

CGSS Special Pub. 278

1951

SURFACE WATER TEMPERATURES

AT TIDE STATIONS

ATLANTIC COAST

NORTH AND SOUTH AMERICA

Woods Hole Oceanographic Institution
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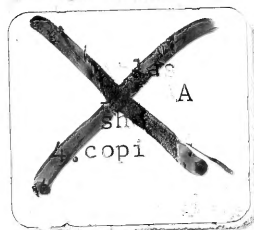
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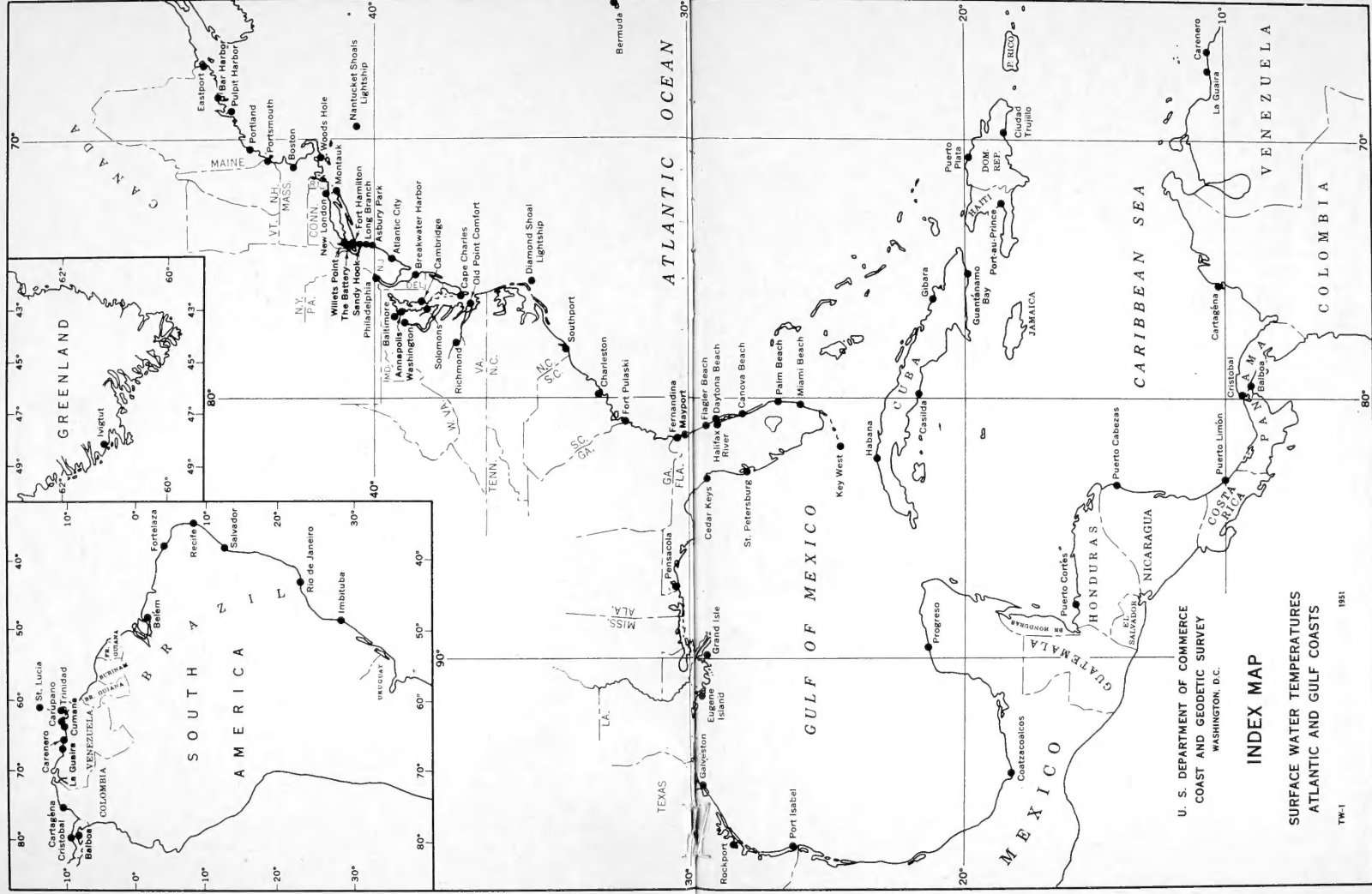
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U. S. DEPARTMENT OF COMMERCE
COAST AND GEODETIC SURVEY
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INDEX MAP

**SURFACE WATER TEMPERATURES
ATLANTIC AND GULF COASTS**

LIST OF STATIONS

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	°	'	°	'	
Annapolis, Md.-----	38	59 N.	76	29 W.	23
Asbury Park, N. J.-----	40	13 N.	74	00 W.	17
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Breakwater Harbor, Del.-----	38	47 N.	75	06 W.	19
Cambridge, Md.-----	38	34 N.	76	04 W.	23
Canova Beach, Fla.-----	28	08 N.	80	35 W.	30
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Fernandina, Fla.-----	30	41 N.	81	28 W.	28
Flagler Beach, Fla.-----	29	29 N.	81	08 W.	29
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Fort Hamilton, New York, N. Y.-----	40	37 N.	74	02 W.	15
Fort Pulaski, Savannah River, Ga.-----	32	02 N.	80	54 W.	27
Galveston, Tex.-----	29	19 N.	94	48 W.	36
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Grand Isle, 8 miles SE. of, La.-----	29	10 N.	89	55 W.	35
Guantánamo Bay, Cuba-----	19	54 N.	75	09 W.	41
Habana, Cuba-----	23	09 N.	82	20 W.	41
Halifax River, Daytona Beach, Fla.-----	29	13 N.	81	01 W.	30

STATION	LAT.		LONG.		PAGE
	°	'	°	'	
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Mayport, Fla.-----	30	24 N.	81	26 W.	28
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Montauk, Fort Pond Bay, L. I., N. Y.-----	41	03 N.	71	58 W.	12
Nantucket Shoals Lightship-----	40	37 N.	69	37 W.	12
New London, Conn.-----	41	22 N.	72	06 W.	12
New York (Fort Hamilton), N. Y.-----	40	37 N.	74	02 W.	15
New York (The Battery), N. Y.-----	40	42 N.	74	01 W.	14, 46
New York (Willets Point), N. Y.-----	40	48 N.	73	47 W.	13
Old Point Comfort, Va.-----	37	00 N.	76	18 W.	20
Palm Beach, Fla.-----	26	43 N.	80	02 W.	31
Pensacola, Fla.-----	30	24 N.	87	13 W.	34
Philadelphia, Pa.-----	39	57 N.	75	08 W.	19
Port-au-Prince, Haiti-----	18	33 N.	72	21 W.	42
Port Isabel, Tex.-----	26	04 N.	97	13 W.	37
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Puerto Cortés, Honduras-----	15	50 N.	87	57 W.	39
Puerto Limón, Costa Rica-----	10	00 N.	83	02 W.	39
Puerto Mexico (Coatzacoalcos), Mexico---	18	09 N.	94	25 W.	38
Puerto Plata, Dominican Republic-----	19	49 N.	70	42 W.	42
Pulpit Harbor, Me.-----	44	09 N.	68	53 W.	8
Recife, Brazil-----	8	03 S.	34	52 W.	44
Richmond, Va.-----	37	32 N.	77	25 W.	21
Rio de Janeiro (Fortaleza de Santa Cruz), Brazil---	22	56 S.	43	08 W.	44
Rockport, Tex.-----	28	01 N.	97	03 W.	37
St. Lucia (Vieux Fort), B. W. I.-----	13	44 N.	60	58 W.	42
St. Petersburg, Fla.-----	27	46 N.	82	38 W.	32
Salvador, Brazil-----	12	58 S.	38	31 W.	44
Sandy Hook, N. J.-----	40	28 N.	74	01 W.	16
Solomons, Md.-----	38	19 N.	76	27 W.	22
Southport, N. C.-----	33	55 N.	78	01 W.	26
Trinidad (Carenage Bay), B. W. I.-----	10	41 N.	61	36 W.	42
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INTRODUCTION

The summaries of sea water temperatures presented in this publication are based on observations made in Atlantic harbor and coastal waters through the year 1950. The temperatures were observed primarily at tide stations which, in the United States, were maintained by the Coast and Geodetic Survey, often with the cooperation of other organizations. Final results for the Canal Zone were supplied by the Meteorological and Hydrographic Branch, The Panama Canal Company, and for Venezuela by the Ministerio de Obras Publicas, Estados Unidos de Venezuela. For other countries, the Coast and Geodetic Survey derived the data from observations made by organizations in the countries concerned. In Latin America the observations were obtained through the cooperation of the Inter American Geodetic Survey.

Table 1 presents monthly means and yearly means and extremes for each year of observations. For each station at which the series of observations covered two or more years, there are also given the following monthly values for the series: the mean of the monthly means, the maximum observed, the mean of the monthly maxima, the mean of the monthly minima, and the minimum observed.

When an asterisk accompanies an annual extreme in either of the two right hand columns of Table 1, it indicates that the extreme might have been exceeded if observations had been available for all months in which the maximum or minimum normally occurs. If observations are not available for any month in which the yearly maximum or minimum might occur, the extreme has been omitted.

These data are based upon thermometer readings made in a sample of water drawn by bucket from a foot or two below the surface. The observations are usually made once each weekday at whatever time the observer attends the tide gage, and it may be assumed that in the course of a month or a year the distribution of observations is fairly uniform over all phases of the tide. For days when ice prevented the drawing of samples at some North American stations, the temperature of the normal freezing point of the sea water at the station has been used to permit the computing of monthly means. This is indicated by footnotes.

Table 2 shows mean bihourly temperatures and series means and extremes by months. They have been derived from a continuous trace made by recording thermometers. At stations within the United States, the thermometer bulbs were fixed just below the lowest observed low water, so that during a day they were covered by varying amounts of tidal water. At stations in the Canal Zone, the bulbs were kept about three feet below the surface of the water.

All temperatures in this publication are given in degrees Fahrenheit. They can be converted to the centigrade scale by means of Table 3 which is on the inside back cover.

Mean temperature variations during the month and year and monthly extreme temperatures from Table 1 are shown graphically for a number of places. The unusual shape of the temperature curves for Daytona Beach and Canova Beach reflects the upwelling that occurs along this section of the coast during the summer months.

The following publications complete this series:

- Special Pub. 279. Density of Sea Water, Atlantic Coast.
- Special Pub. 280. Surface Water Temperatures, Pacific Ocean.
- Special Pub. 281. Density of Sea Water, Pacific Ocean.

Table 1.—Surface Water Temperatures

Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
EASTPORT, ME.															
										<i>Copied</i>					
1930	36.3	33.6	34.5	37.9	41.5	45.1	51.9	54.5	53.1	52.5	48.7	43.2	44.4	57	32
1931	37.9	34.3	35.2	37.6	40.6	45.1	48.7	51.6	52.3	50.2	48.4	43.9	43.9	54	34
1932	39.6	36.0	34.7	36.9	39.6	43.9	48.0	51.6	52.5	52.2	47.7	42.3	43.9	54	34
1933	39.6	37.4	36.5	37.9	41.0	45.1	48.6	50.7	--	50.4	45.1	39.2	--	52	35
1934	34.2	30.7	32.4	35.9	39.9	43.9	48.9	50.7	52.0	51.4	47.3	43.0	42.5	54	28
1935	34.5	31.6	32.2	34.9	39.2	43.9	48.2	51.6	51.6	50.0	47.8	42.1	42.3	53	30
1936	37.9	34.7	35.8	37.8	41.2	45.3	48.4	51.8	52.0	50.7	46.6	41.5	43.6	53	33
1937	38.3	35.8	35.9	38.1	42.3	46.0	49.8	52.9	53.1	50.9	48.0	43.3	44.5	55	35
1938	37.9	34.9	34.2	36.9	39.9	44.6	48.7	51.8	51.4	50.9	48.4	42.1	43.5	54	33
1939	38.5	34.9	33.6	35.4	39.4	43.9	48.7	51.4	52.0	50.2	45.7	41.2	42.9	54	32
1940	36.0	33.3	32.9	35.9	39.7	43.2	46.9	49.9	50.4	48.2	45.7	40.8	41.9	52	31
1941	36.5	33.9	33.4	36.1	39.7	43.3	47.3	49.3	50.2	48.7	45.9	41.0	42.1	51	32
1942	36.5	33.1	34.2	36.5	39.9	43.5	47.3	49.6	50.4	49.3	46.0	39.7	42.2	52	32
1943	34.3	32.4	31.6	34.3	38.3	43.3	47.3	50.5	51.4	50.5	47.5	42.4	42.0	52	30
1944	37.6	34.2	33.3	35.6	39.4	44.1	47.8	51.4	52.9	51.1	47.1	43.2	43.1	54	32
1945	37.2	35.4	36.0	37.9	40.9	44.2	48.9	51.9	52.3	50.4	46.6	41.2	43.6	54	34
1946	36.5	32.5	34.5	37.2	40.5	43.9	48.6	51.3	52.5	52.3	49.1	44.2	43.6	53	30
1947	38.4	36.3	36.4	38.0	41.1	45.5	49.8	53.6	54.8	53.3	49.6	43.7	45.0	56	35
1948	38.4	34.7	33.9	35.8	38.4	42.1	47.0	50.0	50.5	49.9	48.2	44.2	42.9	52	32
1949	40.2	36.9	36.0	38.9	42.1	46.6	50.5	53.9	55.2	53.7	49.7	45.2	45.7	56	35
1950	41.7	37.6	36.1	37.4	40.4	45.1	48.7	51.9	52.3	51.1	48.5	45.5	44.7	54	34
Mean	37.5	34.5	34.4	36.8	40.2	44.4	48.6	51.5	52.1	50.9	47.5	42.5	43.4		
Max.	45	40	41	41	45	49	54	57	56	55	52	47		57	
Mean Max.	40.1	36.1	35.9	38.7	42.4	46.9	51.2	53.2	53.4	52.1	49.5	45.3			
Mean Min.	34.8	33.2	33.0	35.2	38.2	41.8	46.0	49.8	51.1	49.2	44.8	39.1			
Min.	30	28	30	33	36	40	44	48	49	46	41	35			28

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued

Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
BAR HARBOR, ME. †															
										<i>Corrected</i>					
1947	--	--	--	--	--	--	--	--	57.0	53.4	47.5	37.8	--	*63	*33
1948	32.2	30.2	32.9	38.8	43.9	50.2	54.5	56.3	53.4	49.7	47.1	40.5	44.1	63	29
1949	35.5	32.8	35.2	41.1	47.9	54.2	58.1	58.2	57.0	54.4	47.2	39.3	46.7	64	29
1950	35.3	31.1	31.7	37.7	44.6	50.9	57.0	57.6	54.0	50.7	47.2	40.5	44.9	61	28
Mean	34.3	31.4	33.3	39.2	45.5	51.8	56.5	57.4	55.4	52.0	47.2	39.5	45.3		
Max.	43	37	39	48	52	58	64	63	63	58	54	48		64	
Mean Max.	40.2	35.0	37.1	45.3	50.7	55.5	61.0	61.2	58.6	55.5	51.7	45.4			
Mean Min.	29.3	28.3	29.3	34.9	41.1	47.5	52.0	54.3	51.8	43.2	41.9	32.5			
Min.	29	28	28	32	39	46	51	51	50	46	38	32			28
PULPIT HARBOR, PENOBSCOT BAY, ME. <i>Corrected</i>															
1945	--	--	--	--	--	--	--	63.4	59.2	52.5	47.3	37.0	--	*70	*30
1946	33.6	29.3	--	40.5	46.9	53.2	59.9	60.3	58.6	54.3	48.7	42.1	--	63	*29
PORTLAND, ME. <i>Corrected</i>															
1922	+32.0	+32.0	35.3	41.0	47.8	--	59.2	59.7	57.0	51.1	42.8	34.9	--	63	--
1923	+31.0	+31.0	+31.0	36.1	46.0	52.7	55.9	56.7	57.4	52.0	45.3	41.2	44.7	62	--
1924	34.9	33.8	34.2	38.3	45.1	50.2	56.7	57.7	56.5	52.2	44.8	36.5	45.1	61	34
1925	+32.0	+32.0	35.2	42.3	47.1	53.9	58.9	60.3	57.7	49.8	43.0	37.4	45.9	62	--
1926	33.6	+31.0	+32.0	37.2	45.1	51.4	58.1	59.9	57.9	52.7	45.5	38.3	45.2	61	--
1927	33.4	+31.0	34.2	41.0	47.7	54.7	58.8	58.1	57.4	52.9	46.8	36.9	46.1	61	--
1928	33.3	33.1	37.0	39.2	--	--	--	--	--	--	--	38.1	--	--	32
1929	34.9	32.5	34.7	38.7	--	--	58.6	58.5	53.1	52.9	45.9	36.1	--	60	32

1930	†31.0	--	34.7	39.9	48.6	57.2	60.1	60.6	60.3	54.0	44.3	34.2	--	64
1931	†31.0	†31.0	36.3	42.6	52.3	56.5	61.5	60.6	59.4	52.9	46.9	39.9	47.6	63
1932	34.8	†31.0	35.1	40.8	48.6	57.4	60.6	61.7	58.6	52.2	44.6	41.0	47.2	63
1933	38.8	36.3	35.6	41.4	48.9	56.8	60.8	63.0	58.8	53.4	43.3	34.7	47.6	64
1934	--	--	†31.0	40.1	49.6	55.3	58.6	58.6	57.9	--	--	--	--	61
1935	--	†31.0	35.1	39.7	--	--	62.2	61.9	59.7	53.4	48.4	37.4	--	66
1936	†32.0	†31.0	36.9	40.3	45.0	53.1	58.6	59.9	56.5	51.1	--	36.0	--	63
1937	35.2	33.8	35.4	40.6	47.8	56.5	62.1	63.3	58.3	51.4	44.6	36.7	47.1	65
1938	32.9	33.3	35.1	42.3	47.8	55.6	59.4	61.9	56.7	52.9	45.7	37.6	46.3	64
1939	33.3	†31.0	33.4	37.6	45.6	52.7	58.3	60.8	56.5	50.2	41.2	36.0	44.7	63
1940	†31.0	†31.0	32.7	37.4	46.2	53.2	58.1	59.7	56.7	49.5	42.8	34.5	44.4	64
1941	†31.0	†31.0	33.4	41.5	48.6	54.3	59.4	58.5	56.1	51.1	44.2	36.9	45.5	62
1942	32.5	†31.0	34.7	40.5	48.7	56.5	59.5	59.7	56.7	51.6	44.4	35.4	45.9	63
1943	†31.0	†31.0	†32.0	37.3	46.6	55.0	60.1	60.4	57.9	51.6	45.0	36.1	45.4	67
1944	32.9	30.9	33.8	39.0	48.7	55.6	60.6	62.1	57.7	50.7	42.1	34.7	45.7	66
1945	30.6	30.0	35.6	41.2	46.0	54.7	59.7	60.4	59.4	50.9	44.3	35.6	45.7	63
Mean	32.9	31.3	34.4	39.9	47.5	54.7	59.4	60.2	57.8	51.8	44.6	36.8	46.0	
Max.	42	37	42	50	55	64	66	67	65	59	52	45	67	
Mean Max.	35.9	33.7	37.5	43.3	51.8	58.3	61.9	62.5	60.9	55.9	48.5	41.2		
Mean Min.	--	--	32.4	36.6	43.7	51.1	56.4	58.1	54.6	47.4	40.1	33.3		
Min.	28	28	30	32	40	47	53	54	50	42	36	30		28
1944	34.0	33.8	34.5	40.3	49.8	54.0	59.4	62.2	57.4	51.8	45.1	37.9	46.7	67
1945	33.1	32.5	37.8	43.7	48.0	55.0	57.9	61.0	60.1	50.7	45.5	36.9	46.9	64
1946	34.5	31.6	36.1	41.5	47.3	52.9	58.6	62.1	60.1	52.7	48.2	40.1	47.1	65
1947	35.1	34.5	37.2	41.0	46.8	55.4	60.3	64.0	61.0	53.8	47.2	39.6	48.0	68
1948	33.8	32.2	35.1	41.9	48.0	52.7	59.5	59.2	58.6	53.2	48.3	41.3	47.0	66
1949	37.6	36.6	38.2	45.0	50.6	54.5	61.6	62.2	57.1	53.7	47.9	40.8	48.9	68

PORTSMOUTH, N.H.

† For mean bihourly temperatures by months, see Table 2.

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.
 † All observations of 32° and below were recorded as 32°. For months during which all or most of the daily observations were recorded as 32°, a mean of 31.0° has been inferred. For months during which about half of the daily observations were recorded as 32°, a mean of 32.0° has been inferred.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
PORTSMOUTH, N.H.—Continued															
1950	38.1	33.8	33.6	40.7	46.3	52.7	59.1	61.8	57.7	53.4	48.6	42.0	47.3	66	30
Mean	35.2	33.6	36.1	42.0	48.1	53.9	59.5	61.8	59.9	52.8	47.3	39.8	47.4		
Max.	42	38	43	49	56	64	66	68	66	57	52	46		68	
Mean Max.	38.4	35.3	40.0	45.3	52.8	60.3	64.4	65.4	62.7	55.7	50.3	43.4			
Mean Min.	32.2	31.4	32.7	39.0	43.5	48.0	53.1	56.1	54.3	49.7	43.4	35.0			
Min.	29	30	30	37	41	46	50	53	53	46	40	33			29
BOSTON, MASS.															
1922	31.3	32.5	37.4	44.1	54.3	60.1	64.4	64.6	61.5	54.5	44.6	35.8	48.8	70	29
1923	31.5	30.2	33.1	40.6	51.1	60.4	61.0	61.5	61.5	55.2	47.7	42.4	48.0	68	29
1924	35.4	31.6	35.8	43.0	49.1	57.0	61.9	63.1	60.4	53.2	46.6	36.7	47.8	68	30
1925	30.2	34.0	38.3	45.9	51.4	60.4	63.0	66.6	63.1	51.8	44.6	38.7	49.0	70	29
1926	32.9	31.1	34.2	39.9	49.6	57.2	63.9	67.3	62.2	55.0	47.3	35.4	48.0	70	29
1927	32.7	33.3	37.9	43.3	50.9	57.2	63.3	61.0	61.5	55.6	49.3	39.9	48.8	68	29
1928	35.8	32.9	36.0	42.4	50.4	57.7	63.5	67.3	63.0	55.8	46.6	40.1	49.3	71	30
1929	34.5	33.6	37.6	43.5	50.0	61.5	62.1	61.9	63.3	55.6	47.3	36.1	48.9	67	32
1930	36.3	33.6	37.8	43.0	52.7	59.7	63.0	65.1	65.7	55.4	48.4	39.2	50.0	68	31
1931	34.7	33.1	38.3	45.5	50.9	61.0	65.1	65.5	64.4	57.0	49.3	40.6	50.4	69	30
1932	38.5	34.9	36.0	43.7	52.9	59.2	61.0	63.1	61.9	55.6	47.7	39.4	49.5	65	32
1933	38.7	35.6	36.3	43.7	53.1	59.5	64.8	66.9	63.0	56.1	44.6	36.3	49.9	70	30
1934	32.7	29.8	33.4	43.7	49.1	61.3	64.4	62.8	63.3	55.6	47.1	38.3	48.5	65	29
1935	32.0	31.3	36.1	41.9	49.6	57.9	64.0	66.4	61.9	55.0	49.6	37.9	48.6	69	29
1936	33.3	29.8	37.4	43.0	51.8	60.6	66.0	63.9	61.5	54.7	44.4	37.2	48.6	69	29
1937	39.0	36.7	36.7	43.3	52.2	60.4	66.6	64.0	62.1	55.0	46.8	38.8	50.1	69	35
1938	34.3	35.2	38.1	45.1	52.7	58.5	63.9	64.4	60.3	55.0	47.1	39.9	49.5	73	31
1939	34.7	33.8	36.5	42.8	52.0	60.6	63.1	66.7	63.3	55.8	44.4	38.3	49.3	70	31

1940	31.5	31.5	34.3	41.7	51.2	58.5	63.1	64.2	62.8	54.5	46.0	38.3	48.2	69	29
1941	34.0	35.1	34.7	46.2	54.5	62.1	62.1	64.8	61.2	55.2	48.2	39.9	49.7	68	30
1942	33.3	31.5	38.8	45.5	54.3	61.7	64.8	67.1	63.7	57.6	47.1	35.8	50.1	72	28
1943	31.2	32.7	36.0	42.1	53.8	61.5	66.6	66.6	65.3	57.2	48.2	37.2	49.8	72	30
1944	34.5	34.3	37.6	44.2	57.0	61.5	--	68.9	64.0	56.7	47.7	39.0	--	*75	31
1945	32.5	33.3	42.4	49.6	53.6	61.3	66.2	67.1	65.7	55.8	49.5	37.6	51.2	71	28
1946	36.0	33.7	42.3	45.5	53.6	60.4	64.4	68.0	66.2	59.0	52.2	41.9	51.9	72	31
1947	36.4	35.6	39.4	45.9	52.5	60.6	66.9	68.3	67.5	58.7	49.1	39.6	51.7	75	33
1948	33.3	32.2	38.6	46.9	54.2	60.3	66.1	65.2	65.1	57.9	52.0	42.9	51.2	69	29
1949	38.9	37.8	40.4	48.7	57.1	62.5	69.5	69.2	62.8	58.8	50.2	41.5	53.1	72	34
1950	40.6	36.3	36.9	45.5	53.2	60.9	66.5	66.7	63.3	58.0	51.5	43.0	51.9	71	32
Mean	34.5	33.3	37.2	44.2	52.4	60.1	64.3	65.5	63.2	55.9	47.8	38.9	49.8		
Max.	45	41	48	54	63	70	72	75	75	64	58	48		75	
Mean Max.	37.7	35.7	41.3	48.6	57.6	64.9	68.0	69.3	67.0	60.7	52.2	43.4			
Mean Min.	31.5	30.9	33.3	40.2	47.6	55.7	60.7	62.1	59.4	51.0	43.1	34.4			28
Min.	28	26	29	32	44	50	57	56	55	46	37	30			
1944	--	--	35.4	42.1	59.2	63.1	70.0	71.8	68.2	59.2	48.0	38.1	--	76	*33
1945	32.4	30.6	37.9	48.0	54.5	62.4	70.7	70.7	68.5	59.0	50.5	37.6	51.9	73	27
1946	32.9	31.9	39.0	45.3	53.1	61.9	68.4	68.5	66.2	61.2	53.6	42.8	52.1	71	29
1947	35.8	34.0	36.1	43.5	50.7	61.2	71.8	72.5	69.6	61.0	49.5	38.8	52.0	76	31
1948	31.1	30.2	35.8	44.6	52.3	60.6	69.5	71.3	68.0	58.3	53.1	43.8	51.6	74	28
1949	38.6	36.7	--	48.5	55.4	65.4	71.7	72.5	67.9	61.5	52.0	41.9	--	77	*34
1950	39.6	36.2	34.0	42.3	50.2	62.0	69.7	71.0	66.3	59.5	53.0	43.0	52.2	74	31
Mean	35.1	33.3	36.4	44.9	53.6	62.4	70.3	71.2	67.8	60.0	51.4	40.9	52.3		
Max.	45	39	45	53	61	73	76	77	74	67	60	49		77	
Mean Max.	39.4	36.3	41.3	48.6	58.4	68.4	73.8	74.1	71.5	64.3	56.7	45.8			
Mean Min.	32.8	30.1	32.0	41.0	48.2	56.8	66.4	68.7	65.3	55.2	45.9	35.1			
Min.	28	27	30	36	45	55	65	66	60	51	43	30			27

WOODS HOLE, MASS.

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
NANTUCKET SHOALS LIGHTSHIP															
1923	--	--	--	--	--	--	--	--	--	--	50.5	47.8	--	--	*43
1924	41.5	38.3	38.1	40.3	43.3	49.8	55.4	59.6	58.5	56.6	51.4	44.2	48.1	69	36
1925	40.5	39.4	39.2	42.8	46.6	51.8	54.7	--	--	--	--	--	--	*61	*37
NEW LONDON, CONN.															
1947	--	--	--	--	--	--	--	72.6	70.9	63.0	50.2	41.3	--	*78	*37
1948	34.7	33.6	38.8	48.8	56.5	64.7	73.9	71.6	68.2	59.1	54.6	45.1	54.1	80	31
1949	40.3	39.3	42.5	51.6	61.0	69.3	73.6	73.1	68.5	63.4	54.0	44.6	56.8	79	36
1950	41.0	37.9	38.6	47.5	55.8	66.7	70.8	71.9	67.0	61.7	54.0	43.7	54.7	74	33
Mean	38.7	36.9	40.0	49.3	57.8	66.9	72.8	72.3	68.6	61.8	53.2	43.7	55.2	80	
Max.	45	42	52	55	66	78	79	80	78	68	60	50			
Mean Max.	42.7	39.7	48.0	53.3	64.3	74.3	77.0	76.8	74.0	66.5	58.2	48.5			
Mean Min.	34.7	33.7	34.7	44.3	51.3	61.3	68.3	68.5	63.5	56.2	46.2	38.0			
Min.	31	31	33	42	49	59	67	68	62	50	43	37			31
MONTAUK, FORT POND BAY, L.I., N.Y.															
1947	--	--	--	--	--	--	--	--	68.9	62.5	51.9	44.3	--	*73	*32
1948	33.1	31.7	36.6	41.8	49.5	59.6	67.6	70.0	68.5	59.8	54.5	45.2	51.5	76	29
1949	41.4	39.1	39.4	46.6	55.2	65.2	71.2	71.8	67.9	62.3	53.1	44.1	54.8	76	36
1950	41.0	36.7	35.7	42.5	48.2	59.2	67.4	69.5	65.3	60.8	53.2	44.2	52.0	73	30
Mean	38.5	35.8	37.2	43.6	51.0	61.3	68.7	70.4	67.6	61.4	53.2	44.4	52.8		
Max.	48	41	46	52	59	71	76	76	73	67	60	50		76	
Mean Max.	43.3	38.7	42.2	47.5	56.0	67.2	73.2	74.8	71.7	66.0	58.1	48.0			
Mean Min.	35.5	31.8	33.2	40.5	46.3	55.2	64.3	67.3	63.2	56.4	46.8	35.9			
Min.	29	29	31	39	44	52	63	66	62	53	43	32			29

WILLETTS POINT, EAST RIVER, N.Y.

1932	40.5	37.2	36.0	44.4	54.9	61.7	67.8	72.1	69.6	60.3	48.7	39.2	52.7	81	32
1933	38.5	35.6	36.0	43.0	53.1	60.1	64.8	69.4	67.5	60.3	45.0	38.3	51.0	72	32
1934	34.5	†29.7	32.7	41.0	49.8	62.2	66.2	68.0	67.6	63.7	50.0	38.5	50.3	71	29
1935	34.5	†30.4	35.4	41.4	51.1	59.2	65.7	71.4	68.5	58.5	52.7	37.2	50.5	72	29
1936	†32.5	†29.5	†35.6	41.4	54.5	61.9	68.2	71.4	68.7	62.1	48.0	36.8	51.0	76	29
1937	38.7	34.9	36.1	43.7	52.9	63.1	68.2	70.7	67.6	59.0	49.3	39.7	52.0	73	32
1938	35.4	35.1	37.0	44.2	53.2	62.4	68.0	71.2	--	60.4	53.1	41.2	--	*73	31
1939	36.0	34.0	36.3	42.8	53.2	62.2	66.7	73.6	70.0	61.7	48.2	40.3	52.1	76	28
1940	32.4	32.2	35.4	41.9	52.9	63.9	68.0	71.6	69.4	59.5	49.6	41.4	51.5	75	32
1941	35.8	33.1	34.9	46.9	54.7	63.1	65.5	74.1	71.6	64.2	53.2	43.7	53.4	77	32
1942	36.0	32.7	39.0	47.5	58.6	65.8	70.5	72.9	71.1	63.1	52.7	38.7	54.0	76	30
1943	33.4	32.7	35.6	41.9	53.4	64.4	68.9	72.1	69.6	59.7	50.5	39.7	51.8	75	28
1944	34.3	33.8	36.3	43.3	55.8	63.3	69.4	72.7	--	--	46.8	38.1	--	*81	29
1945	†30.9	†32.2	40.3	49.1	54.9	63.0	69.8	72.7	70.7	61.9	51.3	35.2	52.7	75	29
1946	34.5	32.7	39.6	47.5	55.8	63.0	69.4	72.5	71.4	64.2	56.1	43.9	54.2	74	30
1947	37.9	37.4	37.8	44.1	53.2	62.1	68.7	72.3	72.9	63.9	52.5	42.3	53.8	79	36
1948	†33.1	†30.7	37.9	44.8	54.9	61.9	67.1	70.3	71.2	61.6	55.4	44.6	52.8	75	29
1949	39.6	38.6	40.9	49.4	56.2	63.6	73.8	74.9	70.7	65.0	56.9	43.6	56.1	76	36
1950	41.1	37.2	33.9	44.4	52.5	62.3	66.6	68.8	69.5	62.9	55.4	44.4	53.2	74	32
Mean	35.8	33.7	36.7	44.4	54.0	62.6	68.1	71.7	69.9	61.8	51.3	40.5	52.5		
Max.	45	41	49	55	66	72	76	81	81	72	64	52		81	
Mean Max.	39.1	37.1	41.5	50.3	60.5	67.8	72.1	74.9	74.3	67.2	58.1	46.6			
Mean Min.	32.5	31.3	32.8	36.7	48.0	57.4	64.0	68.4	64.0	56.0	44.3	34.5			
Min.	28	28	29	33	43	54	61	64	61	50	35	30			28

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

† To obtain a mean for this month, temperatures were inferred for a number of days when ice prevented the taking of observations. Inferences, based upon the freezing point of the harbor water, were as follows: New London 31°, Montauk 29°, and Willetts Point 29.5°.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
	NEW YORK (The Battery), N. Y. †														
1927	34.0	35.8	38.5	45.7	53.4	-- --	-- --	66.9	68.2	63.5	51.6	42.8	-- --	*71	30
1928	37.4	36.0	36.5	44.8	52.5	62.6	70.0	73.6	68.9	61.0	51.1	43.3	53.3	75	33
1929	37.0	34.7	36.8	45.1	52.9	64.6	70.0	70.7	69.4	59.2	52.2	39.9	52.9	73	33
1930	37.9	36.5	39.7	45.5	56.5	65.3	71.2	73.4	72.5	62.4	51.8	42.4	54.6	77	34
1931	37.2	36.5	39.6	46.4	54.9	64.4	74.3	73.9	72.7	63.7	54.5	46.6	55.4	77	35
1932	42.8	40.6	39.4	45.0	55.2	64.0	70.0	72.5	70.2	61.7	51.4	42.3	54.6	74	37
1933	41.2	38.1	39.0	45.5	55.8	65.8	72.0	73.9	70.2	62.6	49.3	41.2	54.6	76	35
1934	36.5	31.3	34.9	43.5	54.0	64.0	72.1	71.6	71.2	61.9	51.6	42.8	53.0	75	30
1935	36.7	33.4	38.5	44.4	52.9	64.0	72.9	73.4	68.5	59.4	54.0	41.9	53.3	76	30
1936	34.3	30.7	37.4	44.8	55.6	63.7	71.8	71.8	70.2	62.8	50.4	41.5	52.9	75	30
1937	40.6	37.9	39.6	45.7	55.8	67.1	73.4	75.0	70.5	61.2	52.0	43.0	55.2	77	36
1938	38.5	37.9	40.3	48.0	56.8	66.2	72.3	74.3	69.4	61.5	55.0	42.8	55.2	78	35
1939	39.4	37.0	39.2	44.2	55.6	67.5	71.2	77.2	71.4	63.1	49.8	42.4	54.8	79	34
1940	32.5	33.6	36.1	42.8	53.4	64.9	70.0	73.2	69.2	59.2	50.5	42.2	52.5	77	30
1941	37.4	34.9	36.5	46.9	56.3	65.3	72.3	74.8	70.0	63.9	52.9	44.8	54.7	75	32
1942	37.6	34.3	39.9	46.0	58.8	67.3	67.3	73.9	70.9	63.0	52.7	39.9	54.3	77	32
1943	35.4	34.7	36.9	43.3	54.7	67.3	71.2	73.0	70.2	60.8	52.0	41.7	53.4	75	32
1944	36.0	36.5	37.2	43.5	56.1	66.6	71.4	74.1	69.3	61.5	51.1	40.3	53.3	79	34
1945	33.3	33.6	39.2	50.4	55.8	62.6	71.2	73.2	71.1	60.1	52.3	39.4	53.5	76	30
1946	36.5	35.2	40.1	47.2	56.3	64.2	71.4	72.7	71.1	63.7	55.8	45.1	55.0	74	34
1947	39.4	35.6	37.4	44.6	52.9	63.5	71.2	73.4	74.3	64.9	52.9	43.2	54.4	77	33
1948	35.2	32.4	37.4	46.8	55.2	64.5	71.0	72.3	71.3	61.5	55.7	46.5	54.2	76	30
1949	40.3	40.0	41.2	49.4	58.8	67.9	74.8	75.7	69.5	64.2	54.9	44.5	56.8	78	36
1950	41.9	38.3	37.5	44.7	53.3	63.5	70.4	72.4	69.8	62.8	55.2	43.8	54.5	75	32

Mean	37.5	35.6	38.5	45.6	55.1	65.1	71.5	73.3	70.5	62.1	52.5	42.7	54.2	79	30
Max.	44	43	46	54	65	74	78	79	77	72	63	52			
Mean Max.	40.4	37.7	41.7	49.9	60.3	70.0	74.4	75.7	73.4	66.9	57.4	47.0			
Mean Min.	34.4	33.4	35.5	41.7	49.7	60.0	68.2	70.4	66.5	57.2	47.0	38.5			
Min.	30	30	30	38	46	55	63	66	64	54	43	35			
NEW YORK (Fort Hamilton), N.Y.															
1911	37.0	34.0	36.7	43.3	55.4	65.7	71.6	72.0	68.5	60.3	49.3	42.4	53.0	76	30
1912	32.7	31.6	36.3	43.9	54.5	63.0	70.9	69.8	67.5	59.9	50.9	42.4	52.0	76	28
1913	40.5	36.9	40.5	47.8	56.3	64.6	69.3	73.8	67.8	60.8	50.7	43.2	54.4	76	33
1914	34.7	32.9	34.3	42.3	53.9	62.8	69.8	72.3	67.6	60.4	48.0	38.3	51.4	75	28
1915	35.8	34.7	32.5	46.0	55.0	62.6	69.4	71.6	69.6	58.8	48.9	38.8	52.0	76	31
1916	35.4	33.6	32.7	40.8	51.3	60.4	68.9	71.6	67.3	58.3	48.9	39.9	50.8	74	30
1917	35.1	31.1	35.2	42.4	48.7	60.8	67.5	70.5	65.1	56.1	47.1	34.9	49.5	75	28
1918	--	--	35.1	42.1	54.0	60.8	67.1	71.6	67.5	57.6	50.9	42.4	--	73	*30
1919	38.3	36.9	40.1	43.7	53.2	64.6	69.1	69.1	67.3	61.5	50.4	38.5	52.7	73	34
1920	31.3	30.4	34.3	41.5	50.7	62.1	66.2	69.3	67.1	57.9	48.0	--	--	72	28
--															
1927	35.1	37.0	39.4	45.3	53.6	61.2	70.5	69.1	68.4	62.6	50.7	43.5	53.0	74	30
1928	38.3	36.7	39.2	45.5	53.2	63.0	72.3	74.7	68.4	61.3	51.3	44.8	54.1	81	35
Mean	35.8	34.2	36.4	43.7	53.3	62.6	69.4	71.3	67.7	59.6	49.6	40.8	52.0		
Max.	44	41	43	53	64	70	79	81	77	70	60	49		81	
Mean Max.	40.1	37.8	40.4	48.7	59.1	67.2	73.8	74.6	72.1	64.3	55.8	46.2			
Mean Min.	32.0	31.3	32.8	38.9	48.4	57.9	65.4	68.3	62.7	54.6	44.2	35.7			
Min.	28	28	30	36	46	54	62	64	58	50	41	28			

† For mean bihourly temperatures by months, see Table 2.

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
	SANDY HOOK, N.J.														
	<i>Copies</i>														
1887	--	--	--	48.0	61.0	68.7	77.5	73.9	65.5	56.1	44.1	40.5	--	82	*35
1888	32.0	32.0	33.1	45.9	55.6	68.7	70.3	72.7	66.2	52.7	46.6	36.0	51.2	79	28
1869	38.1	32.7	39.2	48.6	62.2	70.0	74.7	72.7	68.7	51.8	44.4	38.8	53.5	78	30
1890	35.0	--	39.4	48.9	59.9	68.5	72.1	72.7	67.6	57.0	45.4	34.9	--	79	*29
1891	34.0	38.3	38.7	49.6	57.4	68.5	71.1	74.3	70.5	57.4	46.4	40.5	53.9	81	30
1892	35.2	34.7	36.1	47.3	57.9	69.4	73.6	74.8	69.3	55.6	43.9	34.3	52.7	82	28
1893	29.8	31.3	35.6	45.3	55.6	68.5	--	--	--	--	--	--	--	*78	28
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1944	--	--	--	--	--	--	74.1	74.5	68.7	58.6	47.7	36.5	--	*82	*32
1945	32.0	33.3	43.3	52.3	56.7	66.6	72.9	72.9	70.5	57.2	50.7	36.5	53.7	77	30
1946	35.6	35.4	44.4	49.3	58.1	66.7	72.1	72.2	69.3	60.6	52.0	39.9	54.7	76	31
1947	37.2	33.0	37.5	48.0	55.7	64.2	73.6	74.1	71.7	62.4	48.5	38.1	53.7	78	30
1948	31.7	31.6	38.7	47.2	55.7	66.0	73.1	73.2	70.3	57.4	52.3	40.4	53.1	83	29
1949	40.3	39.4	41.7	51.0	60.7	70.9	77.2	76.4	68.0	62.3	48.9	40.9	56.5	83	35
1950	41.2	37.2	37.7	47.1	54.3	66.9	73.7	73.6	67.6	60.9	52.9	39.7	54.4	80	30
Mean	35.3	34.4	38.8	48.3	57.8	68.0	73.5	73.7	68.8	57.7	48.2	38.2	53.6		
Max.	46	46	56	60	69	81	82	83	78	71	62	47		83	
Mean Max.	40.8	39.6	46.2	55.1	65.3	76.7	78.7	79.4	74.3	65.3	55.3	43.5			
Mean Min.	31.5	30.8	33.1	43.0	50.7	60.3	68.9	68.3	62.3	50.4	40.4	32.1			
Min.	28	29	30	40	47	54	66	65	56	41	32	28			28
	LONG BRANCH, N.J.														
	<i>Copies</i>														
1948	--	--	--	--	51.5	63.0	67.6	69.9	68.0	59.2	55.9	48.2	--	78	*42
1949	41.9	42.9	42.1	46.8	56.1	64.9	72.3	72.9	64.7	60.7	52.3	44.4	55.2	78	40
1950	45.0	42.8	38.5	45.2	50.0	62.9	67.9	67.8	64.8	60.1	54.3	40.5	53.3	69	33

Mean	43.4	42.8	40.3	46.0	52.5	63.6	69.3	70.2	65.8	60.0	54.2	44.4	54.4
Max.	47	46	45	52	60	74	77	78	73	67	60	51	78
Mean Max.	46.5	45.0	43.5	49.5	59.0	71.3	74.0	75.0	70.0	65.7	59.0	49.3	
Mean Min.	41.0	38.5	37.5	43.0	46.3	55.7	61.7	63.7	59.7	54.0	48.3	38.7	
Min.	40	35	35	41	45	54	59	61	56	50	43	33	33
ASBURY PARK, N.J.													
1945	--	--	--	--	--	--	--	--	--	--	54.0	44.0	--
1946	40.5	--	--	--	--	59.2	66.9	70.5	68.9	64.0	56.3	46.4	--
1947	41.7	37.3	37.7	45.0	50.0	60.3	65.5	--	--	--	--	--	*72
<i>Copied</i>													
ATLANTIC CITY, N.J. †													
1912	32.9	32.4	38.5	46.2	54.9	63.1	69.6	68.4	69.3	61.5	52.2	43.7	52.7
1913	43.2	38.7	43.9	50.0	58.1	65.9	67.6	73.9	69.4	61.9	51.6	43.2	55.6
1914	36.7	34.7	35.8	46.0	57.0	64.4	70.0	71.6	68.4	63.1	49.8	40.8	53.2
1915	38.1	38.3	39.6	49.1	57.9	64.2	69.4	74.7	71.2	62.2	51.6	39.2	54.6
1916	37.2	35.8	36.0	45.3	54.1	63.1	68.5	72.9	69.6	61.0	52.2	40.6	53.0
1917	37.2	32.7	38.5	46.9	51.8	61.9	67.1	74.5	66.4	58.6	47.5	36.7	51.6
1918	29.8	32.4	39.4	45.0	54.0	62.4	70.2	72.3	69.4	61.7	51.4	43.0	52.6
1919	38.1	36.7	42.3	48.4	56.5	67.8	69.4	71.2	70.3	63.7	52.0	41.2	54.8
1920	32.2	33.3	36.7	46.8	54.7	65.5	64.9	66.9	70.7	61.5	50.9	43.2	52.3
1923	38.1	33.1	38.7	45.5	55.6	63.9	71.6	72.1	70.3	60.4	49.5	45.5	53.7
1924	38.3	35.1	38.9	46.2	54.5	64.4	67.6	71.1	66.2	60.3	51.1	40.5	52.8
1925	36.1	37.4	42.8	49.8	56.5	66.6	69.4	70.7	71.1	57.6	47.8	40.3	53.8
1926	34.2	34.2	36.9	45.1	55.6	62.4	70.3	73.8	68.9	60.3	50.5	36.9	52.4
1927	33.4	38.5	40.5	45.0	54.7	63.1	67.3	66.9	70.0	62.9	52.0	42.8	53.1
1928	36.3	35.6	38.7	45.1	54.3	61.0	66.6	71.3	67.8	61.3	50.0	41.4	52.5
1929	37.2	35.1	41.2	47.5	54.0	63.5	67.6	69.8	68.5	58.1	51.4	40.1	52.3

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.
† Monthly mean temperatures derived from two years of simultaneous daily observations (1944-1945) at the tide station on the outer end of Steel Pier and at a point 0.8 mile SSE of it were essentially the same.
‡ For mean bihourly temperatures by months, see Table 2.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
ATLANTIC CITY, N. J. † - Continued															
1930	37.6	36.5	40.5	46.2	56.9	63.3	68.9	69.6	72.0	58.3	49.6	39.6	53.2	79	32
1931	35.2	35.6	39.0	46.9	55.0	64.0	70.5	71.8	70.9	63.0	54.5	45.5	54.3	77	32
1932	43.3	39.9	38.7	46.2	54.1	63.1	67.1	69.3	68.4	61.5	51.3	41.5	53.7	76	34
1933	41.5	38.3	39.7	46.4	56.7	66.2	69.8	73.6	71.2	61.7	47.7	40.1	54.4	78	32
1934	37.8	30.4	35.1	45.9	54.1	64.2	70.0	69.4	71.1	60.1	50.2	41.0	52.4	76	29
1935	36.0	35.1	41.5	45.7	54.7	64.9	70.5	74.5	69.4	59.2	53.8	39.9	53.9	79	29
1936	34.5	29.8	40.3	46.6	56.7	65.5	72.1	71.8	66.9	62.6	49.8	41.5	53.2	77	28
1937	42.6	38.7	40.1	46.4	55.9	66.7	73.9	69.1	68.9	59.2	50.4	39.9	54.3	78	33
1938	38.7	39.4	41.7	49.3	58.1	64.2	68.2	68.9	68.7	60.4	54.1	42.4	54.5	78	34
1939	38.1	38.8	41.9	47.5	56.1	65.5	67.5	76.1	71.6	62.4	49.1	41.4	54.7	80	32
1940	31.3	33.6	36.9	44.4	53.1	64.9	68.7	73.4	70.0	57.7	49.8	41.9	52.1	79	29
1941	37.6	35.1	37.4	48.7	57.4	64.0	67.6	70.2	66.4	63.5	52.9	43.9	53.7	77	29
1942	35.8	33.6	40.5	47.8	58.1	68.4	72.3	72.3	70.9	61.7	52.0	39.0	54.4	79	30
1943	35.6	36.3	38.8	45.1	56.3	64.9	68.4	65.8	68.2	59.0	50.0	39.2	52.3	75	30
1944	37.4	37.2	39.6	46.6	56.8	66.4	67.3	68.5	67.3	60.1	49.8	39.2	53.0	76	34
1945	34.2	34.3	43.0	52.0	57.0	64.8	72.3	73.4	72.0	61.0	54.1	40.3	54.9	78	30
1946	36.8	36.3	44.2	50.0	57.7	64.2	70.9	73.6	70.7	63.8	55.9	43.9	55.7	76	32
1947	40.7	36.2	37.7	48.1	55.5	64.4	67.0	74.0	73.2	64.3	52.0	39.0	54.3	80	32
1948	35.5	33.5	39.8	47.7	55.2	65.0	68.1	70.1	70.7	58.9	55.0	46.2	53.8	78	30
1949	41.8	42.0	42.3	49.5	58.0	68.3	72.5	75.4	68.6	63.4	52.7	43.0	56.5	79	39
1950	43.2	40.8	39.3	45.9	55.1	63.3	69.3	72.9	68.1	61.9	55.1	41.6	54.7	76	33
Mean	37.1	35.8	39.6	47.0	55.7	64.6	69.2	71.5	69.5	61.1	51.4	41.3	53.6		
Max.	46	44	51	61	67	76	79	80	80	72	64	53		80	
Mean Max.	41.1	39.4	44.5	52.8	62.2	71.5	75.4	76.5	74.2	66.8	57.5	47.3			
Mean Min.	32.9	32.5	35.0	42.1	49.7	57.4	61.0	65.0	63.8	54.9	44.4	35.2			
Min.	28	28	29	36	44	54	55	57	58	46	38	28			28

BREAKWATER HARBOR, DEL. *Copied*

1919	39.6	38.5	44.3	48.0	59.7	67.5	73.2	72.0	69.3	64.3	51.4	40.1	55.7	79	32
1920	--	--	--	--	--	67.5	72.0	70.9	--	61.9	48.6	41.7	--	*76	*37
1921	37.4	36.5	48.6	53.2	58.3	67.8	74.5	71.4	72.5	60.8	53.4	42.8	56.4	79	32
1922	34.9	35.6	--	49.6	58.6	69.1	73.4	73.9	70.3	63.5	51.1	40.6	--	79	28
1923	38.3	34.0	40.1	46.4	--	--	--	--	--	--	--	--	--	--	*32
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1947	--	--	--	--	59.2	71.1	72.0	75.6	72.9	64.9	51.3	40.8	--	80	*36
1948	33.4	33.3	41.9	50.9	59.0	68.7	72.4	72.0	70.7	59.4	55.2	45.2	55.2	80	29
1949	41.8	43.0	43.2	51.7	60.8	70.3	75.8	75.3	70.4	64.9	52.8	43.1	57.8	86	37
1950	45.4	41.3	--	--	--	--	--	--	--	--	--	--	--	--	*34
Mean	38.7	37.5	43.6	50.0	59.3	68.9	73.3	73.0	71.0	62.9	52.0	42.0	56.0		
Max.	50	47	61	58	68	83	86	80	80	72	61	54		86	
Mean Max.	43.4	42.3	51.7	55.2	66.1	75.9	78.4	78.0	76.4	69.9	58.6	49.5			
Mean Min.	33.9	33.3	36.9	41.9	51.8	62.6	68.8	68.4	64.6	54.6	43.8	34.7			
Min.	28	29	34	36	50	61	66	66	56	50	40	32			28
PHILADELPHIA, PA. <i>Copied</i>															
1923	34.5	32.5	36.7	49.6	60.3	74.5	77.7	77.0	74.1	63.0	49.3	42.4	56.0	80	32
1924	34.7	33.4	39.2	49.1	58.5	--	76.3	77.9	70.3	58.6	50.7	37.9	--	*81	32
1925	33.3	37.2	43.5	54.3	61.9	74.8	78.6	76.3	72.9	57.2	45.5	39.0	56.2	80	30
1926	33.3	33.4	37.8	47.1	62.4	69.6	77.7	77.7	71.2	60.6	46.8	34.7	54.4	82	30
1927	33.3	37.0	42.3	50.9	60.1	69.4	77.2	74.5	70.3	61.2	48.2	38.8	55.3	82	32
1928	35.2	35.1	40.6	48.2	59.2	68.2	74.1	75.9	68.9	62.6	51.8	41.7	55.1	79	32
1929	35.4	35.8	42.8	51.3	60.6	75.0	78.4	76.6	73.8	58.8	49.6	36.0	56.2	84	32
1930	36.7	36.9	43.2	49.3	66.0	73.8	79.9	78.6	77.2	64.2	52.0	41.2	58.2	84	32
1931	36.1	37.9	41.9	51.4	60.8	73.0	79.7	79.0	77.0	66.9	56.5	45.3	58.8	83	34
1932	42.8	38.5	39.2	48.7	63.1	73.6	78.6	80.2	74.8	60.8	47.1	37.9	57.1	82	35
1933	40.1	37.4	40.5	50.7	63.7	76.1	78.6	77.9	68.9	61.9	45.0	38.3	56.6	84	33
1934	35.6	32.7	37.8	50.7	65.3	76.3	82.4	78.6	72.1	59.7	48.6	39.4	56.6	86	33

† See footnotes † and ‡ on page 17.

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
PHILADELPHIA, PA. - Continued															
1935	34.3	34.5	42.8	49.8	61.7	73.8	79.9	79.7	70.7	63.1	52.0	37.8	56.7	83	32
1936	34.5	32.9	43.0	50.7	68.4	73.8	79.7	81.0	75.2	64.9	48.9	39.4	57.7	85	33
1937	41.4	38.1	40.5	50.2	64.0	76.1	79.2	79.9	72.1	50.6	48.7	38.5	57.4	84	35
1938	35.8	37.9	43.9	54.5	65.1	73.0	76.5	79.9	70.2	61.3	52.5	39.6	57.5	82	32
1939	36.7	37.2	42.3	49.5	64.4	76.8	78.8	82.0	74.3	64.0	47.8	41.7	58.0	86	32
1940	32.9	35.1	37.9	44.4	62.4	72.9	77.7	78.4	70.2	60.3	48.2	39.7	55.0	90	32
1941	35.8	35.1	38.8	55.4	66.9	72.9	79.2	79.0	75.6	68.4	55.0	44.6	58.9	82	33
1942	36.0	35.4	43.5	52.9	67.1	74.3	79.7	77.0	74.7	59.5	49.6	36.5	57.2	83	32
1943	35.2	36.9	41.2	49.6	62.2	75.9	79.9	81.1	73.4	61.9	48.4	39.9	57.1	84	32
1944	36.7	38.7	40.5	48.6	68.4	76.7	81.9	80.6	74.5	63.7	52.9	37.8	58.3	85	34
1945	33.8	36.3	45.1	59.2	61.0	70.9	76.3	74.3	72.3	59.9	50.8	37.4	56.4	81	33
1946	36.5	36.9	44.8	55.0	63.3	68.2	78.6	76.6	74.5	65.3	57.6	44.8	58.5	82	33
Mean	35.9	36.0	41.2	50.9	63.2	73.4	78.6	78.3	72.9	62.0	50.1	39.6	56.8		
Max.	47	45	57	66	76	83	90	86	82	76	64	53		90	
Mean Max.	39.7	39.1	47.6	58.1	69.4	78.5	82.2	82.0	77.1	68.9	56.4	44.9			
Mean Min.	33.1	33.5	36.0	44.8	56.6	67.6	74.6	74.4	67.6	55.2	43.1	35.3			
Min.	30	32	33	38	47	61	68	67	59	46	36	32			30
OLD POINT COMFORT, VA. <i>Continued</i>															
1943	--	--	--	--	--	--	--	--	--	62.4	53.2	42.4	--	--	*36
1944	38.3	42.1	46.4	54.3	70.9	76.3	78.6	77.7	75.0	64.8	53.4	40.5	59.9	82	36
1945	38.1	39.7	51.3	60.8	65.5	74.5	78.6	78.8	77.2	65.7	57.9	--	--	83	*34
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1948	--	35.1	48.4	59.2	66.6	75.3	81.0	78.9	74.5	62.2	58.0	49.2	--	84	*30
1949	44.9	47.5	47.4	56.7	66.7	75.3	82.6	79.7	73.5	68.9	56.0	45.8	62.0	85	40
1950	48.8	47.4	46.9	53.2	64.3	74.6	78.8	78.7	74.1	66.4	55.9	44.0	61.1	84	39

Mean	42.5	42.4	48.1	56.8	66.8	75.2	79.9	78.8	74.9	65.1	55.6	44.4	60.9	85
Max.	53	50	58	64	77	84	85	85	84	77	68	56		
Mean Max.	46.4	46.3	54.6	61.7	72.7	80.4	82.8	83.4	80.2	71.2	62.4	50.6		
Mean Min.	39.5	37.8	42.7	52.1	60.9	69.3	76.6	75.4	69.1	59.9	47.5	39.8		
Min.	36	30	42	47	59	66	75	73	65	57	43	36		30
RICHMOND, VA. Copied														
1947	--	--	42.5	57.6	70.0	76.7	79.0	83.0	76.9	65.7	51.5	38.2	--	87
1948	36.4	38.8	51.3	60.1	66.5	76.2	82.7	78.7	75.7	59.2	55.1	46.4	60.6	85
1949	46.3	47.5	49.7	59.2	68.7	77.6	81.8	80.1	73.6	67.6	52.0	44.0	62.3	87
1950	48.0	46.2	46.6	56.8	67.2	76.2	79.4	80.6	72.8	64.0	52.5	40.2	60.9	86
Mean	43.6	44.2	47.5	58.4	68.1	76.7	80.7	80.6	74.2	64.1	52.2	42.2	61.1	87
Max.	51	52	64	66	80	85	87	87	86	77	65	54		
Mean Max.	47.0	49.0	57.5	64.8	74.0	83.8	84.2	86.0	82.0	70.5	62.2	48.0		
Mean Min.	38.7	39.0	41.0	52.8	62.0	69.5	77.0	75.8	65.2	58.5	44.0	37.8		33
Min.	33	33	36	48	61	67	75	72	62	52	40	35		
CAPE CHARLES (town), VA. Copied														
1947	--	--	--	--	--	--	78.1	79.5	77.8	68.3	55.3	42.6	--	84
1948	36.4	36.7	47.0	56.7	65.0	73.9	80.4	79.3	74.6	62.0	58.2	47.7	59.8	86
1949	44.4	45.7	45.8	55.2	64.6	75.3	81.0	79.0	74.8	67.8	52.8	44.7	60.9	88
1950	46.6	44.8	44.6	51.7	63.5	73.9	77.7	77.0	73.8	66.1	55.1	41.3	59.7	87
Mean	42.5	42.4	45.8	54.5	64.4	74.4	79.3	78.7	75.2	66.0	55.4	44.1	60.2	88
Max.	51	51	56	62	74	86	86	86	88	74	66	54		
Mean Max.	46.5	48.3	55.2	60.3	72.7	82.4	83.4	84.1	84.6	71.5	63.8	49.9		
Mean Min.	37.5	35.7	38.0	49.7	57.0	67.3	74.8	74.0	65.4	60.6	47.1	35.2		
Min.	31	30	36	45	56	66	74	73	62	54	43	30		30

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
	WASHINGTON, D.C. †														
	<i>Copied</i>														
1944	36.3	37.4	45.3	55.4	74.5	79.7	85.1	83.7	77.5	62.8	51.4	37.4	60.5	88	33
1945	34.7	37.8	51.6	66.0	69.4	79.3	82.2	81.0	77.0	63.3	55.2	38.7	61.4	89	33
1946	38.7	39.7	53.1	59.5	69.6	76.5	84.2	80.6	77.7	67.3	58.6	46.2	62.6	88	34
1947	42.3	36.9	42.4	59.8	70.2	78.1	82.6	85.1	79.7	69.4	54.1	42.2	61.9	90	32
1948	35.8	39.7	50.9	59.8	67.0	77.9	84.5	80.8	78.3	61.4	56.5	44.3	61.4	88	34
1949	43.9	46.0	48.3	58.2	71.3	79.2	83.8	83.6	74.7	69.2	53.4	43.8	63.0	90	36
1950	46.6	43.9	42.2	54.4	67.3	78.3	81.7	81.4	73.3	64.0	53.7	38.9	60.5	85	33
Mean	39.8	40.2	47.7	59.1	69.9	78.4	83.4	82.3	76.9	65.3	54.7	41.6	61.6		
Max.	50	52	64	70	82	89	90	90	86	76	69	51		90	
Mean Max.	46.4	47.2	57.0	65.8	76.4	85.2	87.3	86.7	83.2	72.3	63.9	46.8			
Mean Min.	36.0	35.7	40.1	52.8	61.9	71.7	79.8	77.4	68.7	59.4	45.9	35.7			
Min.	33	32	34	46	60	68	77	73	63	52	42	33			32
	SOLOMONS, MD.														
	<i>Copied</i>														
1938	39.4	41.5	46.6	56.1	66.4	74.1	79.7	82.2	72.9	64.4	56.5	43.3	60.3	85	36
1939	39.2	39.2	45.0	--	64.8	76.8	77.5	81.0	75.9	66.2	51.6	--	--	84	*34
1940	33.3	33.3	--	46.6	62.1	73.6	78.4	78.1	73.6	62.6	52.7	44.1	--	86	*30
1941	39.2	37.0	38.7	53.8	66.7	73.6	79.7	79.9	76.6	69.6	57.2	46.9	59.9	85	35
1942	38.5	36.3	42.8	52.5	66.7	76.5	81.3	80.8	76.8	65.5	54.7	40.5	59.4	87	35
1943	36.7	37.0	41.0	49.1	63.9	77.9	80.8	81.3	73.8	62.2	51.6	41.4	58.1	84	33
1944	36.5	36.3	42.4	51.8	68.7	74.8	79.5	80.2	75.7	64.8	52.7	39.6	58.8	84	34
1945	34.5	35.1	46.9	58.1	62.8	73.9	79.5	80.2	76.6	64.2	55.8	40.5	59.0	85	30
1946	37.2	38.1	47.3	55.0	64.2	72.3	79.2	78.4	73.9	66.6	59.0	46.8	59.8	83	32
1947	41.5	36.9	39.0	51.4	64.0	73.8	79.0	81.3	77.5	66.7	54.9	42.8	59.1	84	32
1948	35.4	34.0	43.7	54.3	64.2	74.5	80.2	80.2	75.7	61.7	56.8	46.9	59.0	86	31
1949	41.4	43.0	44.8	53.6	64.8	75.2	81.3	81.3	73.4	67.5	54.5	44.4	60.4	87	40

1950	44.8	42.4	42.1	50.2	61.9	73.4	78.3	78.6	73.8	66.2	55.6	41.2	59.0	82	36
Mean	38.3	37.9	43.4	52.7	64.7	74.6	79.6	80.3	75.1	65.2	54.9	43.2	59.2		
Max.	49	46	58	69	78	83	87	87	83	76	66	54		87	
Mean Max.	42.0	41.6	50.2	59.6	72.6	79.9	83.8	84.3	80.0	71.3	61.4	48.7			
Mean Min.	34.7	34.8	37.9	46.7	57.3	68.6	75.4	75.9	69.1	60.0	47.5	38.3			
Min.	30	30	34	43	53	64	70	72	65	56	42	35			30
CAMBRIDGE, MD. Copied															
1945	--	--	--	--	--	--	--	80.6	76.1	62.4	54.1	36.3	--	*83	*31
1946	36.3	37.8	49.6	56.3	66.6	74.8	79.7	77.0	73.8	63.9	55.0	42.4	59.4	84	32
1947	39.7	34.2	39.2	55.2	65.8	74.8	78.4	80.4	74.1	65.6	51.0	38.9	58.1	85	30
1948	33.4	37.0	46.5	56.6	66.1	74.4	80.6	78.9	73.8	59.4	56.1	44.5	58.9	86	31
1949	42.1	43.6	43.4	55.9	66.8	76.1	82.1	80.8	71.7	64.9	51.6	42.3	60.1	87	37
1950	46.4	41.8	41.4	51.7	64.0	75.3	79.2	77.9	72.1	63.7	53.4	37.5	58.7	84	32
Mean	39.6	38.9	44.0	55.1	65.9	75.1	80.0	79.3	73.6	63.3	53.5	40.3	59.0		
Max.	54	48	59	64	76	84	87	86	84	72	67	53		87	
Mean Max.	45.8	45.2	53.5	62.0	73.7	82.1	84.4	84.0	80.3	70.3	62.3	48.4			
Mean Min.	35.2	33.7	35.8	48.8	57.6	69.1	76.5	73.8	65.4	57.5	44.2	34.1			
Min.	31	30	31	42	55	67	76	72	60	52	41	31			30
ANNAPOLIS, MD. Copied															
1946	--	--	--	--	--	--	--	--	--	--	56.7	43.5	--	--	*40
1947	39.1	34.8	39.2	51.5	63.6	74.0	79.0	81.4	76.4	66.0	52.9	40.8	58.2	84	33
1948	33.1	34.2	43.4	54.9	63.7	73.7	79.4	79.0	73.3	59.8	54.6	45.1	57.8	86	30
1949	40.7	42.4	45.4	54.4	66.0	75.0	81.8	80.6	71.9	65.9	54.1	43.7	60.2	86	37
1950	44.9	41.7	41.5	50.2	61.8	73.2	78.4	78.9	73.5	65.4	54.9	38.4	58.6	84	32
Mean	39.4	38.3	42.4	52.8	63.8	74.0	79.6	80.0	73.8	64.3	54.6	42.3	58.9		
Max.	52	47	56	59	73	82	86	86	83	73	66	51		86	
Mean Max.	44.2	42.8	50.0	58.0	70.2	80.2	83.2	85.0	80.0	70.2	62.2	47.6			
Mean Min.	35.8	34.8	36.5	47.5	56.5	68.2	76.5	76.2	66.2	59.8	46.2	37.2			
Min.	30	31	34	42	53	67	74	75	65	55	42	32			30

† For mean bihourly temperatures by months, see Table 2.

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
	BALTIMORE, MD.														
	<i>Copied</i>														
1914	36.5	34.7	37.2	50.9	65.7	74.8	78.4	78.8	72.5	66.0	51.4	40.1	57.2	84	31
1915	36.3	37.2	40.8	54.3	64.8	72.7	79.2	78.4	76.1	65.1	53.1	40.1	58.2	85	33
1916	35.8	36.5	36.1	49.1	63.5	71.6	80.2	80.6	73.8	63.3	53.4	41.9	57.2	84	32
1917	34.7	32.5	33.9	51.8	58.3	73.6	79.3	80.6	71.2	59.7	48.7	37.2	55.6	83	31
1918	31.8	33.4	42.4	50.2	66.4	73.4	75.6	79.7	72.3	63.7	54.0	44.4	57.3	83	31
1919	37.8	38.5	45.3	51.8	63.3	77.0	77.5	77.5	73.2	66.6	54.1	41.4	58.7	81	34
1920	33.1	33.3	39.4	51.6	60.8	71.8	78.1	78.6	74.1	68.0	54.0	43.9	57.2	81	31
1921	37.2	38.3	50.0	59.0	63.3	74.8	81.9	78.6	77.2	64.0	53.2	43.2	60.1	83	33
1922	34.7	35.8	43.2	54.7	66.2	75.9	79.9	77.9	75.6	66.9	54.0	41.7	58.9	83	32
1923	37.4	34.9	40.8	50.5	63.1	75.2	78.3	77.4	74.8	64.9	51.6	46.0	57.9	81	32
1924	36.7	35.2	--	53.4	61.2	70.5	78.3	77.7	70.9	63.7	53.4	41.0	--	81	*33
1925	34.5	37.2	43.9	55.0	62.1	77.0	79.5	78.3	77.5	61.2	48.4	41.9	58.0	82	31
1926	34.0	34.3	38.7	48.9	62.6	69.4	78.3	79.5	74.5	65.5	51.6	39.7	56.4	85	32
1927	34.7	37.8	44.8	51.1	61.9	70.3	78.1	76.6	74.1	66.7	52.5	43.5	57.7	83	32
1928	35.6	35.8	41.2	50.9	61.9	70.9	80.4	79.2	72.5	64.2	53.6	43.7	57.5	84	33
1929	37.0	35.2	44.1	54.9	63.9	74.1	78.6	77.7	74.5	62.1	54.5	40.3	58.1	81	32
1930	37.8	38.5	43.9	51.1	65.5	74.7	80.4	79.0	77.9	65.3	52.3	40.6	58.9	84	35
1931	36.0	37.9	41.9	52.9	63.7	73.8	81.1	80.6	78.4	67.8	57.6	48.6	60.0	85	34
1932	44.8	42.1	40.8	51.1	64.6	73.8	78.1	80.6	76.1	64.8	52.5	41.9	59.3	83	36
1933	41.4	38.5	41.7	53.2	64.8	74.8	79.2	79.7	74.5	66.0	50.7	41.2	58.8	84	35
1934	37.6	32.4	37.2	51.4	63.9	75.7	82.8	79.2	74.8	65.3	51.3	43.3	57.9	84	31
1935	36.3	35.1	44.4	50.5	61.5	73.4	82.9	80.6	72.7	63.9	56.5	41.0	58.2	85	32
1936	34.3	32.5	42.8	51.1	67.1	73.9	78.6	80.6	75.9	66.9	53.1	41.4	58.2	83	31
1937	42.6	39.4	41.5	51.1	64.8	77.0	79.2	82.0	74.8	63.0	51.3	41.5	59.0	86	37
1938	38.1	39.2	43.9	54.3	64.4	73.2	80.2	82.0	74.1	65.8	57.2	43.7	59.7	85	36
1939	38.5	38.8	43.7	51.6	64.8	76.3	78.3	82.0	75.6	65.5	51.9	43.9	59.2	85	29

1940	32.9	35.1	38.8	40.4	62.2	73.9	78.1	79.0	73.2	63.1	52.3	43.3	56.7	84	31
1941	38.7	36.5	38.5	55.4	63.7	73.0	80.6	79.3	77.4	68.5	56.1	46.9	59.6	84	34
1942	37.9	35.8	43.9	53.4	67.3	75.2	70.2	78.4	75.7	65.1	52.9	39.6	58.7	82	34
1943	35.1	36.3	41.4	48.7	64.6	77.7	80.4	81.0	73.9	62.8	51.1	42.8	58.0	83	30
1944	37.4	38.5	42.3	50.9	68.9	74.8	81.9	81.7	75.6	63.9	54.3	41.4	59.3	86	35
1945	35.1	36.7	48.7	60.8	63.1	74.3	79.9	79.7	76.8	65.7	55.9	41.9	59.9	84	33
1946	39.0	39.0	49.3	56.5	66.9	74.1	81.0	79.2	77.9	69.4	60.1	49.1	61.8	83	35
1947	45.1	37.8	41.5	52.5	64.0	73.2	78.3	80.3	74.7	68.2	55.9	42.4	59.5	85	28
1948	36.7	34.5	44.2	55.4	64.2	73.0	80.3	80.0	77.2	64.2	56.9	48.0	59.6	84	34
1949	41.1	43.2	46.0	54.3	68.0	76.4	82.7	81.5	74.5	68.7	56.1	45.7	61.6	85	36
1950	44.6	40.8	40.6	49.8	61.5	73.0	77.6	78.7	73.6	66.0	57.3	41.9	58.8	82	36
Mean	37.3	36.7	42.4	52.5	64.0	74.0	79.5	79.5	74.9	65.2	53.7	42.7	58.5		
Max.	47	47	61	68	77	83	85	86	84	74	68	54	86		
Mean Max.	39.9	40.0	48.8	59.1	70.6	79.2	82.5	82.9	79.6	71.0	59.8	47.5			
Mean Min.	34.1	34.1	37.1	46.7	57.1	68.6	75.9	76.0	70.2	59.1	47.1	37.9			28
Min.	29	28	32	42	52	63	71	72	63	52	42	32			
DIAMOND SHOAL LIGHTSHIP															
1923	--	--	--	--	73.8	78.1	78.8	79.7	77.2	74.5	62.4	66.0	--	84	*52
1924	60.8	52.0	48.0	55.4	62.8	72.7	78.3	80.4	77.5	71.4	65.7	66.7	66.0	85	41
1925	58.1	65.1	65.1	63.9	70.7	78.6	81.0	81.3	81.5	74.5	70.9	69.8	71.7	86	43
1926	63.9	56.1	57.9	62.4	70.0	76.1	79.5	81.1	79.5	75.4	68.2	55.9	68.8	85	43
1927	60.6	61.9	57.2	62.2	72.9	74.7	77.4	79.5	75.9	72.9	66.7	63.7	68.8	84	39
1928	65.5	64.8	64.9	66.6	--	--	--	--	--	--	--	--	--	--	*48
Mean	61.8	60.0	58.6	62.1	70.0	76.0	79.1	80.4	78.3	73.7	66.8	64.4	69.3		
Max.	74	73	75	75	81	83	85	86	85	82	77	76	86		
Mean Max.	72.4	71.8	72.2	72.4	77.2	82.4	83.8	84.8	83.4	80.4	76.6	73.4			
Mean Min.	46.4	46.0	44.0	49.2	59.8	68.6	70.8	72.8	72.0	65.8	59.2	52.4			
Min.	39	43	39	46	55	63	64	68	69	63	54	47			39

P.F.S.

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
SOUTHPORT, N.C.															
1946	--	50.4	57.7	63.7	72.9	78.3	81.3	79.9	77.2	71.1	64.9	55.9	--	84	*46
1947	54.0	47.7	48.2	63.8	72.9	78.8	80.0	83.7	79.6	71.7	61.0	52.8	66.2	87	43
1948	47.1	45.9	57.2	65.9	74.7	80.8	83.9	82.5	77.4	66.9	64.3	56.1	66.9	87	39
1949	53.6	55.8	56.1	64.6	72.1	77.3	83.5	82.5	76.6	72.7	60.5	52.8	67.3	91	45
1950	55.1	57.4	55.4	61.9	73.8	80.2	81.0	81.7	78.4	70.8	61.4	47.8	67.1	87	41
Mean	52.4	51.4	54.9	64.0	73.3	79.1	81.9	82.1	77.8	70.6	62.5	53.1	66.9		
Max.	60	63	66	74	80	87	91	87	85	76	76	64		91	
Mean Max.	57.2	57.8	61.3	70.0	78.7	84.9	86.2	85.8	83.1	74.8	72.1	59.0			
Mean Min.	46.0	46.5	48.9	56.8	67.9	72.7	77.5	79.2	70.3	65.4	52.0	45.5			
Min.	40	39	43	52	66	69	74	77	67	59	44	41			39
CHARLESTON, S.C.															
1922	49.3	52.0	60.1	69.6	74.8	81.3	84.0	82.0	79.3	71.2	63.9	55.4	68.6	86	44
1923	53.1	52.5	59.9	64.9	73.4	80.4	82.4	82.8	80.2	70.3	57.9	56.1	67.3	86	47
1924	52.2	50.7	53.6	64.6	72.5	82.2	84.0	84.2	78.1	68.5	63.0	53.8	67.3	87	43
1925	51.1	54.5	59.9	66.2	73.9	81.9	84.7	83.3	83.3	73.4	58.3	52.0	68.6	89	45
1926	47.5	52.3	53.8	63.3	72.1	79.7	83.1	85.8	82.9	74.5	60.1	55.8	67.6	88	44
1927	49.3	58.1	59.4	68.2	75.2	81.1	83.1	83.7	81.7	72.3	64.4	54.3	69.2	86	45
1928	48.4	50.7	57.0	66.0	70.7	79.9	82.8	84.0	79.3	74.5	60.3	53.4	67.2	86	44
1929	52.5	51.3	60.4	69.1	74.7	79.3	82.9	83.5	79.6	70.2	63.9	52.0	68.2	86	47
1930	51.4	53.6	56.1	64.8	75.7	78.3	84.0	81.9	82.4	70.0	58.3	50.2	67.2	86	45
1931	47.1	51.6	53.6	63.5	72.5	79.5	85.3	83.1	82.0	73.2	63.5	61.2	68.0	87	45
1932	59.7	60.3	57.0	65.3	74.3	80.1	85.1	82.9	78.8	72.3	62.4	54.5	65.4	88	50
1933	55.9	54.3	58.8	65.7	77.0	81.0	82.4	84.2	83.5	72.7	61.2	57.7	69.5	87	50
1934	53.8	48.9	54.9	64.9	71.6	81.0	84.9	84.2	80.4	73.0	61.7	53.1	67.7	87	45

1935	52.7	49.1	60.1	67.1	75.9	81.7	82.6	83.7	78.3	71.1	66.6	47.1	68.0	87	41
1936	48.6	47.5	57.4	64.4	73.8	79.5	82.9	83.8	81.0	73.4	60.8	51.1	67.0	86	43
1937	59.9	53.6	56.7	64.0	72.7	80.8	82.4	83.1	79.0	67.8	59.7	49.3	67.4	86	46
1938	52.3	53.8	60.8	68.4	75.6	79.5	81.3	84.4	81.0	69.4	64.8	53.2	68.7	86	49
1939	53.1	57.2	61.0	67.5	73.4	82.3	84.4	84.4	80.1	73.2	59.5	53.4	69.2	87	50
1940	45.7	46.8	54.9	63.0	70.5	80.4	82.2	82.6	77.9	68.2	62.8	56.1	65.9	88	40
1941	51.4	49.3	52.2	64.9	72.9	80.2	83.3	83.9	79.7	76.6	64.2	56.8	68.0	87	45
1942	51.3	49.6	57.0	65.1	75.4	82.0	84.7	83.3	79.9	71.1	63.5	52.9	68.0	88	46
1943	51.4	51.6	55.4	63.3	73.4	81.7	83.7	83.3	77.5	68.5	60.3	52.2	66.9	87	46
1944	48.7	54.0	59.2	64.4	74.8	82.6	79.3	78.8	80.2	71.1	60.8	48.7	66.9	85	45
1945	50.4	53.1	64.0	70.0	72.0	79.5	82.4	82.4	81.0	71.2	64.6	50.4	68.4	86	45
1946	50.2	52.7	59.7	66.6	73.8	79.2	82.9	82.4	78.3	71.1	66.2	56.1	68.3	85	47
1947	56.5	49.5	49.8	64.7	73.6	79.3	81.7	83.7	81.2	72.6	62.5	52.7	67.3	86	46
1948	48.4	47.4	57.5	67.6	75.1	80.8	83.8	83.0	78.5	68.2	66.0	58.5	67.9	86	43
1949	55.0	57.0	58.2	65.5	74.4	78.8	84.5	84.0	78.1	73.0	62.3	54.1	68.7	87	46
1950	57.0	59.4	57.1	62.9	74.7	81.3	83.3	83.3	79.0	72.0	62.5	48.6	68.4	88	45
Mean	51.9	52.5	57.4	65.7	73.8	80.5	83.2	83.3	80.0	71.5	62.3	53.5	68.0		
Max.	66	63	70	75	82	88	88	89	88	83	74	65		89	
Mean Max.	55.9	56.9	63.0	70.6	78.5	84.1	85.6	86.2	84.2	77.4	68.5	58.4			
Mean Min.	48.0	48.3	51.8	60.4	68.4	76.2	81.0	80.1	74.8	65.7	55.5	49.1			
Min.	41	40	45	55	62	71	78	76	68	59	50	41			40
FORT PULASKI, SAVANNAH RIVER, GA.															
1940	45.0	47.5	55.8	63.7	72.9	82.0	83.1	82.4	78.8	70.2	63.3	55.8	66.7	88	38
1941	51.4	50.5	53.1	66.4	74.7	81.1	82.6	85.1	81.1	77.7	65.1	57.0	68.8	87	47
1942	50.7	50.5	57.2	66.2	75.6	81.5	85.6	84.6	81.3	72.7	64.9	53.4	68.7	88	46
1943	--	--	58.6	64.8	74.1	--	--	--	--	68.9	60.1	52.5	--	--	*45
1944	48.4	55.0	61.5	64.8	74.8	83.7	82.8	82.2	81.0	71.8	61.5	50.0	68.1	89	45
1945	52.3	53.8	65.8	70.7	72.3	81.1	83.3	83.1	81.0	72.7	65.1	50.2	69.3	86	45
1946	51.8	54.1	61.5	68.0	74.5	80.0	82.8	82.0	78.3	71.8	67.7	56.5	69.1	85	48
1947	57.6	49.7	52.2	68.4	74.9	80.5	82.0	83.3	81.4	72.4	61.3	52.6	68.0	86	45
1948	48.4	48.6	60.8	68.1	76.0	80.7	83.8	82.5	79.1	69.2	66.9	57.4	68.5	86	45
1949	57.6	60.3	60.0	66.5	74.4	80.0	84.2	83.5	77.9	74.4	61.7	55.3	69.6	88	51
1950	60.1	60.5	58.1	64.3	76.2	81.8	82.6	83.2	78.3	72.5	62.9	49.2	69.1	86	45

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
FORT PULASKI, SAVANNAH RIVER, GA. - Continued															
Mean	52.3	53.2	58.6	66.5	74.6	81.2	83.3	83.2	79.8	72.2	63.7	53.6	68.5		
Max.	68	64	77	74	84	88	89	88	86	83	74	64		89	
Mean Max.	57.3	57.6	65.2	70.6	79.6	84.7	86.1	86.1	84.0	77.0	70.9	59.2			
Mean Min.	48.2	49.1	52.1	61.3	69.4	77.7	80.2	80.4	73.8	67.6	57.2	49.0			38
Min.	38	41	45	57	65	75	78	79	69	64	50	45			
FERNANDINA, FLA.															
1944	--	--	--	--	--	82.6	82.4	82.8	83.3	73.8	65.3	53.0	--	88	*48
1945	55.9	59.7	68.4	73.0	75.7	81.9	82.2	83.1	82.0	74.3	67.1	55.6	71.6	86	50
1946	57.4	58.3	63.9	70.5	76.8	81.0	83.3	83.5	80.1	73.8	70.3	61.3	71.7	87	51
1947	62.1	54.7	56.7	69.3	74.3	80.1	81.3	--	82.3	73.8	66.8	57.8	--	*88	52
1948	53.9	54.6	63.6	71.5	77.4	82.1	84.1	83.0	80.7	72.1	70.4	64.1	71.5	88	50
1949	61.7	64.1	63.5	69.7	77.0	80.2	85.0	83.6	81.1	77.9	65.7	59.8	72.4	89	54
1950	63.2	65.0	63.0	66.4	76.7	83.2	81.2	82.5	79.8	74.5	65.3	54.7	71.3	88	50
Mean	59.0	59.4	63.2	70.1	76.3	81.6	82.8	83.1	81.3	74.3	67.3	58.2	71.4		
Max.	68	70	73	79	82	88	89	88	88	82	76	68		89	
Mean Max.	63.6	65.2	68.7	75.0	80.7	85.3	85.7	86.6	86.0	79.1	73.9	62.9			
Mean Min.	54.4	55.0	58.2	64.4	71.6	77.9	79.0	79.2	75.4	69.8	60.3	52.7			
Min.	50	50	52	60	68	75	72	78	69	65	55	48			48
MAYPORT, FLA.															
1944	--	--	--	--	--	81.5	82.0	83.1	83.1	74.1	66.0	55.6	--	88	*49
1945	57.2	60.4	68.4	73.2	75.9	81.1	82.8	84.4	82.6	75.7	67.8	58.6	72.3	91	53
1946	59.0	59.0	63.7	71.1	76.8	80.8	83.8	83.3	81.0	74.8	72.0	62.4	72.3	86	56
1947	63.9	55.6	57.6	68.4	73.6	78.6	81.1	82.7	82.2	73.8	69.6	59.9	70.6	86	52
1948	55.1	55.4	64.5	--	78.1	82.3	84.1	83.0	81.5	73.2	--	65.9	--	86	52
1949	62.5	64.5	63.9	58.9	75.3	80.0	83.2	81.7	80.4	77.5	66.0	61.0	72.1	86	55

1950	63.7	64.7	63.6	66.2	75.4	81.6	78.1	80.8	80.2	75.3	66.7	56.3	71.0	86	52
Mean	60.2	59.9	63.6	69.6	75.8	80.8	82.2	82.7	81.6	74.9	68.0	60.0	71.6	91	
Max.	68	69	72	78	82	86	88	91	87	82	77	70			
Mean Max.	64.0	64.5	68.6	73.9	79.6	84.7	85.2	86.3	85.0	79.5	74.0	64.7			
Mean Min.	56.3	56.0	57.9	63.6	71.9	77.1	79.1	79.4	76.6	70.1	60.2	54.7			
Min.	52	52	52	60	70	75	71	77	72	63	56	49			49
FLAGLER BEACH, FLA.															
1946	--	--	--	69.8	75.2	--	80.2	78.6	80.6	74.8	--	64.8	--	*82	*60
DAYTONA BEACH (ocean), FLA. †															
1925	--	--	--	--	76.6	80.1	77.5	--	83.5	78.6	--	--	--	*86	--
1926	--	62.2	64.9	68.7	76.5	80.4	--	--	--	--	--	--	--	*84	*61
1927	--	--	--	--	--	--	79.7	75.4	--	75.4	70.3	64.9	--	*82	*59
1928	58.8	63.7	64.6	69.4	72.3	74.5	75.2	78.3	79.7	77.0	68.7	--	--	86	*50
1929	--	--	--	--	--	78.4	79.5	--	--	73.0	72.0	64.6	--	*83	*59
1930	61.9	59.5	62.1	68.5	75.2	75.7	74.5	76.3	78.8	73.6	--	57.9	--	82	46
1931	54.0	56.7	--	--	72.7	74.8	78.3	76.3	81.3	77.2	71.2	72.1	--	85	*50
1932	68.2	67.5	62.8	69.1	--	--	--	--	--	--	--	--	--	--	*55
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1939	--	--	--	--	--	--	--	75.7	81.5	77.0	68.0	62.6	--	*84	*55
1940	55.0	57.9	61.9	68.4	73.0	76.1	80.4	83.3	81.0	75.2	70.3	65.1	70.6	87	50
1941	60.8	58.5	59.5	69.8	74.5	76.6	75.9	74.8	82.0	79.2	72.0	68.0	71.0	84	51
1942	58.8	58.5	62.8	69.3	77.0	79.5	79.0	75.9	81.9	77.0	71.6	66.4	71.5	86	53
1943	63.0	62.6	63.1	70.7	79.3	83.3	80.8	80.2	82.8	75.6	71.6	64.4	73.1	87	54
1944	59.4	66.2	70.2	72.9	78.4	84.2	83.3	80.5	83.2	73.9	70.3	60.8	73.6	87	54
1945	60.6	63.5	71.4	73.4	76.3	77.5	79.2	80.4	81.7	78.4	71.2	62.2	73.0	86	56
1946	63.0	61.7	--	71.8	76.5	79.5	82.6	80.8	82.6	77.7	74.6	67.5	--	86	*57
1947	70.0	59.7	61.5	71.8	74.8	79.3	79.5	81.5	83.1	76.6	--	63.7	--	88	54
1948	59.6	58.0	66.3	74.2	78.4	81.7	81.3	79.4	82.2	75.6	74.5	70.1	73.4	86	53
1949	67.1	67.3	66.8	70.2	75.7	78.6	81.3	77.0	80.8	78.2	69.4	64.2	73.0	84	61

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.
 † For mean bihourly temperatures by months, see Table 2.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
1950	67.1	68.8	65.7	67.1	76.1	80.4	70.3	78.6	77.8	--	--	--	--	84	*60
Mean	61.8	62.0	64.5	70.4	75.8	78.9	78.7	78.4	81.5	76.4	71.1	65.0	72.0		
Max.	74	73	76	82	85	87	87	87	88	85	79	75		88	
Mean Max.	67.0	66.6	69.9	74.6	80.3	82.5	83.1	83.6	84.7	80.6	75.8	70.2			
Mean Min.	56.6	57.2	58.2	65.0	71.9	74.7	73.5	70.5	77.4	71.5	64.8	59.0			
Min.	50	53	51	61	66	69	63	61	73	68	59	46			46
DAYTONA BEACH (Halifax River), FLA. Copied															
1946	--	--	71.8	76.1	81.7	83.8	87.3	87.4	84.2	79.5	75.4	68.2	--	90	*63
1947	70.2	58.6	64.4	79.3	81.7	85.3	85.1	--	84.4	77.0	71.4	64.6	--	*90	50
1948	59.0	--	--	--	--	--	--	--	--	--	--	--	--	--	*51
1946	--	--	67.3	72.5	73.9	77.7	79.2	76.8	82.4	78.1	76.1	70.7	--	84	*65
1947	72.1	62.6	64.4	71.6	74.3	78.1	77.0	80.1	81.5	77.4	74.5	67.5	73.4	85	58
1948	62.7	62.6	70.8	72.1	76.1	78.9	77.2	77.3	82.1	76.5	76.0	72.6	73.7	84	58
1949	69.2	71.6	68.8	73.7	77.7	80.6	81.4	76.5	81.0	79.2	71.8	67.8	74.9	84	64
1950	71.3	71.3	69.7	70.7	77.7	79.7	72.6	78.1	78.7	79.6	72.0	63.5	73.7	84	59
Mean	68.8	67.0	68.2	72.1	75.9	79.0	77.5	77.8	81.1	78.2	74.1	68.4	74.0		
Max.	74	75	75	79	82	83	84	84	85	83	79	76		85	
Mean Max.	71.6	72.2	72.1	77.9	79.3	82.1	82.2	82.9	83.8	81.7	78.4	72.6			
Mean Min.	64.2	62.6	63.7	67.6	72.1	74.3	70.9	70.1	77.0	75.1	68.6	63.4			
Min.	58	58	58	65	70	70	62	62	72	71	64	59			58
CANOVA BEACH, FLA. Copied															

PALM BEACH, FLA.

1946 -- -- 75.0 77.4 80.8 82.6 84.6 86.4 84.9 80.8 79.2 76.1 -- -- 90 *72

MIAMI BEACH, FLA.

1940 68.7 68.9 71.4 77.5 79.5 84.4 85.6 85.6 82.4 77.7 73.9 73.9 77.5 90 63

1941 69.6 -- -- 74.5 77.2 83.3 84.0 86.4 84.0 -- 76.1 74.7 -- 88 *65

1942 70.3 69.4 72.7 75.7 81.1 84.7 88.2 86.9 86.0 81.7 76.5 75.0 79.0 90 64

1943 73.6 72.0 73.2 76.6 82.0 85.2 86.0 86.5 84.2 78.3 73.6 71.2 78.6 91 60

1944 68.4 72.3 -- 78.3 78.8 84.9 85.6 85.5 85.3 78.8 72.9 69.1 -- 89 *62

1945 70.0 70.9 75.6 78.4 79.3 83.5 85.3 84.6 82.8 80.0 73.6 70.5 77.9 88 62

1946 70.5 71.4 73.9 78.3 82.0 83.8 86.7 87.8 84.9 80.1 78.1 74.3 79.3 90 65

1947 74.8 68.9 70.2 78.8 79.9 82.2 83.8 84.4 82.2 79.9 79.2 73.8 78.2 86 61

1948 70.5 73.4 77.2 80.4 84.4 84.6 85.7 84.6 -- -- 79.2 76.1 -- *88 62

1949 72.1 75.5 74.5 78.1 81.3 83.3 85.4 85.6 84.8 81.2 75.4 71.8 79.1 89 69

1950 73.0 73.1 74.6 74.1 81.3 85.5 -- 86.8 84.3 -- -- -- -- *89 *70

Mean

78.5

Max.

91

Mean Max.

79

Mean Min.

68.0

Min.

60

KEY WEST, FLA.

1926 73.4 71.6 72.0 79.7 81.5 85.6 88.0 85.8 85.3 81.5 74.3 74.3 79.4 91 66

1927 69.4 76.6 75.2 78.4 83.3 87.3 87.8 88.2 85.8 81.3 74.8 72.0 80.0 92 65

1928 69.1 72.7 75.9 77.4 79.5 86.0 87.1 86.0 84.6 82.0 74.5 71.1 78.8 90 61

1929 71.4 75.4 77.9 80.1 82.9 84.9 85.6 86.7 85.3 78.3 78.1 71.1 79.8 91 63

1930 73.0 72.5 75.0 78.1 82.8 83.3 87.1 88.2 85.8 81.9 73.6 69.4 79.2 90 65

1931 65.8 67.5 69.3 75.9 82.4 84.9 87.1 88.0 85.8 81.0 74.3 77.2 78.3 90 62

1932 73.9 77.7 74.8 77.5 82.6 86.2 88.7 88.0 86.4 82.9 75.2 73.8 80.6 91 68

1933 74.7 76.5 75.6 81.1 83.1 83.8 87.1 86.7 86.4 82.0 73.9 72.5 80.3 91 69

1934 71.4 71.2 73.4 79.0 83.1 84.0 86.0 86.2 84.6 81.7 75.4 72.9 79.1 88 66

† For mean bihourly temperatures by months, see Table 2.

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
KEY WEST, FLA. - Continued															
1935	71.2	70.5	74.8	80.8	84.0	86.4	85.6	87.3	85.6	80.6	76.5	67.3	79.2	90	62
1936	70.7	70.3	71.4	77.9	80.1	83.3	85.6	84.9	85.6	83.7	76.3	73.6	78.6	90	65
1937	75.4	73.6	75.2	77.4	81.5	85.6	86.4	87.1	85.8	81.9	73.9	70.3	79.5	90	65
1938	71.6	72.1	77.2	77.4	83.5	84.9	86.7	85.3	85.3	80.8	77.7	71.6	79.5	88	63
1939	73.0	75.4	77.0	79.7	82.9	85.1	87.1	86.2	86.5	83.3	73.2	72.1	80.1	89	68
1940	68.0	67.3	72.5	77.9	80.4	86.2	88.2	88.5	84.6	79.0	--	--	--	91	*57
--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1946	--	--	75.0	80.2	84.0	84.4	87.3	87.8	85.8	81.7	79.0	75.0	--	90	*71
1947	75.7	69.6	72.1	81.9	82.6	86.4	86.7	86.0	85.1	81.3	81.7	74.1	80.3	89	66
1948	69.6	74.7	78.8	79.0	83.5	86.9	86.9	88.0	85.6	80.8	79.3	76.8	80.8	90	64
1949	72.9	77.0	76.5	81.1	83.5	86.3	86.4	86.9	85.9	82.5	74.3	72.1	80.4	90	69
1950	73.1	73.9	76.8	75.7	82.7	86.6	85.3	86.4	84.9	82.3	74.2	68.7	79.2	90	64
Mean	71.8	73.0	74.8	78.8	82.5	85.4	86.8	86.9	85.5	81.5	75.8	72.4	79.6		
Max.	78	82	83	86	88	90	91	92	91	88	83	80		92	
Mean Max.	75.5	77.2	79.9	82.6	85.9	88.2	89.1	89.6	88.2	85.0	80.0	76.0			
Mean Min.	66.8	68.7	69.5	74.9	79.0	82.4	84.2	83.8	82.6	77.5	70.8	67.7			
Min.	57	61	65	71	75	79	81	81	81	74	66	62			57
ST. PETERSBURG, FLA.															
1947	70.1	60.9	63.0	77.3	81.3	84.9	84.8	84.6	84.3	--	--	--	--	88	*56
1948	60.1	68.4	74.8	75.6	80.3	84.3	85.4	84.5	82.3	76.7	75.4	70.8	76.6	88	54
1949	66.6	71.1	69.1	75.0	79.6	83.2	85.0	83.8	83.5	79.5	68.7	65.0	75.8	88	61
1950	69.0	69.0	67.6	68.5	79.5	84.7	84.4	84.1	81.2	78.5	69.4	60.0	74.7	88	57

copied

Mean	66.4	67.4	68.6	74.1	80.2	84.3	84.9	84.2	82.8	78.2	71.2	65.3	75.6
Max.	77	74	78	80	84	88	88	88	86	82	78	74	88
Mean Max.	71.0	72.4	73.5	77.5	82.5	86.9	87.6	86.1	85.5	81.3	77.2	68.0	
Mean Min.	61.2	62.2	64.0	69.4	76.6	82.0	81.6	81.4	79.1	73.8	64.7	60.7	
Min.	54	57	56	64	75	80	79	81	78	69	60	57	54
CEDAR KEYS, FLA. Copied													
1922	57.7	63.1	69.1	76.5	81.3	85.5	84.0	81.9	75.2	70.5	65.1	65.1	74.6
1923	63.0	63.0	68.7	73.3	78.3	83.1	84.6	86.2	84.0	73.4	62.6	64.8	73.8
1924	55.0	55.6	58.3	69.6	75.0	84.9	84.0	84.2	79.2	69.1	63.9	58.5	69.8
1925	59.9	61.3	65.3	71.6	76.5	82.6	82.4	82.9	84.7	75.6	62.6	55.6	71.8
1926	54.9	60.6	62.2	69.1	75.7	83.1	--	--	--	--	--	--	--
--	--	--	--	--	--	--	--	--	--	--	--	--	--
1944	--	--	--	--	--	83.1	82.6	83.5	82.9	71.9	65.1	53.4	--
1945	56.7	62.6	72.9	74.8	75.7	81.9	84.2	83.3	82.0	74.1	66.2	55.6	72.5
1946	60.4	61.0	67.8	73.9	79.2	82.0	84.2	84.4	82.0	73.9	71.8	62.1	73.6
1947	65.5	53.6	59.5	74.7	78.4	82.6	82.8	84.2	81.5	75.4	68.4	60.1	72.2
1948	54.3	61.5	69.6	73.3	79.0	82.8	85.3	84.2	81.0	72.3	70.7	65.7	73.4
1949	62.2	66.1	64.6	70.5	78.5	83.0	84.0	81.8	81.7	77.3	62.4	59.8	72.7
1950	67.0	64.2	62.6	66.3	79.1	83.4	83.8	82.6	78.7	74.1	63.0	54.0	71.6
Mean	59.7	61.1	65.5	72.2	77.9	83.2	83.9	83.8	81.8	73.8	66.1	59.5	72.4
Max.	75	74	73	82	87	90	90	90	90	86	79	73	90
Mean Max.	68.1	69.2	73.5	78.1	83.8	87.8	87.6	86.3	80.8	74.0	67.2	67.2	
Mean Min.	49.9	50.3	56.0	62.6	71.4	78.1	79.6	79.9	75.9	66.3	54.6	49.1	
Min.	41	45	46	50	64	75	77	76	69	63	46	41	41

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
	PENSACOLA, FLA. Copied														
1924	52.5	54.9	58.8	69.4	74.7	83.1	84.6	86.0	81.3	71.2	66.6	57.7	70.1	89	46
1925	56.3	58.3	64.4	72.7	76.1	83.3	84.6	82.9	83.8	75.6	61.7	54.7	71.3	88	45
1926	52.5	57.0	58.3	67.3	74.5	81.5	83.8	85.5	84.4	74.5	61.2	60.6	70.1	89	48
1927	54.7	64.0	63.3	72.1	75.9	81.5	84.9	86.0	82.9	75.4	68.7	56.3	72.1	90	46
1928	52.5	56.7	64.0	68.2	75.7	83.5	86.9	86.5	81.0	77.0	63.3	56.7	71.0	90	43
1929	59.3	57.2	65.7	74.8	79.5	82.4	84.9	85.5	81.1	71.8	65.1	54.5	71.7	89	46
1930	55.6	60.1	61.3	71.4	79.2	81.3	86.5	85.1	82.2	72.5	63.5	54.5	71.0	90	46
1931	52.2	57.6	59.4	67.6	75.7	82.6	85.5	84.4	84.6	76.5	68.5	65.8	71.7	90	47
1932	63.0	66.4	61.9	71.8	77.2	85.3	88.0	86.2	81.0	72.9	61.2	59.4	72.9	90	52
1933	60.4	58.6	64.4	71.6	82.2	82.8	84.7	86.7	86.0	75.6	65.1	64.4	73.5	90	50
1934	60.3	55.4	62.1	72.5	78.3	85.3	86.2	86.2	82.6	76.6	67.5	57.9	72.6	90	50
1935	58.3	58.6	67.1	73.4	80.2	83.7	85.3	85.6	81.5	75.6	67.5	54.1	72.6	90	48
1936	57.0	55.9	66.2	71.1	77.9	84.2	86.7	86.4	84.2	77.2	66.0	58.3	72.6	92	47
1937	66.9	60.4	--	71.8	78.6	83.5	84.9	84.6	81.0	72.0	62.4	56.3	--	87	*46
1938	57.2	61.9	69.1	72.5	77.7	82.8	82.9	86.0	82.4	73.9	64.9	55.4	72.2	90	50
1939	59.2	60.1	65.3	70.5	77.5	84.2	86.4	84.6	83.7	76.1	61.9	58.6	72.3	92	50
1940	48.6	51.6	60.8	66.9	75.0	81.7	83.7	84.9	80.1	73.0	63.7	58.5	69.0	90	40
1941	56.5	54.9	57.6	71.1	76.8	82.6	84.9	87.1	82.6	78.8	63.0	59.4	71.3	90	52
1942	52.7	54.7	59.0	67.8	76.6	82.8	85.3	83.7	80.6	74.1	65.7	58.3	70.1	88	45
1943	55.0	57.2	60.8	68.7	78.8	84.6	85.6	85.8	79.7	70.3	59.9	55.9	70.2	90	46
1944	51.3	61.7	64.6	67.3	76.3	84.6	83.1	84.0	81.9	71.6	65.3	53.4	70.5	89	46
1945	55.0	59.0	69.3	72.7	75.4	83.5	83.8	84.4	82.4	73.2	65.8	52.7	71.4	88	45
1946	54.7	56.7	64.9	72.3	76.5	81.1	83.1	83.5	78.6	71.8	68.5	60.8	71.0	88	- 49
1947	58.6	52.9	57.4	70.9	76.6	82.2	82.6	84.2	81.3	74.7	64.6	56.1	70.2	87	46
1948	50.9	55.2	65.3	72.2	77.8	82.9	84.8	84.5	79.2	70.3	66.1	60.1	70.8	88	45
1949	60.4	61.8	62.7	68.6	77.9	81.5	83.6	84.5	80.3	77.2	63.5	59.2	71.8	86	50

1950	65.1	64.4	60.9	65.8	78.4	83.2	83.2	83.8	--	--	--	--	--	--	*87	*56
Mean	56.5	58.3	62.9	70.5	77.3	83.0	84.8	85.1	81.9	74.2	64.7	57.7	71.4	92		
Max.	72	73	78	82	87	90	90	92	92	85	76	72				
Mean Max.	64.4	65.0	70.4	76.2	82.1	86.8	88.0	88.5	86.9	80.0	72.0	64.7				
Mean Min.	49.8	51.6	55.5	63.0	71.9	78.9	81.0	81.1	76.1	67.8	56.6	50.9				
Min.	40	45	48	59	66	75	78	78	71	63	49	45				40
GRAND ISLE (Drilling Platform 8 miles SE. of), LA. Copied																
1949	--	--	--	--	78.3	83.0	84.0	84.2	82.5	79.9	71.5	67.5	--	--	86	*63
1950	65.9	64.5	--	--	--	--	--	85.6	82.3	76.5	70.1	61.6	--	--	*88	*57
EUGENE ISLAND, LA. Copied																
1944	--	--	--	68.0	73.0	84.0	85.8	85.9	83.9	73.2	65.8	53.4	--	--	90	*44
1945	51.6	58.6	65.3	70.0	73.9	81.9	83.6	85.1	83.5	72.5	66.7	51.3	70.3	88	43	
1946	52.7	54.1	63.3	72.5	78.1	81.0	83.7	86.4	81.5	75.4	68.0	59.0	71.3	90	46	
1947	51.9	49.1	56.5	69.1	74.8	82.3	82.8	84.3	82.8	78.2	64.0	55.2	69.2	91	43	
1948	47.9	50.3	61.1	70.9	77.2	83.9	85.7	84.3	78.7	71.5	65.3	57.2	69.5	90	38	
1949	54.1	52.2	57.4	65.4	78.1	83.2	84.2	84.1	82.2	77.4	62.6	60.0	70.1	88	44	
1950	63.9	61.2	60.5	65.1	76.5	81.8	83.8	85.4	81.4	75.0	61.7	51.6	70.7	88	44	
Mean	53.6	54.2	60.7	68.7	75.9	82.6	84.2	85.1	82.0	74.7	64.9	55.4	70.2			
Max.	70	74	75	77	84	89	90	91	90	85	79	68		91		
Mean Max.	61.6	62.7	70.2	74.4	80.9	86.4	87.5	88.9	87.2	81.7	74.1	64.6				
Mean Min.	45.9	45.6	52.1	61.7	70.5	77.0	80.7	80.9	75.8	65.9	55.7	46.9				
Min.	38	39	45	58	66	75	80	79	71	54	50	43				38

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
GALVESTON, TEX. Copied															
1922	59.4	60.1	64.0	74.3	80.1	84.4	86.4	87.4	84.9	75.2	68.0	65.1	74.1	92	47
1923	62.8	53.5	62.8	71.1	79.3	86.0	85.5	87.3	82.8	75.4	63.0	61.2	73.0	91	50
1924	51.4	55.9	59.9	69.4	75.4	85.3	87.1	88.9	84.0	76.5	71.1	61.7	72.2	93	39
1925	53.6	59.7	67.6	73.2	78.4	83.0	86.4	86.0	84.6	--	66.2	61.2	--	93	45
1926	56.1	62.6	61.2	68.4	77.5	84.2	86.7	88.2	--	81.5	67.6	69.8	--	*91	43
1927	64.0	68.0	--	79.5	84.7	--	88.2	88.5	87.3	83.3	78.1	61.2	--	*91	*45
1928	63.3	66.6	68.2	69.6	79.5	87.1	89.8	90.7	86.0	81.7	69.4	66.4	76.5	95	50
1929	66.0	61.7	72.9	81.1	84.0	87.1	90.1	93.0	88.7	--	--	--	--	102	*50
1930	--	--	67.5	72.9	80.4	83.7	87.8	88.5	83.5	76.1	--	56.5	--	92	*50
1931	55.0	61.2	59.9	67.3	75.7	83.5	87.8	85.3	84.9	77.7	71.6	57.9	72.3	90	49
1932	59.9	64.6	60.4	69.9	77.5	82.2	87.8	85.6	82.8	75.0	62.4	55.6	72.0	91	42
1933	59.7	57.2	64.8	71.2	81.0	83.1	84.2	85.8	85.5	77.9	67.3	66.6	73.7	89	50
1934	60.6	58.3	61.2	72.1	77.9	85.1	85.5	87.1	83.5	78.6	70.0	58.6	73.2	90	52
1935	59.0	59.9	--	73.0	77.9	83.3	86.4	86.7	81.3	77.0	65.5	56.5	--	91	*44
1936	52.7	50.4	64.4	68.0	77.9	85.1	85.5	86.4	84.0	73.2	60.8	56.1	70.4	90	42
1937	58.8	58.5	60.1	68.0	78.4	85.1	86.5	87.4	84.0	74.1	63.0	54.7	71.6	90	46
1938	55.6	59.5	66.7	68.9	77.0	84.0	85.6	86.2	82.4	76.5	64.2	58.1	72.1	90	49
1939	57.0	57.9	63.3	69.3	78.1	84.0	86.0	86.4	83.8	74.8	62.9	59.9	71.9	91	48
1940	46.2	51.1	60.3	68.0	75.6	82.9	86.2	84.2	81.1	74.5	64.9	59.4	69.5	90	35
1941	57.6	55.8	57.2	68.5	77.4	83.1	85.6	86.4	82.9	80.1	62.8	59.0	71.4	89	46
1942	52.9	55.8	59.7	69.1	77.9	83.8	86.4	86.5	82.4	75.9	69.4	59.4	71.6	90	40
1943	53.8	58.8	60.1	71.8	79.0	84.4	--	--	--	--	63.0	57.0	--	*87	46
1944	53.1	61.0	65.5	70.9	75.7	84.9	85.8	86.5	83.1	75.4	67.6	55.4	72.1	90	45
1945	55.0	59.4	67.8	71.4	76.8	83.3	85.5	85.8	84.0	73.9	69.3	55.6	72.3	89	47
1946	54.5	57.2	65.1	72.9	78.3	82.6	84.9	86.4	82.9	75.4	66.4	61.2	72.3	90	47
1947	52.9	52.9	56.1	70.2	77.4	84.0	86.0	85.3	83.8	79.0	64.8	57.9	70.9	89	42
1948	51.1	50.6	62.3	73.7	79.6	84.1	87.2	86.2	80.6	73.0	65.9	60.9	71.3	89	37
1949	55.3	57.4	64.4	68.6	80.2	84.9	86.5	85.8	83.6	75.4	66.1	60.0	72.4	89	43

1950	62.0	65.1	62.7	69.1	80.0	83.8	85.7	86.4	82.8	76.6	64.7	58.9	73.2	89	50
Mean	56.8	58.8	63.2	71.1	78.6	84.2	86.5	87.0	83.7	76.7	66.5	59.7	72.7		
Max.	72	77	86	88	90	95	97	102	95	91	86	84		102	
Mean Max.	63.7	65.6	70.2	77.6	83.4	88.4	90.2	90.1	88.4	82.6	75.8	67.8			
Mean Min.	47.6	51.3	54.8	62.3	72.9	79.6	82.9	83.2	77.1	68.4	57.4	50.9			
Min.	35	42	43	49	68	75	79	79	69	62	49	42			35
ROCKPORT, TEX. Copied															
1948	--	56.4	65.6	77.5	82.8	86.4	88.4	87.7	83.4	76.5	68.8	65.0	--	94	*45
1949	56.9	60.0	68.3	71.1	82.2	86.7	87.8	87.1	85.4	78.8	69.6	65.8	75.0	91	44
1950	67.0	69.2	66.3	73.9	82.5	86.0	86.9	87.2	85.1	80.9	68.3	--	--	91	*53
Mean	62.0	61.9	66.7	74.2	82.5	86.4	87.7	87.3	84.6	78.7	68.9	65.4	75.5		
Max.	75	75	76	84	88	91	94	90	90	86	80	72		94	
Mean Max.	71.0	71.3	74.7	81.3	87.0	89.3	92.0	89.3	89.0	85.3	78.0	71.5			
Mean Min.	49.0	50.7	55.7	65.7	78.7	82.7	84.7	84.7	79.3	70.7	61.3	57.5			44
Min.	45	44	50	63	78	82	84	83	76	65	57	55			
PORT ISABEL, TEX. Copied															
1944	--	--	--	73.4	78.1	83.7	85.3	85.5	81.7	76.8	70.3	61.3	--	90	*55
1945	63.7	65.5	72.1	74.3	77.9	84.6	87.1	86.9	84.5	77.4	73.6	62.2	75.8	91	54
1946	60.6	64.2	69.3	76.1	81.5	83.7	84.9	84.6	84.4	79.9	71.4	66.0	75.6	88	53
1947	55.8	58.5	63.0	72.7	79.9	84.0	86.0	86.0	84.4	81.3	72.7	62.4	73.9	90	42
1948	58.1	57.7	62.8	--	--	83.4	85.0	85.4	83.9	78.0	68.7	--	--	89	*42
1949	--	--	--	72.5	81.4	84.8	85.2	85.0	84.4	79.5	71.6	68.3	--	89	*56
1950	67.6	69.0	69.3	75.7	83.1	85.1	85.2	85.6	85.9	80.8	70.1	64.6	76.8	88	54
Mean	61.2	63.0	67.3	74.1	80.3	84.2	85.5	85.6	84.2	79.1	71.2	64.1	75.0		
Max.	73	74	77	82	87	90	90	91	90	88	80	75		91	
Mean Max.	68.6	68.0	73.8	79.4	84.6	87.7	88.2	88.6	87.6	85.1	77.8	71.6			
Mean Min.	50.5	57.7	58.2	67.0	75.7	80.8	82.9	80.8	79.7	71.0	62.2	54.4			
Min.	42	52	46	62	72	80	81	78	77	65	57	52			42

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
COATZACOALCOS (Puerto Mexico), MEXICO <i>Copied</i>															
1946	--	--	--	--	--	--	--	83.5	82.6	80.2	77.4	73.6	--	*88	*70
1947	72.0	72.3	76.3	82.0	84.6	84.2	80.8	81.0	78.4	78.3	79.2	73.0	78.5	89	68
1948	71.2	73.4	77.5	81.1	84.2	85.1	80.6	84.6	83.7	76.3	75.9	75.7	79.1	90	68
1949	74.5	77.9	81.7	82.0	84.2	85.8	86.4	86.0	81.7	80.2	74.8	76.8	81.0	90	71
1950	75.6	76.8	81.1	82.8	85.8	84.7	80.8	81.9	81.9	77.2	75.7	74.3	79.9	95	72
Mean	73.3	75.1	79.2	82.0	84.7	85.0	82.2	83.4	81.7	78.4	76.6	74.7	79.7	95	68
Max.	80	82	86	88	90	95	90	88	88	83	82	81			
Mean Max.	76.8	80.2	84.0	86.3	89.0	89.8	86.0	85.6	85.3	81.4	80.3	78.6			
Mean Min.	69.9	70.8	75.7	77.2	80.9	80.9	78.4	80.6	76.9	74.8	72.9	70.6			
Min.	68	69	72	75	79	79	76	76	74	73	72	68			
PROGRESO, MEXICO <i>Copied</i>															
1946	--	--	--	--	--	--	--	84.2	84.2	82.0	79.9	75.9	--	*86	*74
1947	76.8	72.3	74.8	80.2	82.2	84.2	84.6	83.7	84.0	82.6	80.6	75.7	80.1	87	70
1948	72.9	75.6	78.6	80.4	82.2	84.0	83.8	84.6	84.7	82.6	80.6	77.4	80.6	86	68
1949	73.1	76.3	75.4	79.8	81.2	83.3	84.4	84.9	84.7	83.4	75.0	74.1	79.7	86.	70
1950	75.7	75.6	76.7	--	80.0	83.6	84.6	84.6	84.8	84.1	82.0	--	--	86	*75
Mean	74.6	75.0	76.4	80.1	81.6	83.8	84.4	84.4	84.5	82.9	79.6	75.8	80.3	87	--
Max.	79	77	80	82	84	86	87	87	86	85	85	80			
Mean Max.	76.6	76.8	78.2	81.8	83.1	85.3	86.0	85.8	85.9	84.5	82.2	78.1			
Mean Min.	71.8	73.1	74.8	78.1	79.9	82.2	82.0	81.9	82.9	80.6	76.4	73.0			
Min.	68	70	71	77	77	81	81	79	82	79	73	72			68

PUERTO CORTÉS, HONDURAS <i>Copied</i>													
1949	--	--	--	--	--	--	--	--	--	--	--	*89	*74
1950	79.5	79.4	82.0	82.5	84.4	85.3	84.6	85.4	86.3	83.2	77.8	88	68
PUERTO CABEZAS, NICARAGUA <i>Copied</i>													
1949	--	--	--	--	--	--	--	--	--	--	--	*88	*76
1950	--	81.0	--	82.5	84.0	85.2	85.5	85.6	86.2	84.7	80.4	90	*74
PUERTO LIMÓN, COSTA RICA <i>Copied</i>													
1948	--	--	--	--	--	--	--	--	--	--	--	*87	*81
1949	80.6	80.4	81.2	82.3	83.5	83.9	83.0	83.3	84.5	84.4	81.0	87	76
1950	80.5	79.4	80.8	82.3	82.0	82.8	82.1	83.8	84.4	82.7	80.0	87	75
Mean	80.6	79.9	81.0	82.3	82.8	83.4	82.6	83.6	84.4	84.0	81.7		82.2
Max.	82	82	84	85	85	86	86	87	87	87	86	87	85
Mean Max.	82.0	82.0	83.5	84.5	84.5	85.0	86.5	86.5	86.5	86.7	85.0		83.3
Mean Min.	79.5	78.0	79.5	79.5	79.5	81.5	79.5	79.0	82.0	81.3	78.3		77.3
Min.	79	76	79	79	78	81	78	76	82	78	76		75
CRISTOBAL, CANAL ZONE †													
Mean	80.8	80.5	81.2	82.4	83.2	83.8	83.3	83.1	83.6	83.5	82.4		82.4
Max.	86	85	86	87	88	88	88	87	88	88	89	89	86
Min.	75	76	76	77	76	79	79	77	79	74	75		74
BALBOA, CANAL ZONE †													
Mean	78.7	74.8	73.5	76.8	81.6	83.0	82.6	82.6	82.8	82.2	81.3		80.1
Max.	85	85	84	86	88	89	88	89	88	88	90	90	86
Min.	67	60	64	66	69	78	76	77	77	77	75		73

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.
† Means and extremes are from 43 years (1908-1950) of bihourly readings of recording thermometers.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
IVIGTUT, GREENLAND <i>Copied</i>															
1945	--	--	--	--	--	--	45.7	45.3	40.5	36.1	33.1	32.5	--	*50	*30
1946	32.0	31.8	32.0	32.5	39.6	44.4	46.8	44.4	39.9	37.4	35.8	33.3	37.5	54	29
1947	31.3	32.7	32.1	33.8	39.9	47.8	47.1	44.6	41.5	36.4	35.2	34.8	38.1	51	30
1948	33.4	32.3	31.9	34.7	40.2	48.6	47.8	46.3	41.3	36.7	33.4	33.0	38.3	53	29
1949	31.2	32.0	33.3	34.4	37.3	46.5	47.0	44.8	41.6	35.3	33.5	32.1	37.4	51	29
1950	31.6	31.9	--	--	40.5	45.5	47.9	45.5	41.6	36.1	32.3	33.0	--	52	*30
Mean	32.0	32.1	32.3	33.8	39.5	46.6	47.0	45.2	41.1	36.3	33.9	33.1	37.7	54	29
Max.	35	34	38	37	46	53	52	54	48	40	39	36		54	
Mean Max.	34.4	33.6	34.6	37.0	44.7	50.5	50.1	48.9	45.7	38.8	36.2	35.3			
Mean Min.	30.0	30.1	29.8	31.9	35.1	42.7	43.1	41.8	37.8	33.8	31.6	30.6			29
Min.	29	29	29	30	33	39	41	40	37	33	30	29			
FERRY REACH, ST. GEORGES I., BERMUDA <i>Copied</i>															
1945	--	--	--	--	72.3	76.1	81.3	82.9	81.3	76.8	70.5	64.6	--	85	*61
1946	64.9	62.6	67.3	67.6	74.7	79.0	81.5	83.1	82.2	76.6	72.0	67.1	73.2	86	60
1947	66.0	62.8	62.8	70.0	74.8	78.6	82.9	84.6	81.3	75.2	68.4	64.2	72.6	86	61
1948	63.0	63.5	64.0	68.4	73.9	78.1	81.1	82.9	78.4	74.7	72.5	68.4	72.4	85	59
1949	63.7	63.7	64.2	68.5	72.5	77.2	82.2	82.9	79.0	75.0	71.3	66.9	72.3	86	61
1950	65.7	65.7	64.5	67.4	73.0	78.2	82.7	83.2	80.7	76.5	72.0	67.2	73.1	86	60
Mean	64.7	63.7	64.6	68.4	73.5	77.9	82.0	83.3	80.5	75.8	71.1	66.4	72.7	86	
Max.	70	68	71	75	78	83	86	86	86	81	75	72		86	
Mean Max.	67.8	66.3	68.4	72.2	77.1	81.3	84.3	85.7	84.0	78.3	74.4	68.7			
Mean Min.	61.8	60.9	61.4	65.0	69.6	74.8	79.1	79.9	77.4	71.8	68.3	62.8			
Min.	59	60	60	64	67	72	77	79	73	70	64	61			59

HABANA, CUBA <i>Copied</i>															
1947	--	--	77.0	82.4	83.7	85.8	86.0	86.4	85.3	83.7	83.1	79.3	--	90	*73
1948	77.5	79.2	79.2	80.6	83.3	84.6	85.3	86.4	86.5	86.4	78.1	79.5	82.2	90	73
1949	78.3	79.5	79.7	81.0	83.3	85.6	86.4	86.7	85.8	85.3	80.4	78.4	82.5	89	76
1950	77.7	77.7	80.1	79.2	81.5	84.7	85.1	85.3	85.3	84.2	79.5	76.1	81.4	90	73
Mean	77.8	78.3	79.0	80.8	83.0	85.2	85.7	86.3	85.7	84.9	80.3	78.3	82.2		
Max.	81	81	82	85	87	90	88	90	89	90	85	82		90	
Mean Max.	80.1	80.1	81.2	83.0	86.5	87.8	87.4	89.5	88.1	87.1	84.6	81.1			
Mean Min.	75.8	77.3	76.1	79.6	79.5	81.8	83.9	82.0	82.8	81.2	76.7	75.1			
Min.	74	76	73	76	78	79	82	79	82	79	75	73			73
GIBARA, CUBA <i>Copied</i>															
1949	--	--	--	80.5	--	--	--	84.8	84.2	83.3	80.5	76.6	--	*88	*73
1950	73.7	74.6	76.9	77.8	80.7	83.0	82.5	83.8	83.7	82.8	78.4	76.3	79.5	86	71
GUANTÁNAMO BAY, CUBA <i>Copied</i>															
1947	--	--	--	--	84.8	85.6	86.0	86.8	87.0	87.7	85.4	82.4	--	92	*76
1948	81.2	91.4	82.4	83.7	86.3	85.5	86.8	87.1	86.9	86.6	83.9	83.1	84.6	92	76
1949	79.7	79.7	81.6	85.0	85.1	86.5	86.7	86.8	85.4	85.5	81.0	81.0	84.0	89	78
1950	79.6	80.0	81.3	81.8	84.0	86.4	85.1	87.2	87.2	86.4	82.9	78.6	83.4	91	75
Mean	80.2	80.4	81.9	83.5	85.0	85.6	86.1	87.0	87.0	86.5	84.4	81.3	84.1		
Max.	84	84	87	88	89	89	92	91	92	90	88	86		92	
Mean Max.	82.7	83.3	84.7	87.0	87.5	88.0	88.9	89.8	90.2	89.2	87.0	84.2			
Mean Min.	78.3	78.3	79.7	80.7	82.2	80.3	83.2	85.0	83.5	82.5	81.2	77.8			
Min.	78	78	79	79	80	76	82	84	82	81	75	76			75
CASILDA, CUBA <i>Copied</i>															
1949	--	--	--	--	84.4	--	--	86.2	86.3	85.7	84.1	77.5	74.1	*90	*71
1950	73.9	75.1	80.0	78.9	85.8	87.6	86.6	86.8	85.9	85.2	78.1	74.8	81.6	91	70

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued
Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
	PORT-AU-PRINCE, HAITI														
	<i>Copied</i>														
1949	--	--	--	--	83.2	82.7	83.8	--	85.7	84.8	84.1	81.3	--	*87	*80
1950	78.8	79.2	80.3	--	82.4	82.9	84.1	86.1	85.0	84.8	83.5	81.4	--	88	78
	CIUDAD TRUJILLO, DOMINICAN REPUBLIC														
	<i>Copied</i>														
1949	--	--	--	81.5	83.0	83.2	83.5	84.1	84.3	83.9	83.1	80.3	--	88	*78
1950	77.9	77.6	78.7	80.0	81.3	82.0	82.3	83.8	84.9	83.9	82.2	80.3	81.2	86	76
	PUERTO PLATA, DOMINICAN REPUBLIC														
	<i>Copied</i>														
1949	--	--	--	--	79.4	81.1	81.9	83.3	83.3	83.4	82.6	79.8	--	85	*78
1950	76.0	75.5	76.4	77.1	78.9	79.6	80.5	82.0	83.5	83.2	81.7	78.9	79.4	86	74
	ST. LUCIA (Vieux Fort), B.W.I.														
	<i>Copied</i>														
1949	--	--	--	--	--	--	--	82.2	82.9	82.6	79.8	78.3	--	*85	*76
1950	76.4	77.1	77.4	78.4	79.8	80.5	81.0	82.2	83.4	83.3	82.9	80.8	80.3	85	73
	TRINIDAD (Carenage Bay), B.W.I.														
	<i>Copied</i>														
1949	--	--	--	---	---	--	81.2	82.9	83.2	83.4	82.0	80.1	--	*85	*78
1950	78.3	78.8	78.9	79.8	80.6	80.8	81.8	82.8	83.9	83.3	83.8	--	--	88	77
	CARTAGÉNA, COLOMBIA														
	<i>Copied</i>														
1948	--	--	---	---	---	---	---	---	---	---	87.4	86.2	--	*89	--
1949	80.7	79.8	80.4	83.5	84.9	85.9	85.5	85.0	85.0	84.8	84.9	83.1	83.6	88	78
1950	80.9	79.9'	81.3	80.9	82.9	84.2	84.1	85.0	85.9	83.8	83.5	84.1	83.0	89	78

Mean	80.8	79.9	80.9	82.2	83.9	85.0	84.8	85.4	85.3	84.9	84.0	83.5		
Max.	83	81	84	86	97	88	86	89	89	89	86	86	89	
Mean Max.	83.0	81.0	84.0	84.0	86.0	87.0	86.0	88.5	86.7	88.0	86.0	86.0	88.0	
Mean Min.	79.5	78.5	79.0	81.0	82.0	82.0	83.0	82.0	83.0	83.0	82.0	82.0	83.0	
Min.	79	78	78	80	81	82	82	80	82	82	81	81	82	78
1949	--	--	--	--	--	--	--	82.8	82.9	81.9	80.3	--	--	--
1950	73.0	76.0	76.2	75.9	82.3	79.9	78.1	83.5	82.9	83.9	81.0	79.4	88	69
													*86	--
1949	--	--	--	--	--	--	--	--	--	84.9	83.6	--	--	--
1950	78.6	80.7	80.0	81.6	82.2	82.5	83.0	85.0	84.3	83.8	83.3	82.4	87	76
													*87	--
1949	--	--	--	--	--	--	--	--	--	--	81.1	--	--	--
1950	81.4	82.1	81.0	79.9	76.6	78.3	77.9	81.9	83.4	84.2	80.4	81.0	88	73
													*87	--
1949	--	--	--	--	--	--	--	--	--	78.0	78.1	--	--	--
1950	74.4	73.1	72.2	73.0	72.6	73.1	74.8	77.8	80.3	80.2	78.2	75.7	84	71
													*82	--
1949	--	--	--	--	--	--	--	--	--	--	84.4	--	--	--
1950	84.2	83.1	81.4	--	81.2	82.7	83.1	84.2	--	84.1	83.8	--	*85	*80
													--	--
1949	--	--	--	--	--	--	--	--	--	--	81.6	--	--	--
1950	81.8	81.9	81.4	81.6	81.6	81.0	80.5	79.8	79.7	79.9	80.4	80.8	84	76
													--	--

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 1.—Surface Water Temperatures—Continued

Means and Extremes in °F.

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Means	Max.	Min.
	RECIFE, BRAZIL														
	<i>Copied</i>														
1949	--	--	--	--	--	--	--	--	--	--	83.1	82.9	84.0	--	--
1950	84.9	84.9	84.0	82.1	80.2	79.0	78.3	77.8	79.6	81.6	82.1	82.6	81.4	86	76
	SALVADOR, BRAZIL														
	<i>Copied</i>														
1949	--	--	--	--	--	--	--	--	--	78.1	79.5	79.7	--	--	--
1950	80.5	81.9	82.6	81.9	80.7	78.7	76.5	76.0	76.7	77.9	78.8	79.7	79.3	84	76
	RIO DE JANEIRO (Fortaleza de Santa. Cruz), BRAZIL														
	<i>Copied</i>														
1949	--	--	--	--	--	--	--	--	--	68.3	70.8	71.5	--	--	--
1950	76.5	78.8	75.8	76.0	74.1	71.3	68.8	71.7	72.8	73.0	71.3	71.5	73.5	82	66
	IMBITUBA, BRAZIL														
	<i>Copied</i>														
1949	--	--	--	--	--	--	--	--	--	65.1	67.3	68.3	--	--	--
1950	73.7	73.6	71.8	71.0	70.6	67.0	63.2	61.4	64.2	65.5	67.1	69.5	68.2	77	59

* Data are incomplete for the part of year in which this extreme occurs. This value is from the months shown.

Table 2.
Sea Water Temperatures
BAR HARBOR, ME.
Bihourly Means in °F.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	36.1	32.4	32.2	37.6	44.0	49.6	54.7	55.5	54.8	52.6	47.4	41.2
2	36.2	32.3	32.0	37.6	43.9	49.6	54.6	55.6	54.9	52.5	47.3	41.2
4	36.1	32.2	32.0	37.4	43.9	49.5	54.8	55.6	54.8	52.4	47.2	41.2
6	35.9	32.0	31.9	37.4	44.0	49.6	54.9	55.9	54.7	52.2	47.2	41.1
8	35.8	32.0	31.8	37.4	44.0	49.9	55.2	56.2	54.6	52.0	47.2	41.0
10	36.0	32.2	32.0	37.4	44.2	50.4	55.4	56.4	54.9	52.2	47.2	41.0
12	36.0	32.2	32.2	37.8	44.6	50.8	55.6	56.4	55.0	52.4	47.4	41.0
14	36.1	32.3	32.5	38.0	45.0	51.1	55.6	56.6	55.2	52.6	47.4	41.1
16	36.0	32.4	32.7	38.2	45.1	50.7	55.4	56.9	55.3	52.8	47.6	41.1
18	36.0	32.3	32.5	38.0	44.5	50.4	55.0	56.4	55.2	52.7	47.6	41.2
20	36.0	32.2	32.6	37.8	44.4	49.8	55.0	56.0	55.0	52.7	47.6	41.2
22	36.0	32.4	32.4	37.8	44.1	49.7	54.9	55.6	54.9	52.6	47.4	41.2
Mean	36.0	32.2	32.2	37.7	44.3	50.1	55.1	56.1	54.9	52.5	47.4	41.1
Max.	41	35	38	45	52	57	62	61	59	56	52	47
Mean Max.	40.5	34.5	36.5	44.5	50.5	56.0	62.0	61.0	59.0	55.5	51.0	46.0
Mean Min.	30.0	28.0	29.0	34.5	39.5	44.5	49.5	52.0	52.0	46.0	41.5	33.0
Min.	30	28	28	33	39	44	49	52	51	46	39	33

Time meridian 75°W.

This table is derived from a recording thermometer record for the years 1949 and 1950.
For additional data for this station, see Table 1.

Table 2.—Continued
Sea Water Temperatures
NEW YORK (The Battery), N. Y.
Bihourly Means in °F.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	38.3	36.4	37.7	46.0	55.7	65.0	71.8	73.2	70.4	62.7	55.1	44.5
2	38.2	36.4	37.6	46.0	55.6	64.8	71.6	73.1	70.3	62.7	55.0	44.4
4	38.1	36.4	37.5	45.9	55.5	64.7	71.5	73.1	70.3	62.6	55.0	44.3
6	38.0	36.2	37.5	45.9	55.4	64.7	71.5	73.1	70.3	62.5	54.9	44.2
8	38.0	36.2	37.4	45.9	55.5	64.9	71.7	73.2	70.2	62.5	54.8	44.2
10	38.1	36.3	37.7	46.0	55.7	65.1	71.9	73.4	70.2	62.5	54.9	44.2
12	38.4	36.4	37.9	46.3	56.0	65.4	72.1	73.6	70.4	62.7	55.0	44.4
14	38.5	36.7	38.2	46.5	56.3	65.7	72.4	73.8	70.6	62.9	55.2	44.6
16	38.6	36.9	38.2	46.7	56.4	65.9	72.6	74.0	70.8	63.1	55.2	44.6
18	38.4	36.7	38.1	46.7	56.6	66.0	72.7	74.0	70.8	62.9	55.1	44.4
20	38.2	36.4	37.9	46.6	56.3	65.8	72.5	73.7	70.5	62.7	54.9	44.3
22	38.2	36.5	38.0	46.4	56.1	65.5	72.2	73.5	70.3	62.5	54.8	44.2
Mean	38.2	36.5	37.8	46.2	55.9	65.3	72.0	73.5	70.4	62.7	55.0	44.4
Max.	44	42	47	54	64	76	79	79	76	70	61	52
Mean Max.	41.0	39.7	43.0	51.0	62.0	72.0	75.7	76.7	75.3	68.3	59.7	49.0
Mean Min.	34.3	32.7	33.7	42.0	50.3	59.7	68.0	71.0	65.0	58.3	47.7	39.0
Min.	30	30	31	39	47	59	66	69	63	56	46	38

Time meridian 75°W.

This table is derived from a recording thermometer record for the years 1948 through 1950.
For additional data for this station, see Table 1.

Table 2.—Continued
Sea Water Temperatures

ATLANTIC CITY, N. J.

Bihourly Means in °F.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	38.8	37.0	39.4	46.8	54.6	62.9	67.2	71.2	68.3	61.6	53.4	42.4
2	38.7	36.9	39.4	46.8	54.5	62.6	67.0	71.1	68.7	61.4	53.2	42.3
4	38.6	36.8	39.1	46.5	54.5	62.5	66.7	70.9	68.4	61.3	53.1	42.3
6	38.7	36.8	38.9	46.4	54.2	62.2	66.5	70.8	68.2	61.2	53.1	42.2
8	38.7	36.7	38.8	46.3	54.0	62.0	66.2	70.7	68.1	61.2	53.0	42.1
10	38.7	36.7	38.9	46.4	54.2	62.2	66.0	70.8	68.2	61.3	52.9	42.1
12	38.7	36.8	39.2	46.7	54.8	62.6	66.7	71.1	68.5	61.3	53.1	42.2
14	39.0	37.0	39.8	47.2	55.2	63.2	67.2	71.7	68.9	61.8	53.3	42.5
16	39.1	37.3	40.1	47.5	55.6	63.6	67.7	72.1	69.1	61.9	53.4	42.6
18	39.1	37.4	40.0	47.6	55.6	63.6	67.8	72.2	69.1	61.8	53.3	42.4
20	39.0	37.2	39.8	47.3	55.4	63.5	67.6	72.1	69.0	61.7	53.3	42.5
22	38.9	37.1	39.6	47.1	55.2	63.3	67.3	71.8	68.8	61.6	53.1	42.4
Mean	38.8	37.0	39.4	46.9	54.8	62.8	67.0	71.4	68.6	61.5	53.2	42.3
Max.	45	44	49	55	66	75	80	78	80	69	65	52
Mean Max.	42.6	41.6	45.8	53.6	63.5	72.0	75.6	77.8	76.4	68.0	61.2	48.6
Mean Min.	34.4	32.2	33.2	42.0	48.2	55.0	56.6	59.2	62.8	56.0	45.2	35.2
Min.	29	29	31	40	47	52	54	54	60	53	43	30

Time meridian 75°W.

This table is derived from a recording thermometer record for the years 1946 through 1950, except May, June, Sept., and Oct. 1947.

For additional data for this station, see Table 1.

Table 2.—Continued
River Water Temperatures

WASHINGTON, D. C.

Bihourly Means in °F.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	42.5	42.0	45.8	57.6	68.2	77.4	82.4	82.1	76.6	65.6	54.5	42.6
2	42.4	41.9	45.8	57.4	68.0	77.3	82.2	82.0	76.5	65.5	54.4	42.5
4	42.4	41.8	45.7	57.2	67.8	77.1	82.0	81.8	76.2	65.4	54.4	42.5
6	42.4	41.7	45.6	57.0	67.6	76.9	81.3	81.5	76.0	65.3	54.2	42.4
8	42.2	41.6	45.5	56.8	67.6	76.7	81.5	81.3	75.7	65.1	54.2	42.4
10	42.2	41.6	45.5	57.0	67.6	76.7	81.6	81.3	75.6	65.0	54.1	42.3
12	42.3	41.6	45.6	57.2	67.7	77.0	81.8	81.6	75.8	65.1	54.2	42.2
14	42.4	41.8	45.8	57.4	68.2	77.4	82.4	82.0	76.0	65.3	54.3	42.4
16	42.5	41.8	46.2	57.9	68.4	77.8	82.7	82.4	76.4	65.5	54.4	42.4
18	42.6	41.8	46.4	58.1	68.8	78.1	83.0	82.6	76.5	65.6	54.3	42.6
20	42.6	41.8	46.4	58.0	68.7	78.2	82.8	82.6	76.3	65.6	54.2	42.5
22	42.5	41.9	46.3	57.9	68.6	78.0	82.7	82.3	76.2	65.5	54.1	42.4
Mean	42.4	41.8	45.9	57.5	68.1	77.4	82.2	82.0	76.2	65.4	54.3	42.4
Max.	52	52	62	66	79	88	90	89	85	76	66	50
Mean Max.	47.0	49.0	56.5	65.0	75.5	85.0	87.0	87.8	84.2	72.5	63.8	46.7
Mean Min.	38.0	37.2	39.0	50.8	60.5	70.5	78.8	76.8	66.2	59.8	45.2	36.9
Min.	35	33	34	46	59	69	77	75	62	54	42	34

Time meridian 75°W.

This table is derived from a recording thermometer record for the period Feb. 1947 through Dec. 1950.
For additional data for this station, see Table 1.

Table 2.—Continued
Sea Water Temperatures
DAYTONA BEACH (ocean), FLA.
Bihourly Means in °F.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	63.6	63.8	65.6	70.0	75.9	78.9	75.9	76.6	78.8	76.0	71.0	66.4
2	63.4	63.5	65.2	69.7	75.6	78.5	75.5	76.3	78.6	75.8	70.7	66.2
4	63.3	63.2	65.0	69.4	75.3	78.2	75.2	75.9	78.4	75.6	70.6	66.0
6	63.2	63.2	64.8	69.1	75.1	78.0	74.9	75.6	78.2	75.4	70.4	66.0
8	63.1	63.1	64.8	69.2	75.1	78.0	74.9	75.7	78.2	75.4	70.4	65.8
10	63.3	63.3	65.0	69.5	75.4	78.4	75.8	76.1	78.6	75.8	70.6	66.0
12	63.7	63.8	65.5	70.0	75.9	79.0	76.1	76.8	79.1	76.1	71.0	66.4
14	64.1	64.1	66.0	70.7	76.5	79.7	76.9	77.6	79.5	76.5	71.4	66.7
16	64.4	64.6	66.4	71.2	76.9	80.2	77.5	78.0	79.8	76.6	71.7	66.9
18	64.3	64.5	66.4	71.1	77.0	80.2	77.4	78.0	79.7	76.4	71.6	66.8
20	64.2	64.3	66.2	70.8	76.6	79.8	76.7	77.5	79.4	76.2	71.3	66.6
22	63.9	64.0	65.8	70.6	76.3	79.4	76.1	77.1	79.1	76.0	71.1	66.4
Mean	63.7	63.8	65.6	70.1	76.0	79.0	76.0	76.9	79.0	76.0	71.0	66.4
Max.	72	73	70	76	80	84	85	85	84	80	77	72
Mean Max.	68.3	68.3	70.0	74.7	79.7	83.5	83.0	84.3	82.7	80.0	75.5	69.5
Mean Min.	58.0	59.7	60.5	66.3	71.3	75.7	69.0	67.7	74.7	72.0	66.0	61.0
Min.	54	52	59	61	70	74	60	64	71	69	62	60

Time meridian 75°W.

This table is derived from a recording thermometer record for the years 1948 through 1950, except Mar. 1948 and Oct., Nov., and Dec. 1950.

For additional data for this station (ocean), see Table 1.

Table 2.—Continued
Sea Water Temperatures

CRISTOBAL, CANAL ZONE

Bihourly Means in °F.

Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	80.2	80.1	81.3	81.7	82.9	83.9	82.5	82.5	84.2	83.5	82.3	80.7
2	80.3	80.0	81.2	81.7	82.8	83.7	82.4	82.4	84.0	83.3	82.2	80.5
4	80.1	79.9	81.1	81.7	82.8	83.7	82.4	82.3	84.0	83.1	82.1	80.4
6	80.1	79.9	81.0	81.6	82.6	83.5	82.3	82.2	83.7	83.0	82.0	80.4
8	80.1	79.7	80.9	81.4	82.6	83.4	82.2	82.1	83.7	82.9	82.1	80.4
10	80.1	79.7	80.9	81.4	82.6	83.3	82.2	82.2	83.8	82.9	82.0	80.4
12	80.3	79.8	80.9	81.5	82.7	83.4	82.3	82.4	84.0	83.1	82.2	80.5
14	80.5	80.1	81.3	81.9	83.0	83.7	82.4	82.7	84.2	83.5	82.4	80.7
16	80.6	80.2	81.5	82.0	83.1	83.9	82.5	82.7	84.4	83.5	82.6	81.0
18	80.5	80.4	81.7	82.1	83.3	84.1	82.8	82.6	84.3	83.5	82.6	81.1
20	80.3	80.4	81.7	82.0	83.3	84.1	82.7	82.6	84.3	83.5	82.5	81.1
22	80.3	80.2	81.7	82.0	83.1	84.0	82.6	82.6	84.2	83.5	82.4	80.9
Mean	80.3	80.0	81.3	81.7	82.9	83.7	82.4	82.4	84.1	83.3	82.2	80.7
Max.	83	82	83	85	85	86	84	85	86	85	85	84
Min.	78	78	80	80	80	82	80	80	82	82	79	77

Time meridian 75°W.

This table is derived from a recording thermometer record for the year 1950.
For additional data, see Table 1.

Table 2.—Continued
Sea Water Temperatures

BALBOA, CANAL ZONE

Bihourly Means in °F.

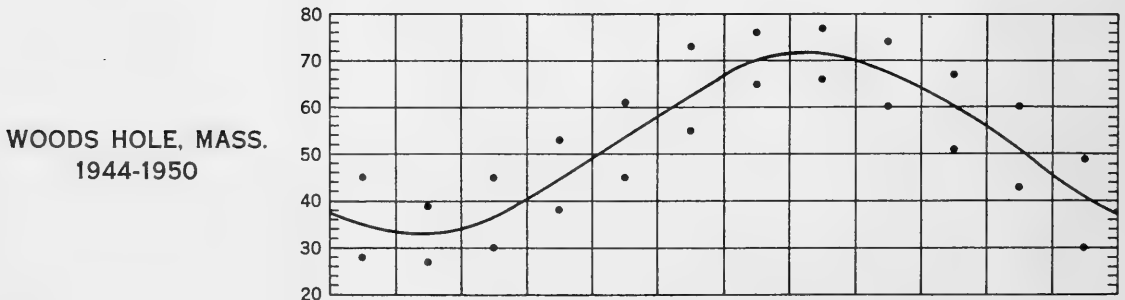
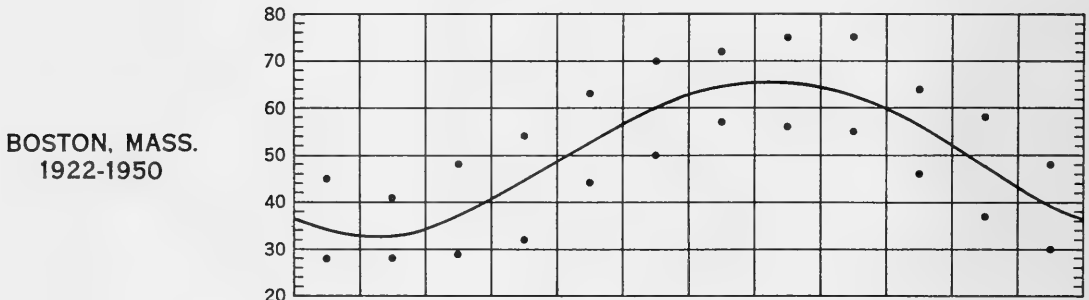
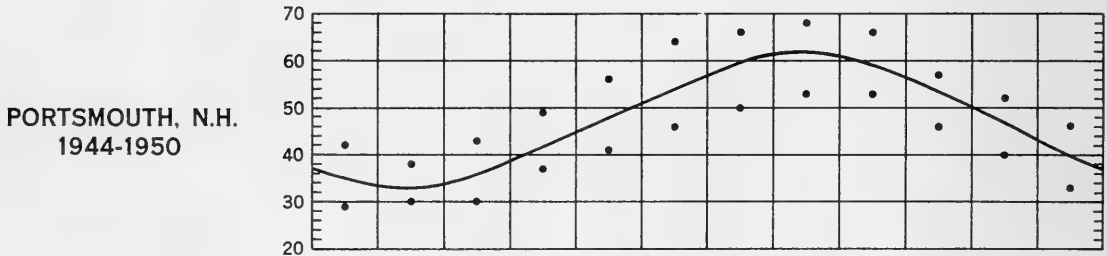
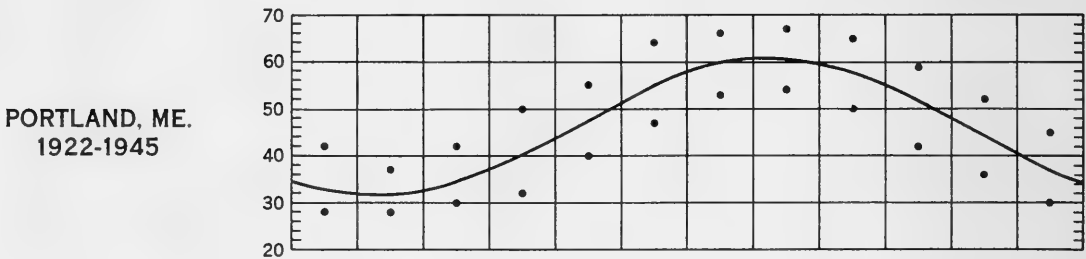
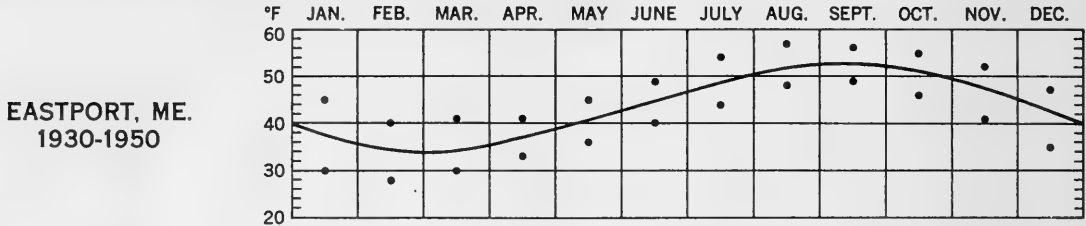
Hour	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
0	79.0	76.0	74.3	74.3	80.7	81.9	81.1	81.3	82.2	82.1	80.5	79.7
2	79.0	76.0	74.0	74.0	80.5	81.9	81.2	81.1	82.2	82.0	80.5	79.4
4	78.8	75.9	74.0	73.8	80.4	81.9	81.3	81.1	82.3	81.7	80.4	79.3
6	78.8	75.6	73.9	73.6	80.3	81.9	81.3	81.2	82.3	81.7	80.2	79.1
8	78.7	75.4	73.9	73.5	80.2	81.8	81.2	81.1	82.3	81.6	80.2	78.9
10	78.7	75.5	73.8	73.6	80.1	81.7	81.2	81.1	82.3	81.5	80.1	78.8
12	78.9	75.8	74.0	74.0	80.5	81.7	81.2	81.2	82.2	81.8	80.3	79.3
14	79.0	76.1	74.4	74.8	80.8	81.9	81.3	81.2	82.2	82.4	80.7	79.8
16	79.2	76.5	74.7	75.2	81.2	82.1	81.3	81.2	82.2	82.4	80.9	80.2
18	79.3	76.5	74.8	75.0	81.2	82.0	81.2	81.2	82.1	82.5	81.1	80.4
20	79.2	76.4	74.6	75.0	81.0	82.1	81.4	81.2	82.2	82.4	80.9	80.2
22	79.0	76.3	74.5	74.5	80.9	82.0	81.3	81.2	82.2	82.2	80.7	80.1
Mean	79.0	76.0	74.2	74.3	80.6	81.9	81.2	81.2	82.2	82.0	80.5	79.6
Max.	83	79	79	78	83	85	83	83	84	86	85	83
Min.	76	69	68	70	76	80	79	79	81	80	77	75

Time meridian 75°W.

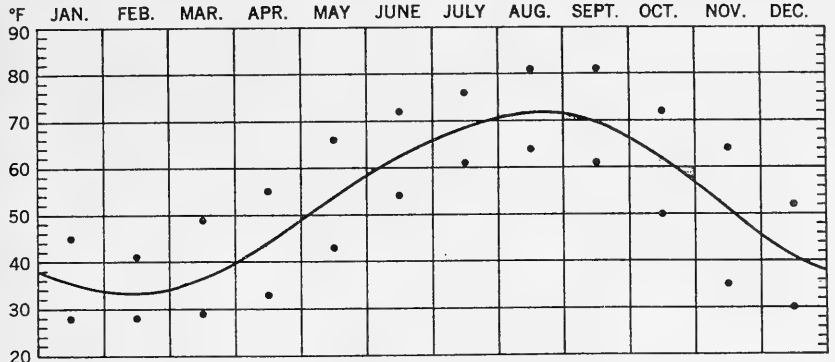
This table is derived from a recording thermometer record for the year 1950.
For additional data, see Table 1.

Graphs of Mean and Extreme Temperatures

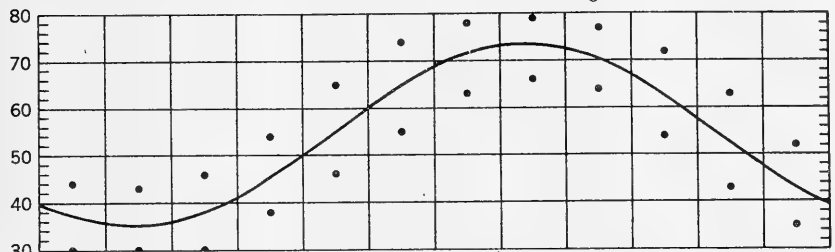
The variation in the mean surface water temperatures during the month and year for a number of places listed in Table 1 is shown by the solid lines. The dots show the maximum and minimum temperatures observed each month.



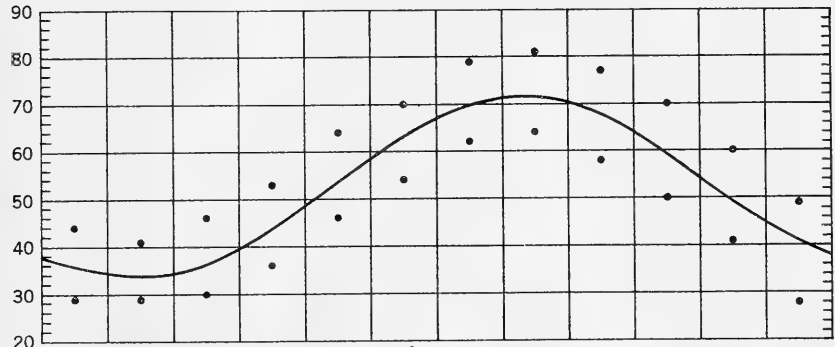
WILLETS POINT, N.Y.
1932-1950



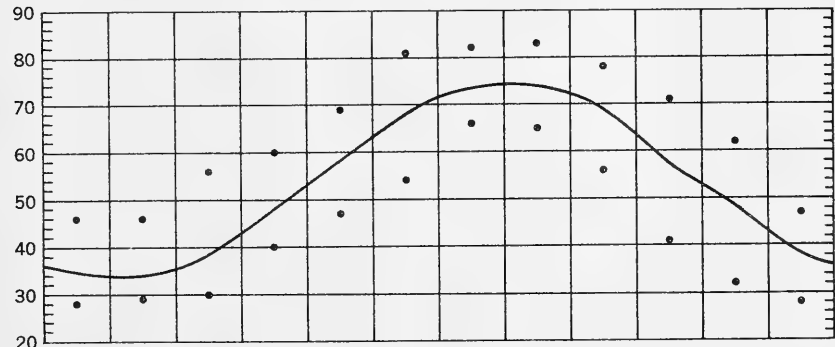
NEW YORK
(The Battery), N.Y.
1927-1950



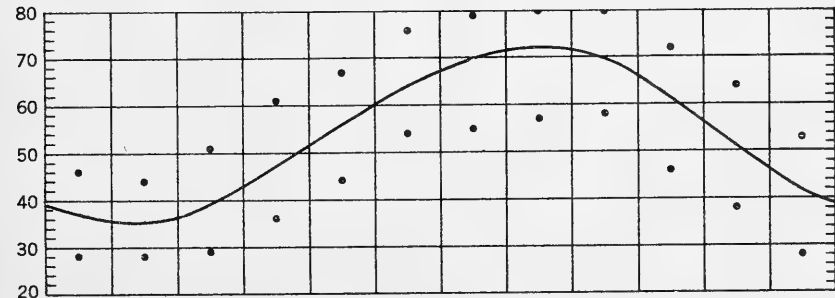
NEW YORK
(Fort Hamilton), N.Y.
1911-1920, 1927-1928



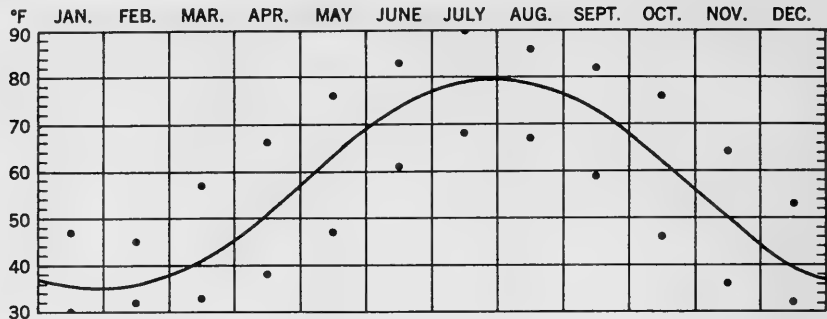
SANDY HOOK, N.J.
1887-1893, 1944-1950



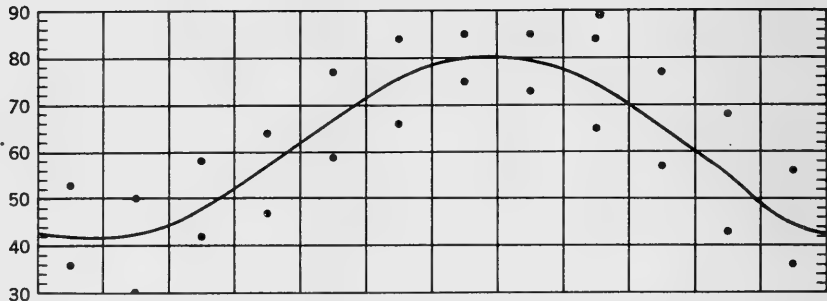
ATLANTIC CITY, N.J.
1912-1920, 1923-1950



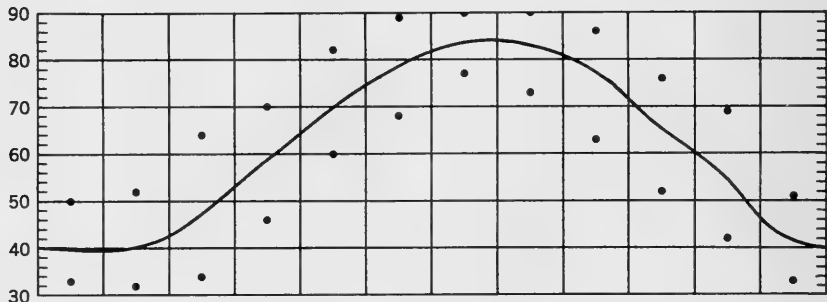
PHILADELPHIA, PA.
1923-1946



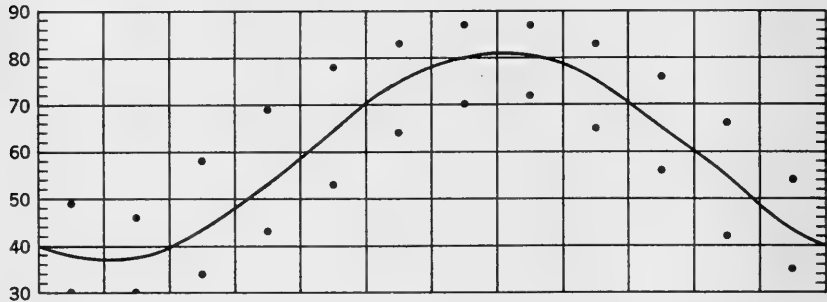
OLD POINT COMFORT, VA.
1943-1945, 1948-1950



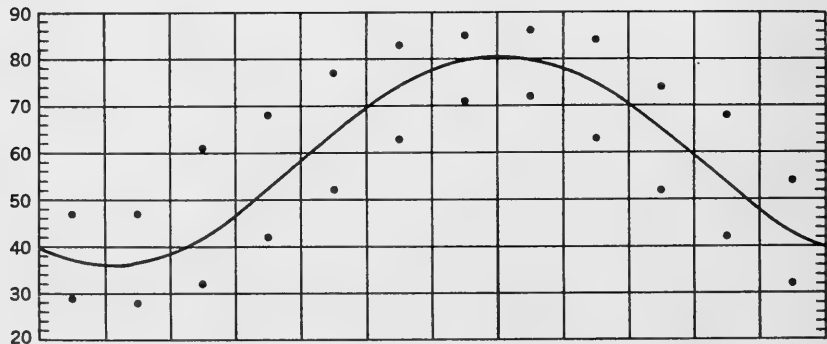
WASHINGTON, D.C.
1944-1950



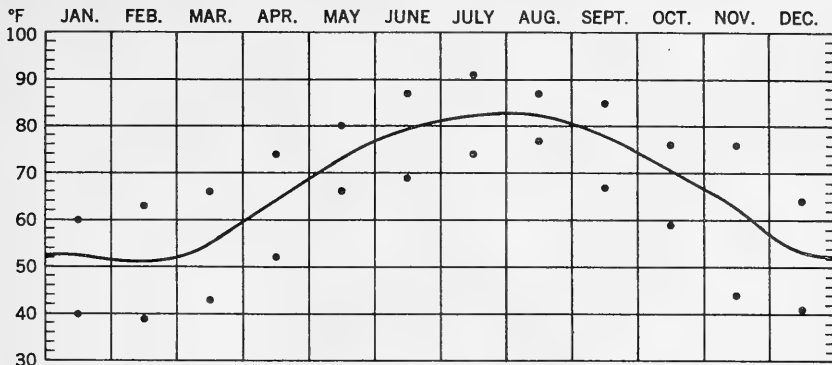
SOLOMONS, MD.
1938-1950



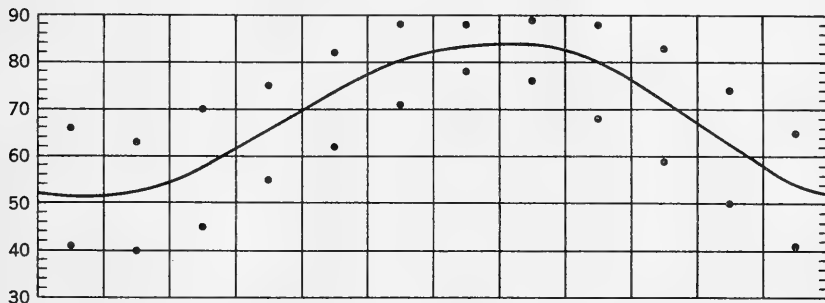
BALTIMORE, MD.
1914-1950



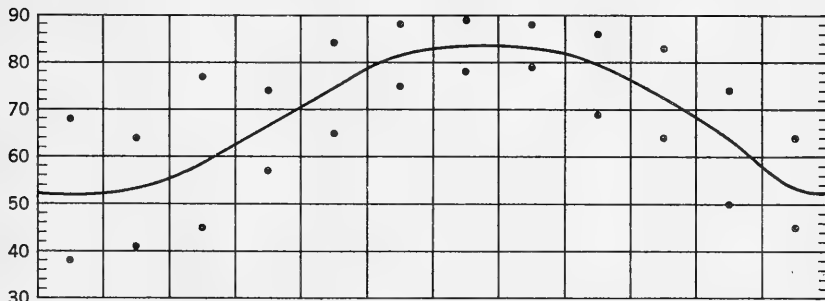
SOUTHPORT, N.C.
1946-1950



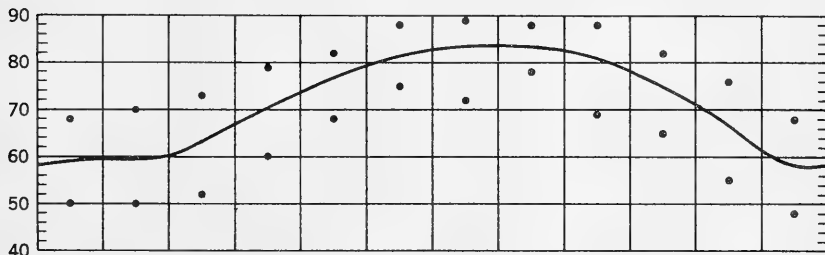
CHARLESTON, S.C.
1922-1950



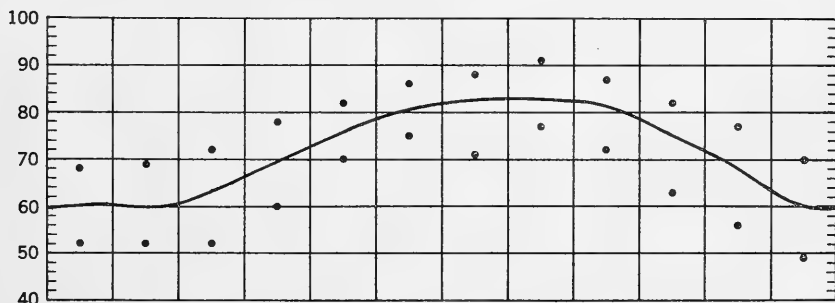
FORT PULASKI, GA.
1940-1950



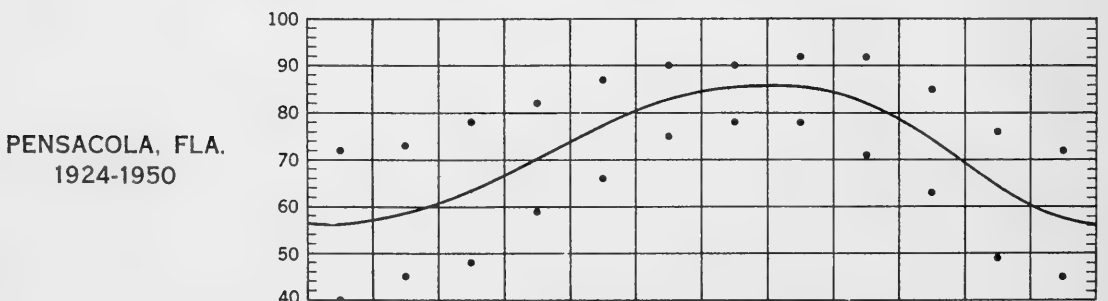
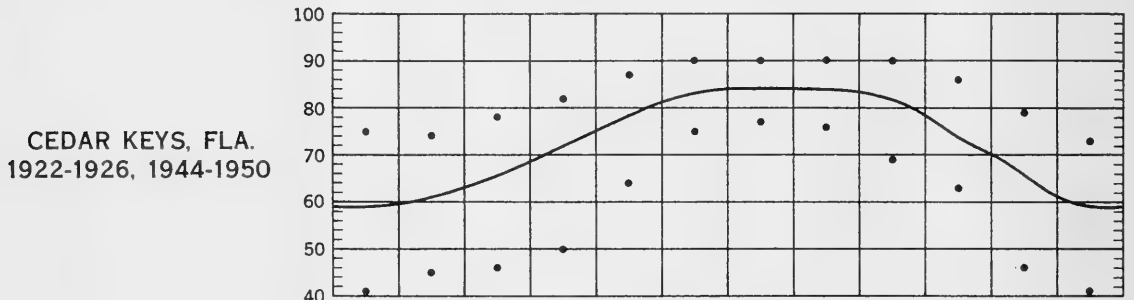
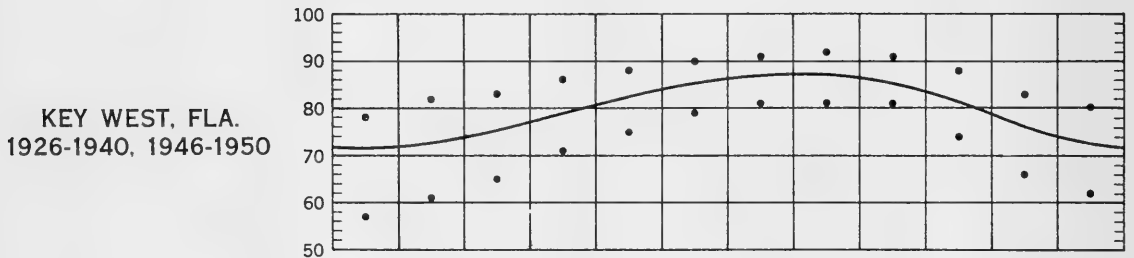
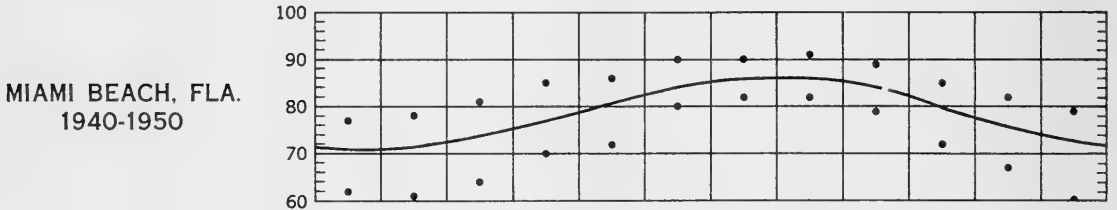
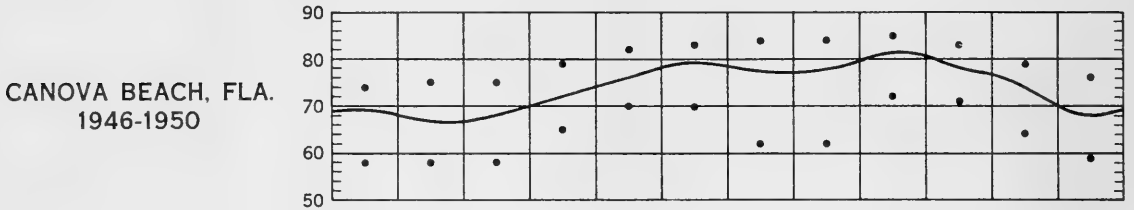
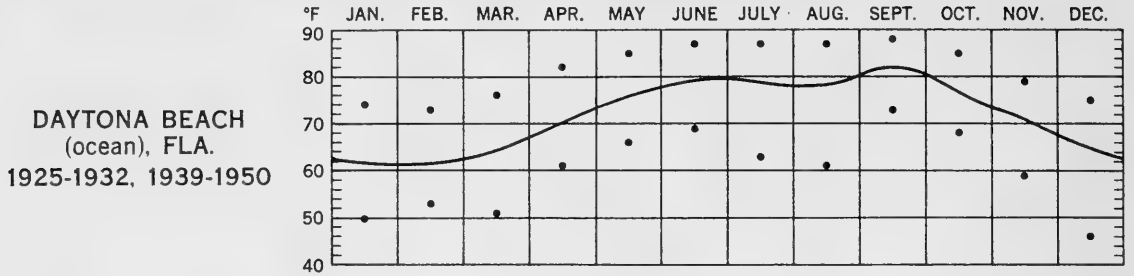
FERNANDINA, FLA.
1944-1950



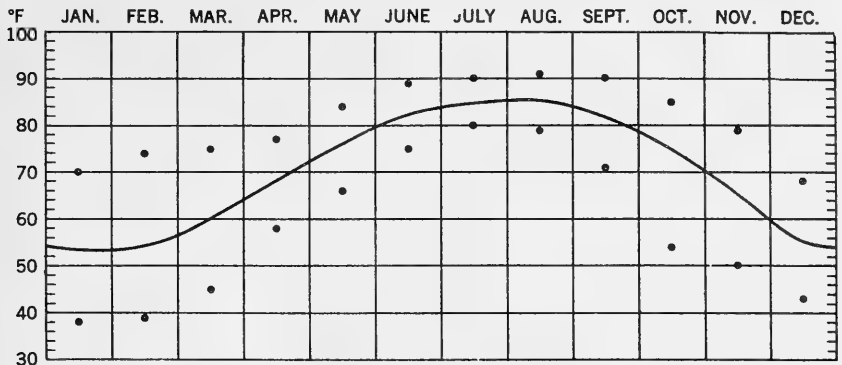
MAYPORT, FLA.
1944-1950



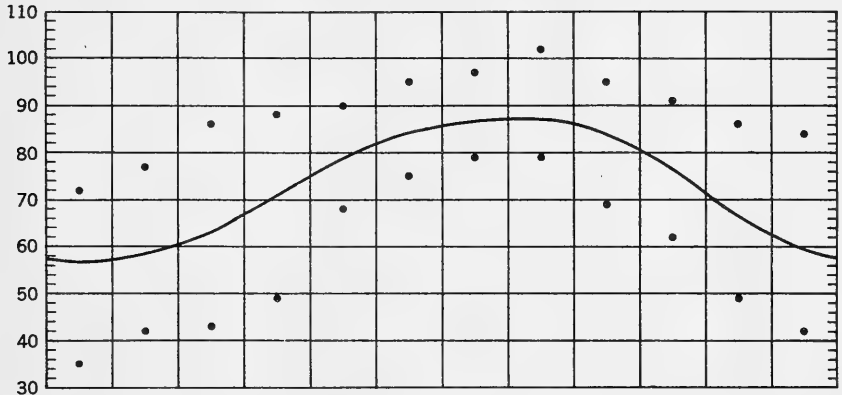
Graphs of Mean and Extreme Temperatures - *Continued*



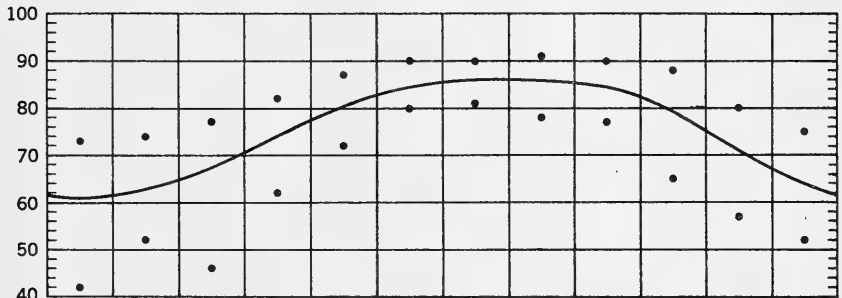
EUGENE ISLAND, LA.
1944-1950



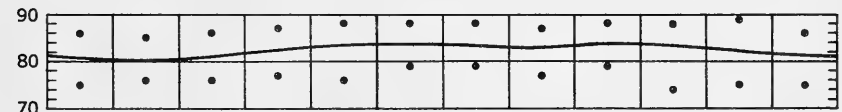
GALVESTON, TEX.
1922-1950



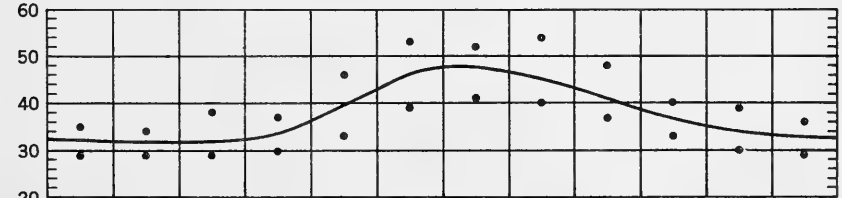
PORT ISABEL, TEX.
1944-1950



CRISTOBAL, C.Z.
1908-1950



IVIGTUT, GREENLAND
1945-1950



FERRY REACH,
ST. GEORGES I., BERMUDA
1945-1950

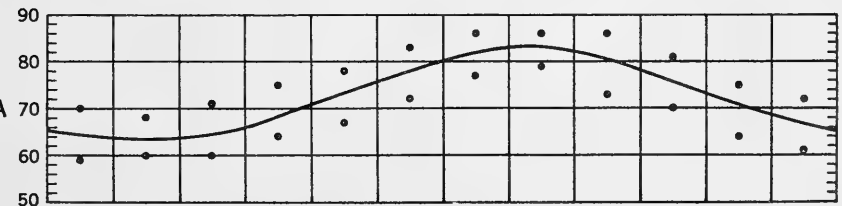


Table 3 - Conversion of Fahrenheit to Centigrade

°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C
25.0	-3.9	35.0	1.7	45.0	7.2	55.0	12.8	65.0	18.3	75.0	23.9	85.0	29.4
25.2	-3.8	35.2	1.8	45.2	7.3	55.2	12.9	65.2	18.4	75.2	24.0	85.2	29.6
25.4	-3.7	35.4	1.9	45.4	7.4	55.4	13.0	65.4	18.6	75.4	24.1	85.4	29.7
25.6	-3.6	35.6	2.0	45.6	7.6	55.6	13.1	65.6	18.7	75.6	24.2	85.6	29.8
25.8	-3.4	35.8	2.1	45.8	7.7	55.8	13.2	65.8	18.8	75.8	24.3	85.8	29.9
26.0	-3.3	36.0	2.2	46.0	7.8	56.0	13.3	66.0	18.9	76.0	24.4	86.0	30.0
26.2	-3.2	36.2	2.3	46.2	7.9	56.2	13.4	66.2	19.0	76.2	24.6	86.2	30.1
26.4	-3.1	36.4	2.4	46.4	8.0	56.4	13.6	66.4	19.1	76.4	24.7	86.4	30.2
26.6	-3.0	36.6	2.6	46.6	8.1	56.6	13.7	66.6	19.2	76.6	24.8	86.6	30.3
26.8	-2.9	36.8	2.7	46.8	8.2	56.8	13.8	66.8	19.3	76.8	24.9	86.8	30.4
27.0	-2.8	37.0	2.8	47.0	8.3	57.0	13.9	67.0	19.4	77.0	25.0	87.0	30.6
27.2	-2.7	37.2	2.9	47.2	8.4	57.2	14.0	67.2	19.6	77.2	25.1	87.2	30.7
27.4	-2.6	37.4	3.0	47.4	8.6	57.4	14.1	67.4	19.7	77.4	25.2	87.4	30.8
27.6	-2.4	37.6	3.1	47.6	8.7	57.6	14.2	67.6	19.8	77.6	25.3	87.6	30.9
27.8	-2.3	37.8	3.2	47.8	8.8	57.8	14.3	67.8	19.9	77.8	25.4	87.8	31.0
28.0	-2.2	38.0	3.3	48.0	8.9	58.0	14.4	68.0	20.0	78.0	25.6	88.0	31.1
28.2	-2.1	38.2	3.4	48.2	9.0	58.2	14.6	68.2	20.1	78.2	25.7	88.2	31.2
28.4	-2.0	38.4	3.6	48.4	9.1	58.4	14.7	68.4	20.2	78.4	25.8	88.4	31.3
28.6	-1.9	38.6	3.7	48.6	9.2	58.6	14.8	68.6	20.3	78.6	25.9	88.6	31.4
28.8	-1.8	38.8	3.8	48.8	9.3	58.8	14.9	68.8	20.4	78.8	26.0	88.8	31.6
29.0	-1.7	39.0	3.9	49.0	9.4	59.0	15.0	69.0	20.6	79.0	26.1	89.0	31.7
29.2	-1.6	39.2	4.0	49.2	9.6	59.2	15.1	69.2	20.7	79.2	26.2	89.2	31.8
29.4	-1.4	39.4								79.4	26.3	89.4	31.9
29.6	-1.3	39.6								79.6	26.4	89.6	32.0
29.8	-1.2	39.8								79.8	26.6	89.8	32.1
30.0	-1.1	40.0								80.0	26.7	90.0	32.2
30.2	-1.0	40.2								80.2	26.8	90.2	32.3
30.4	-0.9	40.4								80.4	26.9	90.4	32.4
30.6	-0.8	40.6								80.6	27.0	90.6	32.6
30.8	-0.7	40.8								80.8	27.1	90.8	32.7
31.0	-0.6	41.0								81.0	27.2	91.0	32.8
31.2	-0.4	41.2								81.2	27.3	91.2	32.9
31.4	-0.3	41.4								81.4	27.4	91.4	33.0
31.6	-0.2	41.6								81.6	27.6	91.6	33.1
31.8	-0.1	41.8								81.8	27.7	91.8	33.2
32.0	0.0	42.0								82.0	27.8	92.0	33.3
32.2	0.1	42.2								82.2	27.9	92.2	33.4
32.4	0.2	42.4								82.4	28.0	92.4	33.6
32.6	0.3	42.6								82.6	28.1	92.6	33.7
32.8	0.4	42.8								82.8	28.2	92.8	33.8
33.0	0.6	43.0								83.0	28.3	93.0	33.9
33.2	0.7	43.2								83.2	28.4	93.2	34.0
33.4	0.8	43.4								83.4	28.6	93.4	34.1
33.6	0.9	43.6								83.6	28.7	93.6	34.2
33.8	1.0	43.8								83.8	28.8	93.8	34.3
34.0	1.1	44.0								84.0	28.9	94.0	34.4
34.2	1.2	44.2								84.2	29.0	94.2	34.6
34.4	1.3	44.4								84.4	29.1	94.4	34.7
34.6	1.4	44.6								84.6	29.2	94.6	34.8
34.8	1.6	44.8								84.8	29.3	94.8	34.9

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