.14		578.21	578.16	577.77	577.88	578.03	577.76	577.99	578.04	578.12	578.06	578.17	1500/28	578.91	0600/27	577.17	
1-10 Feb			578.28	577.86	577.90	578.16	578.18	578.11	578.04	577.76	577.83	577.81						
11-20 Feb			577.78	577.78	577.77	578.22	578.19	578.06	577.84	577.72	578.05	578.06						
21-28 Feb	577.93		577.84	577.80	577.79	577.43	577.69	578.09	578.11	578.01				2300/4	578.61	1800/24	577.18	
1-10 Mar			578.02	577.94	577.92	577.54	577.67	578.02	577.97	577.83	577.68	577.95						
11-20 Mar			577.90	577.80	577.84	578.06	577.94	578.22	578.33	578.35	578.13	578.23						
21-31 Mar	578.06		578.28	578.69	578.39	578.70	578.22	578.04	577.84	578.00	577.86	578.16	578.42	1100/22	579.31	2200/4	577.03	
1-10 Apr			578.35	578.11	578.58	578.22	577.95	578.72	578.58	578.83	578.49	578.24						
11-20 Apr			578.23	578.46	578.45	578.53	578.43	578.45	578.43	578.35	578.44	578.35						
21-30 Apr	578.48		578.37	578.66	578.67	578.66	578.70	578.66	578.54	578.88	578.62	578.54		2200/27	579.63	1000/5	577.20	
1-10 May			578.46	578.65	578.59	578.47	578.44	578.69	578.68	578.98	578.95	578.65						
11-20 May			578.60	578.54	578.62	578.54	578.47	578.37	578.44	578.52	578.46	578.46						
21-31 May	578.54		578.38	578.35	578.38	578.48	578.58	578.55	578.49	578.57	578.43	578.47	578.52	1300/8	579.97	2400/22	578.11	
1-10 Jun			578.45	578.69	578.52	578.51	578.56	578.73	578.85	578.56	578.65	578.53						
11-20 Jun			578.44	578.60	578.54	578.54	578.53	578.37	578.41	578.36	578.51	578.49						
21-30 Jun	578.51		578.55	578.50	578.41	578.38	578.52	578.47	578.37	578.39	578.55	578.42		1000/16	579.26	1600/30	577.69	
1-10 Jul			578.18	578.48	578.37	578.31	578.40	578.47	578.58	578.52	578.69	578.56						
11-20 Jul			578.46	578.37	578.58	578.40	578.45	578.49	578.43	578.51	578.46	578.52						
21-31 Jul	578.49		578.68	578.68	578.52	578.55	578.68	578.73	578.55	578.40	578.35	578.51	578.28	1800/18	579.26	1200/31	577.72	
1-10 Aug			578.54	578.41	578.39	578.34	578.40	578.58	578.58	578.55	578.65	578.40						
11-20 Aug			578.52	578.53	578.49	578.57	578.52	578.34	578.64	578.87	578.68	578.67						
21-31 Aug	578.53		578.57	578.56	578.61	578.67	578.65	578.53	578.40	578.34	578.39	578.51	578.47	1900/17	579.32	0600/5	577.94	
1-10 Sep			578.43	578.53	578.65	578.53	578.55	578.53	578.42	578.35	578.17	578.79						
11-20 Sep			578.50	578.23	578.42	578.57	578.30	578.14	578.33	578.41	578.24	578.25						
21-30 Sep	578.39		578.52	578.35	578.24	577.97	577.97	578.27	578.54	578.62	578.38	578.51		0900/26	579.19	1100/9	577.49	
1-10 Oct			578.80	578.94	578.99	578.54	578.37	578.67	578.33	577.62	578.18	578.34						
11-20 Oct			577.92	578.45	578.46	578.30	578.66	578.78	578.36	578.23	578.42	578.32						
21-31 Oct	578.35		578.24	578.53	578.17	578.07	578.09	578.28	578.33	578.39	578.27	578.14	577.70	1800/15	579.42	0900/8	577.18	
1-10 Nov			577.77	577.98	578.10	578.61	578.53	578.41	578.38	578.23	578.07	577.90						
11-20 Nov			578.23	578.91	578.63	578.38	577.98	578.20	578.26	578.34	578.46	577.53						
21-30 Nov	578.37		578.17	578.57	578.12	578.29	578.67	579.20	579.14	578.87	578.68	578.58		2400/25	579.82	2100/20	576.94	
1-10 Dec			578.43	578.28	/	/	578.63	578.95	579.07	578.98	578.83	/						
11-20 Dec			/	/	/	/	/	/	/	/	/	/						
21-31 Dec	578.74		/	/	/	/	/	/	/	/	/	/	/	0100/7	579.07	0700/2	578.28	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 5002: Lakeport, Michigan on Lake Huron

1977 YEARLY MEAN ELEVATION: 578.40 FEET

HIGHEST
Monthly mean elevation: 578.61 May 1977
Daily mean elevation: 579.07 8 May 1977
Instant/hourly Elevation: 579.92 1500/8 May 1977

LOWEST
Monthly mean elevation: 577.99 Feb 1977
Daily mean elevation: 577.50 24 Feb 1977
Instant/hourly Elevation: 577.03 2000/1 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.52	1 Jan
578.30	1 Feb
578.74	24 Mar
578.89	8 Apr
579.07	8 May
578.82	7 Jun
578.92	25 Jul
578.81	18 Aug
578.88	10 Sep
578.92	3 Oct
578.96	26 Nov
578.78	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.80	23 Jan
577.50	24 Feb
577.76	4 Mar
577.99	5 Apr
578.43	22 May
578.40	16 Jun
578.37	31 Jul
578.29	27 Aug
578.02	24 Sep
577.75	8 Oct
577.73	20 Nov
577.66	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00					1								579.00	1
578.80				2	1	1	3	1	1	3	2		578.80	15
578.60			2	11	10	11	9	10	6	4	4	4	578.60	86
578.40	2		4	12	19	17	18	16	13	10	6	7	578.40	210
578.20	13	5	5	4		1	1	4	8	9	10	6	578.20	276
578.00	11	8	9						2	3	5	9	578.00	323
577.80	4	11	8	1						1	2	2	577.80	352
577.60	1	3	1							1	1	3	577.60	362
577.40		1											577.40	363

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 5002: Lakeport, Michigan on Lake Huron

		Monthly means	----- Daily Means -----											HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			578.52	578.21	578.12	578.23	578.27	577.95	578.35	578.19	578.39	578.45					
11-20 Jan			578.35	578.22	578.00	578.11	578.10	578.27	578.36	578.22	578.33	578.11					
21-31 Jan	578.17		578.26	578.21	577.80	577.93	578.10	577.84	578.04	578.07	578.14	578.08	578.17	1000/1	578.81	0500/27	577.22
1-10 Feb			578.30	577.88	577.94	578.21	578.22	578.15	578.07	577.78	577.89	577.87					
11-20 Feb			577.82	577.85	577.86	578.27	578.21	578.10	577.89	577.80	578.07	578.10					
21-28 Feb	577.99		577.92	577.89	577.88	577.50	577.74	578.14	578.20	578.09				2300/4	578.67	2000/24	577.28
1-10 Mar			578.08	578.02	577.97	577.76	/	/	578.06	577.95	577.82	578.04					
11-20 Mar			578.00	577.90	577.92	578.14	578.02	578.27	578.45	578.42	578.19	578.29					
21-31 Mar	578.16		578.34	578.66	578.46	578.74	578.31	578.10	577.93	578.11	577.95	578.31	578.53	1100/22	579.16	0700/29	577.44
1-10 Apr			578.44	578.26	578.59	578.37	577.99	578.79	578.68	578.89	578.56	578.36					
11-20 Apr			578.32	578.52	578.46	578.61	578.52	578.53	578.51	578.47	578.53	578.45					
21-30 Apr	578.56		578.46	578.72	578.73	578.71	578.75	578.73	578.65	578.88	578.69	578.62		2200/27	579.64	0400/5	577.39
1-10 May			578.55	578.70	578.68	578.53	578.54	578.72	578.76	579.07	578.97	578.75					
11-20 May			578.70	578.60	578.66	578.55	578.52	578.45	578.51	578.58	578.56	578.50					
21-31 May	578.61		578.46	578.43	578.48	578.56	578.61	578.61	578.56	578.63	578.49	578.57	578.54	1500/8	579.92	1500/13	578.10
1-10 Jun			578.48	578.77	578.57	578.54	578.64	578.79	578.82	578.66	578.70	578.61					
11-20 Jun			578.50	578.70	578.62	578.63	578.58	578.40	578.49	578.44	578.61	578.57					
21-30 Jun	578.58		578.64	578.59	578.48	578.47	578.58	578.55	578.45	578.44	578.60	578.41		0900/6	579.31	1600/30	577.75
1-10 Jul			578.48	578.71	578.46	578.57	578.55	578.54	578.63	578.65	578.76	578.65					
11-20 Jul			578.49	578.47	578.56	578.47	578.53	578.56	578.57	578.56	578.56	578.62					
21-31 Jul	578.59		578.81	578.72	578.62	578.59	578.92	578.81	578.65	578.47	578.43	578.56	578.37	2200/25	579.39	1200/31	577.90
1-10 Aug			578.64	578.51	578.52	578.46	578.49	578.64	578.51	578.64	578.64	578.46					
11-20 Aug			578.59	578.62	578.57	578.64	578.61	578.42	578.73	578.81	578.64	578.58					
21-31 Aug	578.55		578.45	578.59	578.67	578.57	578.53	578.31	578.29	578.36	578.60	578.53	578.31	1900/17	579.32	1900/27	577.94
1-10 Sep			578.55	578.61	578.70	578.50	578.66	578.58	578.50	578.47	578.28	578.88					
11-20 Sep			578.58	578.33	578.51	578.66	578.42	578.27	578.37	578.44	578.29	578.31					
21-30 Sep	578.47		578.59	578.41	578.34	578.02	578.03	578.34	578.63	578.68	578.50	578.58		1500/10	579.18	0400/25	577.74
1-10 Oct			578.86	578.86	578.92	578.62	578.45	578.76	578.39	577.75	578.28	578.46					
11-20 Oct			578.04	578.54	578.57	578.41	578.71	578.78	578.44	578.32	578.49	578.41					
21-31 Oct	578.43		578.35	578.58	578.28	578.17	578.17	578.37	578.40	578.42	578.37	578.27	577.81	1800/15	579.19	0900/8	577.37
1-10 Nov			577.88	578.08	578.19	578.66	578.38	578.38	578.31	578.26	578.16	577.99					
11-20 Nov			578.62	578.91	578.55	578.36	578.13	578.34	578.41	578.43	578.55	577.73					
21-30 Nov	578.37		578.27	578.65	578.26	578.41	578.73	578.96	578.45	578.17	578.39	578.37		2400/25	579.74	2100/20	577.21
1-10 Dec			577.66	578.31	578.65	578.54	578.78	578.64	578.69	578.14	578.11	578.54					
11-20 Dec			578.38	578.01	578.16	578.40	578.28	578.20	577.82	577.76	578.10	577.87					
21-31 Dec	578.27		577.72	578.05	578.19	578.20	578.36	578.57	578.54	578.24	578.51	578.45	578.44	1500/5	579.28	2000/1	577.03

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 5014: Harbor Beach, Michigan on Lake Huron

1977 YEARLY MEAN ELEVATION: 578.38 FEET

HIGHEST
Monthly mean elevation: 578.57 May 1977
Daily mean elevation: 578.85 8 May 1977
Instant/hourly Elevation: 579.18 1900/8 May 1977

LOWEST
Monthly mean elevation: 578.00 Feb 1977
Daily mean elevation: 577.62 24 Feb 1977
Instant/hourly Elevation: 577.32 2200/4 Mar 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.47	1 Jan
578.34	1 Feb
578.56	24 Mar
578.77	8 Apr
578.85	8 May
578.69	7 Jun
578.77	25 Jul
578.76	18 Aug
578.82	10 Sep
578.70	3 Oct
578.73	12 Nov
578.63	3 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.90	23 Jan
577.62	24 Feb
577.71	4 Mar
578.06	5 Apr
578.39	29 May
578.44	16 Jun
578.38	31 Jul
578.29	26 Aug
578.01	24 Sep
577.89	8 Oct
577.92	20 Nov
577.81	18 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
578.80					1				1				578.80	2
578.60				12	9	7	9	6	2	4	5	2	578.60	58
578.40	1		2	12	20	23	21	22	12	10	6	9	578.40	196
578.20	15	3	9	5	1		1	3	13	13	14	11	578.20	284
578.00	12	10	11	1					2	2	3	5	578.00	330
577.80	3	14	8							2	2	4	577.80	363
577.60		1	1										577.60	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 5014: Harbor Beach, Michigan on Lake Huron

		Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			578.47	578.23	578.14	578.20	578.26	578.03	578.33	578.22	578.31	578.31					
11-20 Jan			578.30	578.24	578.06	578.08	578.13	578.30	578.39	578.22	578.32	578.12					
21-31 Jan	578.19		578.25	578.22	577.90	577.96	578.10	578.00	578.07	578.19	578.17	578.12	578.21	0800/1	578.60	0500/27	577.65
1-10 Feb			578.34	577.97	577.95	578.16	578.21	578.15	578.07	577.84	577.91	577.90					
11-20 Feb			577.87	577.88	577.93	578.25	578.16	578.09	577.91	577.86	578.03	578.04					
21-28 Feb	578.00		577.93	577.90	577.87	577.62	577.87	578.14	578.14	578.13				0800/27	578.43	1100/24	577.49
1-10 Mar			578.08	578.06	577.98	577.71	577.88	578.13	578.07	577.99	577.89	578.04					
11-20 Mar			577.97	577.89	577.93	578.13	578.04	578.22	578.40	578.25	578.17	578.23					
21-31 Mar	578.12		578.27	578.37	578.36	578.56	578.23	578.06	577.95	578.12	578.05	578.30	578.48	0500/24	578.80	2200/4	577.32
1-10 Apr			578.40	578.28	578.49	578.39	578.06	578.74	578.64	578.77	578.55	578.38					
11-20 Apr			578.38	578.55	578.48	578.58	578.45	578.49	578.48	578.47	578.52	578.47					
21-30 Apr	578.54		578.49	578.68	578.66	578.62	578.69	578.70	578.68	578.71	578.67	578.63		2300/27	579.06	0800/5	577.62
1-10 May			578.59	578.58	578.62	578.50	578.55	578.71	578.67	578.85	578.75	578.67					
11-20 May			578.68	578.62	578.70	578.52	578.51	578.46	578.54	578.61	578.56	578.51					
21-31 May	578.57		578.48	578.46	578.48	578.57	578.56	578.54	578.51	578.60	578.39	578.47	578.46	1900/8	579.18	0500/2	578.16
1-10 Jun			578.53	578.68	578.55	578.50	578.56	578.62	578.69	578.61	578.60	578.56					
11-20 Jun			578.47	578.59	578.56	578.54	578.53	578.44	578.47	578.53	578.64	578.58					
21-30 Jun	578.55		578.62	578.57	578.46	578.46	578.57	578.54	578.44	578.44	578.63	578.50		0400/29	578.93	1600/30	577.98
1-10 Jul			578.52	578.75	578.47	578.54	578.60	578.52	578.60	578.61	578.63	578.57					
11-20 Jul			578.45	578.46	578.59	578.51	578.54	578.55	578.53	578.53	578.55	578.64					
21-31 Jul	578.57		578.73	578.66	578.58	578.61	578.77	578.76	578.58	578.42	578.41	578.52	578.38	2100/8	578.97	0400/1	578.18
1-10 Aug			578.61	578.49	578.52	578.42	578.47	578.60	578.48	578.56	578.60	578.45					
11-20 Aug			578.58	578.63	578.61	578.61	578.56	578.41	578.62	578.76	578.54	578.51					
21-31 Aug	578.52		578.46	578.57	578.56	578.50	578.45	578.29	578.30	578.41	578.59	578.50	578.33	2100/17	578.93	2300/4	578.02
1-10 Sep			578.50	578.50	578.59	578.47	578.55	578.52	578.43	578.38	578.33	578.82					
11-20 Sep			578.56	578.36	578.40	578.56	578.38	578.24	578.35	578.40	578.24	578.27					
21-30 Sep	578.42		578.51	578.34	578.26	578.01	578.01	578.34	578.62	578.63	578.46	578.50		1500/10	579.02	2100/24	577.73
1-10 Oct			578.62	578.61	578.70	578.55	578.49	578.67	578.41	577.89	578.29	578.50					
11-20 Oct			578.22	578.53	578.52	578.37	578.55	578.56	578.41	578.30	578.39	578.38					
21-31 Oct	578.38		578.35	578.41	578.25	578.14	578.19	578.36	578.35	578.37	578.29	578.23	577.90	2400/2	578.87	2000/8	577.57
1-10 Nov			577.96	578.13	578.22	578.48	578.31	578.29	578.25	578.25	578.17	578.12					
11-20 Nov			578.63	578.73	578.45	578.35	578.21	578.35	578.42	578.46	578.54	577.92					
21-30 Nov	578.36		578.32	578.65	578.29	578.39	578.70	578.72	578.44	578.23	578.37	578.36		2400/25	579.08	2000/20	577.45
1-10 Dec			577.93	578.43	578.63	578.53	578.52	578.50	578.56	578.23	578.19	578.47					
11-20 Dec			578.39	578.15	578.21	578.36	578.32	578.18	577.84	577.81	578.12	578.07					
21-31 Dec	578.30		577.90	578.26	578.34	578.30	578.41	578.63	578.54	578.35	578.50	578.38	578.38	0700/26	578.77	1300/1	577.47

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 5034: Essexville, Michigan on Lake Huron (Saginaw Bay)

1977 YEARLY MEAN ELEVATION: 578.43 FEET

HIGHEST
Monthly mean elevation: 578.65 May 1977
Daily mean elevation: 579.82 1 Oct 1977
Instant/hourly Elevation: 580.59 1727/5 Dec 1977

LOWEST
Monthly mean elevation: 578.21 Dec 1977
Daily mean elevation: 577.13 1 Dec 1977
Instant/hourly Elevation: 575.54 0945/5 Apr 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
	Feb
578.78	18 Mar
579.07	28 Apr
579.10	8 May
579.22	6 Jun
578.89	9 Jul
578.68	18 Aug
578.69	21 Sep
579.82	1 Oct
579.07	25 Nov
579.52	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
	Feb
577.64	29 Mar
577.19	5 Apr
578.39	22 May
578.28	18 Jun
577.87	1 Jul
578.20	26 Aug
577.82	9 Sep
577.41	11 Oct
577.23	10 Nov
577.13	1 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.80										1			579.80	1
579.60													579.60	1
579.40												1	579.40	2
579.20						1							579.20	3
579.00				3	2						1		579.00	9
578.80				2	4	5	2			1	2		578.80	25
578.60			1	5	10	7	9	5	7	3	3	1	578.60	76
578.40			3	16	14	10	15	15	10	8	6	5	578.40	178
578.20			5	2	1	7	4	9	8	9	5	10	578.20	238
578.00			9	1				2	4	5	7	4	578.00	270
577.80			1				1		1	2	3	2	577.80	280
577.60			1							1	1	1	577.60	284
577.40										1		1	577.40	286
577.20											2	1	577.20	289
577.00					1							1	577.00	291

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 5034: Essexville, Michigan on Lake Huron (Saginaw Bay)

		Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
			/	/	/	/	/	/	/	/	/	/	/				
1-10 Jan			/	/	/	/	/	/	/	/	/	/	/				
11-20 Jan			/	/	/	/	/	/	/	/	/	/	/				
21-31 Jan			/	/	/	/	/	/	/	/	/	/	/				
1-10 Feb			/	/	/	/	/	/	/	/	/	/	/				
11-20 Feb			/	/	/	/	/	/	/	/	/	/	/				
21-28 Feb			/	/	/	/	/	/	/	/	/	/	/				
1-10 Mar			/	/	/	/	/	/	/	/	/	/	/				
11-20 Mar			/	578.03	577.95	578.07	578.17	578.17	578.35	578.78	578.04	578.22					
21-31 Mar		578.22	578.34	578.59	578.23	578.58	578.27	578.13	578.02	578.20	577.64	578.19	578.44	1425/18	579.77	1153/29	576.62
1-10 Apr			578.45	578.34	578.55	578.60	577.19	578.67	578.50	578.88	578.49	578.38					
11-20 Apr			578.19	578.54	578.49	578.66	578.49	578.55	578.54	578.55	578.59	578.52					
21-30 Apr		578.56	578.44	578.82	579.01	578.73	579.02	578.72	578.51	579.07	578.66	578.51		0150/28	580.06	0945/5	575.54
1-10 May			578.50	578.74	578.87	578.59	578.46	578.79	578.84	579.10	579.06	578.65					
11-20 May			578.63	578.52	578.81	578.64	578.52	578.43	578.47	578.63	578.55	578.59					
21-31 May		578.65	578.50	578.39	578.44	578.56	578.79	578.68	578.54	578.90	578.72	578.69	578.58	1855/28	580.42	0645/8	577.98
1-10 Jun			578.35	578.81	578.53	578.49	578.71	579.22	578.90	578.78	578.85	578.65					
11-20 Jun			578.42	578.95	578.85	578.63	578.61	578.40	578.52	578.28	578.47	578.51					
21-30 Jun		578.59	578.63	578.65	578.48	578.40	578.60	578.55	578.43	578.34	578.37	578.29		0938/6	580.15	1447/30	577.72
1-10 Jul			577.87	578.65	578.33	578.52	578.57	578.66	578.73	578.60	578.89	578.80					
11-20 Jul			578.54	578.42	578.69	578.52	578.61	578.54	578.45	578.44	578.47	578.46					
21-31 Jul		578.54	578.77	578.73	578.44	578.43	578.82	578.76	578.59	578.29	578.33	578.58	578.24	2040/6	579.69	0820/1	577.29
1-10 Aug			578.60	578.38	578.58	578.39	578.36	578.66	578.48	578.55	578.67	578.51					
11-20 Aug			578.32	578.46	578.36	578.61	578.57	578.46	578.58	578.68	578.50	578.48					
21-31 Aug		578.47	578.29	578.37	578.59	578.54	578.59	578.20	578.21	578.20	578.61	578.60	578.22	0540/6	579.32	0355/26	577.81
1-10 Sep			578.61	578.63	578.63	578.38	578.65	578.60	578.58	578.46	577.82	578.62					
11-20 Sep			578.49	578.07	578.47	578.55	578.44	578.25	578.27	578.47	578.37	578.17					
21-30 Sep		578.41	578.69	578.39	578.45	578.23	578.02	578.17	578.39	578.59	578.27	578.62		1615/1	579.25	0950/9	577.44
1-10 Oct			579.82	578.85	578.74	578.42	578.15	578.67	578.57	577.70	577.85	578.38					
11-20 Oct			577.41	578.09	578.49	578.12	578.60	578.69	578.18	578.15	578.40	578.30					
21-31 Oct		578.35	578.21	578.58	578.47	578.21	578.21	578.31	578.29	578.44	578.41	578.40	577.89	1240/1	580.42	2050/11	576.23
1-10 Nov			577.90	578.12	578.20	578.83	578.76	578.60	578.51	578.34	578.24	577.23					
11-20 Nov			578.14	578.92	578.48	578.24	578.14	578.20	578.07	577.90	578.41	577.80					
21-30 Nov		578.27	577.39	578.62	578.27	578.09	579.07	578.65	578.43	577.91	578.26	578.43		2248/25	580.47	0500/21	576.36
1-10 Dec			577.13	577.38	578.47	578.43	579.52	578.63	578.59	578.32	578.02	/					
11-20 Dec			/	/	/	578.46	578.39	578.35	578.11	577.88	578.23	578.21					
21-31 Dec		578.21	577.56	577.80	578.10	578.24	577.83	578.37	578.39	578.10	578.45	578.38	578.40	1727/5	580.59	1500/1	575.64

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 5059: Harrisville, Michigan on Lake Huron

1977 YEARLY MEAN ELEVATION: 578.28 FEET

HIGHEST
Monthly mean elevation: 578.47 May 1977
Daily mean elevation: 578.66 6 May 1977
Instant/hourly Elevation: 578.93 2020/8 May 1977

LOWEST
Monthly mean elevation: 577.92 Feb 1977
Daily mean elevation: 577.66 24 Feb 1977
Instant/hourly Elevation: 577.45 2245/26 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.33	1 Jan
578.25	1 Feb
578.30	24 Mar
578.61	26 Apr
578.66	6 May
578.58	19 Jun
578.59	26 Jul
578.62	18 Aug
578.54	10 Sep
578.47	5 Oct
578.45	12 Nov
	Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.91	24 Jan
577.66	24 Feb
577.73	4 Mar
578.11	5 Apr
578.24	29 May
578.30	28 Jun
578.31	31 Jul
578.26	26 Aug
578.02	25 Sep
577.97	31 Oct
578.04	1 Nov
	Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
578.60				1	3			1					578.60	5
578.40				20	21	22	19	21	5	3	2		578.40	118
578.20	2	1	4	4	7	8	12	9	17	21	5		578.20	208
578.00	24	5	13	2					4	6	9		578.00	271
577.80	5	18	12							1			577.80	307
577.60		4	1										577.60	312

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 5059: Harrisville, Michigan on Lake Huron

	Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		578.33	578.17	578.11	578.13	578.14	578.04	578.16	578.08	578.20	578.12						
11-20 Jan		578.12	578.12	578.05	578.04	578.09	578.09	578.25	578.14	578.17	578.05						
21-31 Jan	578.08	578.05	578.06	577.92	577.91	577.94	577.95	577.92	578.03	578.07	578.01	578.14		0414/18	578.50	2245/26	577.45
1-10 Feb		578.25	578.03	577.95	577.99	577.93	577.96	577.96	577.89	577.88	577.86						
11-20 Feb		577.84	577.91	577.83	578.09	578.01	577.99	577.88	577.78	577.87	577.85						
21-28 Feb	577.92	577.82	577.78	577.78	577.66	577.85	578.04	577.92	578.06					0715/1	578.35	1335/24	577.57
1-10 Mar		578.01	577.98	577.87	577.73	577.85	578.03	577.95	577.94	577.88	577.94						
11-20 Mar		577.86	577.82	577.86	578.01	577.97	578.03	578.21	578.05	578.11	578.08						
21-31 Mar	578.02	578.23	578.14	578.14	578.30	578.13	578.03	577.99	578.10	578.04	578.21	/		1135/30	578.43	2315/4	577.52
1-10 Apr		/	578.18	/	/	578.11	578.55	578.50	578.56	578.49	578.36						
11-20 Apr		578.41	578.46	578.43	578.49	578.38	578.42	578.40	578.38	578.43	578.43						
21-30 Apr	578.46	578.44	578.55	578.51	578.52	578.57	578.61	578.57	578.55	578.59	578.58			1950/28	578.88	1025/5	577.72
1-10 May		578.56	578.58	578.52	578.40	578.50	578.66	578.58	578.65	578.61	578.59						
11-20 May		578.59	578.57	578.55	578.43	578.45	578.42	578.45	578.49	578.44	578.43						
21-31 May	578.47	578.39	578.40	578.40	578.45	578.42	578.42	578.41	578.45	578.24	578.30	578.35		2020/8	578.93	1700/29	578.06
1-10 Jun		578.45	578.55	578.50	578.49	578.45	578.44	578.56	578.48	578.43	578.46						
11-20 Jun		578.36	578.42	578.40	578.43	578.42	578.35	578.50	578.52	578.58	578.50						
21-30 Jun	578.44	578.52	578.45	578.34	578.35	578.41	578.40	578.34	578.30	578.44	578.44			0635/29	578.72	2355/28	578.15
1-10 Jul		578.45	578.57	578.38	578.42	578.37	578.39	578.44	578.52	578.49	578.42						
11-20 Jul		578.37	578.37	578.50	578.39	578.39	578.42	578.40	578.43	578.42	578.50						
21-31 Jul	578.44	578.54	578.48	578.51	578.53	578.51	578.59	578.46	578.39	578.37	578.39	578.31		0530/6	578.78	0710/31	577.95
1-10 Aug		578.49	578.41	578.42	578.42	578.44	578.47	578.43	578.49	578.48	578.39						
11-20 Aug		578.54	578.53	578.53	578.47	578.49	578.39	578.44	578.62	578.47	578.42						
21-31 Aug	578.44	578.34	578.46	578.46	578.37	578.38	578.26	578.32	578.37	578.45	578.41	578.34		0053/5	578.87	2035/4	577.97
1-10 Sep		578.48	578.41	578.47	/	/	/	578.30	578.27	578.27	578.54						
11-20 Sep		578.35	578.25	578.24	578.36	578.28	578.17	578.27	578.29	578.23	578.21						
21-30 Sep	578.30	578.38	578.26	578.19	578.10	578.02	578.30	578.45	/	578.40	578.38			1355/10	578.70	1540/25	577.76
1-10 Oct		578.37	578.40	578.42	578.41	578.47	578.32	578.06	578.23	578.40	578.24						
11-20 Oct		578.40	578.40	578.30	578.36	578.31	578.30	578.23	578.25	578.30	578.30						
21-31 Oct	578.28	578.28	578.24	578.13	578.09	578.18	578.31	578.26	578.28	578.19	578.15	577.97		1250/5	578.61	1755/7	577.58
1-10 Nov		578.04	578.13	578.17	578.33	578.14	578.14	578.10	578.15	578.16	578.16						
11-20 Nov		578.43	578.45	578.33	578.31	578.23	578.36	/	/	/	/						
21-30 Nov	578.23	/	/	/	/	/	/	/	/	/	/			2222/11	578.67	0650/10	577.86
1-10 Dec		/	/	/	/	/	/	/	/	/	/						
11-20 Dec		/	/	/	/	/	/	/	/	/	/						
21-31 Dec		/	/	/	/	/	/	/	/	/	/	/					

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 5080: Mackinaw City, Michigan on Straits of Mackinac

1977 YEARLY MEAN ELEVATION: 578.33 FEET

HIGHEST
Monthly mean elevation: 578.54 May 1977
Daily mean elevation: 578.77 9 Sep 1977
Instant/hourly Elevation: 579.17 0900/9 Sep 1977

LOWEST
Monthly mean elevation: 577.90 Feb 1977
Daily mean elevation: 577.76 27 Feb 1977
Instant/hourly Elevation: 577.55 2100/13 Feb 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.23	6 Jan
578.10	2 Feb
578.37	29 Mar
578.68	30 Apr
578.66	5 May
578.55	1 Jun
578.61	1 Jul
578.71	12 Aug
578.77	9 Sep
578.68	11 Oct
578.68	20 Nov
578.56	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.77	10 Jan
577.76	27 Feb
577.87	3 Mar
578.21	3 Apr
578.41	30 May
578.40	22 Jun
578.45	25 Jul
578.32	24 Aug
578.30	15 Sep
578.18	29 Oct
578.20	4 Nov
578.18	6 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
578.60				2	3		2	2	1	2	1		578.60	13
578.40				22	27	25	29	26	14	5	5	9	578.40	175
578.20	1		5	6		1		3	15	22	23	19	578.20	270
578.00	14	4	19							2	1	3	578.00	313
577.80	14	19	7										577.80	353
577.60	1	4											577.60	358

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 5080: Mackinaw City, Michigan on Straits of Mackinac

	Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		578.07	578.17	578.20	578.07	578.10	578.23	578.04	578.00	578.02	577.77					
11-20 Jan		577.96	578.05	578.12	578.07	578.02	577.97	578.00	577.89	577.96	577.98					
21-31 Jan	578.02	577.90	577.92	578.18	578.04	577.93	578.12	577.95	577.89	577.92	577.96	/	1000/23	578.43	1300/18	577.58
1-10 Feb		/	578.10	577.87	577.87	577.80	577.82	577.90	578.05	577.95	577.98					
11-20 Feb		577.92	578.00	577.80	577.84	577.79	577.87	578.00	577.91	577.83	577.83					
21-28 Feb	577.90	577.95	577.85	577.83	578.04	578.02	577.91	577.76	577.92				2000/24	578.25	2100/13	577.55
1-10 Mar		577.88	577.92	577.87	578.05	578.01	578.03	578.04	578.07	578.08	577.98					
11-20 Mar		577.92	577.94	578.08	578.10	578.14	577.98	578.08	578.01	578.17	578.11					
21-31 Mar	578.08	578.12	578.07	578.02	578.06	578.11	578.21	578.27	578.20	578.37	578.32	578.26	1300/29	578.72	1300/23	577.64
1-10 Apr		578.35	578.26	578.21	578.30	578.27	578.41	578.40	578.41	578.47	578.50					
11-20 Apr		578.56	578.48	578.42	578.44	578.43	578.47	578.46	578.49	578.49	578.54					
21-30 Apr	578.47	578.59	578.49	578.53	578.54	578.56	578.57	578.63	578.51	578.59	578.68		1600/30	578.83	0800/3	577.79
1-10 May		578.64	578.52	578.57	578.58	578.66	578.60	578.53	578.53	578.47	578.51					
11-20 May		578.51	578.55	/	578.51	578.60	578.57	578.56	578.53	578.52	578.57					
21-31 May	578.54	578.56	578.60	578.61	578.52	578.46	578.47	578.47	578.48	578.43	578.41	578.51	2000/5	578.86	1200/8	578.21
1-10 Jun		578.55	578.52	578.49	578.51	578.44	578.50	578.50	578.46	578.48	578.47					
11-20 Jun		578.45	578.49	578.42	578.43	578.45	578.50	578.45	578.52	578.52	578.45					
21-30 Jun	578.48	578.44	578.40	/	/	/	/	578.46	578.50	578.51	578.55		1000/18	578.94	0100/13	578.12
1-10 Jul		578.61	578.48	578.56	578.46	578.49	578.51	578.50	578.55	578.49	578.47					
11-20 Jul		578.56	578.60	578.53	578.58	578.51	578.54	578.54	578.56	578.61	578.60					
21-31 Jul	578.53	578.50	578.48	578.59	578.60	578.45	578.48	578.49	578.53	578.47	578.46	578.55	0300/31	579.02	0500/4	578.22
1-10 Aug		578.45	578.46	578.48	578.48	578.54	578.46	578.51	578.51	578.45	578.57					
11-20 Aug		578.60	578.71	578.56	578.47	578.44	578.50	578.42	578.45	578.42	578.45					
21-31 Aug	578.48	578.46	578.49	578.36	578.32	578.37	578.45	578.55	578.55	578.43	578.47	578.61	0700/27	579.03	1000/27	578.18
1-10 Sep		578.47	578.42	578.44	578.57	578.39	578.40	578.47	578.52	578.77	578.39					
11-20 Sep		578.39	578.36	578.31	578.33	578.30	578.32	578.37	578.32	578.50	578.45					
21-30 Sep	578.43	578.36	578.36	578.42	578.57	578.58	578.54	578.43	578.36	578.46	578.35		0900/9	579.17	2100/23	578.09
1-10 Oct		578.43	578.32	578.29	578.38	578.43	578.30	578.38	578.61	578.39	578.45					
11-20 Oct		578.68	578.32	578.38	578.44	578.28	578.36	578.41	578.28	578.26	578.37					
21-31 Oct	578.35	578.33	578.20	578.26	578.27	578.35	578.31	578.26	578.25	578.18	578.26	578.36	0500/11	579.06	1500/15	578.02
1-10 Nov		578.37	578.36	578.34	578.20	578.30	578.22	578.32	578.36	578.42	578.58					
11-20 Nov		578.37	578.27	578.29	578.36	578.33	578.44	578.41	578.30	578.24	578.68					
21-30 Nov	578.34	578.57	578.26	578.27	578.28	578.24	578.21	578.29	578.38	578.40	578.27		0100/21	579.00	0100/26	577.76
1-10 Dec		578.50	578.48	578.29	578.25	578.37	578.18	578.21	578.43	578.35	578.25					
11-20 Dec		578.33	578.45	578.34	578.25	578.30	578.35	578.56	578.55	578.36	578.51					
21-31 Dec	578.36	578.38	578.54	578.41	578.37	578.39	578.40	578.31	578.40	578.28	578.20	578.20	2000/22	579.07	0400/6	577.85

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 5098: DeTour, Michigan on Lake Huron

1977 YEARLY MEAN ELEVATION: 578.31 FEET

HIGHEST
Monthly mean elevation: 578.61 Sep 1977
Daily mean elevation: 578.67 30 Apr 1977
Instant/hourly Elevation: 578.99 1135/20 Nov 1977

LOWEST
Monthly mean elevation: 577.92 Feb 1977
Daily mean elevation: 577.64 10 Jan 1977
Instant/hourly Elevation: 577.24 0128/27 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.16	6 Jan
578.14	14 Feb
578.22	31 Mar
578.67	30 Apr
578.63	1 May
578.58	30 Jun
578.63	20 Jul
578.67	12 Aug
578.61	1 Sep
578.59	11 Oct
578.62	20 Nov
578.51	3 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.64	10 Jan
577.74	5 Feb
577.80	4 Mar
578.18	2 Apr
578.28	29 May
578.33	6 Jun
578.35	25 Jul
578.27	17 Aug
578.61	1 Sep
578.16	16 Oct
577.90	26 Nov
577.83	18 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
578.60				2	1		3	2	1		1		578.60	10
578.40				20	26	21	26	24		4	3	8	578.40	142
578.20			1	3	4	9	1	5		16	8	11	578.20	200
578.00	13	7	14	2						5	3	9	578.00	253
577.80	17	17	15								1	3	577.80	306
577.60	1	4	1										577.60	312

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 5098: DeTour, Michigan on Lake Huron

	Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		578.05	578.10	578.15	578.08	578.07	578.16	578.03	577.98	577.99	577.64					
11-20 Jan		577.87	578.05	578.11	577.96	578.01	577.97	578.06	577.91	577.94	577.98					
21-31 Jan	577.98	577.86	577.91	578.10	577.99	577.86	578.08	577.82	577.90	577.98	577.92	577.94	0700/6	578.33	0128/27	577.24
1-10 Feb		577.91	578.10	577.87	577.89	577.74	577.82	577.89	577.95	577.88	577.87					
11-20 Feb		577.77	577.86	577.77	578.14	577.97	578.02	578.12	578.01	577.94	577.90					
21-28 Feb	577.92	578.01	577.93	577.89	577.89	577.95	578.01	577.75	577.97				0600/14	578.24	1814/27	577.50
1-10 Mar		577.92	578.00	577.88	577.80	577.87	578.00	577.95	578.01	577.96	577.95					
11-20 Mar		577.86	577.84	577.93	578.04	578.06	577.90	578.15	577.90	578.10	578.02					
21-31 Mar	578.00	578.09	577.94	578.00	578.03	578.03	578.06	578.09	578.08	578.16	578.20	578.22	0305/31	578.48	1910/23	577.55
1-10 Apr		578.32	578.18	578.18	578.51	/	/	/	578.48	578.51	578.45					
11-20 Apr		578.49	578.50	578.37	578.47	578.39	578.46	578.45	578.42	578.44	578.49					
21-30 Apr	578.46	578.53	578.50	578.48	578.45	578.48	578.60	578.61	578.41	578.59	578.67		1545/30	578.76	0320/3	577.69
1-10 May		578.63	578.50	578.32	578.39	578.50	578.51	578.48	578.43	578.44	578.48					
11-20 May		578.54	578.51	578.54	578.42	578.50	578.50	578.53	578.52	578.53	578.50					
21-31 May	578.47	578.52	578.55	578.55	578.53	578.42	578.42	578.44	578.46	578.28	578.33	578.42	1605/1	578.85	1155/8	578.00
1-10 Jun		578.47	578.46	578.49	578.49	578.45	578.33	578.44	578.46	578.36	578.48					
11-20 Jun		578.40	578.38	578.40	578.40	578.46	578.46	578.43	578.49	578.54	578.42					
21-30 Jun	578.44	578.41	578.44	578.38	578.40	578.40	578.46	578.41	578.44	578.49	578.58		1630/30	578.79	1010/6	578.03
1-10 Jul		578.48	578.62	578.53	578.49	578.48	578.52	578.49	578.59	578.51	578.48					
11-20 Jul		578.46	578.56	578.58	578.59	578.51	578.57	578.55	578.58	578.57	578.63					
21-31 Jul	578.52	578.50	578.49	578.55	578.62	578.35	578.48	578.48	578.50	578.47	/	578.48	1605/14	578.78	2055/25	578.05
1-10 Aug		578.52	578.47	578.43	578.45	578.49	578.48	578.46	578.45	578.48	578.44					
11-20 Aug		578.54	578.67	578.62	578.42	578.46	578.41	578.27	578.51	578.38	578.41					
21-31 Aug	578.46	578.43	578.44	578.42	578.28	578.36	578.37	578.49	578.55	578.44	578.45	578.52	1630/12	578.89	1825/17	578.04
1-10 Sep		578.61	/	/	/	/	/	/	/	/	/					
11-20 Sep		/	/	/	/	/	/	/	/	/	/					
21-30 Sep	578.61	/	/	/	/	/	/	/	/	/	/		0300/1	578.74	0023/1	578.45
1-10 Oct		/	/	/	/	/	/	578.35	578.38	578.21	578.52					
11-20 Oct		578.59	578.34	578.44	578.42	578.17	578.16	578.37	578.29	578.23	578.36					
21-31 Oct	578.31	578.38	578.18	578.21	578.20	578.32	578.34	578.28	578.27	578.18	578.21	578.33	0615/11	578.81	1525/15	577.90
1-10 Nov		578.23	/	/	/	/	/	/	/	/	/					
11-20 Nov		/	/	/	/	/	578.42	578.45	578.29	578.38	578.62					
21-30 Nov	578.29	578.22	578.54	578.32	578.15	578.15	577.90	578.33	578.15	578.30	578.26		1135/20	578.99	2135/25	577.49
1-10 Dec		578.13	578.40	578.51	578.41	578.22	577.92	578.15	578.46	577.87	578.13					
11-20 Dec		578.29	578.38	578.35	578.23	578.34	578.25	578.03	577.83	578.17	578.42					
21-31 Dec	578.26	578.14	578.44	578.50	578.48	578.14	578.47	578.32	578.38	578.34	578.19	578.20	2148/22	578.89	0303/25	577.36

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 6050: Frechette Point, Michigan on St. Marys River

1977 YEARLY MEAN ELEVATION: 579.14 FEET

HIGHEST
Monthly mean elevation: 579.66 Nov 1977
Daily mean elevation: 580.18 20 Nov 1977
Instant/hourly Elevation: 580.53 1437/20 Nov 1977

LOWEST
Monthly mean elevation: 578.81 Jun 1977
Daily mean elevation: 578.49 8 May 1977
Instant/hourly Elevation: 578.11 1552/8 May 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
579.63	3 Jan
579.53	1 Feb
579.44	6 Mar
579.32	9 Apr
579.18	1 May
579.10	30 Jun
579.05	28 Jul
579.13	12 Aug
579.39	24 Sep
579.87	31 Oct
580.18	20 Nov
579.75	2 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
579.24	11 Jan
579.26	5 Feb
578.91	22 Mar
578.68	28 Apr
578.49	8 May
578.61	2 Jun
578.54	25 Jul
578.51	17 Aug
578.72	13 Sep
578.52	2 Oct
579.21	26 Nov
578.88	25 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
580.00											1		580.00	1
579.80										2	3		579.80	6
579.60	2									3	17	4	579.60	32
579.40	24	4	1							13	8	6	579.40	88
579.20	5	24	14	2					2	6	1	9	579.20	151
579.00			11	12	8	1	3	7	3	2		8	579.00	206
578.80			5	12	21	16	18	18	21	2		4	578.80	323
578.60				3	1	13	9	5	4	1			578.60	359
578.40					1		1	1		2			578.40	364

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 6050: Frechette Point, Michigan on St. Marys River

		----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
Monthly means																
1-10 Jan		579.57	579.58	579.63	579.63	579.53	579.57	579.53	579.58	579.39	579.29					
11-20 Jan		579.24	579.51	579.52	579.46	579.53	579.50	579.52	579.50	579.42	579.51					
21-31 Jan	579.50	579.38	579.31	579.47	579.52	579.47	579.52	579.52	579.56	579.57	579.55	579.56	2400/3	579.70	0800/11	579.14
1-10 Feb		579.53	579.52	579.48	579.41	579.26	579.29	579.30	579.35	579.39	579.33					
11-20 Feb		579.33	579.37	579.34	579.34	579.31	579.29	579.29	579.36	579.38	579.35					
21-28 Feb	579.35	579.34	579.40	579.29	579.27	579.32	579.39	579.29	579.34				2400/2	579.61	1620/23	579.14
1-10 Mar		579.34	579.37	579.33	579.22	579.33	579.44	579.38	579.40	579.38	579.35					
11-20 Mar		579.26	579.23	579.24	579.22	579.22	579.02	579.12	579.04	579.06	579.05					
21-31 Mar	579.16	579.05	578.91	579.00	578.93	578.98	578.96	579.01	579.01	579.04	579.12	579.07	1200/6	579.54	2215/23	578.80
1-10 Apr		579.13	578.98	578.84	579.18	578.80	578.97	579.29	579.17	579.32	579.15					
11-20 Apr		579.13	579.18	579.07	579.10	578.95	579.01	/	578.99	578.96	579.00					
21-30 Apr	579.02	579.01	578.93	579.02	578.85	578.78	578.90	578.99	578.68	578.97	579.14		0855/7	579.52	1953/28	578.51
1-10 May		579.18	578.81	579.05	578.92	578.99	578.66	578.91	578.49	578.82	578.82					
11-20 May		578.97	578.92	579.04	578.89	579.08	578.99	578.99	578.91	578.97	579.01					
21-31 May	578.93	579.01	579.05	579.10	578.94	578.84	578.90	578.88	578.95	578.94	578.81	578.95	1810/28	579.33	1552/8	578.11
1-10 Jun		578.81	578.61	578.85	578.90	578.85	578.65	578.65	578.76	578.67	578.90					
11-20 Jun		578.85	578.75	578.80	578.74	578.87	578.90	578.76	578.88	578.83	578.74					
21-30 Jun	578.81	578.71	578.84	578.86	578.85	578.72	578.89	578.89	578.90	578.72	579.10		1855/30	579.33	1625/29	578.33
1-10 Jul		578.83	578.83	578.90	578.73	578.80	578.93	578.78	578.82	578.62	578.78					
11-20 Jul		578.89	578.93	578.75	579.03	578.83	578.91	578.83	578.94	579.00	578.95					
21-31 Jul	578.86	578.73	578.80	578.94	578.99	578.54	578.80	578.96	579.05	578.90	578.89	579.04	1800/14	579.36	1725/25	578.20
1-10 Aug		578.79	578.81	578.88	578.90	578.91	578.81	578.76	578.75	578.87	578.93					
11-20 Aug		578.90	579.13	579.05	578.72	578.89	579.01	578.51	578.84	578.84	578.89					
21-31 Aug	578.88	578.94	578.88	578.82	578.64	578.87	579.00	579.03	579.08	578.83	579.02	579.13	1847/12	579.44	1950/17	578.14
1-10 Sep		578.84	578.88	578.82	579.04	578.82	578.85	578.91	578.99	579.27	578.76					
11-20 Sep		578.93	578.86	578.72	578.72	578.89	578.87	578.87	578.90	578.99	578.75					
21-30 Sep	578.91	578.90	578.92	578.89	579.39	579.08	578.95	578.88	578.81	579.02	578.92		1820/24	579.83	0450/14	578.49
1-10 Oct		578.74	578.52	578.59	578.89	579.08	578.94	579.29	579.80	579.33	579.51					
11-20 Oct		579.83	579.41	579.52	579.56	579.24	579.10	579.41	579.41	579.23	579.36					
21-31 Oct	579.36	579.48	579.31	579.50	579.50	579.60	579.63	579.64	579.59	579.58	579.57	579.87	1315/8	580.12	0330/2	578.43
1-10 Nov		579.75	579.77	579.74	579.62	579.63	579.51	579.62	579.70	579.86	579.86					
11-20 Nov		579.55	579.42	579.52	579.68	579.69	579.70	579.79	579.63	579.65	580.18					
21-30 Nov	579.66	579.82	579.78	579.70	579.51	579.56	579.21	579.58	579.54	579.68	579.70		1437/20	580.53	0300/26	579.04
1-10 Dec		579.62	579.75	579.73	579.62	579.51	579.16	579.28	579.60	579.07	579.19					
11-20 Dec		579.37	579.45	579.22	579.02	579.08	579.16	579.30	578.99	579.12	579.22					
21-31 Dec	579.29	578.89	578.98	579.23	579.16	578.88	579.26	579.22	579.46	579.55	579.47	579.39	2153/8	579.92	0623/25	578.38

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 6060: US Slip below locks, Sault Ste. Marie Michigan on St Marys River

1977 YEARLY MEAN ELEVATION: 579.52 FEET

HIGHEST
Monthly mean elevation: 580.40 Nov 1977
Daily mean elevation: 580.79 20 Nov 1977
Instant/hourly Elevation: 581.24 2355/20 Nov 1977

LOWEST
Monthly mean elevation: 579.07 Jun 1977
Daily mean elevation: 578.75 9 Jul 1977
Instant/hourly Elevation: 578.15 1852/8 May 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
580.15	27 Jan
580.11	1 Feb
579.87	6 Mar
579.46	9 Apr
579.33	1 May
579.38	30 Jun
579.33	28 Jul
579.38	12 Aug
579.67	24 Sep
580.51	31 Oct
580.79	20 Nov
580.48	2 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
579.84	11 Jan
579.72	16 Feb
579.10	22 Mar
578.85	28 Apr
578.83	8 May
578.85	2 Jun
578.75	9 Jul
578.80	17 Aug
578.96	14 Sep
578.86	2 Oct
579.97	26 Nov
579.34	25 Dec

Elev. (ft.)	~~~~~	FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977												~~~~~	Elev. (ft.)	No. of days above elev.
		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
580.60												2			580.60	2
580.40											1	10	2		580.40	15
580.20											8	16	2		580.20	41
580.00		23	3								9	1	2		580.00	79
579.80		8	17	2							5	1	7		579.80	119
579.60			8	8						1	2		9		579.60	147
579.40				5	3					2	1		6		579.40	164
579.20				8	15	4	1	8	8	12	2		3		579.20	225
579.00				8	8	21	20	16	17	14	1				579.00	330
578.80					4	6	9	5	5	1	2				578.80	362
578.60								2	1						578.60	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

	Monthly means	----- Daily Means -----												HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		580.06	580.04	580.01	580.04	579.94	579.97	579.98	580.07	579.94	579.88						
11-20 Jan		579.84	580.10	580.07	580.04	580.14	580.11	580.14	580.09	580.04	580.12						
21-31 Jan	580.05	580.00	579.90	580.09	580.13	580.09	580.11	580.15	580.15	580.14	580.13	580.15	0542/8	580.40	1425/10	579.52	
1-10 Feb		580.11	580.02	580.02	579.98	579.86	579.86	579.84	579.85	579.91	579.84						
11-20 Feb		579.84	579.86	579.85	579.82	579.77	579.72	579.72	579.86	579.89	579.87						
21-28 Feb	579.85	579.81	579.89	579.77	579.73	579.79	579.84	579.75	579.78				1400/1	580.16	1335/23	579.50	
1-10 Mar		579.79	579.82	579.74	579.67	579.77	579.87	579.78	579.77	579.70	579.62						
11-20 Mar		579.52	579.50	579.48	579.44	579.43	579.18	579.33	579.24	579.27	579.26						
21-31 Mar	579.43	579.23	579.10	579.15	579.12	579.17	579.15	579.20	579.18	579.25	579.34	579.27	1546/25	580.46	1545/25	578.88	
1-10 Apr		579.32	579.17	578.99	579.38	578.98	579.13	579.45	579.34	579.46	579.29						
11-20 Apr		579.27	579.42	579.36	579.36	579.15	579.23	579.24	579.26	579.18	579.22						
21-30 Apr	579.22	579.23	579.13	579.25	579.07	578.98	579.15	579.27	578.85	579.11	579.32		0913/7	579.94	2025/25	578.46	
1-10 May		579.33	578.99	579.20	579.14	579.19	578.86	579.04	578.83	579.00	579.00						
11-20 May		579.10	579.06	579.22	579.11	579.20	579.15	579.17	579.08	579.15	579.18						
21-31 May	579.11	579.20	579.27	579.28	579.11	579.01	579.09	579.04	579.10	579.13	578.96	579.12	1406/1	579.82	1852/8	578.15	
1-10 Jun		579.01	578.85	579.13	579.19	579.13	578.94	578.91	579.04	578.92	579.19						
11-20 Jun		579.12	579.01	579.07	578.99	579.12	579.16	578.98	579.15	579.08	579.02						
21-30 Jun	579.07	578.96	579.11	579.16	579.10	578.99	579.14	579.16	579.18	578.98	579.38		1703/10	579.70	1737/2	578.18	
1-10 Jul		579.10	579.03	579.07	578.89	579.01	579.12	578.96	579.03	578.75	578.94						
11-20 Jul		579.08	579.15	578.97	579.25	579.05	579.13	579.02	579.20	579.22	579.20						
21-31 Jul	579.08	578.93	579.02	579.16	579.21	578.79	579.03	579.22	579.33	579.21	579.21	579.33	1950/14	579.82	0002/25	578.22	
1-10 Aug		578.98	579.05	579.11	579.13	579.17	579.02	578.92	578.97	579.10	579.19						
11-20 Aug		579.14	579.38	579.30	578.96	579.12	579.31	578.80	579.07	579.09	579.15						
21-31 Aug	579.13	579.20	579.11	579.06	578.92	579.09	579.24	579.27	579.33	579.06	579.26	579.38	2030/12	579.90	1937/17	578.24	
1-10 Sep		579.09	579.14	579.06	579.33	579.10	579.11	579.15	579.24	579.58	579.08						
11-20 Sep		579.22	579.16	579.02	578.96	579.15	579.15	579.18	579.21	579.30	579.07						
21-30 Sep	579.21	579.22	579.24	579.21	579.67	579.45	579.28	579.22	579.11	579.32	579.24		1534/24	580.25	0717/13	578.52	
1-10 Oct		579.09	578.86	578.91	579.21	579.54	579.40	579.79	580.37	579.99	580.08						
11-20 Oct		580.39	580.08	580.10	580.15	579.90	579.69	579.96	580.03	579.85	579.95						
21-31 Oct	579.94	580.09	580.02	580.16	580.19	580.30	580.38	580.37	580.31	580.29	580.25	580.51	1313/31	580.89	0551/2	578.56	
1-10 Nov		580.47	580.45	580.46	580.38	580.36	580.25	580.35	580.40	580.54	580.59						
11-20 Nov		580.35	580.17	580.24	580.38	580.38	580.42	580.49	580.41	580.38	580.79						
21-30 Nov	580.40	580.65	580.50	580.45	580.32	580.31	579.97	580.32	580.31	580.38	580.39		2355/20	581.24	1552/26	579.64	
1-10 Dec		580.36	580.48	580.48	580.35	580.20	579.92	579.98	580.20	579.72	579.79						
11-20 Dec		579.97	579.89	579.62	579.43	579.48	579.54	579.67	579.39	579.51	579.62						
21-31 Dec	579.80	579.32	579.43	579.68	579.57	579.34	579.68	579.65	579.85	579.94	579.86	579.77	0512/3	580.78	0845/15	578.90	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 6070: SW Pier above locks, Sault Ste. Marie Michigan on St Marys River

1977 YEARLY MEAN ELEVATION: 600.17 FEET

HIGHEST
Monthly mean elevation: 601.05 Oct 1977
Daily mean elevation: 601.52 11 Nov 1977
Instant/hourly Elevation: 602.50 2007/5 Oct 1977

LOWEST
Monthly mean elevation: 599.25 Feb 1977
Daily mean elevation: 598.89 24 Feb 1977
Instant/hourly Elevation: 598.00 0440/6 Jul 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.67	16 Jan
599.60	13 Feb
599.75	16 Mar
599.99	5 Apr
600.18	8 May
600.39	29 Jun
600.72	25 Jul
600.89	17 Aug
601.48	10 Sep
601.50	12 Oct
601.52	11 Nov
601.30	25 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.16	23 Jan
598.89	24 Feb
598.98	26 Mar
599.33	10 Apr
599.64	22 May
599.87	3 Jun
600.07	3 Jul
600.08	27 Aug
600.31	8 Sep
600.46	31 Oct
600.17	20 Nov
599.86	17 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
601.40									1	3	2		601.40	6
601.20									4	5	1	1	601.20	17
601.00									4	8	3	5	601.00	37
600.80								1	11	11	12	5	600.80	77
600.60							2	5	8	3	8	9	600.60	112
600.40							9	19		1	3	7	600.40	151
600.20						4	15	3	2			3	600.20	178
600.00					2	14	5	3			1		600.00	203
599.80				7	19	12						1	599.80	242
599.60	5		3	10	10								599.60	270
599.40	16	6	6	9									599.40	307
599.20	9	11	12	4									599.20	343
599.00	1	9	9										599.00	362
598.80		2	1										598.80	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

	Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		599.60	599.47	599.44	599.57	599.41	599.47	599.57	599.65	599.35	599.58						
11-20 Jan		599.47	599.52	599.30	599.34	599.62	599.67	599.63	599.55	599.37	599.40						
21-31 Jan	599.48	599.45	599.25	599.16	599.35	599.38	599.36	599.57	599.56	599.51	599.59	599.61	2340/6	600.10	0123/6	598.70	
1-10 Feb		599.44	599.16	599.41	599.44	599.45	599.40	599.22	599.11	599.24	599.02						
11-20 Feb		599.25	599.14	599.60	599.48	599.36	599.20	599.03	599.23	599.23	599.18						
21-28 Feb	599.25	598.99	599.15	599.17	598.89	599.37	599.28	599.34	599.30				1444/13	599.96	1614/23	598.37	
1-10 Mar		599.31	599.23	599.09	599.13	599.39	599.31	599.18	599.13	599.22	599.20						
11-20 Mar		599.13	599.12	599.38	599.40	599.46	599.75	599.42	599.53	599.39	599.48						
21-31 Mar	599.33	599.48	599.38	599.64	599.33	599.17	598.98	599.16	599.36	599.35	599.57	599.64	1250/23	600.22	0212/4	598.40	
1-10 Apr		599.35	599.70	599.70	599.40	599.99	599.62	599.65	599.47	599.38	599.33						
11-20 Apr		599.62	599.51	599.67	599.60	599.58	599.60	599.56	599.56	599.56	599.59						
21-30 Apr	599.67	599.76	599.88	599.73	599.98	599.98	599.82	599.90	599.96	599.80	599.73		2400/2	600.82	1021/12	598.47	
1-10 May		599.85	599.93	599.72	599.66	599.68	600.11	599.92	600.18	599.98	599.91						
11-20 May		599.92	599.91	599.86	599.79	599.71	599.76	599.85	599.96	599.85	599.71						
21-31 May	599.86	599.66	599.64	599.82	599.97	599.99	599.93	599.94	599.90	599.83	599.90	599.80	0937/8	601.12	0550/31	598.78	
1-10 Jun		600.17	600.14	599.87	599.96	599.98	600.22	600.08	600.18	600.07	599.91						
11-20 Jun		600.01	600.12	599.99	600.05	599.97	599.90	600.03	600.06	600.24	600.29						
21-30 Jun	600.07	600.15	600.07	599.94	600.05	600.17	600.00	599.99	600.00	600.39	599.98		0955/29	601.28	2242/17	598.78	
1-10 Jul		600.47	600.26	600.07	600.30	600.19	600.24	600.36	600.36	600.49	600.36						
11-20 Jul		600.10	600.26	600.39	600.10	600.48	600.24	600.46	600.22	600.18	600.37						
21-31 Jul	600.36	600.62	600.49	600.42	600.47	600.72	600.58	600.39	600.27	600.46	600.30	600.40	0154/25	601.78	0440/6	598.00	
1-10 Aug		600.57	600.54	600.46	600.42	600.50	600.53	600.50	600.56	600.44	600.42						
11-20 Aug		600.56	600.47	600.55	600.58	600.46	600.45	600.89	600.71	600.60	600.40						
21-31 Aug	600.50	600.56	600.66	600.69	600.68	600.40	600.13	600.08	600.15	600.74	600.36	600.47	1736/17	601.82	1859/27	599.05	
1-10 Sep		600.85	600.81	600.74	600.66	600.86	600.80	600.70	600.31	600.77	601.48						
11-20 Sep		600.99	600.95	601.06	601.00	600.80	600.77	600.87	600.86	600.74	601.15						
21-30 Sep	600.91	601.03	600.91	600.84	600.34	600.81	601.19	601.40	601.25	601.21	601.26		0842/10	602.34	1600/8	599.12	
1-10 Oct		601.19	601.34	601.32	601.15	601.46	601.40	600.89	600.65	601.44	600.92						
11-20 Oct		600.97	601.50	600.97	601.09	601.35	601.10	600.84	601.13	601.17	600.96						
21-31 Oct	601.05	601.14	601.23	600.83	600.80	600.83	601.01	600.92	600.99	600.82	600.64	600.46	2007/5	602.50	0955/31	599.86	
1-10 Nov		600.82	600.86	600.97	601.01	600.80	600.90	600.77	600.80	600.55	600.95						
11-20 Nov		601.52	601.02	600.79	600.76	600.65	600.81	600.89	601.13	600.85	600.17						
21-30 Nov	600.86	601.44	600.94	600.84	601.24	600.93	600.90	600.57	600.77	600.65	600.48		0611/11	602.42	0609/20	599.42	
1-10 Dec		601.01	601.10	601.11	600.80	600.50	600.84	600.69	600.25	600.73	600.76						
11-20 Dec		600.47	600.53	600.58	600.80	600.64	600.22	599.86	600.39	600.51	600.53						
21-31 Dec	600.71	600.77	600.85	600.91	601.03	601.30	601.01	600.79	600.91	600.88	600.71	600.50	2247/24	602.37	1830/17	599.22	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7023: Ludington, Michigan on Lake Michigan

1977 YEARLY MEAN ELEVATION: 578.56 FEET

HIGHEST
Monthly mean elevation: 578.81 May 1977
Daily mean elevation: 579.20 18 Dec 1977
Instant/hourly Elevation: 579.55 2000/4 Apr 1977

LOWEST
Monthly mean elevation: 578.14 Feb 1977
Daily mean elevation: 577.90 1 Feb 1977
Instant/hourly Elevation: 577.78 1700/31 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.41	6 Jan
578.53	24 Feb
578.73	29 Mar
579.12	5 Apr
578.98	4 May
578.83	11 Jun
578.93	7 Jul
578.93	10 Aug
579.00	25 Sep
579.00	8 Oct
578.84	10 Nov
579.20	18 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.91	31 Jan
577.90	1 Feb
578.02	2 Mar
578.54	1 Apr
578.65	8 May
578.54	29 Jun
578.52	26 Jul
578.38	18 Aug
578.23	10 Sep
578.32	6 Oct
578.21	22 Nov
578.32	3 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00				1								2	579.00	3
578.80				8	16	1	6	2	3	1	1	5	578.80	46
578.60			1	18	15	26	21	15	13	7	10	8	578.60	180
578.40	1	1	13	3		3	4	13	13	21	15	13	578.40	280
578.20	19	4	10					1	1	2	4	3	578.20	324
578.00	10	21	7										578.00	362
577.80	1	2											577.80	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 7023: Ludington, Michigan on Lake Michigan

		Monthly means	----- Daily Means -----										HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			578.23	578.31	578.35	578.28	578.33	578.41	578.31	578.29	578.21	578.37					
11-20 Jan			578.24	578.25	578.31	578.36	578.27	578.19	578.09	578.17	578.10	578.21					
21-31 Jan	578.23		578.15	578.18	578.31	578.30	578.20	578.27	578.13	578.23	578.05	578.05	577.91	1800/26	578.56	1700/31	577.78
1-10 Feb			577.90	578.07	578.14	578.08	578.13	578.08	578.09	578.13	578.11	578.18					
11-20 Feb			578.17	578.15	578.24	578.00	578.11	578.10	578.16	578.21	578.10	578.10					
21-28 Feb	578.14		578.10	578.15	578.29	578.53	578.29	578.07	578.15	578.07				1600/24	578.73	0400/1	577.80
1-10 Mar			578.09	578.02	578.19	578.57	578.34	578.16	578.19	578.20	578.30	578.24					
11-20 Mar			578.32	578.48	578.52	578.37	578.48	578.31	578.20	578.45	578.39	578.42					
21-31 Mar	578.37		578.36	578.41	578.29	578.22	578.43	578.46	578.55	578.58	578.73	578.58	578.50	0400/29	579.08	2400/2	577.84
1-10 Apr			578.54	578.80	578.61	578.88	579.12	578.58	578.61	578.55	578.64	578.78					
11-20 Apr			578.76	578.72	578.80	578.72	578.80	578.80	578.81	578.85	578.81	578.81					
21-30 Apr	578.76		578.87	578.79	578.83	578.81	578.76	578.75	578.76	578.80	578.75	578.72		2000/4	579.55	2300/3	578.34
1-10 May			578.80	578.78	578.87	578.98	578.95	578.81	578.82	578.65	578.74	578.71					
11-20 May			578.73	578.74	578.76	578.89	578.85	578.85	578.81	578.79	578.80	578.86					
21-31 May	578.81		578.87	578.88	578.80	578.79	578.81	578.80	578.76	578.73	578.90	578.82	578.82	1500/5	579.13	2100/8	578.35
1-10 Jun			578.80	578.63	578.69	578.73	578.73	578.80	578.62	578.71	578.72	578.69					
11-20 Jun			578.83	578.76	578.75	578.71	578.66	578.76	578.70	578.72	578.60	578.71					
21-30 Jun	578.70		578.60	578.65	578.75	578.71	578.66	578.65	578.70	578.73	578.54	578.72		0900/6	579.29	1500/30	578.27
1-10 Jul			578.65	578.59	578.77	578.81	578.80	578.85	578.93	578.77	578.68	578.76					
11-20 Jul			578.84	578.81	578.67	578.78	578.82	578.74	578.78	578.80	578.80	578.73					
21-31 Jul	578.72		578.69	578.70	578.65	578.64	578.60	578.52	578.58	578.61	578.70	578.63	578.76	0300/1	579.22	1300/9	578.03
1-10 Aug			578.58	578.70	578.68	578.71	578.77	578.72	578.77	578.76	578.73	578.93					
11-20 Aug			578.68	578.60	578.58	578.67	578.60	578.83	578.62	578.38	578.59	578.58					
21-31 Aug	578.64		578.60	578.53	578.47	578.54	578.54	578.61	578.60	578.57	578.64	578.65	578.70	0700/10	579.08	1800/18	578.15
1-10 Sep			578.67	578.73	578.62	578.63	578.60	578.62	578.72	578.68	578.57	578.23					
11-20 Sep			578.43	578.59	578.60	578.47	578.58	578.74	578.58	578.61	578.82	578.75					
21-30 Sep	578.64		578.55	578.63	578.70	578.98	579.00	578.75	578.51	578.51	578.60	578.60		0100/25	579.39	1000/10	578.09
1-10 Oct			578.80	578.64	578.51	578.48	578.49	578.32	578.54	579.00	578.61	578.45					
11-20 Oct			578.67	578.35	578.45	578.54	578.49	578.47	578.50	578.62	578.50	578.42					
21-31 Oct	578.53		578.43	578.51	578.59	578.62	578.54	578.41	578.43	578.44	578.52	578.55	578.65	1400/8	579.34	1700/26	578.15
1-10 Nov			578.64	578.60	578.62	578.52	578.69	578.68	578.80	578.73	578.76	578.84					
11-20 Nov			578.34	578.42	578.57	578.52	578.65	578.56	578.49	578.39	578.36	578.78					
21-30 Nov	578.57		578.51	578.21	578.59	578.50	578.52	578.51	578.48	578.71	578.46	578.53		1900/20	579.12	0700/22	577.91
1-10 Dec			578.84	578.42	578.32	578.42	578.71	578.69	578.48	578.67	578.93	578.57					
11-20 Dec			578.55	578.68	578.62	578.57	578.51	578.69	578.99	579.20	578.83	578.91					
21-31 Dec	578.64		579.06	578.67	578.60	578.70	578.49	578.33	578.46	578.50	578.33	578.53	578.54	0400/18	579.39	0900/3	578.15

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7031: Holland, Michigan on Lake Michigan

1977 YEARLY MEAN ELEVATION: 578.45 FEET

HIGHEST
Monthly mean elevation: 578.73 May 1977
Daily mean elevation: 579.10 5 Apr 1977
Instant/hourly Elevation: 579.45 0553/5 Apr 1977

LOWEST
Monthly mean elevation: 577.98 Feb 1977
Daily mean elevation: 577.68 17 Feb 1977
Instant/hourly Elevation: 577.60 0820/2 Feb 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.60	10 Jan
578.37	24 Feb
578.51	30 Mar
579.10	5 Apr
578.90	4 May
578.85	6 Jun
578.75	7 Jul
578.75	10 Aug
578.85	25 Sep
578.81	1 Oct
578.74	7 Nov
579.07	21 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.86	31 Jan
577.68	17 Feb
577.93	2 Mar
578.44	1 Apr
578.61	12 May
578.39	29 Jun
578.40	26 Jul
578.28	18 Aug
578.09	10 Sep
578.25	26 Oct
578.09	22 Nov
578.20	3 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00				1								3	579.00	4
578.80				4	4	1			2	1		2	578.80	18
578.60				17	27	14	15	7	7	3	8	5	578.60	121
578.40	1		6	8		14	15	18	17	11	9	11	578.40	231
578.20	8	1	12			1	1	6	3	13	12	9	578.20	297
578.00	20	8	11						1		1	1	578.00	339
577.80	2	14	2										577.80	357
577.60		3											577.60	360

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 7031: Holland, Michigan on Lake Michigan

	Monthly means	----- Daily Means -----											HIGH----Instant/hourly-----LOW			
													Hrs/day	Elev.	Hrs/day	Elev.
1-10 Jan		578.24	578.19	578.18	578.14	578.14	578.12	578.16	578.29	578.18	578.60					
11-20 Jan		578.26	578.32	578.16	578.28	578.20	578.17	578.05	578.24	578.05	578.14					
21-31 Jan	578.16	578.22	578.14	578.06	578.17	578.15	578.10	578.03	578.23	578.02	577.98	577.86	1207/10	578.83	1637/31	577.68
1-10 Feb		577.83	577.76	577.96	578.03	578.14	578.01	577.94	577.87	577.95	577.94					
11-20 Feb		577.98	/	/	577.94	578.00	577.76	577.68	577.92	577.99	578.05					
21-28 Feb	577.98	577.89	578.07	578.18	578.37	578.12	577.98	578.15	577.94				0650/24	578.51	0820/2	577.60
1-10 Mar		577.99	577.93	578.12	578.41	578.19	578.08	578.10	578.09	578.14	578.16					
11-20 Mar		578.23	578.38	578.39	578.23	578.29	578.12	578.05	578.44	578.20	578.30					
21-31 Mar	578.25	578.31	578.30	578.22	578.13	578.28	578.32	578.38	578.48	578.49	578.51	578.48	0620/31	578.85	0630/2	577.78
1-10 Apr		578.44	578.68	578.44	578.73	579.10	578.47	578.55	578.46	578.46	578.61					
11-20 Apr		578.54	578.52	578.68	578.65	578.73	578.66	578.68	578.72	578.67	578.69					
21-30 Apr	578.67	578.73	578.82	578.81	578.85	578.80	578.65	578.70	578.86	578.65	578.62		0553/5	579.45	2358/6	578.16
1-10 May		578.62	578.73	578.78	578.90	578.78	578.71	578.82	578.70	578.72	578.67					
11-20 May		578.64	578.61	578.64	578.84	578.77	578.74	578.66	578.68	578.69	578.74					
21-31 May	578.73	578.74	578.71	578.69	578.69	578.76	578.74	578.71	578.67	578.87	578.80	578.74	1348/4	579.01	1815/13	578.47
1-10 Jun		578.73	578.66	578.64	578.66	578.72	578.85	578.55	578.69	578.70	578.58					
11-20 Jun		578.73	578.78	578.67	578.63	578.59	578.61	578.57	578.55	578.46	578.61					
21-30 Jun	578.61	578.53	578.59	578.63	578.58	578.55	578.49	578.55	578.56	578.39	578.48		0722/6	579.21	2117/29	578.14
1-10 Jul		578.51	578.43	578.61	578.67	578.62	578.65	578.75	578.64	578.74	578.71					
11-20 Jul		578.70	578.64	578.55	578.60	578.66	578.59	578.60	578.62	578.62	578.55					
21-31 Jul	578.59	578.67	578.64	578.53	578.52	578.60	578.40	578.45	578.45	578.48	578.51	578.57	0620/7	578.96	1105/2	578.23
1-10 Aug		578.44	578.59	578.61	578.58	578.59	578.62	578.64	578.63	578.65	578.75					
11-20 Aug		578.56	578.41	578.42	578.53	578.45	578.70	578.51	578.28	578.48	578.44					
21-31 Aug	578.50	578.47	578.36	578.38	578.48	578.37	578.41	578.34	578.35	578.54	578.54	578.51	1745/16	578.94	1000/18	578.15
1-10 Sep		578.55	578.63	578.48	578.46	578.56	578.47	578.66	578.52	578.33	578.09					
11-20 Sep		578.29	578.44	578.58	578.35	578.41	578.58	578.43	578.47	578.70	578.72					
21-30 Sep	578.52	578.49	578.54	578.64	578.84	578.85	578.67	578.43	578.44	578.48	578.61		2255/24	579.21	1910/10	577.88
1-10 Oct		578.81	578.65	578.44	578.35	578.41	578.33	578.42	578.80	578.64	578.28					
11-20 Oct		578.45	578.41	578.32	578.36	578.51	/	/	/	578.32	578.26					
21-31 Oct	578.43	578.33	578.47	578.48	578.49	578.38	578.25	578.29	578.35	578.40	578.41	578.48	1430/8	579.08	2017/26	578.02
1-10 Nov		578.43	578.30	578.36	578.44	578.62	578.67	578.74	578.65	578.64	578.62					
11-20 Nov		578.48	578.47	578.45	578.40	578.49	578.39	578.37	578.34	578.23	578.46					
21-30 Nov	578.46	578.31	578.09	578.50	578.40	578.66	578.49	578.36	578.65	578.27	578.40		2205/9	579.05	0602/22	577.71
1-10 Dec		578.70	578.29	578.20	578.29	578.62	578.67	578.36	578.49	579.06	578.63					
11-20 Dec		578.42	578.35	578.45	578.46	578.34	578.52	578.87	579.05	578.69	578.92					
21-31 Dec	578.53	579.07	578.41	578.40	578.58	578.44	578.32	578.43	578.38	578.30	578.45	578.42	1400/9	579.28	1850/22	577.82

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7044: Calumet Harbor, Illinois on Lake Michigan

1977 YEARLY MEAN ELEVATION: 578.52 FEET

HIGHEST
Monthly mean elevation: 578.83 May 1977
Daily mean elevation: 579.20 28 Apr 1977
Instant/hourly Elevation: 579.96 0900/28 Apr 1977

LOWEST
Monthly mean elevation: 578.09 Feb 1977
Daily mean elevation: 577.64 31 Jan 1977
Instant/hourly Elevation: 576.95 1700/22 Dec 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.92	10 Jan
578.45	23 Feb
578.81	18 Mar
579.20	28 Apr
579.05	29 May
579.07	6 Jun
578.97	9 Jul
578.79	10 Aug
	Sep
	Oct
578.87	12 Nov
579.11	5 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.64	31 Jan
577.77	2 Feb
578.02	9 Mar
578.46	11 Apr
578.64	12 May
578.42	29 Jun
578.45	2 Jul
578.12	28 Aug
	Sep
	Oct
578.19	17 Nov
578.01	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00				5	4	2						3	579.00	14
578.80	1		1	7	12	8	4				2	3	578.80	52
578.60	1		1	14	15	15	13	11			4	6	578.60	132
578.40		1	9	4		5	14	12			8	6	578.40	191
578.20	12	6	11					4			8	10	578.20	242
578.00	10	12	9					1			1	3	578.00	278
577.80	6	7											577.80	291
577.60	1	2											577.60	294

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 7044: Calumet Harbor, Illinois on Lake Michigan

		Monthly means	----- Daily Means -----										HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.				
1-10 Jan			578.29	578.25	578.22	578.38	578.37	578.12	578.22	578.39	578.68	578.92					
11-20 Jan			578.16	578.21	578.06	578.35	578.24	578.16	578.02	578.40	578.10	578.19					
21-31 Jan	578.18		578.28	578.20	577.90	578.08	578.19	577.92	577.91	577.88	577.86	577.84	577.64	1000/10	579.33	1200/26	577.34
1-10 Feb			577.89	577.77	577.95	578.28	578.32	578.11	578.01	577.80	577.93	577.98					
11-20 Feb			578.03	578.03	578.14	578.16	578.33	578.12	577.96	578.14	578.23	578.24					
21-28 Feb	578.09		577.91	578.20	578.45	578.14	577.98	578.16	578.26	578.04							
1-10 Mar			578.08	578.03	578.28	578.24	578.07	578.10	578.11	578.03	578.02	578.20					
11-20 Mar			578.38	578.45	578.35	578.30	578.28	578.19	578.33	578.81	578.49	578.50					
21-31 Mar	578.33		578.69	578.57	578.45	578.38	578.40	578.43	578.48	578.53	578.25	578.33	578.60	1100/18	579.37	0700/29	577.51
1-10 Apr			578.62	578.74	578.71	578.93	579.13	578.60	578.71	578.67	578.61	578.60					
11-20 Apr			578.46	578.54	578.76	578.80	578.88	578.82	578.84	578.89	578.81	578.80					
21-30 Apr	578.80		578.80	579.03	579.05	579.04	578.98	578.77	578.74	579.20	578.79	578.68					
1-10 May			578.65	578.87	579.02	579.01	578.79	578.76	579.03	578.98	578.93	578.83					
11-20 May			578.74	578.64	578.69	578.92	578.85	578.77	578.70	578.70	578.75	578.80					
21-31 May	578.83		578.85	578.73	578.71	578.76	578.86	578.92	578.84	578.77	579.05	578.98	578.84	1300/8	579.52	0900/6	578.31
1-10 Jun			578.78	578.83	578.82	578.73	578.98	579.07	578.74	578.94	578.87	578.78					
11-20 Jun			578.82	579.01	578.92	578.85	578.80	578.75	578.75	578.57	578.50	578.65					
21-30 Jun	578.75		578.65	578.77	578.75	578.69	578.67	578.60	578.65	578.62	578.42	578.44					
1-10 Jul			578.60	578.45	578.49	578.56	578.59	578.60	578.70	578.64	578.97	578.94					
11-20 Jul			578.74	578.65	578.68	578.66	578.67	578.57	578.67	578.59	578.61	578.49					
21-31 Jul	578.65		578.79	578.83	578.59	578.52	578.89	578.73	578.68	578.53	578.60	578.64	578.53	0700/1	579.64	2400/4	578.01
1-10 Aug			578.54	578.62	578.65	578.53	578.47	578.68	578.65	578.52	578.67	578.79					
11-20 Aug			578.49	578.35	578.35	578.64	578.61	578.74	578.63	578.48	578.59	578.56					
21-31 Aug	578.54		578.53	578.44	578.60	578.68	578.51	578.37	578.21	578.12	/	/	/	1900/16	579.06	0600/28	577.90
1-10 Sep			/	/	/	/	/	/	/	/	/	/					
11-20 Sep			/	/	/	/	/	/	/	/	/	/					
21-30 Sep			/	/	/	/	/	/	/	/	/	/					
1-10 Oct			/	/	/	/	/	/	/	/	/	/					
11-20 Oct			/	/	/	/	/	/	/	/	/	/					
21-31 Oct			/	/	/	/	/	/	/	/	/	/	/				
1-10 Nov			/	/	/	/	/	/	/	578.71	578.57	578.26					
11-20 Nov			578.65	578.87	578.56	578.45	578.43	578.45	578.19	578.36	578.41	578.31					
21-30 Nov	578.48		578.22	578.30	578.47	578.37	578.87	578.61	578.38	578.50	578.39	578.68					
1-10 Dec			578.41	578.01	578.25	578.55	579.11	578.82	578.42	578.48	578.67	578.62					
11-20 Dec			578.39	578.08	578.39	578.55	578.39	578.66	579.08	579.10	578.85	578.80					
21-31 Dec	578.52		578.89	578.03	578.22	578.46	578.36	578.26	578.35	578.26	578.36	578.61	578.66	2100/17	579.49	1700/22	576.95

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7057: Milwaukee, Wisconsin on Lake Michigan

1977 YEARLY MEAN ELEVATION: 578.51 FEET

HIGHEST
Monthly mean elevation: 578.80 May 1977
Daily mean elevation: 579.18 17 Dec 1977
Instant/hourly Elevation: 579.78 1300/30 Jun 1977

LOWEST
Monthly mean elevation: 578.08 Feb 1977
Daily mean elevation: 577.60 31 Jan 1977
Instant/hourly Elevation: 577.47 1600/31 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.52	10 Jan
578.51	23 Feb
578.67	28 Mar
579.06	5 Apr
578.99	4 May
578.89	11 Jun
578.86	10 Jul
578.75	10 Aug
579.04	24 Sep
579.10	1 Oct
578.82	7 Nov
579.18	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.60	31 Jan
577.83	1 Feb
578.01	1 Mar
578.59	11 Apr
578.67	12 May
578.43	29 Jun
578.42	1 Jul
578.35	28 Aug
578.08	10 Sep
578.23	11 Oct
578.03	21 Nov
578.10	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00				3					1	1		4	579.00	9
578.80				11	13	3	2		2	1	1	1	578.80	43
578.60			2	14	18	23	20	7	8	6	6	5	578.60	152
578.40	2	1	12	2		4	9	18	15	15	14	13	578.40	257
578.20	8	1	10					6	3	8	7	7	578.20	307
578.00	13	20	7						1		2	1	578.00	351
577.80	5	6											577.80	362
577.60	2												577.60	364
577.40	1												577.40	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 7057: Milwaukee, Wisconsin on Lake Michigan

	Monthly means	----- Daily Means -----											HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		578.19	578.28	578.25	578.26	578.33	578.15	578.11	578.29	578.41	578.52					
11-20 Jan		578.18	578.16	578.24	578.26	578.05	577.99	577.94	578.27	578.10	578.17					
21-31 Jan	578.12	578.18	578.17	578.10	578.15	578.12	577.95	577.90	577.83	577.80	577.77	577.60	0800/10	578.81	1600/31	577.47
1-10 Feb		577.83	577.92	577.98	578.08	578.08	578.05	578.03	578.00	578.06	578.09					
11-20 Feb		578.10	578.09	578.07	578.00	578.14	578.10	578.05	578.16	578.11	578.13					
21-28 Feb	578.08	578.01	578.20	578.51	578.40	578.02	578.03	578.14	578.00				1900/23	578.97	0400/1	577.64
1-10 Mar		578.01	578.02	578.34	578.42	578.16	578.08	578.13	578.21	578.20	578.26					
11-20 Mar		578.38	578.54	578.46	578.30	578.37	578.19	578.32	578.63	578.39	578.41					
21-31 Mar	578.35	578.47	578.41	578.34	578.30	578.43	578.49	578.54	578.67	578.46	578.49	578.48	0300/18	579.43	0900/6	577.89
1-10 Apr		578.63	578.72	578.64	579.04	579.06	578.60	578.70	578.61	578.65	578.75					
11-20 Apr		578.59	578.64	578.75	578.73	578.86	578.79	578.84	578.87	578.83	578.84					
21-30 Apr	578.78	578.83	578.85	578.88	578.87	578.83	578.74	578.82	579.01	578.76	578.72		2400/4	579.49	0400/2	578.22
1-10 May		578.75	578.79	578.91	578.99	578.87	578.77	578.88	578.77	578.82	578.76					
11-20 May		578.71	578.67	578.69	578.84	578.84	578.81	578.70	578.73	578.78	578.81					
21-31 May	578.80	578.82	578.80	578.74	578.73	578.77	578.79	578.78	578.75	578.97	578.87	578.84	0100/6	579.16	1100/6	578.48
1-10 Jun		578.75	578.69	578.77	578.75	578.80	578.88	578.64	578.75	578.77	578.75					
11-20 Jun		578.89	578.82	578.77	578.69	578.67	578.71	578.62	578.54	578.47	578.61					
21-30 Jun	578.68	578.58	578.65	578.73	578.70	578.62	578.61	578.64	578.62	578.43	578.61		1300/30	579.78	1100/30	578.08
1-10 Jul		578.42	578.47	578.63	578.62	578.66	578.70	578.70	578.69	578.76	578.86					
11-20 Jul		578.83	578.66	578.62	578.70	578.69	578.61	578.59	578.65	578.64	578.54					
21-31 Jul	578.64	578.65	578.71	578.60	578.55	578.62	578.55	578.57	578.58	578.61	578.62	578.61	0100/11	579.00	0800/1	578.03
1-10 Aug		578.47	578.62	578.60	578.63	578.63	578.59	578.62	578.54	578.68	578.75					
11-20 Aug		578.46	578.38	578.39	578.51	578.53	578.68	578.48	578.36	578.57	578.54					
21-31 Aug	578.52	578.53	578.39	578.46	578.53	578.51	578.51	578.39	578.35	578.48	578.58	578.50	1000/10	579.03	1600/28	578.02
1-10 Sep		578.49	578.61	578.53	578.52	578.55	578.60	578.71	578.60	578.28	578.08					
11-20 Sep		578.35	578.48	578.51	578.42	578.60	578.65	578.54	578.60	578.72	578.71					
21-30 Sep	578.58	578.62	578.73	578.84	579.04	578.88	578.54	578.40	578.53	578.58	578.75		2000/24	579.39	0800/10	577.86
1-10 Oct		579.10	578.83	578.63	578.54	578.48	578.44	578.72	578.80	578.49	578.33					
11-20 Oct		578.23	578.24	578.42	578.44	578.54	578.51	578.37	578.54	578.49	578.37					
21-31 Oct	578.52	578.40	578.56	578.70	578.61	578.49	578.35	578.40	578.43	578.54	578.58	578.66	1400/1	579.34	1900/11	577.85
1-10 Nov		578.60	578.55	578.56	578.61	578.78	578.76	578.82	578.75	578.71	578.43					
11-20 Nov		578.34	578.54	578.56	578.50	578.55	578.35	578.20	578.24	578.39	578.58					
21-30 Nov	578.50	578.03	578.22	578.55	578.34	578.62	578.42	578.55	578.56	578.39	578.54		1800/5	579.06	1900/21	577.72
1-10 Dec		578.46	578.10	578.22	578.44	578.84	578.60	578.42	578.62	578.71	578.52					
11-20 Dec		578.42	578.39	578.50	578.49	578.47	578.78	579.18	579.16	578.78	579.04					
21-31 Dec	578.56	579.02	578.47	578.46	578.59	578.26	578.22	578.35	578.32	578.39	578.59	578.70	0200/18	579.49	1200/2	577.89

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7068: Kewaunee, Wisconsin on Lake Michigan

1977 YEARLY MEAN ELEVATION: 578.48 FEET

HIGHEST
Monthly mean elevation: 578.73 May 1977
Daily mean elevation: 579.17 17 Dec 1977
Instant/hourly Elevation: 579.53 2200/17 Dec 1977

LOWEST
Monthly mean elevation: 577.63 Feb 1977
Daily mean elevation: 577.63 31 Jan 1977
Instant/hourly Elevation: 577.57 0200/1 Feb 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.29	9 Jan
578.50	24 Feb
578.68	29 Mar
578.92	5 Apr
578.90	4 May
578.83	11 Jun
578.77	11 Jul
578.79	10 Aug
579.13	24 Sep
578.99	8 Oct
578.81	20 Nov
579.17	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.63	31 Jan
577.76	1 Feb
577.95	2 Mar
578.50	1 Apr
578.63	8 May
578.42	29 Jun
578.43	2 Jul
578.39	13 Aug
578.04	10 Sep
578.19	12 Oct
578.11	21 Nov
578.12	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00									2			2	579.00	4
578.80				2	4	1				2	1	2	578.80	16
578.60			1	21	27	22	18	7	11	3	6	6	578.60	138
578.40		1	9	7		7	13	20	14	12	12	12	578.40	245
578.20	7	1	11					4	2	7	7	6	578.20	290
578.00	17	18	8						1	1	3	3	578.00	341
577.80	4	7	2										577.80	354
577.60	3	1											577.60	358

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 7068: Kewaunee, Wisconsin on Lake Michigan

	Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		578.08	578.27	578.27	578.20	578.25	578.19	578.05	578.17	578.29	578.29						
11-20 Jan		578.15	578.10	578.23	578.21	578.02	577.93	577.93	578.09	578.10	578.11						
21-31 Jan	578.08	578.06	578.12	578.19	578.14	578.07	578.05	577.89	577.86	577.77	577.77	577.63	1000/9	578.53	1000/7	577.97	
1-10 Feb		577.76	578.01	577.96	577.92	577.97	577.98	578.03	578.11	578.03	578.12						
11-20 Feb		578.09	578.11	578.03	577.84	578.03	578.07	578.12	578.10	578.01	578.03						
21-28 Feb	578.05	578.06	578.09	578.36	578.50	578.06	577.96	578.06	577.98				2100/23	578.62	0200/1	577.57	
1-10 Mar		577.96	577.95	578.20	578.46	578.18	578.07	578.16	578.19	578.21	578.17						
11-20 Mar		578.25	578.49	578.43	578.28	578.37	578.17	578.17	578.43	578.32	578.34						
21-31 Mar	578.30	578.27	578.35	578.21	578.22	578.40	578.46	578.48	578.56	578.68	578.52	578.44	0400/29	579.10	2100/2	577.90	
1-10 Apr		578.50	578.71	578.53	578.86	578.92	578.51	578.56	578.51	578.59	578.76						
11-20 Apr		578.67	578.66	578.63	578.57	578.72	578.69	578.71	578.70	578.73	578.77						
21-30 Apr	578.68	578.80	578.68	578.79	578.71	578.68	578.69	578.68	578.74	578.70	578.69		0100/5	579.31	0700/18	577.95	
1-10 May		578.71	578.67	578.74	578.90	578.86	578.68	578.69	578.63	578.69	578.69						
11-20 May		578.67	578.66	578.68	578.79	578.78	578.77	578.72	578.65	578.71	578.78						
21-31 May	578.73	578.80	578.82	578.73	578.66	578.67	578.70	578.69	578.66	578.83	578.75	578.80	1500/4	579.05	1700/7	578.19	
1-10 Jun		578.71	578.62	578.71	578.71	578.74	578.76	578.64	578.65	578.70	578.68						
11-20 Jun		578.83	578.71	578.69	578.65	578.65	578.72	578.65	578.62	578.50	578.58						
21-30 Jun	578.65	578.56	578.60	578.69	578.64	578.56	578.60	578.64	578.62	578.42	578.65		1200/30	579.00	0400/6	578.08	
1-10 Jul		578.46	578.43	578.66	578.60	578.63	578.71	578.71	578.66	578.63	578.71						
11-20 Jul		578.77	578.67	578.57	578.71	578.64	578.65	578.64	578.67	578.68	578.56						
21-31 Jul	578.61	578.52	578.61	578.59	578.53	578.48	578.50	578.58	578.61	578.56	578.57	578.66	0100/1	578.95	0800/1	578.16	
1-10 Aug		578.46	578.58	578.62	578.62	578.59	578.56	578.65	578.61	578.67	578.79						
11-20 Aug		578.55	578.47	578.39	578.45	578.50	578.71	578.50	578.41	578.57	578.53						
21-31 Aug	578.53	578.50	578.42	578.39	578.47	578.48	578.55	578.46	578.39	578.40	578.54	578.58	0900/10	578.89	1800/28	578.26	
1-10 Sep		578.46	578.58	578.50	578.57	578.53	578.62	578.73	578.78	578.38	578.04						
11-20 Sep		578.36	578.49	578.49	578.43	578.55	578.68	578.54	578.63	578.80	578.71						
21-30 Sep	578.60	578.65	578.75	578.80	579.13	579.02	578.64	578.45	578.52	578.58	578.58		2000/24	579.28	0700/10	577.87	
1-10 Oct		578.86	578.70	578.56	578.49	578.41	578.32	578.72	578.99	578.44	578.44						
11-20 Oct		578.37	578.19	578.40	578.43	578.39	578.47	578.48	578.46	/	/						
21-31 Oct	578.50	/	/	/	/	578.45	578.33	578.39	578.38	578.49	578.54	578.70	1200/8	579.12	0900/12	578.03	
1-10 Nov		578.64	578.58	578.59	578.46	578.67	578.66	578.74	578.71	578.78	578.60						
11-20 Nov		578.20	578.38	578.58	578.49	578.57	578.42	578.29	578.21	578.33	578.81						
21-30 Nov	578.48	578.11	578.14	578.54	578.33	578.37	578.48	/	578.51	578.36	578.49		1600/20	578.98	0100/22	577.74	
1-10 Dec		578.64	578.12	578.16	578.36	578.69	578.53	578.41	578.68	578.71	578.47						
11-20 Dec		578.53	578.49	578.47	578.43	578.46	578.68	579.17	579.12	578.75	578.88						
21-31 Dec	578.52	578.94	578.54	578.39	578.48	578.21	578.12	578.28	578.29	578.24	578.43	578.47	2200/17	579.53	2400/25	577.96	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7072: Sturgeon Bay Canal, Wisconsin on Lake Michigan

1977 YEARLY MEAN ELEVATION: 578.46 FEET

HIGHEST
Monthly mean elevation: 578.71 May 1977
Daily mean elevation: 579.19 17 Dec 1977
Instant/hourly Elevation: 579.51 2000/17 Dec 1977

LOWEST
Monthly mean elevation: 578.04 Feb 1977
Daily mean elevation: 577.67 31 Jan 1977
Instant/hourly Elevation: 577.56 0100/1 Feb 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.26	2 Jan
578.49	24 Feb
578.66	29 Mar
578.93	5 Apr
578.88	4 May
578.71	5 Jun
578.71	10 Jul
578.81	10 Aug
579.14	24 Sep
579.02	8 Oct
578.75	9 Nov
579.19	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.67	31 Jan
577.77	1 Feb
577.93	2 Mar
578.50	1 Apr
578.59	8 May
578.39	29 Jun
578.38	1 Jul
578.34	28 Aug
577.98	10 Sep
578.18	12 Oct
577.98	21 Nov
578.06	26 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00									1	1		2	579.00	4
578.80				3	3			1	1	1		2	578.80	15
578.60			1	20	27	17	16	5	9	3	6	5	578.60	124
578.40		1	7	7	1	12	13	22	16	12	12	10	578.40	237
578.20	8	1	11			1	2	3	2	13	8	8	578.20	294
578.00	16	16	10							1	3	4	578.00	344
577.80	4	9	2						1		1		577.80	361
577.60	3	1											577.60	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 7072: Sturgeon Bay Canal, Wisconsin on Lake Michigan

	Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		578.07	578.26	578.26	578.15	578.24	578.21	578.01	578.10	578.24	578.21						
11-20 Jan		578.14	578.09	578.21	578.25	578.05	577.90	577.90	578.01	578.07	578.12						
21-31 Jan	578.07	578.01	578.11	578.19	578.13	578.08	578.03	577.89	577.88	577.79	577.79	577.67	1200/13	578.49	2400/31	577.58	
1-10 Feb		577.77	578.04	577.95	577.87	577.94	577.97	578.03	578.13	578.04	578.14						
11-20 Feb		578.07	578.16	578.02	577.84	578.03	578.05	578.13	578.09	577.99	578.00						
21-28 Feb	578.04	578.06	578.05	578.31	578.49	578.11	577.93	578.06	577.99				2400/23	578.62	0100/1	577.56	
1-10 Mar		577.95	577.93	578.16	578.44	578.18	578.07	578.15	578.17	578.24	578.14						
11-20 Mar		578.24	578.45	578.44	578.27	578.36	578.16	578.14	578.38	578.31	578.32						
21-31 Mar	578.28	578.24	578.33	578.15	578.14	578.36	578.44	578.50	578.53	578.66	578.44	578.38	0900/29	579.02	0100/24	577.83	
1-10 Apr		578.50	578.67	578.50	578.89	578.93	578.51	578.51	578.52	578.57	578.78						
11-20 Apr		578.71	578.65	578.65	578.58	578.73	578.69	578.70	578.78	578.74	578.81						
21-30 Apr	578.68	578.73	578.66	578.78	578.72	578.69	578.67	578.64	578.67	578.65	578.68		1900/4	579.48	2300/27	578.31	
1-10 May		578.64	578.64	578.74	578.88	578.86	578.65	578.71	578.59	578.69	578.65						
11-20 May		578.66	578.68	578.69	578.79	578.74	578.74	578.67	578.64	578.71	578.73						
21-31 May	578.71	578.71	578.71	578.71	578.64	578.67	578.69	578.69	578.63	578.87	578.75	578.80	0800/5	579.16	1200/8	578.38	
1-10 Jun		578.66	578.61	578.65	578.63	578.71	578.71	578.58	578.61	578.69	578.64						
11-20 Jun		578.69	578.68	578.66	578.66	578.66	578.70	578.64	578.59	578.47	578.58						
21-30 Jun	578.61	578.54	578.57	578.63	578.56	578.53	578.57	578.60	578.57	578.39	578.57		0200/6	578.98	1200/30	578.08	
1-10 Jul		578.38	578.40	578.62	578.60	578.60	578.68	578.61	578.65	578.67	578.71						
11-20 Jul		578.69	578.64	578.56	578.65	578.61	578.62	578.67	578.64	578.66	578.54						
21-31 Jul	578.60	578.56	578.64	578.57	578.55	578.49	578.50	578.55	578.58	578.58	578.59	578.68	2100/4	579.08	2000/4	577.96	
1-10 Aug		578.47	578.61	578.58	578.57	578.54	578.58	578.65	578.63	578.69	578.81						
11-20 Aug		578.56	578.45	578.38	578.44	578.55	578.76	578.53	578.41	578.53	578.47						
21-31 Aug	578.53	578.50	578.41	578.38	578.46	578.47	578.53	578.43	578.34	578.46	578.54	578.58	0600/10	578.95	2100/13	578.20	
1-10 Sep		578.42	578.63	578.53	578.55	578.54	578.62	578.76	578.68	578.29	577.98						
11-20 Sep		578.33	578.48	578.48	578.45	578.53	578.69	578.52	578.52	578.75	578.72						
21-30 Sep	578.57	578.60	578.64	578.74	579.14	578.98	578.57	578.41	578.49	578.50	578.56		0700/24	579.44	0500/10	577.81	
1-10 Oct		578.82	578.66	578.51	578.45	578.39	578.26	578.67	579.02	578.49	578.42						
11-20 Oct		578.32	578.18	578.38	578.40	578.38	578.46	578.40	578.44	578.42	578.37						
21-31 Oct	578.46	578.35	578.33	578.56	578.54	578.45	578.30	578.38	578.31	578.45	578.51	578.64	0200/8	579.17	2400/11	577.98	
1-10 Nov		578.56	578.55	578.53	578.41	578.63	578.63	578.74	578.69	578.75	578.55						
11-20 Nov		578.18	578.38	578.51	578.43	578.57	578.32	578.25	578.18	578.32	578.70						
21-30 Nov	578.44	577.98	578.05	578.50	578.39	578.36	578.40	578.49	578.55	578.27	578.41		1500/20	579.08	2300/21	577.73	
1-10 Dec		578.53	578.09	578.12	578.32	578.66	578.55	578.37	578.65	578.75	578.46						
11-20 Dec		578.47	578.42	578.47	578.40	578.44	578.66	579.19	579.13	578.73	578.85						
21-31 Dec	578.49	578.93	578.52	578.32	578.41	578.18	578.06	578.27	578.25	578.21	578.37	578.45	2000/17	579.51	0100/26	577.92	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7078: Green Bay, Wisconsin on Lake Michigan (Green Bay)

1977 YEARLY MEAN ELEVATION: 578.41 FEET

HIGHEST
Monthly mean elevation: 578.86 May 1977
Daily mean elevation: 579.45 17 Dec 1977
Instant/hourly Elevation: 580.54 1100/8 May 1977

LOWEST
Monthly mean elevation: 577.79 Jan 1977
Daily mean elevation: 577.34 11 Oct 1977
Instant/hourly Elevation: 576.19 2100/26 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.12	23 Jan
578.38	24 Feb
578.55	28 Mar
579.06	4 Apr
579.19	8 May
579.14	6 Jun
578.80	10 Jul
578.76	9 Aug
579.24	24 Sep
579.37	1 Oct
578.61	1 Nov
579.45	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.53	31 Jan
577.60	14 Feb
577.76	1 Mar
578.33	6 Apr
578.56	1 May
578.24	29 Jun
578.07	1 Jul
577.90	12 Aug
577.50	9 Sep
577.34	11 Oct
578.51	2 Nov
577.63	2 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.40												1	579.40	1
579.20									1	1			579.20	3
579.00				1	4	2						2	579.00	12
578.80					18	3			4	2		2	578.80	41
578.60				16	8	5	9	4	4	2	1	4	578.60	94
578.40			4	9	1	15	19	14	13	8	2	3	578.40	182
578.20		1	8	2		5	2	11	6	11		9	578.20	237
578.00	1	4	11				1	1		5		1	578.00	261
577.80	3	18	3					1	1	1		1	577.80	289
577.60	4	4	1									1	577.60	299
577.40	1	1							1				577.40	302
577.20										1			577.20	303

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977
Station 7078: Green Bay, Wisconsin on Lake Michigan (Green Bay)

	Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		/	/	/	/	/	/	/	/	/	/	/				
11-20 Jan		/	/	/	/	/	/	/	/	/	/	/				
21-31 Jan	577.79	/	/	578.12	577.99	577.89	577.79	577.81	577.70	577.68	577.64	577.53	0200/27	578.97	2100/26	576.19
1-10 Feb		577.61	577.96	577.81	577.66	577.73	577.78	577.86	578.02	577.93	578.01					
11-20 Feb		577.96	578.00	577.83	577.60	577.86	577.89	578.02	577.97	577.84	577.85					
21-28 Feb	577.90	577.97	577.88	578.20	578.38	577.98	577.81	577.89	577.82				2300/23	578.72	0100/4	576.91
1-10 Mar		577.76	577.81	578.08	578.33	578.02	577.94	578.02	578.04	/	/					
11-20 Mar		/	/	578.27	578.13	578.23	578.03	578.00	578.25	578.24	578.19					
21-31 Mar	578.18	578.11	578.19	578.08	578.13	578.38	578.44	578.49	578.55	578.51	578.38	578.35	0900/29	579.48	0100/24	576.86
1-10 Apr		578.43	578.67	578.42	579.06	578.79	578.33	578.41	578.38	578.50	578.71					
11-20 Apr		578.60	578.56	578.66	578.58	578.74	578.72	578.74	578.77	578.74	578.73					
21-30 Apr	578.64	578.68	578.68	578.78	578.80	578.74	/	/	578.63	578.53	578.49		2000/4	579.84	1400/8	577.45
1-10 May		578.56	578.69	578.94	579.08	578.90	578.92	578.91	579.19	578.81	578.74					
11-20 May		578.83	578.77	578.84	579.05	578.97	578.89	578.82	578.85	578.88	578.88					
21-31 May	578.86	578.92	578.76	578.73	578.83	578.92	578.78	578.69	578.72	579.14	578.87	578.84	1100/8	580.54	2400/1	577.75
1-10 Jun		578.86	578.70	578.57	578.66	578.83	579.14	578.60	578.79	578.53	578.46					
11-20 Jun		578.85	579.04	578.67	578.61	578.60	578.58	578.59	578.36	578.34	578.58					
21-30 Jun	578.59	578.46	578.52	578.54	578.55	578.49	578.47	578.48	578.28	578.24	578.29		0600/12	580.06	0500/20	577.39
1-10 Jul		578.07	578.29	578.36	578.60	578.59	578.58	578.72	578.67	578.74	578.80					
11-20 Jul		578.57	578.45	578.51	578.57	578.58	578.58	578.54	578.59	578.48	578.44					
21-31 Jul	578.54	578.72	578.68	578.43	578.43	578.69	578.44	578.41	578.44	578.69	578.61	578.42	2100/8	579.76	1500/1	577.11
1-10 Aug		578.38	578.63	578.42	578.54	578.52	578.55	578.57	578.59	578.76	578.68					
11-20 Aug		578.32	577.90	578.30	578.43	578.48	578.76	578.45	578.24	578.46	578.30					
21-31 Aug	578.42	578.42	578.25	578.23	578.43	578.38	578.39	578.20	578.24	578.44	578.44	578.35	1600/9	579.34	0100/28	577.14
1-10 Sep		578.48	578.66	578.52	578.41	578.58	578.57	578.81	578.44	577.50	577.95					
11-20 Sep		578.23	578.57	578.60	578.34	578.52	578.68	578.44	578.55	578.75	578.82					
21-30 Sep	578.52	578.54	578.58	578.79	579.24	578.85	578.28	578.28	578.38	578.38	578.90		0500/24	579.93	1000/10	576.74
1-10 Oct		579.37	578.85	578.42	578.25	578.08	578.22	578.66	578.87	578.27	578.09					
11-20 Oct		577.34	577.99	578.22	578.28	578.54	578.34	578.11	578.48	578.28	578.16					
21-31 Oct	578.37	578.32	578.49	578.64	578.49	578.34	578.13	578.24	578.33	578.49	578.50	578.55	1300/1	580.12	1800/11	576.62
1-10 Nov		578.61	578.51	/	/	/	/	/	/	/	/					
11-20 Nov		/	/	/	/	/	/	/	/	/	/					
21-30 Nov	578.55	/	/	/	/	/	/	/	/	/	/	578.52	2100/1	579.04	0400/1	578.02
1-10 Dec		578.26	577.63	577.96	578.25	578.83	578.48	578.23	578.67	578.78	578.37					
11-20 Dec		578.33	578.39	578.44	578.38	578.40	578.76	579.45	579.16	578.67	579.13					
21-31 Dec	578.52	578.92	578.20	578.22	578.53	/	/	/	/	/	/	/	1100/17	580.03	0500/2	576.78

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 7096: Port Inland, Michigan on Lake Michigan

1977 YEARLY MEAN ELEVATION: 578.40 FEET

HIGHEST
Monthly mean elevation: 578.62 May 1977
Daily mean elevation: 579.06 20 Nov 1977
Instant/hourly Elevation: 580.06 0231/20 Nov 1977

LOWEST
Monthly mean elevation: 578.00 Feb 1977
Daily mean elevation: 577.81 14 Feb 1977
Instant/hourly Elevation: 577.39 1730/26 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
578.33	6 Jan
578.41	24 Feb
578.65	29 Mar
578.80	30 Apr
578.79	5 May
578.68	28 Jun
578.72	19 Jul
578.77	31 Aug
579.02	24 Sep
579.03	8 Oct
579.06	20 Nov
578.98	18 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
577.83	31 Jan
577.81	14 Feb
577.87	3 Mar
578.29	3 Apr
578.37	8 May
578.42	25 Jun
578.34	25 Jul
578.31	18 Aug
578.07	10 Sep
578.07	6 Oct
577.98	11 Nov
578.12	3 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
579.00									1	1	1		579.00	3
578.80									1			2	578.80	6
578.60			1	11	16	3	9	8	5	2	3	2	578.60	66
578.40		1		15	14	27	19	18	17	10	14	10	578.40	211
578.20	5	1	11	4	1		3	5	5	15	8	14	578.20	283
578.00	15	9	14						1	3	3	3	578.00	331
577.80	11	17	4								1		577.80	364

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 7096: Port Inland, Michigan on Lake Michigan

	Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		578.05	578.25	578.21	578.10	578.18	578.33	578.03	578.02	578.04	577.92						
11-20 Jan		578.10	578.12	578.20	578.22	578.12	578.02	578.00	577.91	577.99	578.04						
21-31 Jan	578.06	577.92	578.02	578.30	578.09	578.00	578.12	577.95	577.96	577.96	577.99	577.83	1028/23	578.74	1730/26	577.39	
1-10 Feb		577.83	578.14	577.98	577.84	577.91	577.87	577.93	578.15	577.98	578.06						
11-20 Feb		578.07	578.08	578.08	577.81	577.88	577.93	578.13	578.04	577.89	577.92						
21-28 Feb	578.00	578.06	577.95	577.94	578.41	578.24	577.92	577.96	577.93				1515/24	578.76	0416/23	577.57	
1-10 Mar		577.97	577.95	577.87	578.24	578.20	/	578.15	578.08	578.20	578.03						
11-20 Mar		578.06	578.13	578.27	578.11	578.25	578.12	578.00	578.14	578.21	578.25						
21-31 Mar	578.17	578.12	578.23	578.08	578.02	578.20	578.31	578.39	578.26	578.65	578.36	578.22	0810/29	579.21	1145/3	577.55	
1-10 Apr		578.38	578.46	578.29	578.48	578.64	578.34	578.36	578.41	578.49	578.66						
11-20 Apr		578.65	578.53	578.46	578.47	578.57	578.54	578.54	578.67	578.61	578.68						
21-30 Apr	578.54	578.67	578.48	578.62	578.59	578.55	578.62	578.60	578.52	578.64	578.80		1815/30	579.06	2248/27	577.82	
1-10 May		578.66	578.57	578.65	578.75	578.79	578.52	578.57	578.37	578.56	578.53						
11-20 May		578.56	578.65	578.56	578.65	578.67	578.73	578.66	578.56	578.64	578.68						
21-31 May	578.62	578.65	578.73	578.74	578.59	578.58	578.60	578.53	578.53	578.68	578.58	578.62	0725/31	579.15	1740/6	577.98	
1-10 Jun		578.59	578.45	578.55	578.52	578.51	578.51	578.46	578.45	578.52	578.49						
11-20 Jun		578.60	578.47	578.52	578.51	578.51	578.64	578.54	578.61	578.49	578.49						
21-30 Jun	578.52	578.44	578.45	578.57	578.56	578.42	578.51	578.59	578.68	578.42	578.59		2115/30	579.43	2115/11	577.97	
1-10 Jul		578.56	578.36	578.61	578.42	578.44	578.58	578.57	578.53	578.46	578.56						
11-20 Jul		578.68	578.64	578.46	578.66	578.62	578.55	578.63	578.64	578.72	578.59						
21-31 Jul	578.54	578.42	578.52	578.59	578.56	578.34	578.36	578.49	578.58	578.48	578.45	578.63	0125/31	579.54	0600/5	578.03	
1-10 Aug		578.40	578.51	578.53	578.55	578.56	578.50	578.61	578.52	578.52	578.75						
11-20 Aug		578.51	578.66	578.47	578.52	578.49	578.71	578.37	578.31	578.48	578.54						
21-31 Aug	578.52	578.50	578.43	578.34	578.38	578.41	578.63	578.65	578.56	578.47	578.62	578.77	0508/27	579.43	1740/17	577.95	
1-10 Sep		578.48	578.58	578.49	578.64	578.43	578.48	578.60	578.71	578.79	578.07						
11-20 Sep		578.47	578.50	578.44	578.39	578.49	578.64	578.46	578.42	578.73	578.49						
21-30 Sep	578.52	578.38	578.48	578.59	579.02	578.95	578.54	578.28	578.34	578.49	578.35		0708/9	579.64	0630/10	577.57	
1-10 Oct		578.44	578.27	578.26	578.38	578.34	578.07	578.46	579.03	578.38	578.49						
11-20 Oct		578.76	578.16	578.44	578.48	578.15	578.32	578.49	578.39	578.32	578.40						
21-31 Oct	578.40	578.30	578.21	578.46	578.46	578.45	578.28	578.37	578.30	578.40	578.49	578.72	1708/8	579.42	0915/6	577.77	
1-10 Nov		578.55	578.47	578.47	578.26	578.51	578.44	578.58	578.53	578.62	578.74						
11-20 Nov		577.98	578.14	578.47	578.47	578.64	578.50	578.40	578.23	578.21	579.06						
21-30 Nov	578.43	578.60	578.09	578.47	578.28	578.10	578.29	578.38	578.51	578.42	578.36		0231/20	580.06	0144/22	577.47	
1-10 Dec		578.64	578.25	578.12	578.24	578.41	578.30	578.22	578.57	578.53	578.26						
11-20 Dec		578.46	578.60	578.48	578.33	578.38	578.51	578.94	578.98	578.57	578.48						
21-31 Dec	578.42	578.74	578.59	578.37	578.39	578.24	578.13	578.29	578.30	578.13	578.28	578.27	1735/17	579.54	0007/26	577.76	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 9004: Pt. Iroquois, Brimley, Michigan, Lake Superior (Whitefish Bay)

1977 YEARLY MEAN ELEVATION: 600.36 FEET

HIGHEST
Monthly mean elevation: 601.29 Oct 1977
Daily mean elevation: 601.76 11 Nov 1977
Instant/hourly Elevation: 602.18 0600/11 Nov 1977

LOWEST
Monthly mean elevation: 599.53 Feb 1977
Daily mean elevation: 599.13 23 Feb 1977
Instant/hourly Elevation: 598.75 0200/4 Mar 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.98	16 Jan
599.85	13 Feb
599.88	16 Mar
600.08	5 Apr
600.23	8 May
600.41	29 Jun
600.74	25 Jul
600.84	17 Aug
601.46	27 Sep
601.65	12 Oct
601.76	11 Nov
601.34	25 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.49	23 Jan
599.13	23 Feb
599.25	26 Mar
599.53	10 Apr
599.82	4 May
599.99	3 Jun
600.21	3 Jul
600.38	26 Aug
600.55	8 Sep
600.86	31 Oct
600.65	20 Nov
600.31	17 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
601.60										1	2		601.60	3
601.40									1	7	2		601.40	13
601.20									6	13	7	4	601.20	43
601.00									9	8	14	12	601.00	86
600.80								2	11	2	4	8	600.80	113
600.60							2	12	2		1	5	600.60	135
600.40						1	18	16	1			1	600.40	172
600.20					1	8	11	1				1	600.20	194
600.00				5	13	20							600.00	232
599.80	15	1	3	10	17	1							599.80	279
599.60	14	9	7	13									599.60	322
599.40	2	12	17	2									599.40	355
599.20		5	4										599.20	364
599.00		1											599.00	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

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

		Monthly means	----- Daily Means -----											HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan			599.94	599.81	599.78	599.90	599.72	599.80	599.88	599.96	599.66	599.87					
11-20 Jan			599.77	599.83	599.63	599.70	599.93	599.98	599.95	599.88	599.72	599.74					
21-31 Jan	599.80		599.76	599.55	599.49	599.66	599.69	599.72	599.89	599.87	599.80	599.87	599.90	2100/26	600.23	0200/23	599.20
1-10 Feb			599.73	599.47	599.71	599.72	599.71	599.66	599.48	599.40	599.53	599.33					
11-20 Feb			599.53	599.43	599.85	599.73	599.62	599.47	599.33	599.54	599.53	599.48					
21-28 Feb	599.53		599.32	599.46	599.13	599.22	599.67	599.58	599.63	599.58				1000/13	600.06	2300/23	598.84
1-10 Mar			599.58	599.50	599.37	599.42	599.65	599.56	599.44	599.41	599.45	599.44					
11-20 Mar			599.37	599.36	599.56	599.58	599.65	599.88	599.61	599.70	599.57	599.65					
21-31 Mar	599.55		599.64	599.54	599.81	599.56	599.42	599.25	599.41	599.58	599.52	599.75	599.82	1100/16	600.23	0200/4	598.75
1-10 Apr			599.58	599.87	599.79	599.71	600.08	599.81	599.88	599.76	599.62	599.53					
11-20 Apr			599.74	599.71	599.84	599.76	599.72	599.75	599.72	599.72	599.73	599.73					
21-30 Apr	599.82		599.89	599.96	599.88	600.08	600.04	599.91	600.06	600.04	599.90	599.86		2300/2	600.56	1000/12	599.36
1-10 May			599.94	600.02	599.86	599.82	599.86	600.14	600.03	600.23	600.07	600.00					
11-20 May			599.98	599.99	599.96	599.92	599.86	599.87	599.96	600.02	599.95	599.93					
21-31 May	599.99		600.01	599.91	599.94	600.07	600.07	600.04	600.03	600.05	600.09	600.01	599.97	0800/8	600.58	0300/16	599.60
1-10 Jun			600.26	600.19	599.99	600.08	600.10	600.31	600.16	600.21	600.16	600.03					
11-20 Jun			600.15	600.22	600.11	600.14	600.06	600.03	600.12	600.14	600.27	600.32					
21-30 Jun	600.16		600.23	600.16	600.07	600.18	600.24	600.12	600.12	600.18	600.41	600.12		0800/29	600.83	1700/26	599.70
1-10 Jul			600.46	600.23	600.21	600.36	600.28	600.42	600.43	600.46	600.49	600.38					
11-20 Jul			600.21	600.35	600.44	600.27	600.50	600.42	600.51	600.38	600.39	600.49					
21-31 Jul	600.44		600.60	600.51	600.47	600.56	600.74	600.62	600.48	600.40	600.57	600.42	600.50	0100/25	600.98	0300/6	599.27
1-10 Aug			600.63	600.58	600.52	600.54	600.57	600.55	600.56	600.62	600.53	600.53					
11-20 Aug			600.62	600.53	600.60	600.67	600.55	600.59	600.84	600.74	600.67	600.51					
21-31 Aug	600.61		600.64	600.71	600.72	600.72	600.46	600.38	600.54	600.73	600.81	600.51	600.62	1600/17	601.14	0200/26	600.05
1-10 Sep			600.94	600.86	600.79	600.82	600.95	600.86	600.81	600.55	601.00	601.37					
11-20 Sep			601.06	601.07	601.14	601.07	600.93	600.95	601.00	601.00	601.01	601.27					
21-30 Sep	601.04		601.15	601.06	601.02	600.74	601.02	601.30	601.46	601.36	601.34	601.39		0900/10	601.83	2300/8	599.93
1-10 Oct			601.36	601.44	601.41	601.28	601.54	601.52	601.16	601.08	601.55	601.17					
11-20 Oct			601.27	601.65	601.21	601.35	601.58	601.33	601.11	601.40	601.37	601.21					
21-31 Oct	601.29		601.39	601.41	601.16	601.13	601.14	601.28	601.23	601.27	601.14	601.00	600.86	0800/12	602.07	0900/31	600.63
1-10 Nov			601.14	601.16	601.25	601.28	601.13	601.19	601.13	601.14	600.93	601.28					
11-20 Nov			601.76	601.34	601.12	601.10	601.02	601.11	601.18	601.42	601.17	600.65					
21-30 Nov	601.18		601.61	601.21	601.19	601.45	601.28	601.23	600.97	601.10	600.98	600.85		0600/11	602.18	1400/20	600.18
1-10 Dec			601.27	601.30	601.33	601.12	600.92	601.17	601.02	600.70	601.08	601.03					
11-20 Dec			600.77	600.80	600.82	600.98	600.84	600.55	600.31	600.71	600.79	600.83					
21-31 Dec	600.97		600.98	600.98	601.03	601.15	601.34	601.19	601.02	601.06	601.08	601.01	600.95	2300/24	601.92	2300/17	600.14

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 9016: Marquette, Michigan on Lake Superior

1977 YEARLY MEAN ELEVATION: 600.46 FEET

HIGHEST
Monthly mean elevation: 601.39 Oct 1977
Daily mean elevation: 601.70 11 Nov 1977
Instant/hourly Elevation: 601.99 1000/11 Nov 1977

LOWEST
Monthly mean elevation: 599.60 Feb 1977
Daily mean elevation: 599.48 21 Feb 1977
Instant/hourly Elevation: 599.20 0100/4 Mar 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
600.03	1 Jan
599.78	13 Feb
599.86	31 Mar
600.07	24 Apr
600.22	28 May
600.42	28 Jun
600.71	25 Jul
600.91	28 Aug
601.48	30 Sep
601.54	12 Oct
601.70	11 Nov
601.21	6 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.63	23 Jan
599.48	21 Feb
599.52	2 Mar
599.76	1 Apr
600.04	5 May
600.14	3 Jun
600.36	1 Jul
600.66	11 Aug
600.88	3 Sep
601.22	31 Oct
601.01	30 Nov
600.86	17 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
601.60											1		601.60	1
601.40									4	12	1		601.40	18
601.20									9	19	21	1	601.20	68
601.00									9		7	18	601.00	102
600.80								4	8			12	600.80	126
600.60							12	27					600.60	165
600.40						1	18						600.40	184
600.20					3	23	1						600.20	211
600.00	1			9	28	6							600.00	255
599.80	14		3	16									599.80	288
599.60	16	8	18	5									599.60	335
599.40		20	10										599.40	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 9016: Marquette, Michigan on Lake Superior

	Monthly means	----- Daily Means -----										HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		600.03	599.86	599.83	599.88	599.83	599.81	599.88	599.93	599.85	599.96				
11-20 Jan		599.85	599.78	599.75	599.81	599.80	599.89	599.87	599.87	599.75	599.74				
21-31 Jan	599.80	599.76	599.67	599.63	599.69	599.70	599.68	599.74	599.73	599.71	599.73	599.76	1600/10	600.12	2400/22 599.45
1-10 Feb		599.69	599.59	599.66	599.76	599.74	599.65	599.58	599.58	599.62	599.56				
11-20 Feb		599.58	599.60	599.78	599.77	599.59	599.53	599.52	599.58	599.55	599.52				
21-28 Feb	599.60	599.48	599.53	599.50	599.57	599.59	599.59	599.60	599.56				0700/14	599.87	1600/26 599.26
1-10 Mar		599.53	599.52	599.56	599.63	599.62	599.60	599.54	599.57	599.58	599.56				
11-20 Mar		599.57	599.67	599.74	599.71	599.69	599.77	599.72	599.72	599.66	599.71				
21-31 Mar	599.66	599.69	599.65	599.77	599.65	599.61	599.54	599.66	599.73	599.81	599.85	599.86	0900/30	600.26	0100/4 599.20
1-10 Apr		599.76	599.90	599.88	599.92	600.04	599.86	599.86	599.79	599.76	599.79				
11-20 Apr		599.83	599.87	599.78	599.83	599.82	599.86	599.85	599.88	599.92	599.94				
21-30 Apr	599.91	599.99	599.99	600.02	600.07	600.04	600.02	600.05	600.04	600.02	600.03		0200/5	600.44	0600/13 599.38
1-10 May		600.07	600.07	600.05	600.05	600.04	600.11	600.08	600.09	600.06	600.08				
11-20 May		600.12	600.10	600.10	600.07	600.11	600.08	600.12	600.09	600.14	600.16				
21-31 May	600.12	600.15	600.16	600.16	600.17	600.17	600.19	600.19	600.22	600.20	600.21	600.22	1800/6	600.46	1600/18 599.79
1-10 Jun		600.24	600.18	600.14	600.19	600.23	600.26	600.21	600.23	600.21	600.18				
11-20 Jun		600.23	600.20	600.21	600.20	600.22	600.21	600.22	600.25	600.26	600.30				
21-30 Jun	600.25	600.28	600.28	600.27	600.31	600.29	600.29	600.29	600.42	600.35	600.36		1000/28	600.81	1600/27 599.80
1-10 Jul		600.36	600.42	600.44	600.44	600.52	600.54	600.54	600.56	600.55	600.52				
11-20 Jul		600.50	600.59	600.54	600.54	600.54	600.62	600.57	600.61	600.58	600.60				
21-31 Jul	600.57	600.61	600.62	600.60	600.70	600.71	600.67	600.64	600.63	600.69	600.66	600.64	2200/24	601.43	1100/14 600.01
1-10 Aug		600.70	600.70	600.67	600.70	600.69	600.69	600.70	600.74	600.70	600.70				
11-20 Aug		600.66	600.67	600.67	600.74	600.74	600.76	600.78	600.75	600.75	600.72				
21-31 Aug	600.74	600.75	600.74	600.75	600.74	600.68	600.67	600.78	600.91	600.88	600.81	600.89	0800/27	601.44	1100/27 600.21
1-10 Sep		600.98	600.97	600.88	600.98	600.97	600.98	600.99	600.92	601.04	601.21				
11-20 Sep		601.17	601.16	601.17	601.15	601.11	601.17	601.14	601.10	601.38	601.35				
21-30 Sep	601.17	601.29	601.25	601.28	601.22	601.29	601.35	601.41	601.41	601.42	601.48		0900/9	601.74	0300/9 600.41
1-10 Oct		601.52	601.48	601.40	601.36	601.40	601.51	601.38	601.50	601.44	601.40				
11-20 Oct		601.43	601.54	601.39	601.43	601.54	601.43	601.36	601.44	601.42	601.36				
21-31 Oct	601.39	601.40	601.40	601.35	601.31	601.33	601.29	601.32	601.31	601.31	601.27	601.22	0500/6	601.74	1300/26 600.74
1-10 Nov		601.29	601.29	601.32	601.33	601.29	601.30	601.32	601.30	601.34	601.35				
11-20 Nov		601.70	601.42	601.24	601.24	601.21	601.21	601.24	601.33	601.23	601.12				
21-30 Nov	601.27	601.16	601.20	601.30	601.27	601.35	601.24	601.18	601.15	601.06	601.01		1000/11	601.99	0400/21 600.56
1-10 Dec		601.13	601.12	601.18	601.17	601.13	601.21	601.14	601.00	601.20	601.08				
11-20 Dec		600.95	601.01	600.96	601.01	600.98	600.91	600.86	600.92	600.96	601.08				
21-31 Dec	601.05	601.15	601.04	601.01	601.06	601.12	601.11	601.05	600.97	600.97	600.99	601.00	2200/12	601.58	0500/12 600.47

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 9044: Ontonagon, Michigan on Lake Superior

1977 YEARLY MEAN ELEVATION: 600.61 FEET

HIGHEST
Monthly mean elevation: 601.43 Oct 1977
Daily mean elevation: 601.65 11 Oct 1977
Instant/hourly Elevation: 602.64 1923/10 Nov 1977

LOWEST
Monthly mean elevation: 599.82 Mar 1977
Daily mean elevation: 599.69 6 Apr 1977
Instant/hourly Elevation: 599.30 1415/5 Apr 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
	Feb
599.82	31 Mar
600.00	30 Apr
600.31	29 May
600.48	30 Jun
600.73	30 Jul
600.97	31 Aug
601.50	24 Sep
601.65	11 Oct
601.54	10 Nov
	Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
	Jan
	Feb
599.82	31 Mar
599.69	6 Apr
600.00	1 May
600.17	1 Jun
600.42	1 Jul
600.67	5 Aug
600.93	2 Sep
601.34	25 Oct
601.13	21 Nov
	Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
601.60										1			601.60	1
601.40									4	19	5		601.40	29
601.20									8	11	18		601.20	66
601.00									10		1		601.00	77
600.80								6	8				600.80	91
600.60							19	25					600.60	135
600.40						1	12						600.40	148
600.20					12	28							600.20	188
600.00					18	1							600.00	207
599.80			1	19	1								599.80	228
599.60				11									599.60	239

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 9044: Ontonagon, Michigan on Lake Superior

	Monthly means	----- Daily Means -----										HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		/	/	/	/	/	/	/	/	/	/				
11-20 Jan		/	/	/	/	/	/	/	/	/	/				
21-31 Jan		/	/	/	/	/	/	/	/	/	/				/
1-10 Feb		/	/	/	/	/	/	/	/	/	/				
11-20 Feb		/	/	/	/	/	/	/	/	/	/				
21-28 Feb		/	/	/	/	/	/	/	/	/	/				
1-10 Mar		/	/	/	/	/	/	/	/	/	/				
11-20 Mar		/	/	/	/	/	/	/	/	/	/				
21-31 Mar	599.82	/	/	/	/	/	/	/	/	/	/	599.82	1100/31	600.02	1600/31 599.70
1-10 Apr		599.88	599.82	599.78	599.84	599.70	599.69	599.69	599.69	599.78	599.80				
11-20 Apr		599.73	599.78	599.74	599.81	599.84	599.80	599.85	599.83	599.87	599.83				
21-30 Apr	599.83	599.84	599.88	599.90	599.89	599.89	599.94	599.96	599.91	599.97	600.00		2450/5	600.29	1415/5 599.30
1-10 May		600.00	600.06	600.14	600.16	600.13	600.11	600.09	600.08	600.10	600.13				
11-20 May		600.10	600.08	600.16	600.22	600.17	600.18	600.15	600.16	600.24	600.18				
21-31 May	600.18	600.19	600.30	600.23	600.23	600.30	600.26	600.23	600.26	600.31	600.24	600.25	1615/17	600.64	0940/19 599.69
1-10 Jun		600.17	600.22	600.26	600.25	600.28	600.21	600.26	600.24	600.25	600.30				
11-20 Jun		600.26	600.24	600.26	600.26	600.29	600.28	600.30	600.28	600.28	600.28				
21-30 Jun	600.29	600.31	600.35	600.36	600.33	600.31	600.36	600.40	600.35	600.36	600.48		1822/27	600.84	1922/27 599.78
1-10 Jul		600.42	600.50	600.56	600.53	600.58	600.54	600.55	600.53	600.56	600.59				
11-20 Jul		600.64	600.57	600.61	600.69	600.63	600.69	600.68	600.66	600.65	600.65				
21-31 Jul	600.61	600.62	600.64	600.61	600.65	600.62	600.62	600.64	600.69	600.66	600.73	600.60	2230/30	601.43	1650/4 599.88
1-10 Aug		600.68	600.68	600.74	600.72	600.67	600.69	600.70	600.68	600.76	600.69				
11-20 Aug		600.70	600.78	600.75	600.75	600.76	600.72	600.70	600.73	600.74	600.76				
21-31 Aug	600.75	600.72	600.72	600.70	600.68	600.80	600.82	600.84	600.82	600.89	600.92	600.97	1215/27	601.53	0800/27 599.89
1-10 Sep		600.95	600.93	600.95	600.98	600.99	600.95	600.94	601.05	601.00	601.17				
11-20 Sep		601.20	601.21	601.15	601.17	601.18	601.15	601.14	601.19	601.36	601.19				
21-30 Sep	601.19	601.25	601.31	601.34	601.50	601.40	601.35	601.39	601.43	601.45	601.45		1100/19	602.16	1648/9 600.28
1-10 Oct		601.43	601.36	601.36	601.39	601.35	601.42	601.46	601.53	601.36	601.47				
11-20 Oct		601.65	601.54	601.54	601.49	601.47	601.46	601.47	601.42	601.40	601.45				
21-31 Oct	601.43	601.41	601.38	601.41	601.42	601.34	601.36	601.36	601.37	601.43	601.46	601.48	2158/11	602.45	1018/26 600.82
1-10 Nov		601.39	601.37	601.35	601.37	601.40	601.40	601.39	601.41	601.52	601.54				
11-20 Nov		601.46	601.36	601.33	601.33	601.35	601.28	601.39	601.33	601.36	601.45				
21-30 Nov	601.37	601.13	601.34	601.34	601.29	/	/	/	/	/	/		1923/10	602.64	0608/21 599.95
1-10 Dec		/	/	/	/	/	/	/	/	/	/				
11-20 Dec		/	/	/	/	/	/	/	/	/	/				
21-31 Dec		/	/	/	/	/	/	/	/	/	/				/

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 9064: Duluth, Minnesota on Lake Superior

1977 YEARLY MEAN ELEVATION: 600.54 FEET

HIGHEST
Monthly mean elevation: 601.50 Oct 1977
Daily mean elevation: 601.96 24 Sep 1977
Instant/hourly Elevation: 602.34 2400/23 Sep 1977

LOWEST
Monthly mean elevation: 599.63 Feb 1977
Daily mean elevation: 599.29 30 Jan 1977
Instant/hourly Elevation: 599.01 2000/30 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.89	13 Jan
600.21	23 Feb
600.19	12 Mar
600.23	27 Apr
600.46	22 May
600.49	23 Jun
600.87	30 Jul
601.05	30 Aug
601.96	24 Sep
601.82	7 Oct
601.76	9 Nov
601.85	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.29	30 Jan
599.42	13 Feb
599.42	1 Mar
599.78	5 Apr
600.06	1 May
600.18	1 Jun
600.24	1 Jul
600.54	17 Aug
600.68	9 Sep
601.22	5 Oct
600.71	21 Nov
600.81	25 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
601.80									1	1		1	601.80	3
601.60									1	4	2	1	601.60	11
601.40									7	20	13	1	601.40	52
601.20									10	6	9	6	601.20	83
601.00								1	8		5	16	601.00	113
600.80							1	5	2			6	600.80	127
600.60							23	23	1		1		600.60	175
600.40					1	8	6	2					600.40	192
600.20		1		2	24	21	1						600.20	241
600.00			6	19	6	1							600.00	273
599.80	7	1	11	8									599.80	300
599.60	15	11	11	1									599.60	338
599.40	6	15	3										599.40	362
599.20	3												599.20	365

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 9064: Duluth, Minnesota on Lake Superior

	Monthly means	----- Daily Means -----												HIGH-----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		599.78	599.87	599.87	599.84	599.85	599.70	599.75	599.70	599.86	599.75						
11-20 Jan		599.72	599.69	599.89	599.73	599.54	599.52	599.55	599.65	599.76	599.67						
21-31 Jan	599.67	599.67	599.85	599.75	599.72	599.69	599.49	599.59	599.34	599.50	599.29	599.32	1700/22	600.18	2000/30	599.01	
1-10 Feb		599.54	599.61	599.55	599.59	599.53	599.59	599.65	599.57	599.68	599.72						
11-20 Feb		599.64	599.60	599.42	599.57	599.59	599.65	599.63	599.56	599.58	599.63						
21-28 Feb	599.63	599.67	599.82	600.21	599.80	599.46	599.61	599.58	599.51				1900/23	600.47	0600/13	599.19	
1-10 Mar		599.42	599.56	600.00	599.83	599.53	599.68	599.71	599.75	599.63	599.83						
11-20 Mar		599.84	600.19	599.87	599.87	599.67	599.61	599.96	599.84	599.80	599.71						
21-31 Mar	599.83	599.78	599.78	599.67	600.13	600.07	600.03	599.87	600.12	600.06	599.97	599.91	2400/28	600.60	2100/4	599.13	
1-10 Apr		600.09	599.89	600.00	600.11	599.78	599.86	599.87	599.95	600.09	600.03						
11-20 Apr		599.94	599.97	599.92	600.07	600.06	600.01	600.05	600.05	600.08	600.03						
21-30 Apr	600.04	600.04	600.10	600.07	600.04	600.12	600.17	600.23	600.15	600.22	600.18		1200/27	600.59	1100/5	599.49	
1-10 May		600.06	600.17	600.32	600.34	600.16	600.20	600.13	600.23	600.23	600.21						
11-20 May		600.21	600.12	600.23	600.27	600.29	600.26	600.24	600.25	600.28	600.26						
21-31 May	600.26	600.31	600.46	600.28	600.32	600.36	600.35	600.32	600.35	600.38	600.33	600.28	1600/4	600.69	0900/1	599.76	
1-10 Jun		600.18	600.32	600.36	600.32	600.40	600.29	600.38	600.35	600.38	600.48						
11-20 Jun		600.36	600.41	600.39	600.36	600.42	600.34	600.37	600.22	600.29	600.33						
21-30 Jun	600.37	600.38	600.44	600.49	600.38	600.40	600.45	600.46	600.30	600.38	600.45		1400/15	600.82	0700/1	599.76	
1-10 Jul		600.24	600.56	600.62	600.62	600.67	600.60	600.60	600.55	600.64	600.76						
11-20 Jul		600.80	600.55	600.74	600.69	600.69	600.72	600.76	600.77	600.77	600.65						
21-31 Jul	600.66	600.68	600.72	600.65	600.67	600.56	600.66	600.72	600.75	600.70	600.87	600.62	1900/4	601.31	1000/1	599.80	
1-10 Aug		600.74	600.76	600.79	600.79	600.69	600.75	600.74	600.68	600.80	600.66						
11-20 Aug		600.58	600.68	600.62	600.68	600.76	600.69	600.54	600.66	600.73	600.78						
21-31 Aug	600.75	600.67	600.65	600.65	600.68	600.87	600.89	600.94	600.80	600.95	601.05	600.96	0400/30	601.35	0800/11	600.22	
1-10 Sep		600.95	600.93	601.04	601.04	601.05	601.15	601.09	601.30	600.68	601.10						
11-20 Sep		601.20	601.21	601.18	601.24	601.30	601.26	601.23	601.36	601.44	601.27						
21-30 Sep	601.29	601.42	601.58	601.68	601.96	601.59	601.36	601.38	601.51	601.51	601.58		2400/23	602.34	1600/9	599.99	
1-10 Oct		601.57	601.45	601.48	601.51	601.22	601.46	601.82	601.74	601.39	601.50						
11-20 Oct		601.34	601.47	601.65	601.49	601.47	601.60	601.55	601.43	601.51	601.53						
21-31 Oct	601.50	601.44	601.51	601.60	601.55	601.38	601.34	601.36	601.44	601.58	601.65	601.62	0200/8	602.29	1500/5	601.03	
1-10 Nov		601.46	601.48	601.39	601.52	601.56	601.62	601.56	601.59	601.76	601.23						
11-20 Nov		601.22	601.43	601.45	601.48	601.48	601.14	601.27	601.19	601.51	601.50						
21-30 Nov	601.37	600.71	601.44	601.33	601.16	601.17	601.25	601.38	601.20	601.26	601.35		0500/20	602.30	0500/21	599.99	
1-10 Dec		601.05	601.01	601.07	601.31	601.31	601.19	601.23	601.37	601.16	601.00						
11-20 Dec		601.21	601.20	601.13	601.12	601.24	601.62	601.85	601.41	601.19	601.18						
21-31 Dec	601.15	601.01	601.16	601.01	600.95	600.81	600.88	600.88	600.96	601.01	601.01	601.05	1000/17	602.04	0700/25	600.52	

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 9070: Two Harbors, Minnesota on Lake Superior

1977 YEARLY MEAN ELEVATION: 600.50 FEET

HIGHEST
Monthly mean elevation: 601.43 Oct 1977
Daily mean elevation: 601.74 24 Sep 1977
Instant/hourly Elevation: 602.12 1200/20 Nov 1977

LOWEST
Monthly mean elevation: 599.53 Feb 1977
Daily mean elevation: 599.30 30 Jan 1977
Instant/hourly Elevation: 599.05 2000/30 Jan 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.87	2 Jan
600.14	23 Feb
600.09	12 Mar
600.16	29 Apr
600.38	5 May
600.45	30 Jun
600.79	30 Jul
601.00	30 Aug
601.74	24 Sep
601.63	7 Oct
601.69	9 Nov
601.63	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.30	30 Jan
599.41	13 Feb
599.40	1 Mar
599.70	5 Apr
600.04	1 May
600.13	1 Jun
600.26	1 Jul
600.53	17 Aug
600.75	9 Sep
601.23	5 Oct
600.78	21 Nov
600.81	25 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
601.60									1	1	1	1	601.60	4
601.40									6	16	12	1	601.40	39
601.20									8	14	10	5	601.20	76
601.00									9		6	13	601.00	104
600.80								6	5			11	600.80	126
600.60							18	23	1		1		600.60	169
600.40						3	12	2					600.40	186
600.20					13	26	1						600.20	226
600.00					4	1							600.00	247
599.80	7		2	13									599.80	276
599.60	15	7	10	12									599.60	312
599.40	6	20	13	1									599.40	342
599.20	3		4										599.20	346
			1											

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 9070: Two Harbors, Minnesota on Lake Superior

	Monthly means	----- Daily Means -----											HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		599.78	599.87	599.84	599.82	599.84	599.68	599.74	599.69	599.83	599.72					
11-20 Jan		599.71	599.68	599.85	599.71	599.54	599.51	599.54	599.63	599.74	599.65					
21-31 Jan	599.66	599.65	599.81	599.73	599.68	599.67	599.50	599.56	599.36	599.49	599.30	599.32	1800/22	600.11	2000/30	599.05
1-10 Feb		599.52	599.59	599.52	599.56	599.51	599.57	599.62	599.55	599.63	599.70					
11-20 Feb		599.60	599.57	599.41	599.52	599.56	599.62	599.59	599.51	599.55	599.59					
21-28 Feb	599.59	599.63	599.69	600.14	599.75	599.45	599.58	599.54	599.49				2100/23	600.31	0600/13	599.21
1-10 Mar		599.40	599.52	599.90	599.77	599.52	599.64	599.67	599.70	599.60	599.77					
11-20 Mar		599.80	600.09	599.83	599.82	599.65	599.46	/	599.73	599.77	599.67					
21-31 Mar	599.77	599.74	599.74	599.66	600.01	600.00	599.97	599.83	600.00	599.96	599.91	599.86	2200/28	600.38	2000/4	599.23
1-10 Apr		600.02	/	/	600.01	599.70	599.86	599.83	599.87	/	/					
11-20 Apr		599.88	599.91	599.86	600.01	600.00	599.97	600.02	600.00	600.02	599.99					
21-30 Apr	599.99	599.99	600.04	600.04	600.00	600.06	600.13	600.14	600.10	600.16	600.15		1100/27	600.36	1100/5	599.50
1-10 May		600.04	600.12	600.26	600.30	600.38	/	/	/	/	/					
11-20 May		/	/	/	/	/	600.22	600.19	600.22	600.23	600.23					
21-31 May	600.23	600.23	/	/	/	/	600.23	600.24	600.26	600.17	600.24	600.27	1600/4	600.55	0300/29	599.57
1-10 Jun		600.13	600.27	600.31	600.26	600.32	600.24	600.32	600.29	600.32	600.41					
11-20 Jun		600.30	600.29	600.32	600.30	600.36	600.30	600.33	600.24	600.27	600.28					
21-30 Jun	600.32	600.33	600.38	600.42	600.33	600.34	600.39	600.39	600.27	600.31	600.45		1300/15	600.73	0700/1	599.81
1-10 Jul		600.26	600.50	600.55	600.53	600.61	600.57	600.55	600.52	600.58	600.67					
11-20 Jul		600.69	600.52	600.66	600.63	600.61	600.66	600.67	600.71	600.71	600.60					
21-31 Jul	600.61	600.62	600.67	600.61	600.61	600.52	600.60	600.67	600.70	600.64	600.79	600.59	1800/5	601.17	1000/1	599.89
1-10 Aug		600.68	600.70	600.74	600.74	600.66	600.70	600.71	600.66	600.75	600.65					
11-20 Aug		600.55	600.66	600.61	600.64	600.70	600.65	600.53	600.63	600.68	600.73					
21-31 Aug	600.71	600.64	600.62	600.63	600.64	600.82	600.82	600.85	600.78	600.90	601.00	600.93	0300/30	601.30	0600/11	600.19
1-10 Sep		600.90	600.89	600.99	601.00	600.98	601.06	601.01	601.23	600.75	601.07					
11-20 Sep		601.14	601.15	601.13	601.17	601.24	601.20	601.18	601.27	601.33	601.21					
21-30 Sep	601.22	601.33	601.46	601.55	601.74	601.54	601.36	601.38	601.45	601.47	601.50		2400/23	602.01	1600/9	600.09
1-10 Oct		601.50	601.40	601.43	601.47	601.23	601.39	601.63	601.55	601.29	601.43					
11-20 Oct		601.33	601.40	601.55	601.40	601.39	601.52	601.49	601.36	601.42	601.45					
21-31 Oct	601.43	601.36	601.41	601.49	601.46	601.32	601.26	601.27	601.35	601.49	601.59	601.57	0100/8	601.96	2400/25	601.04
1-10 Nov		601.43	601.45	601.37	601.46	601.50	601.52	601.50	601.54	601.69	601.23					
11-20 Nov		601.20	601.38	601.43	601.42	601.45	601.19	601.26	601.17	601.43	601.47					
21-30 Nov	601.34	600.78	601.39	601.29	601.13	601.16	601.24	601.34	601.19	601.24	601.32		1200/20	602.12	0500/21	600.14
1-10 Dec		601.05	601.00	601.06	601.25	601.31	601.17	601.21	601.36	601.12	600.99					
11-20 Dec		601.19	601.16	601.09	601.09	601.19	601.48	601.63	601.31	601.18	601.15					
21-31 Dec	601.11	601.00	601.14	600.99	600.94	600.81	600.85	600.90	600.93	600.98	600.98	601.02	1000/17	601.80	2200/26	600.59

INTERNATIONAL
GREAT LAKES
DATUM (1955)

ANNUAL SUMMARY OF LEVELS, 1977
Station 9090: Grand Marais, Minnesota on Lake Superior

1977 YEARLY MEAN ELEVATION: 600.53 FEET

HIGHEST
Monthly mean elevation: 601.39 Oct 1977
Daily mean elevation: 601.55 24 Sep 1977
Instant/hourly Elevation: 601.79 1300/20 Nov 1977

LOWEST
Monthly mean elevation: 599.73 Jan 1977
Daily mean elevation: 599.66 8 Jan 1977
Instant/hourly Elevation: 599.42 0400/13 Apr 1977

HIGHEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.82	2 Jan
	Feb
599.93	26 Mar
600.08	30 Apr
600.21	29 May
600.38	30 Jun
600.67	11 Jul
600.88	30 Aug
601.55	24 Sep
601.51	17 Oct
601.53	9 Nov
601.30	17 Dec

LOWEST DAILY MEAN
FOR EACH MONTH

Elev.	Date
599.66	8 Jan
	Feb
599.73	30 Mar
599.69	5 Apr
600.02	1 May
600.09	1 Jun
600.27	1 Jul
600.52	17 Aug
600.82	2 Sep
601.28	26 Oct
600.99	21 Nov
600.86	25 Dec

Elev. (ft.)	~~~~~ FREQUENCY DISTRIBUTION OF DAILY AVERAGE LEVELS, 1977 ~~~~~												Elev. (ft.)	No. of days above elev.
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
601.40									3	13	3		601.40	19
601.20									9	17	19	4	601.20	68
601.00									10		7	15	601.00	100
600.80								2	8		1	12	600.80	123
600.60							2	11					600.60	136
600.40							24	13					600.40	173
600.20					1	20	1						600.20	195
600.00					30	10							600.00	240
599.80	1		2	20									599.80	263
599.60	11		4	5									599.60	283

INTERNATIONAL
GREAT LAKES
DATUM (1955)

DAILY MEAN WATER LEVELS, MONTHLY MEANS AND EXTREMES, 1977

Station 9090: Grand Marais, Minnesota on Lake Superior

	Monthly means	----- Daily Means -----										HIGH----Instant/hourly-----LOW Hrs/day Elev. Hrs/day Elev.			
1-10 Jan		599.75	599.82	599.80	599.76	599.80	599.70	599.72	599.66	599.76	599.68				
11-20 Jan		599.68	599.66	/	/	/	/	/	/	/	/				
21-31 Jan	599.73	/	/	/	/	/	/	/	/	/	/	/	2400/2	599.94	1200/8 599.46
1-10 Feb		/	/	/	/	/	/	/	/	/	/				
11-20 Feb		/	/	/	/	/	/	/	/	/	/				
21-28 Feb		/	/	/	/	/	/	/	/	/	/				
1-10 Mar		/	/	/	/	/	/	/	/	/	/				
11-20 Mar		/	/	/	/	/	/	/	/	/	/				
21-31 Mar	599.81	/	/	/	/	/	599.93	599.75	599.80	599.87	599.73	599.78	0100/29	600.08	0300/30 599.48
1-10 Apr		599.91	599.76	599.88	599.86	599.69	599.82	599.77	599.82	599.95	599.92				
11-20 Apr		599.84	599.79	599.75	599.86	599.87	599.86	599.91	599.86	599.93	599.90				
21-30 Apr	599.90	599.91	599.96	599.99	599.95	599.99	600.04	600.05	600.01	600.06	600.08		2100/29	600.20	0400/13 599.42
1-10 May		600.02	600.02	600.11	600.11	600.09	600.06	600.02	600.04	600.05	600.09				
11-20 May		600.08	600.05	600.10	600.14	600.11	600.12	600.07	600.11	600.13	600.11				
21-31 May	600.11	600.16	600.19	600.20	600.16	600.18	600.18	600.16	600.17	600.21	600.15	600.16	2100/21	600.58	0200/6 599.79
1-10 Jun		600.09	600.18	600.23	600.19	600.21	600.14	600.22	600.19	600.20	600.24				
11-20 Jun		600.20	600.18	600.20	600.21	600.23	600.22	600.25	600.22	600.21	600.20				
21-30 Jun	600.23	600.24	600.26	600.29	600.25	600.25	600.29	600.30	600.26	600.28	600.38		2100/17	600.74	0800/1 599.85
1-10 Jul		600.27	600.41	600.45	600.44	600.45	600.49	600.47	/	/	/				
11-20 Jul		600.67	600.49	600.52	600.57	600.50	600.56	600.56	600.60	600.59	600.52				
21-31 Jul	600.52	600.53	600.55	600.53	600.47	600.53	600.59	600.58	600.60	600.63	600.59	/	2000/5	601.02	0700/1 599.94
1-10 Aug		/	/	/	/	/	600.64	600.61	600.60	600.62	600.62				
11-20 Aug		600.54	600.60	600.59	600.56	600.60	600.61	600.52	600.57	600.57	600.62				
21-31 Aug	600.64	600.59	600.58	600.57	600.55	600.67	600.71	600.72	600.74	600.78	600.88	600.87	1800/30	601.08	0700/11 600.28
1-10 Sep		600.84	600.82	600.86	600.90	600.88	600.91	600.89	601.05	600.93	601.03				
11-20 Sep		601.07	601.07	601.06	601.09	601.14	601.11	601.11	601.15	601.28	601.22				
21-30 Sep	601.15	601.28	601.34	601.38	601.55	601.48	601.37	601.35	601.40	601.41	601.40		1300/24	601.64	2400/9 600.56
1-10 Oct		601.39	601.34	601.38	601.41	601.29	601.34	601.47	601.46	601.33	601.47				
11-20 Oct		601.46	601.42	/	601.45	601.39	601.47	601.51	601.37	601.40	601.43				
21-31 Oct	601.39	601.35	601.35	601.41	601.40	601.35	601.28	601.28	601.31	601.38	601.43	601.44	0200/8	601.66	2300/27 601.14
1-10 Nov		601.36	601.37	601.32	601.33	601.38	601.36	601.38	601.41	601.53	601.23				
11-20 Nov		601.15	601.27	601.35	601.32	601.37	601.28	601.26	601.16	601.30	601.49				
21-30 Nov	601.28	600.99	601.32	601.22	601.14	601.15	601.18	601.24	601.17	601.20	601.27		1300/20	601.79	0600/21 600.62
1-10 Dec		601.05	601.01	601.03	601.13	601.26	601.09	601.14	601.28	601.00	600.96				
11-20 Dec		601.11	601.10	601.06	601.02	601.05	601.21	601.30	601.11	601.10	601.07				
21-31 Dec	601.04	600.98	601.05	600.96	600.90	600.86	600.86	600.91	600.91	600.92	600.90	600.91	1100/8	601.49	0600/25 600.65