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(WITH DATA THROUGH 1954)

SURFACE WATER TEMPERATURES

AT TIDE STATIONS

ATLANTIC COAST

NORTH AND SOUTH AMERICA

UNITED STATES
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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 1954. 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 places in Venezuela were supplied 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 mean 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.

The monthly temperature summaries given in Table 2 are from records of recording thermometers. The thermometer bulb at each station was at a fixed position just below lowest observed low water, so that during a day it was covered by varying amounts of tidal water. The instrument record is in the form of a continuous trace; the mean values are from hourly readings. When it could be done with reasonable certainty, highest or lowest values are shown also for months for which the record was only partially complete.

All temperatures in this publication are given in degrees Fahrenheit. They can be converted to the centigrade scale by means of Table 3.

The mean temperature curves are derived from the monthly means of Table 1 and show graphically the seasonal variation for many places. The unusual shape of the 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. No. 279. Density of Sea Water, Atlantic Coast, North and South America.

Special Pub. No. 280. Surface Water Temperatures, Pacific Coast, North and South America and Pacific Ocean Islands.

Special Pub. No. 281. Density of Sea Water, Pacific Coast, North and South America and Pacific Ocean Islands.

SURFACE WATER TEMPERATURES

INDEX MAP

ATLANTIC COAST STATIONS

1955

LIST OF STATIONS

Station	Lat. ° ′	Long. ° ′	Page
Amuay, Venezuela	11 45N.	70 13W.	52
Annapolis, Md.	38 59N.	76 29W.	26,66
Asbury Park, N. J.	40 13N.	74 00W.	18
Ashley River, Charleston, S. C.	32 50N.	79 58W.	31
Atlantic City, N. J.	39 21N.	74 25W.	18,61,66
Baltimore, Md.	39 16N.	76 35W.	27,66
Bar Harbor, Me.	44 23N.	68 12W.	7,59,65
Battery, The, New York, N. Y.	40 42N.	74 01W.	14,60,65
Belém, Brazil	1 27S.	48 30W.	55,68
Bermuda (Ferry Reach, St. Georges Island)	32 22N.	64 42W.	47,68
Boston, Mass.	42 21N.	71 03W.	10,60,65
Breakwater Harbor, Del.	38 47N.	75 06W.	20,66
Cainhoy, Wando River, S.C.	32 55N.	79 50W.	31
Cambridge, Md.	38 34N.	76 04W.	25
Canavieiras, Brazil	15 41S.	38 59W.	57
Canova Beach, Fla.	28 08N.	80 35W.	34,64,67
Cape Charles (town), Va.	37 16N.	76 01W.	22
Carenero, Venezuela	10 32N.	66 07W.	53
Cartagéna, Colombia	10 24N.	75 33W.	51,68
Carúpano, Venezuela	10 40N.	63 15W.	54,68
Casilda, Cuba	21 45N.	79 59W.	49,68
Cedar Keys, Fla.	29 08N.	83 02W.	37,67
Charleston (Customhouse Wharf), S.C.	32 47N.	79 55W.	29,67
Charleston (Ashley River), S.C.	32 50N.	79 58W.	31
Ciudad Trujillo, Dominican Republic	18 28N.	69 53W.	50,68
Coatzacoalcos (Puerto Mexico), Mexico	18 09N.	94 25W.	44,68
Cristobal, Canal Zone	9 21N.	79 54W.	46,68
Cumaná, Venezuela	10 28N.	64 11W.	54,68
Daytona Beach (Halifax River), Fla.	29 13N.	81 01W.	34
Daytona Beach (ocean), Fla.	29 14N.	81 00W.	33,63,67
Diamond Shoal Lightship	35 05N.	75 20W.	28,66
Eastport, Me.	44 54N.	66 59W.	6,65
Eugene Island, La.	29 22N.	91 23W	40,67
Fernandina Beach, Fla.	30 41N.	81 28W.	32,67
Flagler Beach, Fla.	29 29N.	81 08W.	33
Fortelaza (Mucuripe), Brazil	3 43S.	38 29W.	55,68
Fort Hamilton, New York, N. Y.	40 37N.	74 02W.	15
Fort Pulaski, Savannah River, Ga.	32 02N.	80 54W	31,67
Galveston, Tex.	29 19N.	94 48W.	41,67
Gibara, Cuba	21 07N.	76 07W.	48,68
Gloucester Point, Va.	37 15N.	76 30W.	24
Grand Isle, 8 miles SE. of, La.	29 10N.	89 55W.	39,67
Guantánamo Bay, Cuba	19 54N.	75 09W.	48,68
Habana, Cuba	23 09N.	82 20W.	47,68
Halifax River, Daytona Beach, Fla.	29 13N.	81 01W.	34
Imbituba, Brazil	28 17S.	48 40W.	58
Ivigtut, Greenland	61 12N.	48 11W.	6,65

LIST OF STATIONS - *Continued*

Station	Lat. ° ′	Long. ° ′	Page
Key West, Fla.	24 33N.	81 48W.	36,67
Kiptopeke Beach, Va.	37 10N.	75 59W.	21,66
La Guaira, Venezuela	10 36N.	66 56W.	53,68
Little Creek, Va.	36 55N.	76 11W.	22
Long Branch, N.J.	40 18N.	73 59W.	17,65
Mayport, Fla.	30 24N.	81 26W.	33,67
Miami Beach, Fla.	25 46N.	80 08W.	35,67
Monrovia, Liberia	6 20N.	10 48W.	58
Montauk, Fort Pond Bay, L.I., N.Y.	41 03N.	71 58W.	13,65
Myrtle Beach, S.C.	33 41N.	78 53W.	29
Nantucket Shoals Lightship	40 37N.	69 37W.	12
New London, Conn.	41 22N.	72 06W.	12,65
New York (Fort Hamilton), N.Y.	40 37N.	74 02W.	15
New York (The Battery), N.Y.	40 42N.	74 01W.	14,60,65
New York (Willets Point), N.Y.	40 48N.	73 47W.	13,65
North Charleston Terminals, Cooper River, S.C.	32 54N.	79 58W.	31
Old Point Comfort, Va.	37 00N.	76 18W.	23,66
Palm Beach, Fla.	26 43N.	80 02W.	35
Pensacola, Fla.	30 24N.	87 13W.	38,67
Philadelphia, Pa.	39 57N.	75 08W.	20,66
Port-au-Prince, Haiti	18 33N.	72 21W.	49,68
Port Isabel, Tex.	26 04N.	97 13W.	43,67
Portland, Me.	43 40N.	70 15W.	8,65
Port Royal, Jamaica	17 56N.	76 51W.	49
Portsmouth, N.H.	43 05N.	70 45W.	9,65
Progreso, Mexico	21 17N.	89 40W.	44,68
Puerto Cabezas, Nicaragua	14 01N.	83 23W.	45,68
Puerto Cortés, Honduras	15 50N.	87 57W.	45,68
Puerto Limón, Costa Rica	10 00N.	83 02W.	46,68
Puerto Mexico (Coatzacoalcos), Mexico	18 09N.	94 25W.	44,68
Puerto Plata, Dominican Republic	19 49N.	70 42W.	50,68
Pulpit Harbor, Me.	44 09N.	68 53W.	8
Recife, Brazil	8 03S.	34 52W.	56,68
Richmond, Va.	37 32N.	77 25W.	23,66
Rio de Janeiro (Fortaleza de Santa Cruz), Brazil	22 56S.	43 08W.	57,68
Riohacha, Colombia	11 34N.	72 55W.	52
Rockport, Tex.	28 01N.	97 03W.	42,67
St. Lucia (Vieux Fort), B.W.I.	13 44N.	60 58W.	51,68
St. Petersburg, Fla.	27 46N.	82 38W.	37,67
Salinópolis, Brazil	0 37S.	47 23W.	55
Salvador, Brazil	12 58S.	38 31W.	56,68
Sandy Hook, N.J.	40 28N.	74 01W.	16,65
Solomons, Md.	38 19N.	76 27W.	25,66
Southport, N.C.	33 55N.	78 01W.	29,66
Trinidad (Carenage Bay), B.W.I.	10 41N.	61 36W.	51,68
Veracruz, Mexico	19 11N.	96 07W.	43
Washington, D.C.	38 52N.	77 01W.	24,62,66
Willets Point, New York, N.Y.	40 48N.	73 47W.	13,65
Woods Hole, Mass.	41 31N.	70 40W.	11,65

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.
							IVIGTUT, GREENLAND								
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	31.8	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
1951	30.3	31.5	32.8	33.2	38.8	46.8	44.5	44.5	42.7	36.4	34.9	32.6	37.4	52	29
1952	31.9	32.0	31.5	31.9	41.1	44.4	44.8	42.7	42.0	-- -	-- -	32.7	-- -	48	29
Mean	31.7	32.0	32.3	33.4	39.6	46.3	46.4	44.8	41.4	36.3	34.0	33.0	37.6		
Max.	35	35	38	37	48	53	52	54	48	41	39	36		54	
Mean Max.	34.2	33.9	34.2	36.0	45.3	50.4	49.4	48.4	45.6	39.1	36.2	35.2			
Mean Min.	29.9	30.0	29.9	31.6	34.9	42.4	42.8	41.7	38.4	33.5	31.8	30.6			
Min.	29	29	29	30	33	39	41	40	37	32	30	29			29
							EASTPORT, ME.								
1930	36.3	33.6	34.5	37.8	41.5	45.1	51.8	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	43.8	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	43.8	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	35.8	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	37.8	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	35.8	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	35.8	38.7	43.2	46.8	49.8	50.4	48.2	45.7	40.8	41.8	52	31
1941	36.5	33.8	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	40.8	44.2	48.9	51.8	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	42.8	52	32
1949	40.2	36.8	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
1951	42.4	38.9	38.7	40.6	43.6	47.2	51.2	53.8	54.4	52.9	49.4	44.9	46.5	56	37
1952	40.2	37.3	36.5	38.2	41.4	45.2	49.4	52.3	52.5	51.4	47.7	43.7	44.6	54	35
1953	39.1	37.4	37.7	40.5	43.3	46.9	51.2	53.0	54.0	52.2	49.4	46.9	46.0	55	36
1954	41.5	37.5	37.7	39.5	42.7	46.2	49.5	51.7	53.1	52.0	48.9	44.5	45.4	54	36
Mean	38.0	35.0	35.0	37.3	40.6	44.7	48.3	51.7	52.4	51.1	47.7	42.9	43.8		
Max.	45	40	41	42	46	50	55	57	56	55	52	49		57	
Mean Max.	40.5	36.6	36.3	39.1	42.9	47.3	51.5	53.4	53.6	52.3	49.7	45.6			
Mean Min.	35.3	33.7	33.6	35.8	38.6	42.3	46.3	50.0	51.3	49.5	45.1	39.6			
Min.	30	28	30	33	36	40	44	48	49	46	41	35			28
							BAR HARBOR, ME.‡								
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
1951	35.1	33.5	37.0	41.3	46.9	53.8	58.6	59.1	57.0	52.5	46.5	39.9	46.8	63	29
1952	34.1	32.8	35.9	40.1	46.0	52.0	57.6	58.1	55.9	51.6	46.2	40.6	45.9	61	29
1953	35.5	34.0	37.4	42.6	47.1	52.4	57.9	58.0	56.8	52.5	48.1	43.3	47.1	62	30
1954	33.6	33.4	36.2	39.9	46.0	51.5	55.7	56.8	55.1	52.3	46.8	39.8	45.6	60	29

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

‡ For temperatures from recording thermometer, 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.
BAR HARBOR, ME. ‡ - Continued															
Mean	34.5	32.5	35.2	40.2	46.1	52.1	57.1	57.7	55.8	52.1	47.1	40.2	45.9		
Max.	43	39	42	48	52	58	64	63	63	58	54	52		64	
Mean Max.	40.4	36.6	39.1	44.6	50.7	56.2	61.0	61.2	58.8	55.8	51.5	46.8			
Mean Min.	29.6	29.0	31.2	35.9	41.9	48.3	53.1	54.8	52.5	48.5	41.6	33.5			
Min.	29	28	28	32	39	46	51	51	50	46	37	32			28
PULPIT HARBOR, PENOBSCOT BAY, ME.															
1945	--	--	--	--	--	--	--	63.4	59.2	52.5	47.3	37.0	--	*70	*30
1946	33.6	29.8	--	40.5	46.9	53.2	59.9	60.3	58.6	54.3	48.7	42.1	--	63	*29
PORTLAND, ME.															
1922	†32.0	†32.0	35.8	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	38.8	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	53.8	58.3	60.3	57.7	49.8	43.0	37.4	45.8	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	46.3	36.9	46.1	61	--
1928	33.8	33.1	37.0	39.2	--	--	--	--	--	--	--	38.1	--	--	32
1929	34.9	32.5	34.7	38.7	--	--	58.6	58.5	58.1	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	44.8	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	34.3	†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	32
1934	--	--	†31.0	40.1	49.6	55.8	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	32
1938	32.9	33.3	35.1	42.8	47.8	55.6	59.4	61.9	56.7	52.9	45.7	37.6	46.8	64	--
1939	33.3	†31.0	33.4	37.6	45.5	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	37.8	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	28
1945	30.6	30.0	35.6	41.2	46.0	54.7	59.7	60.4	59.4	50.9	44.8	35.6	45.7	63	28
Mean	32.9	31.8	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	43.8	51.8	58.8	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
PORTSMOUTH, N.H.															
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	30
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	46.8	64	29
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	30
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	32
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	30
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	48.8	68	34
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
1951	38.7	35.1	37.2	43.4	51.0	57.8	60.0	63.5	60.4	53.2	45.8	41.1	48.9	68	32
1952	36.6	35.5	36.4	42.9	49.5	55.5	61.4	60.7	57.9	50.4	43.5	40.2	47.5	66	33
1953	36.2	36.5	38.5	43.8	--	57.2	60.0	60.8	56.8	52.9	48.9	43.6	--	66	34
1954	36.0	34.8	38.0	43.5	49.7	56.0	58.8	58.3	57.5	53.4	47.4	41.3	47.9	66	32

‡ For temperatures from recording thermometer, see Table 2.

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

† All daily temperatures of 32° and below were recorded by the observer 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								
Mean	35.8	34.3	36.6	42.5	48.7	54.9	59.7	61.4	58.6	52.7	46.9	40.4	47.7		
Max.	42	40	43	49	56	64	66	68	66	57	52	47		68	
Mean Max.	39.0	36.4	40.3	46.0	53.4	60.8	64.9	65.4	62.6	55.4	50.0	44.2			
Mean Min.	32.8	31.9	33.6	39.5	44.2	49.4	53.2	56.1	54.2	49.7	43.0	35.7			
Min.	29	30	30	37	41	46	50	52	52	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	35.8	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	51.8	58.5	63.1	64.2	62.8	54.5	46.0	38.3	48.2	69	29
1941	34.0	33.1	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	31.8	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	49.8	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	38.8	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
1951	37.5	35.9	39.9	46.9	55.4	62.6	65.8	67.8	65.7	57.2	48.3	41.6	52.0	70	32
1952	37.4	36.2	38.5	47.0	52.9	60.9	67.6	66.8	63.6	55.0	46.8	41.4	51.2	72	33
1953	37.4	37.5	41.2	47.6	57.1	63.6	66.2	67.2	64.9	57.4	51.0	44.6	53.0	72	34
1954	35.9	36.6	41.0	47.9	53.8	60.8	64.2	64.0	61.9	58.1	48.8	40.8	51.2	69	32
Mean	34.8	33.7	37.5	44.5	52.7	60.3	64.5	65.6	63.3	56.0	47.9	39.3	50.0		
Max.	45	41	48	58	63	70	72	75	75	64	58	50		75	
Mean Max.	38.0	36.2	41.8	49.2	57.9	65.1	68.3	69.4	67.1	60.8	52.3	43.9			
Mean Min.	31.8	31.2	33.6	40.5	47.8	55.9	60.9	62.3	59.5	51.3	43.3	34.8			
Min.	28	28	29	32	44	50	57	56	55	46	37	30			28
							WOODS HOLE, MASS.								
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
1951	37.1	35.0	38.4	46.7	56.0	63.1	70.6	71.7	70.2	61.4	50.4	41.3	53.5	74	33
1952	36.1	35.0	36.6	45.0	54.0	65.0	71.9	73.0	68.3	59.4	49.6	42.1	53.0	76	33
1953	37.1	36.5	38.7	45.6	53.8	63.5	70.1	70.1	69.0	60.3	52.6	46.0	53.6	74	36
1954	35.8	34.4	38.5	45.4	52.6	63.5	69.8	69.8	65.1	61.5	51.4	40.8	52.4	74	33

‡ For temperatures from recording thermometer, 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.
							WOODS HOLE, MASS. - Continued								
Mean	35.6	34.0	37.0	45.2	53.8	62.9	70.4	71.2	67.9	60.2	51.2	41.5	52.6		
Max.	45	39	45	53	61	73	76	77	74	67	60	50		77	
Mean Max.	39.1	36.5	41.5	49.2	58.4	68.6	73.8	73.9	71.4	64.7	56.5	46.5			
Mean Min.	33.5	31.6	33.4	41.1	48.8	57.8	66.7	68.9	64.1	55.5	46.5	36.2			
Min.	28	27	30	38	45	55	65	66	60	51	43	30			27
							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
1951	37.7	†36.7	41.1	51.3	59.3	65.9	73.0	72.5	70.3	62.1	49.5	42.2	55.1	77	31
1952	38.7	38.5	40.8	50.4	56.8	67.2	71.7	74.1	69.2	60.7	51.5	43.2	55.2	78	36
1953	38.2	38.6	43.2	49.3	57.7	66.9	71.6	71.6	69.9	61.5	53.4	45.3	55.6	78	36
1954	39.2	39.0	43.0	49.5	54.3	64.6	69.2	69.5	66.4	63.0	51.1	41.0	54.2	72	32
Mean	38.5	37.7	41.1	49.8	57.3	66.5	72.0	72.1	68.8	61.8	52.3	43.3	55.1		
Max.	45	43	52	58	66	78	79	80	78	70	60	50		80	
Mean Max.	41.9	40.9	47.6	54.9	63.3	73.3	76.4	75.9	74.2	67.1	57.8	48.4			
Mean Min.	35.1	33.9	36.7	44.3	52.1	60.3	67.1	68.9	64.2	56.5	46.4	37.4			
Min.	31	31	33	42	49	58	65	68	62	50	43	35			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
1951	38.9	36.6	39.2	45.8	53.6	61.2	68.0	70.8	69.9	61.9	51.3	43.6	53.4	74	32
1952	39.5	38.4	39.8	46.2	53.5	62.8	70.8	71.2	-- -	-- -	51.7	44.2	-- -	76	35
1953	38.7	38.4	40.3	46.0	52.9	62.6	68.4	70.4	68.1	61.3	54.5	45.8	54.0	74	30
1954	36.9	36.8	40.1	46.5	52.4	61.7	69.2	68.4	65.5	62.1	52.3	42.0	52.8	73	30
Mean	38.5	36.8	38.7	45.1	52.2	61.8	68.9	70.3	67.7	61.5	52.8	44.2	53.2		
Max.	48	41	46	52	59	72	76	76	74	67	60	51		76	
Mean Max.	42.4	39.4	42.8	49.2	57.1	67.6	72.9	73.8	71.8	66.0	57.2	48.6			
Mean Min.	34.9	32.9	34.6	41.5	47.3	56.1	64.7	67.6	63.4	57.1	47.6	36.8			
Min.	29	29	30	39	44	52	63	65	61	53	43	32			29
							NEW YORK (Willets Point), 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	38.8	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

* 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 Willets 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 (Willets Point), N.Y. - Continued									
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
1951	37.4	34.5	39.9	47.4	56.9	65.8	67.6	-- -	-- -	63.9	51.6	42.1	— -	*70	33
1952	38.3	37.0	39.3	47.3	54.9	65.4	71.0	-- -	72.7	62.8	51.6	43.3	— -	*75	36
1953	38.7	38.1	41.0	46.8	54.5	61.6	67.8	72.4	70.8	63.4	53.8	45.8	54.6	76	36
1954	35.0	35.2	39.9	47.0	55.7	62.7	68.7	71.6	68.8	64.6	52.7	41.2	53.6	76	30
Mean	36.0	34.1	37.3	44.8	54.2	62.8	68.2	71.7	70.0	62.1	51.5	40.9	52.8		
Max.	45	41	49	55	66	72	76	81	81	72	64	52		81	
Mean Max.	39.3	37.3	42.0	50.6	60.5	67.8	72.4	74.9	74.3	67.5	58.0	46.8			
Mean Min.	32.9	31.8	33.4	39.3	48.4	58.0	64.1	68.5	64.3	56.4	45.2	35.1			
Min.	28	28	29	33	43	54	60	64	60	50	35	30			28
						NEW YORK (The Battery), N.Y.‡									
1927	34.0	35.8	38.5	45.7	53.4	-- -	-- -	68.9	68.2	63.5	51.6	42.8	— -	*71	30
1928	37.4	36.0	38.5	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	38.8	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	73.8	69.8	59.9	50.5	42.8	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	37.8	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	37.8	43.5	56.1	66.6	71.4	74.1	69.8	61.9	51.1	40.3	53.8	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	47.8	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	64.9	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	41.8	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
1951	39.0	36.3	40.1	47.1	57.0	67.0	71.4	74.2	71.4	62.9	51.5	43.3	55.1	76	34
1952	38.5	38.2	40.1	47.2	55.6	64.9	74.0	74.2	71.3	60.8	50.9	44.5	55.0	78	35
1953	39.2	38.8	42.1	48.3	56.5	64.3	72.8	73.5	70.8	63.3	54.6	47.2	56.0	77	36
1954	38.3	37.7	41.5	49.1	56.0	65.2	71.5	71.2	67.9	64.5	52.2	42.7	54.8	75	34
Mean	37.6	35.9	38.8	45.9	55.3	65.1	71.6	73.3	70.4	62.2	52.5	43.0	54.3		
Max.	44	43	46	54	65	74	78	79	77	72	63	52		79	
Mean Max.	40.6	38.1	42.1	50.3	60.5	70.0	74.6	75.7	73.5	67.1	57.4	47.3			
Mean Min.	34.6	33.6	36.0	42.0	49.9	60.1	68.3	70.4	66.7	57.4	47.2	38.7			
Min.	30	30	30	38	46	55	63	66	64	53	43	35			30
						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	67.6	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	53.8	62.8	69.8	72.3	67.6	60.4	48.0	38.3	51.4	75	28

† See footnote † on page 13.

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

‡ For temperatures from recording thermometer, 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.
NEW YORK (Fort Hamilton), N.Y. - Continued															
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	46	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	57.8	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			28
SANDY HOOK, N.J.															
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	48.6	36.0	51.2	79	28
1889	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	36.0	-- -	39.4	48.9	59.9	68.5	72.1	72.7	67.6	57.0	46.4	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	69.8	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	70.8	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
1951	37.4	35.5	41.1	49.5	60.0	69.5	75.2	76.1	71.2	60.8	48.4	41.1	55.5	80	32
1952	38.4	38.0	40.9	50.2	58.3	69.1	77.6	75.8	71.1	57.9	47.9	41.6	55.6	84	33
1953	38.3	39.1	43.9	49.6	60.3	70.0	76.8	75.7	71.8	61.1	51.1	43.2	56.7	82	36
1954	34.5	37.5	42.0	51.8	57.9	69.1	75.0	73.2	68.0	64.0	49.0	39.6	55.1	79	30
Mean	35.7	35.3	39.6	48.8	58.1	68.3	74.2	74.0	69.2	58.5	48.4	39.0	54.1		
Max.	46	46	56	61	69	81	84	83	80	72	62	50		84	
Mean Max.	40.6	40.2	46.5	55.7	65.5	76.7	79.3	79.4	74.8	66.1	55.1	44.4			
Mean Min.	31.9	31.5	34.2	43.4	51.4	60.7	69.6	69.5	62.9	51.4	41.5	32.6			
Min.	28	29	30	40	47	54	66	65	56	41	32	28			28
LONG BRANCH, N.J.															
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
1951	35.4	35.7	39.9	46.1	58.5	64.9	68.7	69.7	68.2	60.6	47.3	41.0	53.0	71	33
1952	38.3	38.8	39.2	48.2	54.7	64.5	70.0	71.6	68.0	59.0	48.4	42.4	53.6	76	34
1953	38.0	38.0	40.0	46.8	56.5	65.3	69.0	69.9	65.5	56.9	49.4	42.0	53.1	73	36
1954	35.0	35.8	39.1	45.1	54.0	62.9	67.0	65.7	63.4	58.5	48.7	41.3	51.4	69	33
Mean	38.9	39.0	39.8	46.4	54.5	64.1	68.9	69.6	66.1	59.3	50.9	42.8	53.4		
Max.	47	46	45	55	64	74	77	78	73	67	60	51		78	
Mean Max.	41.5	41.8	42.8	52.2	60.1	69.1	72.7	73.0	70.4	64.7	55.3	47.7			
Mean Min.	36.3	36.2	37.2	42.5	49.0	57.6	64.0	65.6	61.0	53.9	45.9	37.4			
Min.	33	33	35	40	45	54	59	61	56	49	42	33			33

* 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.
							ASBURY PARK, N.J.								
1945	--	--	--	--	--	--	--	--	--	--	54.0	44.0	--	--	*39
1946	40.5	--	--	--	--	59.2	66.9	70.5	68.9	64.0	56.3	46.4	--	74	*36
1947	41.7	37.8	37.7	45.0	50.0	60.3	65.5	--	--	--	--	--	--	*72	*35
							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	76	29
1913	43.2	38.7	43.9	50.0	58.1	65.8	67.6	73.9	69.4	61.9	51.6	43.2	55.6	78	35
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	76	29
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	80	34
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	78	32
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	79	30
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	79	29
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	74	32
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	74	29
—															
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	78	29
1924	38.3	35.1	38.8	46.2	54.5	64.4	67.6	71.1	66.2	60.3	51.1	40.5	52.8	74	31
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	76	28
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	78	30
1927	33.4	38.5	40.5	45.0	54.7	63.1	67.3	66.9	70.0	62.8	52.0	42.8	53.1	73	28
1928	36.3	35.6	38.7	45.1	54.3	61.0	66.6	71.8	67.8	61.3	50.0	41.4	52.5	76	32
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	52.8	75	29
1930	37.6	36.5	40.5	46.2	56.8	63.3	68.9	69.6	72.0	58.3	49.6	39.6	53.2	78	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	53.8	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
1951	38.6	37.8	42.3	49.7	58.7	66.3	70.4	75.2	73.0	63.5	50.6	43.4	55.8	78	33
1952	39.5	40.0	41.6	48.6	55.6	65.2	74.0	73.6	71.4	60.0	51.2	44.4	55.4	81	36
1953	41.6	40.6	43.8	49.6	58.0	63.7	73.6	75.0	70.6	63.4	53.5	46.4	56.6	81	39
1954	39.0	39.0	43.1	51.2	57.0	64.2	71.6	68.7	70.2	64.8	50.9	41.4	55.1	76	34
Mean	37.4	36.2	39.9	47.3	55.9	64.6	69.5	71.7	69.7	61.3	51.4	41.6	53.9		
Max.	46	44	51	61	67	76	81	80	80	72	64	53		81	
Mean Max.	41.3	39.7	44.7	53.0	62.3	71.5	75.7	76.6	74.4	67.2	57.5	47.4			
Mean Min.	33.2	32.8	35.3	42.3	50.0	57.5	61.4	65.4	64.2	55.2	44.6	35.6			
Min.	28	28	29	36	44	54	55	57	58	46	38	28			28

* 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 temperatures from recording thermometer, 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.
							BREAKWATER HARBOR, DEL.								
1919	39.6	38.5	44.3	48.0	59.7	67.5	73.2	72.0	69.3	64.8	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
--															
1952	-- -	-- -	-- -	-- -	-- -	68.9	74.7	75.4	72.6	60.4	51.6	44.3	-- -	81	*40
1953	41.6	41.4	45.0	51.5	61.3	68.4	75.1	75.9	72.6	64.1	54.0	46.4	58.1	81	40
1954	38.7	40.0	43.3	52.1	60.1	68.6	74.0	72.3	71.5	65.1	51.5	42.1	56.6	77	35
Mean	39.0	38.2	43.8	50.4	59.6	68.8	73.7	73.5	71.4	63.0	52.1	42.7	56.4		
Max.	50	47	61	60	68	83	86	80	81	72	61	54		86	
Mean Max.	43.5	42.8	50.8	55.9	66.3	75.1	78.6	78.1	77.0	69.8	58.2	49.4			
Mean Min.	34.7	34.2	37.7	43.2	52.7	62.9	69.5	69.4	65.8	55.6	45.2	36.3			
Min.	28	29	34	36	50	61	66	66	56	50	40	32			28
							PHILADELPHIA, PA.								
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
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	60.6	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	75.7	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
--															
1954	-- -	-- -	-- -	-- -	-- -	-- -	79.6	79.3	74.0	69.8	51.0	39.9	-- -	*84	*36
Mean	35.9	36.0	41.2	50.9	63.2	73.4	78.6	78.4	72.9	62.3	50.2	39.6	56.9		
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	82.3	82.1	77.2	69.1	56.6	44.9			
Mean Min.	33.1	33.5	36.0	44.8	56.6	67.6	74.7	74.5	67.6	55.6	43.1	35.3			
Min.	30	32	33	38	47	61	68	67	59	46	36	32			30
							KIPTOPEKE BEACH, VA.								
1951	-- -	-- -	-- -	-- -	-- -	-- -	-- -	-- -	74.5	64.4	52.0	46.6	-- -	*82	*39
1952	42.2	42.6	45.1	57.0	64.7	75.5	81.0	78.6	74.5	62.9	53.5	45.7	60.3	89	38
1953	44.4	44.9	48.7	55.7	68.3	74.0	78.8	79.5	75.1	66.3	55.1	47.7	61.5	84	39
1954	40.6	43.5	47.4	57.6	65.6	74.3	78.3	77.7	76.0	-- -	52.9	42.2	-- -	83	35

* 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.
KIPTOPEKE BEACH, VA. - Continued															
Mean	42.4	43.7	47.1	56.8	66.2	74.6	79.4	78.6	75.0	64.5	53.4	45.6	60.6		
Max.	48	51	55	69	74	82	89	83	84	75	64	55		89	
Mean Max.	46.7	48.3	54.0	67.3	73.0	81.7	85.0	82.0	82.0	73.0	60.8	51.0			
Mean Min.	38.7	40.3	40.7	49.0	59.0	66.0	74.7	75.0	68.8	58.3	47.8	38.5			
Min.	36	39	39	47	57	63	73	74	64	54	41	35			35
CAPE CHARLES (town), VA.															
1947	-- -	-- -	-- -	-- -	-- -	-- -	78.1	79.5	77.8	68.3	55.3	42.6	-- -	*84	*37
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	30
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	39
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	34
1951	40.2	39.2	44.9	55.1	64.7	73.7	80.0	79.6	75.0	66.0	51.2	44.2	59.5	85	34
1952	41.8	41.9	45.4	56.2	64.9	77.0	81.3	80.1	75.2	64.7	-- -	-- -	-- -	86	*36
Mean	41.9	41.7	45.5	55.0	64.5	74.8	79.8	79.1	75.2	65.8	54.5	44.1	60.2		
Max.	51	51	56	64	74	86	86	86	88	74	66	54		88	
Mean Max.	46.1	47.0	53.7	61.6	71.6	82.7	84.1	84.2	83.6	72.0	63.0	50.7			
Mean Min.	36.5	35.8	38.4	50.0	57.8	67.2	75.0	74.3	66.6	59.1	45.5	35.4			
Min.	31	30	36	45	56	66	74	73	62	52	39	30			30
LITTLE CREEK, VA.															
1954	42.2	43.3	-- -	-- -	65.8	75.2	79.4	79.8	76.9	68.9	54.5	42.2	-- -	84	37
OLD POINT COMFORT, VA.															
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	55.0	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
1951	42.3	41.7	47.5	56.3	66.2	74.5	79.4	79.9	75.1	66.8	51.9	45.7	60.6	85	37
1952	43.1	43.3	47.6	58.5	66.8	76.6	81.8	79.9	74.2	63.4	53.6	46.2	61.2	88	40
1953	44.2	45.3	50.0	56.9	71.0	74.4	80.9	80.2	75.3	67.6	54.8	47.1	62.3	84	41
1954	41.0	43.6	48.9	59.1	65.5	75.3	79.0	77.8	76.6	67.7	53.4	42.8	60.9	82	38
Mean	42.6	42.9	48.3	57.2	67.1	75.2	80.1	79.1	75.1	65.6	54.7	44.9	61.1		
Max.	53	50	58	69	77	84	88	85	84	77	68	56		88	
Mean Max.	46.1	46.9	54.4	63.3	72.9	80.4	83.6	83.1	80.1	72.3	61.1	50.6			
Mean Min.	39.6	38.7	43.3	52.0	61.5	69.5	76.4	75.4	70.2	59.7	48.3	40.1			
Min.	36	30	42	47	59	66	75	73	65	54	43	36			30
RICHMOND, VA.															
1947	-- -	-- -	42.5	57.6	70.0	76.7	79.0	83.0	76.9	65.7	51.5	38.2	-- -	87	*36
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	33
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	40
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	35
1951	41.1	41.7	49.8	56.8	68.7	75.5	83.0	82.1	76.0	66.5	49.0	43.0	61.1	86	34
1952	43.4	44.1	48.5	59.1	67.0	80.7	84.2	80.7	73.6	61.1	51.6	42.6	61.4	89	39
1953	42.4	44.5	50.4	58.6	73.8	78.3	84.8	81.5	76.5	67.2	52.0	44.2	62.8	87	39
1954	40.5	45.2	48.2	62.9	67.6	79.6	81.5	81.5	79.3	68.0	52.5	40.4	62.3	87	35
Mean	42.6	44.0	48.4	58.9	68.7	77.6	82.0	81.0	75.6	64.9	52.0	42.4	61.5		
Max.	52	52	64	74	81	87	89	87	86	84	65	54		89	
Mean Max.	47.0	49.0	56.9	67.1	74.5	84.5	85.4	86.0	82.4	73.2	60.1	49.0			
Mean Min.	38.3	39.3	42.4	52.9	62.1	70.8	77.8	76.5	68.2	57.8	45.1	37.5			
Min.	33	33	36	48	58	67	75	72	62	52	40	34			33

* 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.
						GLOUCESTER POINT, VA.									
1950	— -	— -	— -	— -	— -	75.8	79.5	80.3	76.5	68.0	58.4	43.0	— -	85	*37
1951	41.8	42.0	47.4	56.9	67.9	76.5	81.6	82.7	77.3	68.2	54.4	46.3	61.9	87	38
1952	42.9	43.6	47.0	57.6	67.1	77.4	82.7	81.3	76.1	64.1	53.9	46.3	61.7	90	40
1953	44.9	45.4	49.0	57.2	70.7	76.6	82.0	80.9	76.8	67.8	56.0	48.4	63.0	85	40
1954	41.1	43.4	48.7	61.1	67.3	76.7	80.1	80.4	78.3	70.6	54.6	43.7	62.2	85	38
Mean	42.7	43.6	48.0	58.2	68.2	76.6	81.2	81.1	77.0	67.7	55.5	45.5	62.1		
Max.	48	48	56	70	78	86	90	86	85	78	68	54		90	
Mean Max.	45.8	46.8	54.8	65.0	74.5	83.8	85.6	84.4	83.4	75.0	62.2	51.2			
Mean Min.	39.5	41.0	44.0	52.2	62.5	71.0	76.2	77.4	72.0	61.2	49.0	39.8			
Min.	38	38	42	52	61	70	72	76	69	56	46	37			37
						WASHINGTON, D.C.‡									
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	58.8	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
1951	37.4	37.8	48.2	57.0	68.4	75.8	83.2	83.0	77.9	67.2	50.3	41.7	60.7	87	33
1952	39.2	42.2	46.1	57.5	65.1	78.9	84.9	82.3	76.0	63.3	52.5	42.7	60.9	90	36
1953	40.7	42.7	48.6	56.1	70.8	76.7	84.9	80.9	77.1	67.1	52.9	43.7	61.8	88	36
1954	36.5	40.8	47.3	62.4	66.8	78.3	82.1	80.8	77.0	66.7	49.1	38.9	60.6	86	34
Mean	39.3	40.4	47.6	58.8	69.1	78.1	83.6	82.1	76.9	65.6	53.4	41.7	61.4		
Max.	50	52	64	71	82	89	90	90	88	78	69	52		90	
Mean Max.	44.2	46.8	55.7	66.1	75.1	84.8	87.5	86.5	83.6	73.3	62.1	47.5			
Mean Min.	35.8	36.3	41.2	52.5	61.9	70.9	80.0	77.8	70.0	59.2	46.1	36.0			
Min.	33	32	34	46	59	66	77	73	63	52	42	33			32
						SOLOMONS, MD.									
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	38.3	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
1951	38.3	36.7	43.5	52.2	64.2	73.2	81.1	81.5	76.6	66.6	52.7	43.2	59.2	87	33
1952	39.4	40.1	43.0	54.7	63.9	75.7	80.8	81.3	76.3	63.5	52.9	44.4	59.7	88	37
1953	41.7	41.9	45.7	54.3	68.7	75.6	81.9	79.7	76.5	66.7	54.0	45.7	61.0	86	40
1954	38.5	39.6	43.9	56.5	64.3	74.3	79.2	79.0	77.0	70.0	53.1	42.1	59.8	82	35
Mean	38.6	38.3	43.5	53.1	64.8	74.7	79.8	80.3	75.4	65.6	54.5	43.4	59.3		
Max.	49	46	58	69	78	84	88	87	83	77	66	54		88	
Mean Max.	42.0	41.9	49.8	60.0	72.5	80.4	84.2	84.4	80.4	71.8	61.1	48.9			
Mean Min.	35.2	35.3	38.5	47.1	57.8	68.4	75.9	76.2	69.7	60.1	47.6	38.5			
Min.	30	30	34	43	53	64	70	72	65	55	42	35			30
						CAMBRIDGE, MD.									
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

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

‡ For temperatures from recording thermometer, 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.
							CAMBRIDGE, MD. - Continued								
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
1951	37.3	38.3	45.1	55.4	66.1	75.1	80.6	79.9	74.8	64.4	48.5	41.4	58.9	87	32
1952	38.8	40.6	44.9	57.0	64.9	77.2	83.4	81.0	74.5	60.7	50.5	42.9	59.7	90	35
1953	41.2	42.1	47.5	54.9	70.1	75.5	82.8	79.9	74.7	65.5	— -	— -	— -	87	*38
Mean	39.4	39.4	44.7	55.4	66.3	75.4	80.8	79.6	74.0	63.4	52.5	40.8	59.3		
Max.	54	48	59	66	76	85	90	86	85	73	67	53		90	
Mean Max.	45.4	45.1	53.2	62.6	73.7	82.6	85.8	84.2	81.2	71.1	61.1	48.8			
Mean Min.	35.4	34.7	37.1	49.5	58.6	68.4	76.1	74.6	66.5	57.4	44.0	34.2			
Min.	31	30	31	42	55	66	72	72	60	50	40	31			30
							ANNAPOLIS, MD.								
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
1951	36.2	35.6	43.7	52.9	64.6	73.5	80.8	80.5	75.3	65.2	49.4	40.8	58.2	84	32
1952	37.9	39.0	43.1	55.0	63.4	75.7	82.2	80.8	75.5	61.6	51.7	43.0	59.1	89	34
1953	39.9	40.5	45.1	53.4	68.4	74.1	82.3	79.2	75.1	65.7	53.5	44.1	60.1	86	38
1954	36.6	38.4	43.6	56.3	64.0	74.0	78.8	78.2	75.5	67.3	51.0	39.9	58.6	84	32
Mean	38.6	38.3	43.1	53.6	64.4	74.2	80.3	79.8	74.6	64.6	52.8	42.0	58.9		
Max.	52	47	56	64	73	82	89	86	84	76	66	51		89	
Mean Max.	42.4	42.8	49.5	60.1	70.8	80.5	84.1	84.4	80.8	71.5	59.9	47.8			
Mean Min.	35.1	34.9	38.0	48.0	57.8	68.0	76.6	76.4	68.4	59.1	45.8	36.8			
Min.	30	31	34	42	53	65	74	75	65	54	42	32			30
							BALTIMORE, MD.								
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	39.9	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	51.8	43.9	59.2	85	29
1940	32.9	35.1	38.8	48.4	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	79.2	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

* 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. - Continued								
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	80.8	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	54.8	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	57.8	41.9	58.8	82	36
1951	39.0	36.3	— -	— -	— -	— -	80.4	80.7	76.8	67.7	51.8	— -	— -	*84	*32
1952	39.9	40.4	43.6	55.0	61.8	74.0	80.9	80.9	75.1	62.9	52.6	45.0	59.3	86	37
1953	42.0	42.0	46.5	54.1	68.7	74.4	81.4	79.3	76.9	68.9	57.8	47.4	61.6	84	39
1954	39.4	40.5	45.4	57.7	— -	74.3	78.4	78.7	77.1	70.2	54.8	43.4	— -	82	37
Mean	37.5	37.0	42.6	52.7	64.1	74.0	79.6	79.6	75.0	65.4	53.7	42.9	58.7		
Max.	47	47	61	68	77	83	85	86	84	76	68	54		86	
Mean Max.	40.2	40.3	48.9	59.3	70.6	79.2	82.7	82.9	79.8	71.3	59.8	47.7			
Mean Min.	34.4	34.3	37.4	46.9	57.1	68.6	75.8	76.1	70.4	59.2	47.4	38.1			
Min.	29	28	32	42	52	63	71	72	63	50	42	32			28
							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	78.8	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
							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	64.8	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
1951	48.9	49.4	55.4	62.1	70.5	78.8	82.5	82.9	78.6	70.3	59.2	53.2	66.0	86	41
1952	53.0	52.3	55.1	63.8	73.0	81.2	83.0	82.8	77.5	68.0	59.9	52.7	66.9	87	48
1953	51.5	53.0	58.1	64.3	75.6	79.6	82.8	80.8	77.9	70.5	59.3	53.3	67.2	86	47
1954	50.1	52.4	56.6	66.2	70.8	79.5	82.5	83.8	79.8	— -	— -	— -	— -	87	*46
Mean	51.7	51.6	55.5	64.0	72.9	79.4	82.3	82.3	78.1	70.2	61.4	53.1	66.9		
Max.	60	63	66	74	80	87	91	87	85	78	76	64		91	
Mean Max.	56.5	57.3	61.7	70.3	78.0	84.9	86.1	85.9	83.3	75.5	70.0	59.1			
Mean Min.	46.3	46.6	49.5	57.1	67.8	72.8	78.1	78.1	71.7	64.5	52.4	46.4			
Min.	40	39	43	52	66	69	74	73	67	59	44	41			39
							MYRTLE BEACH, S.C.								
1951	— -	— -	— -	— -	— -	— -	— -	79.1	78.6	69.8	59.0	51.8	— -	*83	*46
1952	50.1	51.7	56.5	62.6	71.5	80.5	82.8	81.9	76.1	66.8	57.8	49.7	65.7	88	48
1953	49.3	51.6	56.0	61.5	70.0	78.6	82.2	81.7	77.1	70.2	59.4	52.4	65.8	86	45
1954	49.4	51.3	56.2	65.7	71.5	78.5	83.1	82.1	78.9	69.8	59.9	50.5	66.4	85	46
Mean	49.6	51.5	56.2	63.3	71.0	79.2	82.7	81.2	77.7	69.2	59.0	51.1	66.0		
Max.	52	56	60	73	78	84	88	86	84	76	68	57		88	
Mean Max.	52.0	55.0	60.0	69.0	76.3	83.7	86.0	84.8	81.8	75.0	64.0	54.8			
Mean Min.	46.3	49.3	53.7	59.0	66.3	74.7	79.7	76.5	73.2	64.0	54.0	47.5			
Min.	45	48	53	58	63	74	79	73	72	60	52	46			45
							CHARLESTON (Customhouse Wharf), 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	67.8	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	48

* 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.
						CHARLESTON (Customhouse Wharf), S.C. - Continued									
1925	51.1	54.5	59.9	66.2	73.9	81.9	84.7	83.3	83.3	73.4	58.8	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	51.8	60.4	69.1	74.7	79.3	82.9	83.5	78.6	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	69.4	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	82.8	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	83.8	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
1951	49.1	50.7	57.9	64.9	73.3	80.4	84.3	85.5	81.0	71.9	61.4	54.5	67.9	88	47
1952	55.3	54.3	58.4	64.5	73.6	83.1	85.2	85.0	78.3	69.3	60.6	53.1	68.4	89	51
1953	53.2	55.7	59.8	65.5	76.2	81.9	84.4	83.0	79.2	71.9	61.1	55.2	68.9	88	49
1954	52.5	53.8	57.1	68.8	73.5	81.9	84.3	85.5	81.3	73.7	60.3	51.8	68.7	87	48
Mean	51.9	52.6	57.5	65.7	73.8	80.7	83.4	83.5	80.0	71.6	62.1	53.5	68.0		
Max.	66	63	70	75	82	88	89	89	88	83	74	65		89	
Mean Max.	55.8	56.9	63.0	70.8	78.5	84.3	85.8	86.4	84.2	77.5	68.3	58.4			
Mean Min.	48.2	48.6	52.1	60.6	68.7	76.3	81.1	80.3	75.0	65.7	55.6	49.2			
Min.	41	40	45	55	62	71	78	76	68	59	50	41			40
						CAINHOY, WANDO RIVER, S.C.									
1951	— -	— -	— -	— -	74.1	80.8	84.0	85.1	80.4	71.8	59.7	55.0	— -	88	*50
1952	56.1	55.0	59.9	66.7	76.3	— -	— -	— -	— -	— -	— -	— -	— -	—	*52
						NORTH CHARLESTON TERMINALS, COOPER RIVER, S.C.									
1951	— -	— -	— -	— -	— -	79.0	83.8	84.9	80.4	71.2	61.2	54.7	— -	88	*51
1952	54.5	53.2	57.9	64.0	74.1	— -	— -	— -	— -	— -	— -	— -	— -	—	*50
						CHARLESTON (Virginia - Carolina Chemical Co. Wharf), ASHLEY R., S.C.									
1951	— -	— -	— -	— -	74.7	82.0	84.7	86.2	81.3	72.3	61.0	55.4	— -	92	*51
1952	56.8	55.4	59.9	66.4	76.5	— -	— -	— -	— -	— -	— -	— -	— -	—	*51
						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	64.8	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	49.6	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

* 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									
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
1951	50.7	52.8	59.6	66.0	75.2	81.5	84.6	86.2	82.0	73.6	62.0	55.6	69.2	88	47
1952	55.5	55.8	60.1	65.5	75.0	84.7	85.8	86.0	80.0	70.4	61.9	54.0	69.6	90	51
1953	54.0	56.4	61.9	66.3	77.0	82.3	84.7	83.6	79.4	72.4	62.6	55.2	69.6	88	50
1954	54.4	55.4	59.4	69.7	74.3	82.6	84.9	86.2	82.6	74.6	61.0	52.9	69.8	88	49
Mean	52.7	53.7	59.0	66.6	74.8	81.7	83.8	83.8	80.2	72.4	63.2	53.8	68.8		
Max.	68	64	77	75	84	90	89	89	86	83	74	64		90	
Mean Max.	57.5	57.8	64.9	71.1	79.4	85.3	86.4	86.7	84.2	77.6	70.2	59.1			
Mean Min.	48.8	49.9	53.0	61.7	70.2	77.9	80.9	80.9	74.8	67.4	57.3	49.4			
Min.	38	41	45	57	65	75	78	79	69	62	50	45			38
						FERNANDINA BEACH, FLA.									
1944	— -	— -	— -	— -	— -	82.6	82.4	82.8	83.3	73.8	65.3	53.8	— -	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
1951	55.1	56.3	64.0	68.0	75.2	81.6	83.7	84.4	82.8	74.3	63.5	59.6	70.7	88	51
1952	59.5	— -	65.3	68.4	75.8	82.8	84.8	82.3	79.3	71.9	64.8	57.5	— -	88	*52
1953	57.8	61.4	66.8	69.4	78.1	82.1	83.8	83.6	79.8	74.2	63.8	59.5	71.7	90	53
1954	58.2	59.7	62.8	73.0	77.0	82.7	85.0	86.0	83.7	75.6	63.3	56.4	72.0	88	53
Mean	58.5	59.3	63.8	69.9	76.4	81.8	83.3	83.5	81.4	74.2	66.0	58.2	71.4		
Max.	68	70	73	80	83	88	89	90	88	84	76	68		90	
Mean Max.	62.8	65.4	69.7	74.8	80.5	85.8	86.4	87.1	85.3	79.6	72.8	63.7			
Mean Min.	54.3	55.0	58.8	64.9	72.1	78.1	79.9	79.6	76.3	69.0	60.2	52.8			
Min.	50	50	52	60	68	75	72	78	69	62	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	68.9	75.3	80.0	83.2	81.7	80.4	77.5	66.0	61.0	72.1	86	56
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
1951	56.3	56.3	63.4	68.2	75.2	81.2	83.9	83.0	82.6	75.7	65.5	60.3	71.0	86	52
1952	60.3	59.9	63.8	68.8	75.2	82.0	83.2	80.6	80.1	72.9	65.8	59.2	71.0	87	55
1953	58.1	61.4	66.4	69.4	77.7	81.6	83.0	83.5	80.0	74.4	64.5	60.3	71.7	87	54
1954	58.5	60.1	61.6	71.6	75.5	82.2	84.4	84.9	83.5	75.9	64.4	57.4	71.7	87	52
Mean	59.5	59.7	63.7	69.5	75.9	81.2	82.7	82.8	81.6	74.8	66.8	59.7	71.5		
Max.	68	69	72	78	82	87	88	91	87	84	77	70		91	
Mean Max.	63.2	64.0	68.8	73.7	79.6	85.1	85.7	86.1	84.4	80.0	72.6	64.4			
Mean Min.	55.6	56.0	58.6	64.2	72.0	77.5	79.0	79.4	77.6	69.3	60.4	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

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

‡ For temperatures from recording thermometer, 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.
							DAYTONA BEACH (ocean), FLA. ‡ - Continued								
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
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.								
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
							CANOVA BEACH, FLA. ‡								
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
1951	65.4	63.8	70.0	71.9	76.2	81.0	79.1	81.7	83.7	79.4	70.8	68.3	74.3	87	58
1952	66.5	65.1	68.9	71.9	76.5	79.4	81.3	79.0	83.3	77.7	72.3	66.0	74.0	86	61
1953	64.4	67.2	70.8	72.9	75.1	80.0	80.9	81.4	82.3	77.1	72.9	68.8	74.5	85	60
1954	65.8	65.9	66.7	76.0	78.4	80.7	80.1	82.8	83.1	77.3	70.8	65.5	74.4	86	60
Mean	67.2	66.3	68.6	72.6	76.2	79.6	78.8	79.3	82.0	78.0	73.0	67.9	74.1		
Max.	74	75	75	80	83	85	86	86	87	85	79	76		87	
Mean Max.	70.2	70.7	72.7	77.7	80.5	83.1	83.5	83.8	84.5	82.2	76.9	72.0			
Mean Min.	62.5	62.1	64.1	68.1	72.1	74.9	71.7	72.0	78.6	73.5	68.4	62.9			
Min.	58	58	58	65	70	70	62	62	72	70	64	59			58
							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	86.2	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	77.2	80.4	84.4	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
1951	70.1	--	73.7	77.7	79.8	85.7	86.1	88.1	86.0	80.9	74.9	--	--	90	*66

‡ For temperatures from recording thermometer, 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.
							MIAMI BEACH, FLA. - Continued								
Mean	71.0	71.6	73.7	77.1	80.2	84.3	85.7	86.1	84.3	79.8	75.8	73.0	78.6		
Max.	77	78	81	85	86	90	90	91	89	85	82	79		91	
Mean Max.	74.5	75.5	77.9	80.6	83.6	87.4	87.5	88.7	86.8	83.8	80.0	76.5			
Mean Min.	65.7	66.4	69.5	73.4	76.2	81.2	84.0	83.9	81.3	75.7	71.1	68.0			
Min.	62	61	64	70	72	80	82	82	79	72	67	60			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
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.[illegible]	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
1951	68.4	68.1	74.4	78.2	81.8	86.6	87.1	87.8	85.9	81.2	75.6	74.5	79.1	91	62
1952	72.5	70.6	76.3	76.0	80.8	86.1	85.5	87.8	85.5	81.8	76.2	71.1	79.2	90	65
1953	— -	— -	— -	79.6	— -	— -	86.5	87.5	85.1	80.7	75.9	71.7	— -	*89	*66
1954	72.6	72.4	72.4	80.1	83.1	84.9	87.5	87.4	84.6	79.8	75.2	69.7	79.1	90	66
Mean	71.7	72.6	74.8	78.8	82.4	85.5	86.8	87.0	85.5	81.4	75.8	72.3	79.6		
Max.	78	82	83	86	88	90	91	92	91	88	83	80		92	
Mean Max.	75.3	76.8	79.9	82.5	85.9	88.2	89.0	89.6	88.2	84.9	79.9	76.0			
Mean Min.	66.7	68.4	69.7	75.0	78.9	82.4	84.2	84.0	82.7	77.4	70.8	67.6			
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
1951	61.0	61.7	69.4	70.6	78.7	83.8	85.9	87.2	85.9	78.7	67.0	65.8	74.6	89	56
1952	64.8	63.8	68.4	72.2	78.7	85.8	— -	— -	— -	— -	— -	62.1	— -	*89	56
1953	63.4	66.1	73.7	74.3	81.9	84.2	86.9	85.6	83.0	77.1	69.4	65.2	75.9	89	59
1954	63.3	65.6	65.5	78.6	80.1	84.7	85.7	87.0	85.1	77.5	67.8	61.3	75.2	90	57
Mean	64.8	65.8	68.9	74.0	80.0	84.4	85.4	85.3	83.6	78.0	69.6	64.3	75.3		
Max.	77	74	78	83	86	89	89	90	88	84	80	74		90	
Mean Max.	68.6	70.3	74.1	78.1	82.8	87.3	87.9	87.4	86.1	82.2	76.2	68.6			
Mean Min.	59.9	61.4	64.8	69.9	76.3	81.2	82.5	82.8	80.4	73.1	63.3	59.0			
Min.	54	56	56	64	74	79	79	81	78	69	58	56			54
							CEDAR KEYS, FLA.								
1922	57.7	63.1	69.1	76.5	81.3	85.5	85.5	84.0	81.9	75.2	70.5	65.1	74.6	90	48
1923	63.0	63.0	68.7	73.8	78.3	83.1	84.6	86.2	84.0	73.4	62.6	64.8	73.8	90	48
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	90	43
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	88	41
1926	54.9	60.6	62.2	69.1	75.7	83.1	— -	— -	— -	— -	— -	— -	— -	*88	*50

* 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.
						CEDAR KEYS, FLA. - Continued									
—															
1944	-- -	-- -	-- -	-- -	-- -	83.1	82.6	83.5	82.9	71.8	65.1	53.4	-- -	90	*45
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	86	46
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	90	54
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	88	45
1948	54.3	61.5	69.6	73.8	79.0	82.8	85.3	84.2	81.0	72.3	70.7	65.7	73.4	88	43
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	89	41
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	90	46
1951	55.8	58.7	65.6	68.1	76.3	82.0	84.0	85.6	81.4	75.0	62.3	61.6	71.4	90	45
—															
1954	59.2	60.8	62.9	78.1	78.8	85.7	85.6	88.3	84.6	75.4	63.9	-- -	-- -	92	*49
Mean	59.4	60.9	65.3	72.4	77.8	83.3	84.1	84.2	82.0	74.0	65.6	59.7	72.4		
Max.	75	74	78	84	87	90	90	92	90	86	80	73		92	
Mean Max.	67.4	69.4	73.5	78.6	83.6	87.8	88.0	88.1	86.4	81.1	74.5	67.4			
Mean Min.	49.5	50.4	55.8	63.2	71.6	78.2	79.3	80.3	76.4	66.2	54.5	49.2			
Min.	41	45	46	50	64	75	76	76	69	63	46	41			41
						PENSACOLA, FLA.									
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	56.8	58.8	64.4	72.7	76.1	83.8	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	58.3	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	56.8	-- -	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	51.8	61.7	64.6	67.3	76.3	84.6	83.1	84.0	81.9	71.6	65.8	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	60.8	65.8	78.4	83.2	83.2	83.8	-- -	-- -	-- -	-- -	-- -	*87	*56
1951	-- -	-- -	64.4	66.7	74.8	82.7	84.7	86.3	81.9	74.0	62.4	59.3	-- -	88	*52
1952	59.6	59.5	61.2	67.0	77.1	84.9	84.7	84.8	78.5	69.1	62.2	56.1	70.4	88	52
1953	55.9	57.7	64.8	68.4	78.6	84.1	84.0	84.3	80.6	74.5	62.7	55.4	70.9	88	47
1954	54.7	57.9	60.9	74.0	73.9	83.3	85.2	85.5	83.1	75.8	62.1	55.4	71.0	88	50
Mean	56.6	58.3	62.9	70.3	77.1	83.1	84.8	85.1	81.8	74.1	64.4	57.5	71.3		
Max.	72	73	78	82	87	90	90	92	92	85	76	72		92	
Mean Max.	64.2	64.9	70.4	76.0	82.0	86.8	87.9	88.4	86.8	80.0	71.7	64.7			
Mean Min.	49.9	51.7	55.7	63.0	71.8	79.1	81.0	81.1	76.2	67.5	56.5	50.8			
Min.	40	45	48	59	66	75	78	78	71	62	49	45			40
						GRAND ISLE (Drilling Platform 8 miles SE. of), LA.									
1949	-- -	-- -	-- -	-- -	78.3	83.0	84.0	84.2	82.5	79.9	71.5	67.5	-- -	86	*63

* 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.
							GRAND ISLE (Drilling Platform 8 miles SE. of), LA. - Continued								
1950	65.8	64.5	— -	-- -	-- -	— -	-- -	85.6	82.3	76.5	70.1	61.6	— -	*88	*57
1951	60.0	58.3	64.7	67.1	75.1	82.8	85.5	86.2	84.0	76.2	69.2	64.8	72.8	88	52
1952	63.7	64.1	63.9	66.3	75.9	83.4	84.6	84.4	80.2	73.2	67.3	62.7	72.5	88	56
1953	60.3	60.8	65.2	69.7	78.6	84.2	84.1	84.7	82.1	77.7	70.8	63.3	73.5	89	52
1954	61.0	63.1	64.5	73.7	76.0	82.9	84.7	85.0	-- -	— -	69.1	63.2	— -	*88	57
Mean	62.2	62.2	64.6	69.2	76.8	83.3	84.6	85.0	82.2	76.7	69.7	63.8	73.4		
Max.	68	68	72	78	85	87	89	88	87	86	78	73		89	
Mean Max.	65.4	66.6	70.5	74.2	81.8	86.4	87.6	87.3	85.0	83.7	75.8	69.7			
Mean Min.	57.0	57.0	59.8	64.8	72.8	78.8	82.2	82.5	78.8	71.0	62.0	56.7			
Min.	52	53	58	62	72	75	82	82	76	65	58	52			52
							EUGENE ISLAND, LA.								
1944	-- -	-- -	-- -	68.0	73.0	84.0	85.8	85.8	83.8	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	51.8	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	47.8	50.3	61.1	70.8	77.2	83.8	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
1951	52.8	51.8	60.1	64.5	75.8	83.6	85.5	87.3	82.3	75.6	58.7	54.6	69.4	90	39
1952	55.1	56.5	59.0	65.6	74.3	84.3	84.9	86.0	80.2	67.5	62.2	55.3	69.2	89	47
1953	56.4	56.5	65.7	70.0	77.5	85.3	84.6	84.1	80.9	75.1	61.4	54.1	71.0	89	46
1954	56.5	60.0	62.8	— -	75.4	84.2	86.4	86.7	83.6	75.5	— -	— -	-- -	89	*47
Mean	54.3	55.0	61.2	68.1	75.9	83.2	84.6	85.4	81.9	74.3	63.6	55.2	70.2		
Max.	70	74	75	77	84	89	90	91	90	85	79	70		91	
Mean Max.	61.5	63.5	70.5	73.9	81.2	87.0	87.8	88.8	86.9	82.4	72.6	65.4			
Mean Min.	46.9	46.0	52.6	60.1	69.8	77.7	80.9	81.5	76.4	65.4	54.5	46.8			
Min.	38	39	45	50	66	75	78	79	71	54	50	43			38
							GALVESTON, TEX.								
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	58.5	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	69.8	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	62.8	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

* 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. - Continued								
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
1951	56.0	54.3	64.0	67.1	77.5	84.1	86.8	87.6	82.6	76.4	63.2	59.3	71.6	90	37
1952	61.6	61.3	62.1	68.1	76.1	83.8	85.9	86.3	81.9	70.0	63.0	55.1	71.3	88	48
1953	57.1	57.9	65.3	72.0	77.9	85.3	85.5	85.2	81.5	75.4	62.5	54.3	71.7	88	42
1954	54.5	59.9	59.9	72.6	76.3	83.8	85.9	86.6	84.0	77.9	63.1	59.0	72.0	88	49
Mean	56.8	58.7	63.1	70.9	78.4	84.2	86.5	86.9	83.6	76.4	66.1	59.4	72.6		
Max.	72	77	86	88	90	95	97	102	95	91	86	84		102	
Mean Max.	63.5	65.5	70.0	77.3	83.3	88.3	89.9	89.9	88.2	82.5	74.9	67.5			
Mean Min.	48.2	51.1	54.9	62.6	72.9	79.7	82.9	83.2	77.2	68.4	56.9	50.7			
Min.	35	37	43	49	68	75	79	79	69	62	48	42			35
							ROCKPORT, TEX.								
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
1951	61.1	58.6	69.2	72.6	80.2	— -	86.7	88.1	84.5	79.5	66.3	62.2	— -	*92	40
1952	65.7	64.6	66.6	72.8	79.2	85.1	87.3	87.1	83.4	74.6	67.6	58.6	74.4	90	52
1953	62.1	61.8	71.5	75.3	80.4	87.8	87.9	86.3	84.1	78.4	67.9	60.9	75.4	91	51
1954	59.6	64.7	66.2	76.8	78.3	85.0	87.1	88.1	— -	— -	— -	— -	— -	*89	*53
Mean	62.1	62.2	67.7	74.3	80.8	86.2	87.4	87.4	84.3	78.1	68.1	62.5	75.1		
Max.	75	75	77	84	88	91	94	92	90	86	80	72		94	
Mean Max.	69.5	70.1	74.9	80.0	85.7	89.2	90.1	89.6	88.7	85.0	76.3	69.8			
Mean Min.	52.7	52.1	57.7	66.6	75.9	82.8	84.9	84.6	79.2	71.5	59.2	54.4			
Min.	45	40	50	63	72	82	84	81	76	65	53	51			40
							PORT ISABEL, TEX.								
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
1951	63.0	62.4	68.0	72.9	80.0	82.0	84.0	85.2	83.0	79.3	67.7	65.8	74.4	88	45
1952	66.0	65.1	68.6	72.8	78.8	83.7	85.8	85.4	82.9	75.8	70.9	62.3	74.8	88	54
1953	63.6	65.1	72.6	76.1	80.5	86.8	86.8	84.4	83.7	78.3	68.9	60.8	75.6	90	46
1954	62.4	66.7	68.5	76.9	79.5	85.5	84.5	84.4	86.4	78.8	69.3	— -	— -	88	*57
Mean	62.3	63.8	68.2	74.3	80.1	84.3	85.4	85.3	84.1	78.7	70.5	63.7	75.1		
Max.	73	74	77	82	87	90	90	91	90	88	80	75		91	
Mean Max.	68.7	69.2	74.4	79.0	84.7	87.6	88.0	88.1	87.6	84.8	76.7	71.7			
Mean Min.	52.4	56.8	60.0	67.7	74.9	81.1	82.9	81.1	79.8	71.4	62.0	53.7			
Min.	42	45	46	62	72	79	81	78	77	65	56	46			42
							VERACRUZ, MEXICO								
1953	73.0	73.9	77.9	80.4	81.0	85.2	85.6	86.9	83.4	80.7	76.8	72.9	79.8	91	68
1954	73.1	73.6	74.1	79.1	81.0	83.3	83.8	85.0	84.0	82.2	77.5	74.3	79.2	90	69
Mean	73.0	73.8	76.0	79.8	81.0	84.2	84.7	86.0	83.7	81.4	77.2	73.6	79.5		
Max.	76	78	84	84	86	90	90	91	90	87	82	79		91	
Mean Max.	75.5	77.0	82.5	83.0	85.5	89.0	89.0	89.5	89.0	85.0	81.0	79.0			
Mean Min.	70.5	70.5	71.0	77.0	76.5	81.0	81.0	82.5	81.0	79.0	73.0	68.5			
Min.	70	70	70	76	76	80	79	81	80	79	73	68			68

* 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															
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
1951	74.7	73.4	79.3	81.1	84.6	86.4	81.9	82.9	79.3	79.5	74.8	75.2	79.4	89	70
1952	76.1	76.5	80.2	82.0	83.1	80.8	79.2	80.6	79.3	75.0	76.3	73.6	78.6	86	72
1953	74.1	75.7	80.2	82.2	82.9	86.0	85.3	82.4	81.1	77.4	75.4	73.4	79.7	89	68
1954	72.9	75.0	76.5	82.2	83.5	83.7	79.7	82.6	80.6	— -	75.6	— -	— -	89	*70
Mean	73.9	75.1	79.1	81.9	84.1	84.6	81.8	82.8	81.0	78.0	76.1	74.4	79.4		
Max.	80	82	86	88	90	95	90	88	88	83	82	81		95	
Mean Max.	76.9	79.9	84.2	85.8	88.1	88.9	85.6	85.1	84.8	81.1	79.9	78.5			
Mean Min.	70.8	71.3	74.8	77.0	79.5	81.0	78.7	79.8	76.8	74.6	72.3	70.6			
Min.	68	69	71	74	76	77	76	76	74	73	70	68			68
PROGRESO, MEXICO															
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	81.8	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
1951	— -	— -	75.5	77.5	78.8	80.3	80.8	80.9	81.2	82.1	80.1	78.4	— -	83	*74
1952	74.6	72.3	79.4	77.6	81.1	82.0	84.0	84.1	84.9	78.5	76.7	73.9	79.1	86	71
1953	72.8	73.2	80.4	80.9	83.6	83.7	84.4	83.0	82.4	81.2	75.5	75.3	79.7	86	70
1954	75.9	75.9	75.6	79.3	82.0	82.3	82.4	81.5	— -	— -	— -	— -	— -	*83	*73
Mean	74.5	74.5	77.0	79.4	81.5	82.9	83.6	83.5	83.9	82.1	78.8	75.8	79.8		
Max.	79	77	83	82	85	86	87	87	86	86	85	81		87	
Mean Max.	76.5	75.8	79.1	81.5	83.1	84.4	85.0	84.9	85.3	84.3	81.1	77.9			
Mean Min.	71.9	72.9	74.5	76.7	79.4	81.4	81.9	81.1	82.2	79.6	75.6	73.0			
Min.	68	70	71	73	76	78	80	78	79	75	73	71			68
PUERTO CORTÉS, HONDURAS															
1949	— -	— -	— -	— -	— -	— -	— -	— -	— -	85.9	78.5	79.5	— -	*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	77.5	82.3	88	68
1951	79.5	78.1	80.2	83.4	— -	— -	— -	— -	— -	— -	— -	— -	— -	—	*76
1952	— -	— -	— -	83.7	84.4	85.3	85.9	87.0	88.1	81.2	80.2	78.0	— -	90	*72
1953	79.1	— -	81.7	84.0	85.2	86.3	86.4	86.7	87.3	84.0	81.4	79.6	— -	90	*68
1954	78.9	79.2	81.2	82.6	85.5	86.3	85.5	86.2	86.1	82.2	80.8	78.3	82.7	90	73
Mean	79.2	78.9	81.3	83.2	84.9	85.8	85.6	86.3	87.0	83.3	79.7	78.6	82.8		
Max.	83	83	86	86	88	90	89	90	90	89	88	82		90	
Mean Max.	81.8	81.7	84.5	86.0	87.2	89.0	88.0	88.5	89.2	87.6	84.2	82.0			
Mean Min.	74.0	76.7	79.2	80.8	82.8	82.2	83.5	84.0	83.0	77.4	72.4	73.2			
Min.	68	76	78	80	82	78	83	83	78	72	68	70			68
PUERTO CABEZAS, NICARAGUA															
1949	— -	— -	— -	— -	— -	— -	— -	— -	— -	86.1	79.7	79.9	— -	*88	*76
1950	— -	81.0	— -	82.5	84.0	83.2	83.5	85.6	86.2	84.7	80.4	78.4	— -	90	*74
1951	78.9	79.1	81.6	84.5	85.3	83.2	83.4	85.9	86.2	85.0	82.9	82.4	83.2	90	76
1952	80.9	80.7	84.8	84.7	85.8	— -	— -	82.9	85.1	83.6	82.2	78.0	— -	*88	75
1953	— -	80.4	81.0	— -	— -	— -	— -	— -	87.0	84.9	83.5	— -	— -	*90	*78
1954	81.3	81.0	84.3	83.9	86.0	84.1	83.6	86.0	86.4	84.0	81.4	79.5	83.5	90	76
Mean	80.4	80.4	82.9	83.9	85.3	83.5	83.5	85.1	86.2	84.7	81.7	79.6	83.1		
Max.	90	85	88	88	88	88	88	89	90	89	86	84		90	
Mean Max.	84.3	83.2	85.2	86.5	87.8	86.7	86.7	87.2	89.6	88.0	84.7	82.0			
Mean Min.	78.3	77.2	80.5	80.2	82.8	80.0	81.0	82.2	83.0	80.7	78.2	76.2			
Min.	76	76	78	78	80	80	80	80	82	78	76	74			74

* 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.
							PUERTO LIMÓN, COSTA RICA								
1948	— -	— -	— -	— -	— -	— -	— -	— -	— -	84.9	84.2	82.7	— -	*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	79.2	82.3	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	78.6	81.6	87	75
1951	80.6	80.3	80.8	82.5	83.5	82.7	83.4	83.9	— -	— -	— -	— -	— -	*87	*76
1952	— -	— -	— -	— -	— -	84.4	83.5	83.8	84.7	83.6	81.8	80.2	— -	*86	*76
1953	80.1	80.6	81.1	83.1	82.7	82.7	81.9	81.4	82.9	82.0	81.1	81.5	81.8	86	75
1954	83.0	82.1	81.7	— -	— -	— -	— -	— -	83.5	83.2	81.3	79.8	— -	*86	*78
Mean	81.0	80.6	81.1	82.6	82.9	83.3	82.8	83.2	84.0	83.5	81.6	80.3	82.2		
Max.	86	84	86	86	87	86	86	87	87	87	86	86		87	
Mean Max.	83.6	83.2	84.2	85.0	85.5	85.2	85.6	86.0	86.2	86.0	84.7	84.0			
Mean Min.	78.0	77.2	79.0	79.2	80.2	81.0	79.8	80.0	81.2	79.7	77.8	77.7			
Min.	75	76	78	78	78	80	78	76	80	76	76	75			75
							CRISTOBAL, CANAL ZONE								
1949	— -	— -	— -	— -	— -	84.2	83.2	82.9	84.2	83.7	82.4	81.1	— -	86	*78
1950	80.2	79.7	80.9	81.6	82.8	83.3	82.3	82.4	84.0	83.2	81.5	80.5	81.9	86	78
1951	80.7	79.7	80.1	83.3	83.9	84.1	84.3	84.1	84.8	84.1	83.2	82.7	82.9	87	78
1952	80.9	81.3	82.3	82.9	— -	84.1	82.9	82.9	83.9	84.1	83.4	81.9	— -	87	79
1953	80.7	80.5	80.0	82.8	83.5	83.9	83.4	80.5	84.4	83.8	82.9	83.0	82.4	86	78
1954	81.1	80.7	82.2	82.6	83.6	83.9	83.0	82.6	83.8	83.1	82.5	81.2	82.5	86	79
Mean	80.7	80.4	81.1	82.6	83.4	83.9	83.2	82.6	84.2	83.7	82.6	81.7	82.5		
Max.	83	83	85	85	86	87	86	86	86	87	85	84		87	
Mean Max.	82.4	82.0	83.0	84.4	85.2	85.5	84.7	84.7	85.7	85.3	84.5	83.3			
Mean Min.	79.4	79.0	79.2	81.0	81.8	82.0	81.3	81.5	82.7	82.0	80.3	79.8			
Min.	79	78	78	80	80	80	81	81	82	82	78	78			78
							FERRY REACH, ST. GEORGES I., BERMUDA								
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
1951	64.2	64.1	62.6	67.9	72.1	77.4	81.9	83.2	81.6	76.2	72.1	66.1	72.4	86	60
1952	64.0	63.1	63.8	69.6	73.0	75.2	82.5	84.1	82.4	78.3	69.2	64.9	72.5	86	61
1953	63.9	63.3	64.4	67.5	74.4	77.2	82.8	84.3	81.6	76.3	72.7	67.3	73.0	86	60
1954	64.2	63.2	65.3	69.9	74.5	78.0	82.2	82.8	82.4	76.7	71.9	65.4	73.0	85	61
Mean	64.4	63.6	64.3	68.5	73.5	77.5	82.1	83.4	81.1	76.2	71.3	66.2	72.7		
Max.	70	68	71	75	78	83	86	86	86	82	77	72		86	
Mean Max.	67.2	66.2	68.0	72.8	77.0	81.2	84.6	85.7	84.1	79.4	74.4	68.6			
Mean Min.	61.6	60.7	61.2	65.1	70.2	74.7	79.2	80.5	78.1	72.3	67.8	63.0			
Min.	59	60	60	63	67	72	77	79	73	70	63	61			59
							HABANA, CUBA								
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	85.8	85.3	84.2	79.5	76.1	81.4	90	73
1951	75.2	75.0	78.3	80.6	82.8	84.4	86.0	87.6	86.4	84.4	80.2	79.0	81.7	90	71
1952	76.8	76.1	79.9	79.5	83.1	85.8	86.2	87.1	85.8	83.8	80.6	77.5	81.8	88	72
1953	75.6	77.5	80.4	81.0	83.3	83.8	86.5	87.4	85.5	82.0	80.2	77.2	81.7	92	67
1954	77.5	76.5	76.6	81.4	82.6	84.3	86.3	86.2	84.9	82.2	79.0	76.2	81.1	88	73
Mean	76.9	77.4	78.9	80.7	83.0	84.9	86.0	86.7	85.7	84.0	80.1	77.9	81.8		
Max.	82	81	83	85	87	90	90	92	89	90	86	82		92	
Mean Max.	80.0	79.6	81.5	83.1	86.1	87.7	88.1	89.5	87.8	87.4	83.9	80.6			
Mean Min.	73.8	74.8	75.9	78.3	79.5	80.9	83.7	83.0	82.6	80.1	76.6	74.8			
Min.	67	71	73	76	78	79	81	79	82	77	75	73			67

*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.
GIBARA, CUBA															
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
1951	74.5	74.4	75.4	— -	— -	84.0	84.2	85.3	85.1	84.8	80.1	77.3	— -	88	70
1952	75.3	— -	— -	— -	— -	— -	83.7	84.7	85.1	84.4	81.1	75.3	— -	*87	*72
1953	75.4	76.0	76.9	79.3	81.2	82.5	83.1	83.7	84.1	83.5	81.1	78.3	80.4	86	73
1954	77.2	75.8	76.5	77.0	82.0	84.0	83.5	84.3	83.7	82.2	80.7	77.6	80.4	87	74
Mean	75.2	75.2	76.4	78.6	81.3	83.4	83.4	84.4	84.3	83.5	80.3	76.9	80.2		
Max.	79	78	80	83	86	87	87	88	88	87	87	85		88	
Mean Max.	77.6	77.5	78.5	82.0	85.0	85.8	85.8	86.2	86.3	85.7	85.3	81.0			
Mean Min.	72.8	72.8	74.0	75.8	76.7	78.5	81.4	82.7	81.7	79.5	74.8	73.7			
Min.	70	71	72	75	76	76	81	82	80	76	72	72			70
GUANTÁNAMO BAY, CUBA															
1947	— -	— -	— -	— -	84.8	85.6	86.0	86.8	87.0	87.7	85.4	82.4	— -	92	*76
1948	81.2	81.4	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	85.1	86.5	86.7	86.8	85.4	85.5	81.0	84.0	89	78
1950	79.6	80.0	81.8	81.8	84.0	86.4	85.1	87.2	87.2	86.4	82.9	78.6	83.4	91	75
1951	79.1	79.3	79.9	84.8	85.3	87.9	87.8	88.6	88.2	88.7	86.3	83.2	84.9	91	74
1952	80.4	81.7	83.0	84.0	85.2	85.1	85.2	86.3	86.5	86.1	83.7	79.7	83.9	88	78
1953	78.5	79.3	80.4	83.3	83.9	84.9	85.7	86.3	86.5	85.5	84.0	81.4	83.3	88	76
1954	80.0	79.0	83.0	82.2	84.5	85.4	85.1	85.4	85.2	83.9	83.1	79.3	83.0	88	77
Mean	79.8	80.1	81.7	83.5	84.9	85.7	86.0	86.8	86.8	86.3	84.4	81.1	83.9		
Max.	84	86	87	88	89	91	92	91	92	91	89	86		92	
Mean Max.	82.4	82.7	84.6	86.6	87.5	88.1	88.4	89.0	89.1	88.5	86.6	83.8			
Mean Min.	77.1	78.0	79.4	81.0	81.6	82.4	83.4	84.1	83.6	83.4	81.6	78.2			
Min.	74	77	78	79	80	76	80	79	80	81	75	76			74
CASILDA, CUBA															
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
1951	73.6	74.8	79.4	84.0	86.3	88.2	88.8	89.5	87.3	84.1	80.4	78.2	82.9	92	70
1952	74.2	77.1	80.8	82.0	85.1	87.3	87.5	90.0	87.0	86.5	79.8	74.0	82.6	92	70
1953	75.4	79.1	82.5	85.5	85.7	86.8	87.7	89.8	88.5	84.3	81.0	78.4	83.7	92	70
1954	77.2	77.1	80.9	83.5	86.9	86.8	88.6	88.1	87.7	83.4	79.6	74.7	82.9	90	70
Mean	74.9	76.6	80.7	82.8	85.7	87.3	87.6	88.4	87.0	84.6	79.4	75.7	82.6		
Max.	81	82	85	89	91	91	92	92	92	91	86	82		92	
Mean Max.	78.4	80.4	83.6	86.6	89.3	90.2	89.8	91.2	90.3	88.3	84.3	79.3			
Mean Min.	71.4	73.4	77.6	78.4	81.2	81.8	84.2	84.0	82.2	79.7	73.8	71.3			
Min.	70	72	76	74	78	80	83	76	78	78	71	70			70
PORT ROYAL, JAMAICA															
1954	— -	— -	— -	81.6	82.5	83.0	83.6	84.4	84.2	82.1	80.9	80.4	— -	86	*79
PORT-AU-PRINCE, HAITI															
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
1951	79.1	78.5	79.7	81.4	82.7	82.2	83.6	85.4	85.7	85.4	84.6	82.6	82.6	88	78
1952	79.7	80.0	81.7	82.7	84.6	84.2	85.0	86.3	87.0	86.6	85.3	81.8	83.7	89	78
1953	81.3	81.5	82.4	84.3	84.0	83.7	84.1	85.5	86.6	86.6	86.2	83.9	84.2	89	80
1954	82.0	81.7	82.2	83.6	84.2	84.4	85.4	86.8	85.6	83.8	84.5	82.6	83.9	89	81
Mean	80.2	80.2	81.3	83.0	83.5	83.4	84.3	86.0	85.9	85.3	84.7	82.3	83.3		
Max.	84	83	84	86	86	86	88	88	89	88	87	86		89	
Mean Max.	81.4	81.4	82.8	84.5	85.7	84.7	86.2	87.6	88.0	86.5	85.3	83.8			
Mean Min.	79.2	79.0	80.0	81.5	81.7	82.3	83.2	84.2	84.3	83.8	83.5	81.0			
Min.	78	78	78	80	81	82	82	83	84	82	82	80			78

* 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.
						CIUDAD TRUJILLO, DOMINICAN REBUBLIC									
1949	— -	— -	— -	81.3	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
1951	78.6	77.7	78.4	82.2	81.6	83.0	82.3	83.7	83.2	83.3	82.2	80.2	81.4	87	74
1952	80.3	81.1	82.4	83.0	85.0	84.1	81.9	84.4	83.9	83.7	82.9	80.8	82.8	88	79
1953	79.6	79.8	80.0	82.4	81.2	81.2	81.6	— -	— -	— -	— -	— -	— -	*86	*74
Mean	79.1	79.0	79.9	81.8	82.4	82.7	82.3	84.0	84.1	83.7	82.6	80.4	81.8		
Max.	82	83	85	85	88	86	84	86	88	86	84	82		88	
Mean Max.	81.0	80.8	83.0	84.0	86.4	84.6	83.8	85.8	86.8	85.5	84.0	82.0			
Mean Min.	77.8	76.5	77.8	79.2	77.8	80.6	79.6	82.0	81.2	80.8	80.5	77.0			
Min.	77	74	76	78	74	79	78	82	79	80	78	75			74
						PUERTO PLATA, DOMINICAN REPUBLIC									
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
1951	77.3	76.6	76.7	79.1	81.5	81.3	81.7	82.6	83.7	83.6	82.2	79.2	80.5	86	74
1952	77.2	— -	— -	— -	— -	82.1	80.9	82.7	83.6	83.5	82.4	79.3	— -	86	*76
1953	77.7	77.5	77.5	79.6	79.3	81.4	80.6	81.7	83.0	83.9	82.5	80.1	80.4	86	76
1954	78.7	78.0	78.5	78.0	80.3	80.7	80.7	82.4	82.8	81.8	81.9	79.8	80.3	84	73
Mean	77.4	76.9	77.3	78.4	79.9	81.0	81.0	82.4	83.3	83.2	82.2	79.5	80.2		
Max.	80	80	80	81	84	84	84	86	86	86	84	83		86	
Mean Max.	78.8	79.2	79.0	79.5	82.4	82.7	82.7	84.2	84.8	84.2	83.8	81.8			
Mean Min.	75.4	74.2	76.0	77.0	78.2	79.5	79.3	81.0	81.5	81.8	79.7	77.2			
Min.	74	73	75	76	78	78	78	80	81	80	76	74			73
						ST. LUCIA (Vieux Fort), B.W.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
1951	79.4	79.0	80.0	80.9	82.2	82.3	83.0	83.8	84.2	84.3	84.2	81.5	82.1	88	76
1952	81.1	80.0	81.5	82.7	84.4	81.8	82.5	84.6	83.9	84.1	82.1	80.9	82.5	88	74
1953	78.5	78.8	79.8	81.7	81.4	82.8	82.3	82.8	82.9	82.5	81.8	81.9	81.4	88	76
1954	79.4	80.8	80.4	80.4	80.8	82.0	83.1	83.6	83.3	— -	82.4	80.6	- - -	*86	76
Mean	79.0	79.1	79.8	80.8	81.7	81.9	82.4	83.2	83.4	83.4	82.2	80.7	81.5		
Max.	86	86	88	86	88	87	86	88	87	88	88	86		88	
Mean Max.	81.6	82.0	83.6	82.8	84.0	84.2	84.6	85.5	85.7	85.8	85.0	83.7			
Mean Min.	75.6	76.6	77.4	78.0	79.8	78.8	80.2	81.5	81.0	79.8	79.0	77.7			
Min.	74	74	76	73	78	76	78	81	78	77	75	76			73
						TRINIDAD (Carenage Bay), B.W.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
1951	79.1	80.1	80.0	80.8	81.9	81.5	82.2	82.4	83.4	82.1	82.5	81.6	81.5	85	77
1952	80.6	80.0	80.7	82.3	83.3	82.2	82.6	83.8	84.2	84.6	83.9	82.6	82.6	88	79
1953	80.5	80.4	80.2	83.0	81.4	82.8	— -	— -	— -	— -	— -	— -	— -	*88	*78
1954	80.4	80.4	80.7	81.4	82.2	82.4	82.8	84.4	83.7	83.7	82.9	81.7	82.2	88	78
Mean	79.8	79.9	80.1	81.5	81.9	81.9	82.1	83.3	83.7	83.4	83.0	81.5	81.8		
Max.	83	83	83	88	85	86	86	88	88	86	86	84		88	
Mean Max.	81.6	81.8	81.6	84.6	83.4	84.2	84.8	86.0	86.2	85.0	85.0	83.0			
Mean Min.	78.2	78.8	78.4	79.2	80.6	80.4	80.4	81.6	82.0	82.2	81.4	79.5			
Min.	77	78	77	78	80	80	80	80	82	82	81	78			77
						CARTAGENA, COLOMBIA									
1948	— -	— -	— -	— -	— -	— -	— -	— -	— -	87.4	86.2	84.8	— -	*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

*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.
CARTAGENA, COLOMBIA - Continued															
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
1951	82.4	80.2	79.8	84.7	85.3	86.1	— -	— -	— -	— -	— -	85.4	— -	*88	78
1952	81.4	81.4	82.6	83.6	86.7	87.1	87.0	88.1	87.2	87.0	86.1	84.5	85.2	90	80
1953	83.2	82.4	82.1	83.6	85.9	86.2	87.0	87.4	87.3	88.0	87.5	— -	— -	90	81
1954	82.6	81.0	82.1	83.3	86.1	86.6	85.2	85.8	86.1	84.8	85.0	83.9	84.4	89	79
Mean	81.9	80.8	81.4	83.3	85.3	86.0	85.8	86.3	86.3	86.0	85.5	84.3	84.4		
Max.	86	84	85	87	89	89	89	90	89	90	89	87		90	
Mean Max.	83.8	82.5	83.7	85.3	87.5	88.0	87.2	87.8	88.2	87.7	87.8	86.3			
Mean Min.	80.3	79.3	80.0	81.7	83.0	83.8	84.2	83.2	84.0	83.7	83.7	82.3			
Min.	79	78	78	80	81	82	82	80	80	82	82	81			78
RIOHACHA, COLOMBIA															
1952	— -	— -	— -	— -	— -	— -	— -	— -	86.9	85.4	83.6	80.5	— -	*90	—
1953	78.8	77.8	78.0	82.0	83.2	84.5	— -	— -	— -	85.5	84.3	81.9	— -	*88	75
1954	77.8	79.9	80.9	80.8	83.6	83.2	82.7	84.1	86.5	84.2	83.2	81.0	82.3	88	76
AMUAY, VENEZUELA															
1953	72.9	70.8	67.6	70.7	74.2	76.1	74.1	71.8	79.1	82.4	79.3	79.1	74.8	84	66
1954	73.7	72.1	72.5	71.9	74.1	75.1	74.6	74.5	79.4	80.0	80.6	79.3	75.6	85	70
Mean	73.3	71.4	70.0	71.3	74.2	75.6	74.4	73.2	79.2	81.2	80.0	79.2	75.2		
Max.	77	75	74	73	79	79	77	80	85	84	83	82		85	
Mean Max.	76.5	73.5	72.0	72.5	78.0	78.0	76.5	76.5	84.0	83.5	82.5	82.0			
Mean Min.	71.0	69.5	68.5	68.5	71.0	73.5	72.5	70.5	74.0	78.0	77.0	74.0			
Min.	71	69	66	66	71	73	72	70	72	77	77	72			66
LA GUAIRA, VENEZUELA															
1949	— -	— -	— -	— -	— -	— -	— -	— -	82.8	82.8	81.9	80.3	— -	*86	—
1950	73.0	76.0	76.2	75.9	82.3	79.9	78.1	80.3	83.5	82.9	83.9	81.0	79.4	88	69
1951	77.9	77.6	75.9	78.0	81.3	79.0	80.8	82.0	84.4	82.8	81.7	79.0	80.0	86	75
1952	75.7	76.8	77.2	78.4	80.8	81.0	80.1	82.8	85.3	84.0	83.1	80.2	80.4	88	72
1953	77.4	75.8	74.3	78.4	80.2	81.5	80.3	81.4	82.4	82.8	82.4	80.6	79.8	86	72
1954	75.0	76.5	77.7	77.3	79.8	79.3	79.9	82.6	82.8	81.1	80.6	78.6	79.3	86	72
Mean	75.8	76.5	76.3	77.6	80.9	80.1	79.8	81.8	83.5	82.7	82.3	80.0	79.8		
Max.	84	86	82	84	85	88	85	86	87	88	85	84		88	
Mean Max.	80.4	80.2	78.8	81.4	82.8	84.0	82.8	84.6	85.8	85.0	84.2	82.3			
Mean Min.	72.8	73.2	74.4	75.2	76.6	77.2	76.6	78.8	80.8	80.0	80.8	76.8			
Min.	69	72	72	74	74	76	74	77	79	78	78	76			69
CARENERO, VENEZUELA															
1949	— -	— -	— -	— -	— -	— -	— -	— -	— -	84.9	83.6	80.5	— -	*87	—
1950	78.6	80.7	80.0	81.6	82.2	82.5	83.0	84.0	85.0	84.3	83.8	83.3	82.4	87	76
1951	— -	81.3	80.1	81.5	81.0	82.4	82.2	82.4	83.7	84.0	82.9	82.6	— -	87	*77
1952	81.0	80.6	81.0	84.2	80.8	83.8	83.3	83.3	83.5	84.6	83.8	82.9	82.7	87	79
1953	84.7	82.0	81.1	82.9	83.9	82.6	83.5	83.5	84.2	83.3	84.6	82.9	83.3	87	79
1954	— -	82.9	83.7	83.3	83.3	84.5	83.0	84.0	83.5	83.7	83.3	81.5	— -	*87	*80
Mean	81.4	81.5	81.2	82.7	82.2	83.2	83.0	83.4	84.0	84.1	83.7	82.3	82.7		
Max.	87	86	86	87	85	87	86	87	87	87	87	86		87	
Mean Max.	85.0	83.6	83.8	84.8	84.0	84.8	85.2	85.6	86.2	86.0	85.7	84.8			
Mean Min.	79.0	79.2	78.8	80.6	80.0	81.0	81.2	82.0	81.6	82.0	81.8	80.7			
Min.	76	78	77	79	77	79	80	82	81	81	81	78			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.
							CUMANÁ, VENEZUELA								
1949	— -	— -	— -	— -	— -	— -	— -	— -	82.7	82.3	82.1	81.1	— -	*87	—
1950	81.4	82.1	81.0	79.9	76.6	78.8	77.9	81.9	85.0	83.4	84.2	80.4	81.0	88	73
1951	78.2	77.0	76.6	75.7	77.7	77.4	78.8	80.1	82.4	80.4	79.5	76.5	78.4	85	71
1952	73.0	72.0	72.7	74.8	78.1	75.2	78.8	79.5	83.3	82.6	79.4	77.2	77.2	86	69
1953	73.2	70.8	68.9	74.1	74.1	76.9	77.5	78.3	80.7	80.1	79.0	76.4	75.8	84	68
1954	74.3	72.0	72.0	71.1	72.9	74.3	76.8	80.3	80.4	80.1	78.8	77.0	75.8	84	69
Mean	76.0	74.8	74.2	75.1	75.9	76.5	78.0	80.0	82.4	81.5	80.5	78.1	77.8		
Max.	83	84	84	82	82	82	83	85	88	87	87	84		88	
Mean Max.	78.4	78.2	77.8	79.0	80.2	80.8	82.6	84.4	85.7	84.7	83.5	81.8			
Mean Min.	73.2	72.6	71.4	70.4	72.8	72.8	73.0	74.2	78.8	78.0	77.7	74.7			
Min.	71	69	68	68	70	71	72	72	76	74	75	73			68
							CARUPANO, VENEZUELA								
1949	— -	— -	— -	— -	— -	— -	— -	— -	— -	78.0	78.1	78.6	— -	*82	—
1950	74.4	73.1	72.2	73.0	72.6	73.1	74.8	77.8	78.2	80.3	80.2	78.2	75.7	84	71
1951	76.2	73.8	75.4	72.2	73.1	75.9	76.3	76.6	77.7	80.2	79.5	75.9	76.1	83	69
1952	73.6	72.7	72.5	75.2	74.1	75.7	77.0	78.4	80.5	82.2	79.1	78.1	76.6	85	71
1953	75.6	73.8	72.3	72.0	73.0	75.2	76.8	76.3	77.1	79.5	77.7	77.9	75.6	82	69
1954	75.2	73.0	72.4	74.7	74.7	75.9	75.9	77.1	78.3	79.0	80.6	78.4	76.3	85	70
Mean	75.0	73.3	73.0	73.4	73.5	75.2	76.2	77.2	78.4	79.9	79.2	77.8	76.0		
Max.	80	78	80	79	77	79	81	82	85	84	84	85		85	
Mean Max.	78.6	75.8	76.0	76.8	76.0	77.8	79.2	80.2	82.6	82.5	81.8	81.2			
Mean Min.	72.0	71.0	71.0	71.0	71.2	72.6	73.6	74.8	75.0	77.2	77.3	75.5			
Min.	71	70	70	69	70	71	72	74	73	74	76	74			69
							BELÉM, BRAZIL								
1949	— -	— -	— -	— -	— -	— -	— -	— -	— -	— -	84.4	84.4	— -	—	—
1950	84.2	83.1	81.4	— -	81.2	82.7	83.1	84.2	— -	84.1	83.7	83.8	— -	*85	*80
1951	84.0	84.4	84.3	84.0	84.5	84.1	83.7	84.5	84.3	83.9	84.3	84.0	84.2	85	83
1952	84.8	84.1	83.6	— -	83.5	84.2	84.5	84.6	— -	— -	— -	84.3	— -	*86	*83
1953	— -	83.5	83.8	83.5	83.8	83.5	83.9	83.7	84.1	84.4	84.0	84.0	— -	*86	*78
1954	84.0	84.0	83.7	84.2	85.0	84.5	84.1	84.2	84.3	84.1	84.6	84.6	84.3	85	82
Mean	84.2	83.8	83.4	83.9	83.6	83.8	83.9	84.2	84.2	84.1	84.2	84.2	84.0		
Max.	86	85	85	85	85	85	86	86	85	86	85	85		86	
Mean Max.	85.2	84.8	84.2	85.0	84.2	84.4	85.0	85.2	85.0	84.8	84.8	84.8			
Mean Min.	83.2	81.8	82.0	82.0	82.8	83.0	83.2	83.2	83.3	83.5	83.6	83.7			
Min.	83	78	80	80	80	82	82	81	83	83	83	83			78
							SALINOPOLIS, BRAZIL								
1951	— -	82.1	82.2	82.8	84.1	83.4	— -	83.6	83.4	83.0	83.4	84.1	— -	*86	*79
1952	— -	— -	— -	— -	— -	— -	— -	82.1	81.9	82.5	82.9	82.6	— -	*84	*80
1953	83.0	83.0	83.1	82.6	83.0	83.8	83.3	82.4	82.3	82.5	82.3	82.3	82.8	85	80
1954	82.4	81.7	82.9	82.8	83.8	83.8	83.0	82.0	81.8	82.2	82.4	82.1	82.6	86	78
Mean	82.7	82.3	82.7	82.7	83.6	83.7	83.2	82.5	82.4	82.6	82.8	82.8	82.8		
Max.	84	85	85	86	85	86	84	85	86	85	85	85		86	
Mean Max.	84.0	84.3	84.7	84.7	85.0	84.7	84.0	84.0	84.8	84.2	84.2	84.5			
Mean Min.	81.5	79.7	80.0	79.7	82.3	82.0	82.0	80.8	80.5	81.0	80.8	81.2			
Min.	81	78	79	78	82	82	82	80	80	80	80	80			78
							FORTALEZA (Mucuripe), BRAZIL								
1949	— -	— -	— -	— -	— -	— -	— -	— -	— -	— -	81.0	81.6	— -	—	—
1950	81.8	81.9	81.4	81.6	81.6	81.0	80.5	79.8	79.7	79.9	79.9	80.4	80.8	84	76
1951	80.8	81.1	81.1	81.6	81.6	80.6	80.1	79.2	79.4	80.0	80.0	81.2	80.6	85	76
1952	81.8	82.8	82.6	82.1	82.5	82.2	81.1	80.3	80.5	80.6	81.1	82.0	81.6	85	76
1953	82.0	82.4	83.0	83.2	83.2	82.9	82.5	81.6	82.2	82.3	82.5	82.2	82.5	85	78
1954	82.2	82.5	82.2	82.4	82.3	82.0	81.5	80.9	81.1	80.7	81.3	82.1	81.8	84	78

* 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.
FORTALEZA (Mucuripe), BRAZIL - Continued															
Mean	81.7	82.1	82.1	82.2	82.2	81.7	81.1	80.4	80.6	80.7	81.0	81.6	81.4		
Max.	84	84	85	84	84	84	84	84	83	83	84	84		85	
Mean Max.	83.0	84.0	84.4	83.6	83.4	82.8	82.6	82.4	81.8	82.0	82.5	83.0			
Mean Min.	80.0	80.0	80.0	80.2	80.6	80.4	79.2	76.8	78.6	78.6	78.7	79.7			
Min.	80	79	79	78	80	78	78	76	77	78	78	79			76
RECIFE, BRAZIL															
1949	— -	— -	— -	— -	— -	— -	— -	— -	— -	83.1	82.9	84.0	— -	—	—
1950	84.8	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
1951	83.6	84.0	84.6	83.9	82.5	77.9	77.7	77.7	78.9	81.6	82.2	82.8	81.4	86	76
1952	84.0	85.3	84.5	84.2	82.2	80.6	79.2	78.6	80.6	81.2	83.0	83.6	82.2	86	78
1953	83.3	84.5	84.8	84.4	82.5	79.8	78.6	78.1	81.2	82.5	83.8	83.6	82.3	86	76
1954	83.8	85.7	85.0	84.7	82.2	80.0	79.1	78.5	79.4	80.6	82.0	83.1	82.0	87	77
Mean	83.9	84.9	84.6	83.9	81.9	79.5	78.6	78.1	79.9	81.8	82.7	83.3	81.9		
Max.	86	87	86	86	85	82	81	80	82	84	85	85		87	
Mean Max.	85.0	86.0	86.0	85.4	84.4	81.6	80.4	79.4	81.8	83.5	83.7	84.7			
Mean Min.	82.8	83.8	83.2	81.8	79.4	77.8	77.0	76.6	77.8	79.8	81.3	81.7			
Min.	82	83	82	79	76	76	76	76	76	79	80	81			76
SALVADOR, BRAZIL															
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
1951	80.7	81.2	81.6	81.0	79.9	77.3	75.3	75.1	75.6	77.6	78.0	— -	— -	84	72
1952	80.7	81.2	81.2	82.5	— -	79.0	77.2	77.5	78.6	79.3	80.0	80.1	— -	*84	*76
1953	80.8	80.8	81.8	82.1	— -	79.3	77.5	76.8	78.1	79.1	79.9	80.1	— -	*83	*76
1954	80.6	81.7	82.5	81.9	81.1	79.6	78.2	76.6	77.0	78.2	78.7	79.7	79.6	83	75
Mean	80.7	81.4	81.9	81.9	80.6	78.8	76.9	76.4	77.2	78.4	79.2	79.9	79.4		
Max.	83	84	84	84	83	80	79	78	79	81	81	82		84	
Mean Max.	82.2	82.8	83.0	83.2	82.3	79.8	78.0	77.2	78.2	79.8	80.2	81.6			
Mean Min.	79.8	79.8	81.0	78.8	79.3	77.6	75.6	75.6	76.6	77.5	77.7	78.8			
Min.	79	78	80	72	78	76	72	74	75	77	76	78			72
CANAVIEIRAS, BRAZIL															
1952	82.9	83.5	81.7	81.6	77.1	77.0	75.7	75.7	78.0	80.1	81.0	80.1	79.5	86	72
1953	83.1	82.5	83.3	— -	77.8	76.5	74.8	75.3	77.7	79.5	80.4	79.8	— -	*85	72
1954	82.1	82.4	— -	79.1	79.0	76.5	75.2	72.6	76.3	79.5	79.1	79.1	— -	*84	70
Mean	82.7	82.8	82.5	80.4	78.0	76.7	75.2	74.5	77.3	79.7	80.2	79.7	79.1		
Max.	86	85	85	84	82	80	80	78	80	82	84	82		86	
Mean Max.	84.7	84.3	84.5	84.0	81.3	78.7	77.3	77.0	79.0	81.7	83.3	82.0			
Mean Min.	80.0	79.3	78.0	76.0	75.3	74.0	72.7	72.3	74.3	76.3	75.7	76.7			
Min.	78	78	74	74	72	72	72	70	72	76	75	76			70
RIO DE JANEIRO (Fortaleza de Santa Cruz), BRAZIL															
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
1951	74.9	75.8	74.9	75.1	74.3	68.8	65.7	65.2	66.2	69.1	71.5	69.5	70.9	80	63
1952	72.5	74.0	73.8	71.6	72.7	71.8	70.6	71.3	72.4	73.8	74.9	76.5	73.0	82	68
1953	76.5	77.6	78.1	76.4	72.9	71.2	68.4	69.3	70.3	70.7	73.2	74.1	73.2	82	66
1954	75.1	75.8	75.1	74.2	71.8	72.3	71.8	70.4	70.7	70.0	73.4	73.2	72.8	80	65

* 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.
RIO DE JANEIRO (Fortaleza de Santa Cruz), BRAZIL - Continued															
Mean	75.1	76.4	75.5	74.7	73.2	71.1	69.1	69.6	70.5	70.8	72.5	72.7	72.6		
Max.	80	82	82	80	78	74	73	74	74	76	78	82		82	
Mean Max.	78.8	80.6	79.8	78.2	75.2	72.6	70.6	71.6	72.4	73.8	75.3	76.5			
Mean Min.	69.8	71.8	70.8	72.2	70.8	67.6	67.4	68.0	68.4	67.3	69.3	68.3			
Min.	66	69	68	69	70	63	64	63	63	63	66	66			63
IMBITUBA, BRAZIL															
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
1951	74.7	72.2	73.3	69.8	69.8	65.2	62.8	64.1	64.1	64.4	66.6	66.4	67.8	79	61
1952	68.6	73.0	69.6	69.6	68.2	65.0	62.2	63.3	63.1	65.0	68.9	72.2	67.4	77	60
1953	75.8	75.2	74.1	73.8	69.5	67.5	62.2	62.7	64.9	66.4	69.5	70.1	69.3	79	58
1954	73.5	74.3	76.7	69.5	66.1	65.8	62.5	63.2	65.2	65.4	69.7	70.2	68.5	80	60
Mean	73.3	73.7	73.1	70.7	68.8	66.1	62.6	62.9	64.3	65.3	68.2	69.4	68.2		
Max.	79	79	80	76	74	70	67	66	68	69	73	76		80	
Mean Max.	77.4	77.2	77.6	74.0	72.0	68.4	65.4	65.4	66.8	68.0	71.7	73.8			
Mean Min.	67.6	67.2	68.0	66.6	66.0	63.2	60.4	60.4	62.4	62.7	64.3	63.3			
Min.	62	64	64	64	63	61	58	59	61	62	62	61			58
MONROVIA, LIBERIA															
1953	— -	— -	— -	— -	— -	— -	— -	— -	79.0	80.1	82.6	82.4	— -	*84	*76
1954	81.7	80.8	81.3	81.9	82.4	80.1	77.0	75.9	— -	— -	81.1	82.0	— -	86	*75

* 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 from Recording Thermometers

Max. and Min. Obs.=Maximum and minimum observed (from a continuous trace),

Max. and Min. Day=Maximum and minimum daily mean (from hourly readings),

Mean=Monthly mean (from hourly readings).

Each bulb was in a fixed position below lowest observed low water.

Temperatures are in °F.

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						BAR HARBOR, ME.						
						1949						
Max. Obs.	40	35	38	44	49	57	62	61	59	56	--	45
Max. Day	39.3	34.1	36.3	41.9	48.2	54.8	60.1	58.3	57.3	55.0	-- -	45.0
Mean	35.9	32.6	33.6	38.8	45.0	50.5	55.3	56.2	55.8	54.1	47.2	40.1
Min. Day	31.9	30.2	31.8	36.2	41.0	45.6	50.9	54.3	54.3	-- -	40.8	35.0
Min. Obs.	30	28	30	36	40	44	49	52	53	--	39	33
						1950						
Max. Obs.	41	35	35	45	52	55	62	61	59	55	50	47
Max. Day	41.0	34.7	33.9	40.9	48.8	53.1	59.2	59.5	57.1	53.3	49.5	46.7
Mean	36.1	31.9	31.0	36.6	43.6	49.7	54.9	56.0	54.1	50.9	47.6	42.1
Min. Day	32.2	28.5	28.1	33.8	39.6	46.9	51.1	53.8	52.0	48.2	44.3	34.9
Min. Obs.	30	28	28	33	39	45	50	52	51	46	44	33
						1951						
Max. Obs.	41	37	38	47	52	58	62	62	60	55	51	47
Max. Day	40.2	36.8	38.0	44.2	49.8	55.7	59.3	59.2	58.1	54.8	50.5	46.1
Mean	36.6	34.6	35.8	40.4	46.3	52.2	56.4	57.2	56.3	52.7	47.5	40.3
Min. Day	30.4	31.0	33.0	38.0	43.3	49.3	52.6	54.5	52.8	50.1	43.2	34.2
Min. Obs.	29	29	31	38	42	47	52	53	51	49	40	32
						1952						
Max. Obs.	39	36	37	46	50	56	61	62	59	55	50	44
Max. Day	38.5	36.0	36.1	42.5	48.4	54.3	57.8	58.7	56.8	54.8	49.8	43.5
Mean	35.1	33.4	34.1	39.0	44.6	50.1	55.4	56.2	55.2	51.6	46.2	40.5
Min. Day	32.2	29.9	31.4	36.1	42.2	47.4	52.2	53.7	53.7	47.8	42.4	35.9
Min. Obs.	30	28	30	36	42	46	49	51	53	46	42	33
						1953						
Max. Obs.	39	37	42	46	53	57	63	60	61	56	52	48
Max. Day	38.6	36.9	40.5	43.6	49.9	54.7	60.1	58.4	58.9	55.1	52.0	47.7
Mean	35.9	34.7	36.2	41.8	46.4	51.0	56.1	56.6	56.4	52.8	48.9	44.0
Min. Day	32.9	31.8	31.1	40.0	42.4	48.3	51.8	54.1	54.2	51.2	46.6	38.8
Min. Obs.	31	30	29	40	42	46	50	53	54	50	45	36
						1954						
Max. Obs.	42	35	40	46	49	56	59	60	58	56	51	45
Max. Day	41.0	34.2	37.8	44.3	48.0	53.9	55.6	57.3	56.6	55.5	50.2	43.7
Mean	34.8	32.8	35.7	39.8	45.2	50.1	53.8	55.4	54.6	52.5	47.4	40.9
Min. Day	29.6	28.9	33.9	33.9	43.0	46.0	51.1	53.7	52.5	49.3	44.4	37.6
Min. Obs.	29	28	32	32	43	45	49	52	52	48	44	35

Table 2.- Sea Water Temperatures from Recording Thermometers - *Continued*

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
BOSTON, MASS.												
1952												
Max. Obs.	—	—	42	52	59	65	73	71	68	62	50	45
Max. Day	— -	— -	40.6	49.6	56.3	62.5	70.0	68.5	65.3	60.2	49.8	44.6
Mean	— -	— -	37.9	45.7	52.1	58.9	66.1	65.5	63.1	54.9	46.9	41.5
Min. Day	— -	— -	— -	40.7	49.0	56.2	62.4	63.3	60.3	49.6	45.2	38.0
Min. Obs.	—	—	—	40	48	54	60	61	59	49	45	38
1953												
Max. Obs.	41	41	47	50	61	69	71	70	72	62	56	50
Max. Day	39.9	39.9	44.8	48.4	58.7	65.4	69.4	68.1	69.0	60.5	55.2	50.0
Mean	37.8	38.0	39.9	45.8	53.3	61.2	64.9	66.6	64.2	56.6	51.2	45.7
Min. Day	36.1	37.0	36.8	43.7	46.4	58.0	60.1	64.4	59.5	54.7	48.9	41.8
Min. Obs.	36	36	36	43	45	56	58	62	58	54	48	41
1954												
Max. Obs.	42	42	46	54	59	66	67	67	65	62	54	47
Max. Day	41.5	40.6	43.4	51.0	56.3	63.9	65.0	65.5	63.2	60.3	53.4	46.8
Mean	37.0	37.0	40.8	46.2	52.9	58.9	62.4	63.1	60.9	58.0	49.7	42.1
Min. Day	34.3	34.7	39.5	41.3	50.2	54.2	59.4	60.9	58.5	53.6	47.3	40.2
Min. Obs.	33	34	39	41	49	53	58	59	58	53	47	39
NEW YORK (The Battery), N.Y.												
1948												
Max. Obs.	37	36	42	52	62	72	75	76	74	70	58	52
Max. Day	36.1	35.1	41.5	51.3	61.0	70.3	74.1	75.9	73.8	68.9	57.8	51.3
Mean	34.0	32.5	36.7	46.4	55.8	64.8	70.8	72.2	71.6	61.7	55.5	46.2
Min. Day	30.3	30.0	33.4	42.2	51.6	60.2	68.1	69.7	67.9	56.4	51.5	39.3
Min. Obs.	30	30	32	42	51	60	67	69	67	56	51	38
1949												
Max. Obs.	43	42	47	54	64	76	79	79	76	68	60	47
Max. Day	42.2	41.0	45.8	52.8	62.1	73.8	78.1	78.2	75.2	67.2	59.6	46.2
Mean	39.6	39.3	40.2	48.8	58.8	68.0	75.3	76.0	69.7	63.8	54.1	43.5
Min. Day	35.6	37.9	38.5	45.6	53.2	60.8	71.9	74.5	64.0	60.1	46.6	41.5
Min. Obs.	34	37	38	45	53	60	71	74	63	60	46	41
1950												
Max. Obs.	44	41	40	47	60	68	73	75	76	67	61	48
Max. Day	43.7	40.3	39.5	47.0	58.8	66.5	72.3	74.5	75.3	65.7	60.6	47.6
Mean	41.1	37.5	36.5	43.6	53.2	63.1	70.1	72.3	70.0	62.5	55.3	43.4
Min. Day	39.5	33.0	32.9	39.3	47.0	59.3	67.2	71.1	64.6	59.2	46.5	38.8
Min. Obs.	39	31	31	39	47	59	66	70	64	59	46	38
1951												
Max. Obs.	41	38	43	53	64	71	—	77	75	68	60	48
Max. Day	40.2	37.2	42.7	52.6	62.5	70.5	— -	76.2	74.0	67.1	59.2	47.6
Mean	38.2	35.0	39.1	46.7	56.9	66.8	— -	74.3	71.7	63.2	51.8	42.7
Min. Day	35.8	32.5	37.0	42.5	53.2	63.9	— -	72.2	66.9	60.1	46.6	37.2
Min. Obs.	35	31	37	42	52	63	—	72	66	60	46	36

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
NEW YORK (The Battery), N.Y. -Continued												
1952												
Max.Obs.	40	41	42	53	61	70	78	78	75	70	55	49
Max.Day	40.0	39.8	41.5	51.7	59.8	69.4	76.9	76.8	74.1	69.3	53.5	48.4
Mean	38.0	37.5	38.7	46.9	55.3	64.7	74.1	74.7	72.0	61.9	51.2	44.4
Min. Day	35.2	35.4	36.9	42.5	51.7	59.8	70.0	72.7	69.2	53.8	49.5	40.3
Min. Obs.	34	34	36	42	51	59	69	72	69	53	49	40
1953												
Max.Obs.	41	42	45	52	62	71	77	77	79	70	62	52
Max.Day	40.4	41.2	44.2	51.3	61.3	70.0	76.4	76.6	78.0	68.5	61.3	51.1
Mean	39.1	38.6	41.6	47.9	56.8	64.4	73.2	74.8	72.2	64.2	54.6	47.0
Min. Day	36.9	36.3	38.6	44.5	50.5	57.8	70.4	72.9	67.1	61.5	51.0	42.3
Min. Obs.	36	35	38	44	50	57	70	72	66	61	51	41
1954												
Max.Obs.	44	40	45	54	62	71	77	77	74	69	59	49
Max.Day	44.0	39.3	44.1	53.5	60.9	69.4	75.9	76.2	73.1	68.7	58.2	48.4
Mean	38.1	36.8	40.6	48.2	56.2	65.3	71.5	72.1	69.3	64.7	52.6	43.0
Min. Day	34.0	34.1	38.0	43.3	53.9	61.8	68.5	69.8	66.1	58.8	48.2	40.2
Min. Obs.	33	33	37	43	53	61	67	69	65	58	47	39
ATLANTIC CITY, N.J.:												
1946												
Max.Obs.	41	38	48	54	66	70	78	77	75	69	65	52
Max.Day	39.2	36.7	45.1	53.4	63.4	67.4	74.9	75.4	73.4	67.4	64.1	51.3
Mean	35.4	35.0	42.6	48.4	55.8	61.7	69.2	73.4	70.4	63.5	55.8	44.5
Min. Day	32.0	32.1	38.4	44.8	49.9	56.8	61.6	70.4	65.8	60.2	49.5	40.7
Min. Obs.	30	31	--	44	48	55	58	67	64	59	49	40
1947												
Max.Obs.	45	44	42	54	--	70	72	78	80	--	60	46
Max.Day	44.2	43.2	41.6	51.3	-- -	68.7	70.7	76.6	78.2	-- -	59.2	45.0
Mean	41.0	36.4	37.8	47.6	-- -	-- -	63.6	71.8	-- -	-- -	51.3	40.1
Min. Day	38.9	32.6	34.0	43.0	-- -	-- -	57.0	57.9	-- -	-- -	44.4	35.6
Min. Obs.	38	31	33	41	--	--	54	54	--	60	43	34
1948												
Max.Obs.	39	39	46	52	64	--	74	78	76	67	58	51
Max.Day	38.4	37.2	44.3	49.3	60.2	-- -	72.4	75.1	74.8	66.3	56.8	50.1
Mean	35.5	33.1	38.5	46.4	53.7	-- -	65.0	67.1	69.4	59.4	53.5	44.8
Min. Day	30.1	30.2	33.8	43.6	48.2	56.4	58.6	58.4	64.1	54.4	49.1	35.9
Min. Obs.	29	29	33	43	48	54	57	57	63	53	46	33
1949												
Max.Obs.	43	44	49	55	61	75	80	78	75	68	59	45
Max.Day	42.2	42.2	45.6	53.2	59.5	74.0	76.6	76.8	72.2	66.8	57.3	44.0
Mean	40.4	40.6	40.4	47.5	56.2	66.1	70.3	73.4	67.4	62.0	51.7	41.5
Min. Day	38.0	38.1	37.6	42.8	51.6	60.9	60.1	65.2	64.8	57.1	43.2	38.7
Min. Obs.	38	37	36	42	50	59	59	60	64	56	43	38

 Table 2.- Sea Water Temperatures from Recording Thermometers - *Continued*

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
ATLANTIC CITY, N.J. -Continued												
1950												
Max. Obs.	45	43	44	53	63	71	74	78	76	68	62	47
Max. Day	44.7	42.4	42.4	50.1	59.4	68.5	73.1	76.5	72.8	66.5	61.4	46.8
Mean	41.7	39.7	37.7	44.5	53.6	60.5	67.0	71.2	67.5	61.1	53.6	40.7
Min. Day	38.5	34.4	33.5	41.0	48.0	54.4	57.7	62.3	60.2	56.7	44.7	32.0
Min. Obs.	37	33	31	40	47	52	55	58	60	56	44	30
1951												
Max. Obs.	40	42	45	57	65	71	78	79	79	70	61	50
Max. Day	39.2	40.5	44.0	54.8	62.3	68.9	76.4	78.2	76.9	67.5	59.3	49.3
Mean	37.4	36.2	40.5	48.2	56.7	64.6	68.4	74.1	72.2	62.0	50.7	43.1
Min. Day	34.4	31.4	38.1	43.7	53.2	61.0	62.2	70.2	64.7	57.1	42.8	38.2
Min. Obs.	33	29	37	43	52	58	61	66	63	56	41	36
1952												
Max. Obs.	43	42	46	55	64	75	81	81	78	71	56	49
Max. Day	42.8	40.8	44.5	51.6	61.1	73.1	76.9	78.9	75.5	69.5	54.7	48.1
Mean	39.5	39.2	41.0	47.6	55.0	63.7	71.6	73.1	71.3	60.4	51.0	44.5
Min. Day	36.8	36.8	38.0	42.1	50.5	57.6	65.5	66.0	68.4	52.6	48.0	39.1
Min. Obs.	35	36	36	41	50	56	59	62	67	51	47	37
1953												
Max. Obs.	44	43	49	53	63	71	81	80	78	70	60	51
Max. Day	43.3	42.4	47.7	51.8	60.7	67.6	78.7	76.6	76.1	69.5	59.5	50.8
Mean	41.2	40.1	43.0	49.0	56.7	61.5	72.4	74.6	70.3	63.0	53.4	46.1
Min. Day	39.4	38.3	38.7	46.3	51.8	55.8	61.2	71.9	66.7	59.6	48.4	41.6
Min. Obs.	38	37	38	45	51	54	60	70	66	59	48	39
1954												
Max. Obs.	45	43	49	58	63	71	77	74	76	71	57	47
Max. Day	44.3	42.5	47.5	55.6	61.3	68.7	-- -	72.5	74.3	70.2	56.3	46.0
Mean	38.1	38.7	42.6	50.2	56.2	63.0	71.5	68.3	70.1	64.4	50.7	40.7
Min. Day	33.9	34.6	39.5	44.0	53.2	56.2	66.6	61.4	66.8	57.2	46.8	36.7
Min. Obs.	31	34	39	43	52	54	62	60	66	56	46	35
WASHINGTON, D.C.												
1947												
Max. Obs.	--	45	50	66	79	84	85	89	85	73	66	46
Max. Day	-- -	44.2	48.3	63.8	77.2	81.5	83.3	87.2	84.0	72.2	65.1	45.8
Mean	-- -	36.9	41.9	58.1	68.4	76.6	81.2	83.6	78.5	68.7	54.0	42.4
Min. Day	-- -	-- -	35.4	47.6	60.0	73.1	77.7	80.9	67.0	65.4	45.0	38.2
Min. Obs.	--	33	34	46	59	72	77	79	66	64	44	38
1948												
Max. Obs.	40	49	61	66	75	88	88	88	85	72	62	50
Max. Day	39.9	46.5	60.4	65.2	73.9	86.0	-- -	86.1	82.7	71.0	61.1	49.5
Mean	37.0	40.2	51.1	59.6	67.2	77.4	83.5	80.4	77.9	60.9	56.0	44.4
Min. Day	35.2	37.0	43.7	55.9	61.1	72.7	81.9	76.0	70.1	54.1	49.8	-- -
Min. Obs.	35	37	42	55	60	71	81	75	70	54	49	--

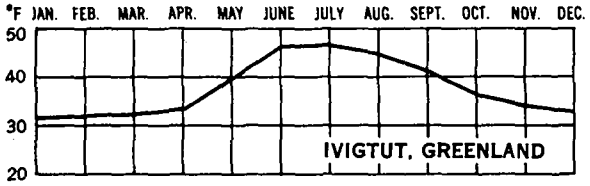
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
WASHINGTON, D.C. -Continued												
1949												
Max.Obs.	49	52	62	66	76	84	90	89	82	76	61	—
Max.Day	47.0	50.5	60.6	64.0	74.3	82.6	88.3	87.9	81.4	74.6	59.5	— -
Mean	43.7	45.8	48.0	58.5	70.2	78.1	83.0	83.1	74.6	68.4	53.4	43.0
Min. Day	37.3	42.1	42.5	55.0	64.5	70.0	79.5	76.8	67.8	61.2	46.2	41.2
Min. Obs.	37	41	42	54	64	69	78	76	67	61	46	40
1950												
Max.Obs.	52	50	53	62	72	84	85	85	85	69	66	44
Max.Day	50.6	47.9	51.0	61.5	71.1	82.4	83.1	— -	84.3	67.5	64.5	43.7
Mean	46.5	44.2	42.7	53.7	66.5	77.4	81.2	80.7	73.6	63.6	53.6	39.8
Min. Day	43.4	39.0	38.1	48.1	60.3	71.3	79.7	77.5	62.9	60.0	42.5	35.9
Min. Obs.	42	38	38	48	59	70	79	77	62	60	42	34
1951												
Max.Obs.	44	—	56	66	74	84	87	87	83	74	64	52
Max.Day	41.2	— -	53.1	64.9	72.4	83.5	86.3	86.3	82.6	73.2	62.5	50.2
Mean	38.4	39.0	48.3	56.5	68.2	75.2	83.5	83.0	77.8	67.0	50.4	42.2
Min. Day	35.9	35.6	46.0	52.0	64.2	68.2	79.6	79.7	72.0	63.0	43.5	36.0
Min. Obs.	35	35	46	52	64	68	79	79	72	63	43	36
1952												
Max.Obs.	44	45	53	67	71	86	91	88	82	74	57	49
Max.Day	43.0	44.0	52.4	65.7	70.2	84.7	90.2	87.1	81.2	73.4	56.2	48.0
Mean	39.6	42.7	46.0	57.3	64.5	78.4	85.7	83.2	76.1	63.7	52.9	43.6
Min. Day	36.0	40.5	41.3	53.7	57.5	68.4	80.8	79.2	72.0	55.5	49.6	41.0
Min. Obs.	36	40	41	53	57	68	80	78	71	55	49	41
1953												
Max.Obs.	46	48	56	64	76	87	88	86	89	74	63	51
Max.Day	45.2	47.5	55.2	62.3	75.0	86.2	87.9	85.8	88.1	73.9	62.2	50.1
Mean	41.7	43.7	49.0	56.6	71.3	76.9	85.7	81.6	77.4	67.5	53.6	44.5
Min. Day	39.0	42.1	44.0	50.8	64.6	66.3	83.5	78.7	71.8	62.5	49.7	38.0
Min. Obs.	38	42	44	50	64	66	83	78	71	62	49	38
1954												
Max.Obs.	40	50	55	72	76	85	88	88	83	80	56	48
Max.Day	40.0	49.4	54.0	70.2	74.2	82.5	86.7	87.5	— -	78.4	55.8	47.7
Mean	37.9	42.0	48.0	62.4	67.1	79.0	82.9	81.4	77.4	67.6	50.0	40.5
Min. Day	36.0	38.0	44.6	52.8	61.8	75.9	80.6	78.8	74.0	56.6	48.0	37.7
Min. Obs.	36	38	44	52	61	75	80	78	74	56	48	37
DAYTONA BEACH (ocean), FLA.												
1948												
Max.Obs.	65	62	—	76	80	84	84	85	84	80	74	72
Max.Day	64.3	59.0	— -	74.0	79.3	81.3	82.9	83.8	82.5	79.0	73.5	71.4
Mean	58.9	56.3	— -	72.5	76.8	79.6	79.0	77.4	80.4	74.5	72.6	69.1
Min. Day	54.9	52.4	— -	70.8	74.0	78.2	71.9	69.5	77.2	69.5	70.6	62.0
Min. Obs.	54	52	—	70	72	77	71	69	77	69	70	62

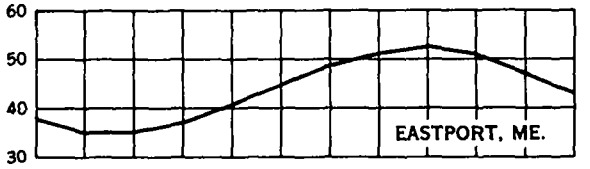
Table 2.- Sea Water Temperatures from Recording Thermometers - *Continued*

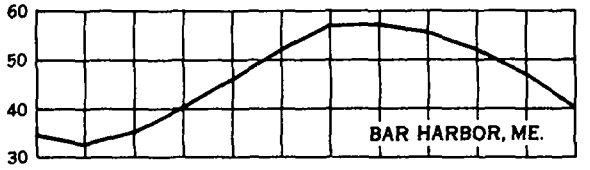
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						DAYTONA BEACH, FLA. -Continued						
						1949						
Max. Obs.	68	70	70	74	79	--	85	84	83	80	77	67
Max. Day	67.6	68.6	69.5	73.0	77.8	-- -	82.9	81.6	81.9	78.8	75.7	66.5
Mean	65.4	66.3	65.5	70.7	75.8	78.1	80.8	76.2	79.8	77.5	69.3	63.7
Min. Day	61.2	64.2	63.1	68.6	73.1	74.7	76.8	71.5	78.1	75.5	63.2	60.6
Min. Obs.	60	64	62	68	72	74	75	70	76	75	62	60
						1950						
Max. Obs.	72	73	70	74	80	83	80	84	81	--	--	--
Max. Day	70.4	71.6	69.2	71.6	78.7	80.7	77.1	81.9	79.5	-- -	-- -	-- -
Mean	66.8	68.7	65.6	67.2	75.4	79.4	68.2	76.7	76.7	-- -	-- -	-- -
Min. Day	61.0	64.9	61.5	62.1	71.9	76.9	61.6	66.5	72.4	-- -	-- -	-- -
Min. Obs.	60	63	59	61	70	76	60	64	71	--	--	--
						CANOVA BEACH, FLA.						
						1950						
Max. Obs.	--	--	--	80	--	--	--	85	85	84	80	69
Max. Day	-- -	-- -	-- -	77.6	-- -	-- -	-- -	83.5	83.2	82.0	78.9	68.3
Mean	-- -	-- -	-- -	-- -	77.2	-- -	-- -	78.2	79.0	79.5	72.4	64.2
Min. Day	-- -	-- -	-- -	-- -	73.1	-- -	64.5	63.4	72.6	76.7	64.8	60.0
Min. Obs.	--	--	--	--	72	--	62	60	71	76	63	59
						1951						
Max. Obs.	70	70	75	80	80	86	87	89	86	--	--	--
Max. Day	68.5	68.5	73.3	78.2	78.5	83.7	84.7	86.5	-- -	-- -	-- -	-- -
Mean	65.8	64.0	70.2	72.1	76.0	80.7	78.3	81.8	-- -	-- -	-- -	-- -
Min. Day	60.8	58.9	67.5	68.2	73.5	78.6	71.6	71.5	-- -	-- -	-- -	-- -
Min. Obs.	59	58	66	66	71	77	70	69	--	--	--	--
						1952						
Max. Obs.	--	67	73	76	81	86	87	84	86	82	75	70
Max. Day	-- -	65.6	71.4	72.9	79.0	83.1	84.1	81.7	84.2	80.2	73.4	68.6
Mean	-- -	63.9	67.3	70.7	74.6	77.1	79.9	77.2	82.1	76.4	71.1	-- -
Min. Day	-- -	61.6	63.2	67.3	70.8	70.1	72.0	68.5	80.3	68.9	67.8	-- -
Min. Obs.	--	60	62	65	69	66	68	67	79	67	65	60

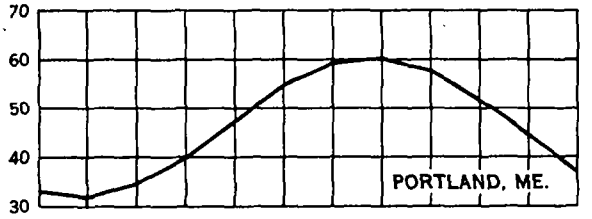
Mean Temperature Curves

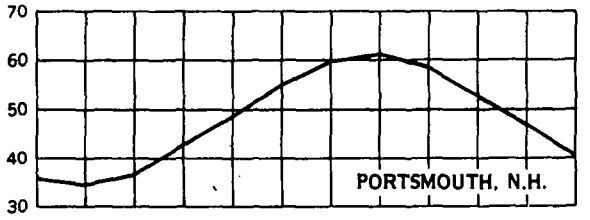
Monthly mean surface water temperatures from Table 1 are presented graphically to show the seasonal variation.

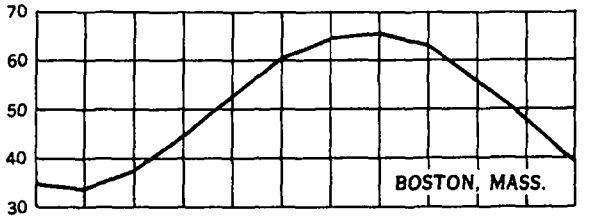


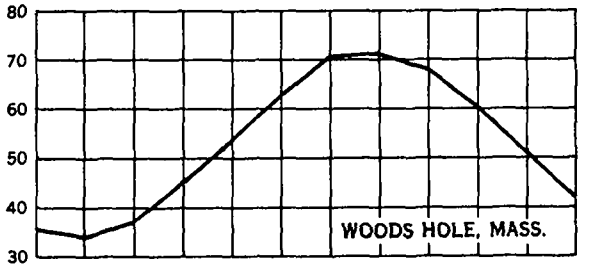


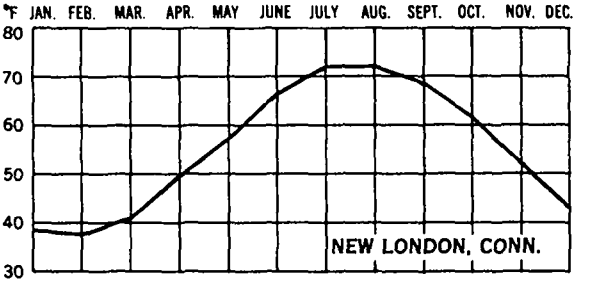


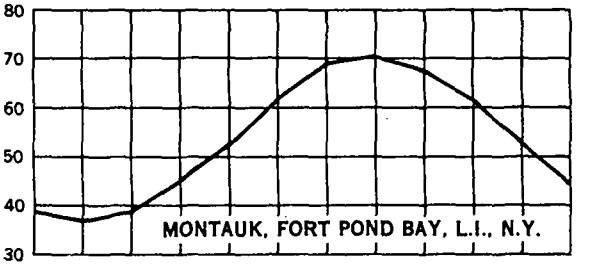


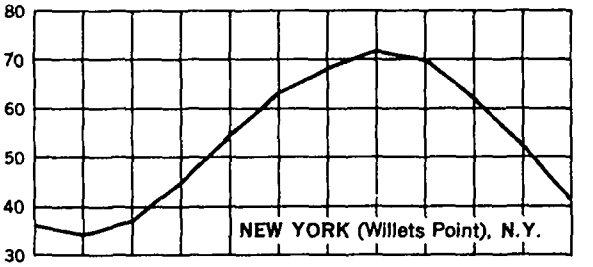


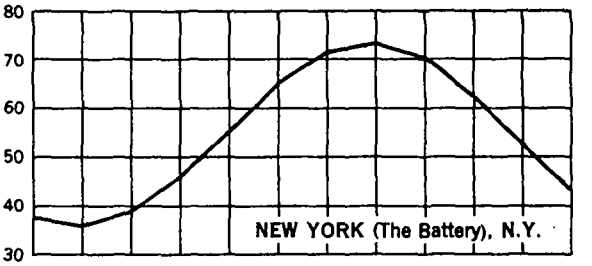


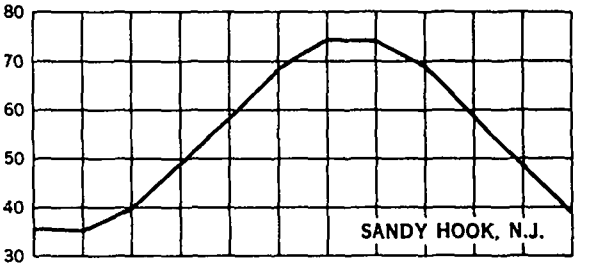


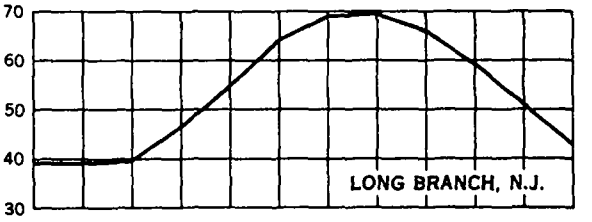




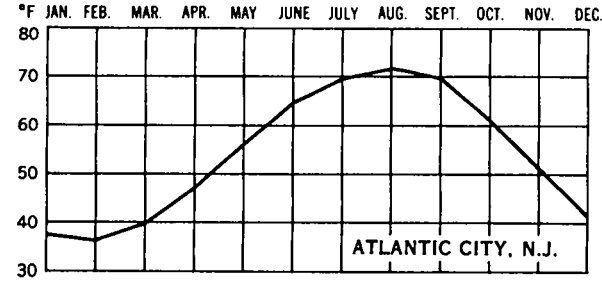


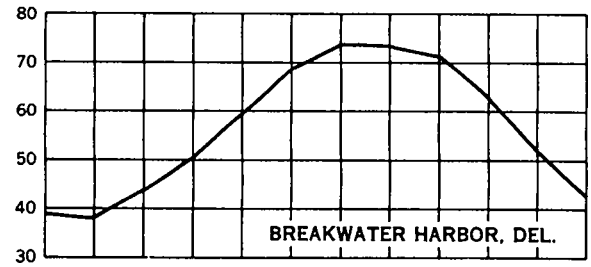


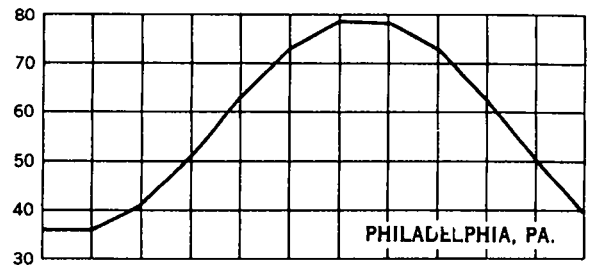


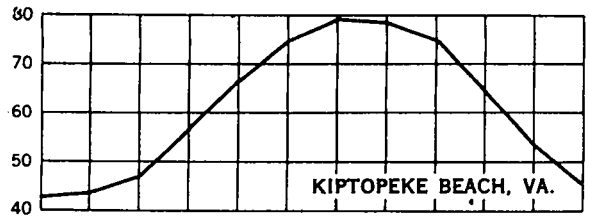


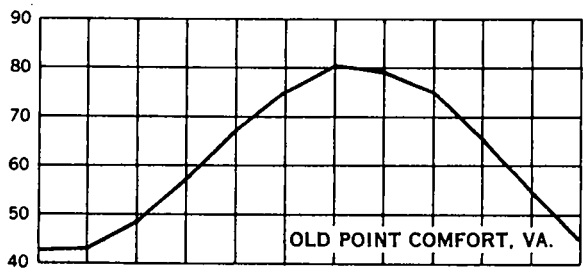
Mean Temperature Curves-*Continued*

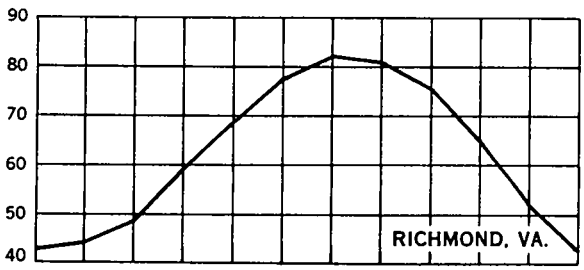


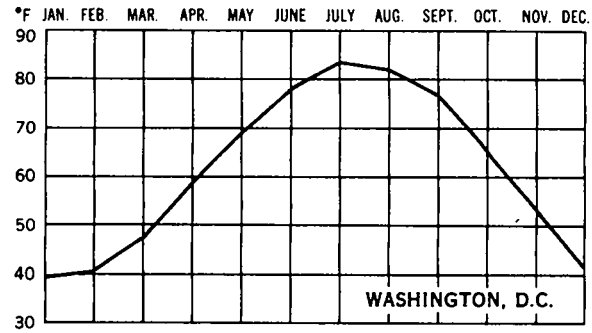


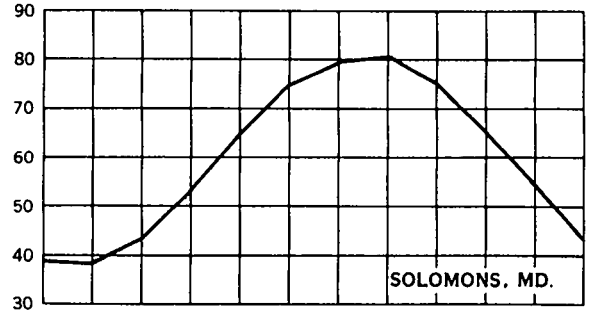


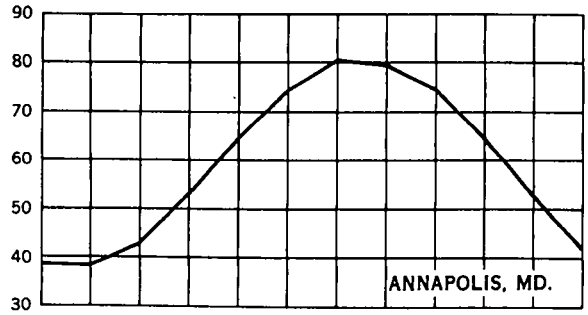


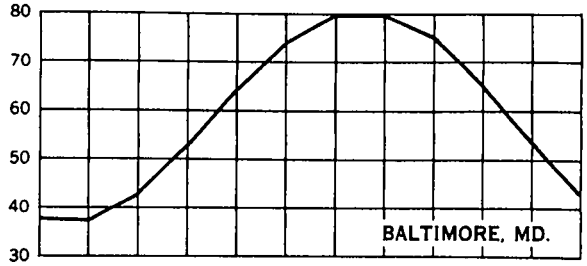


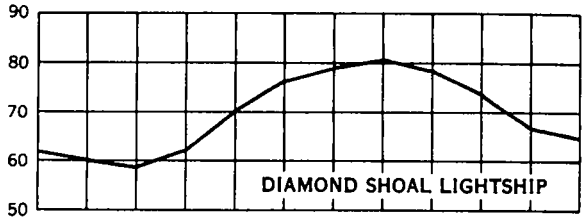


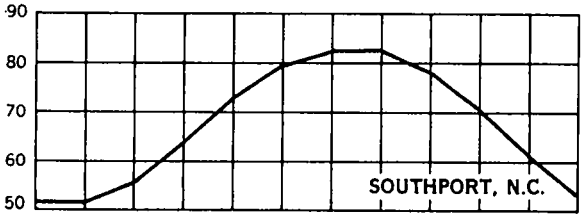




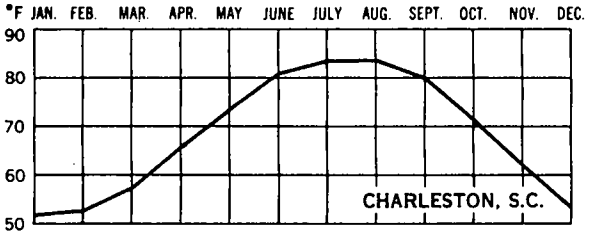


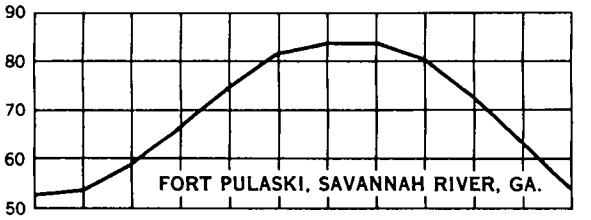


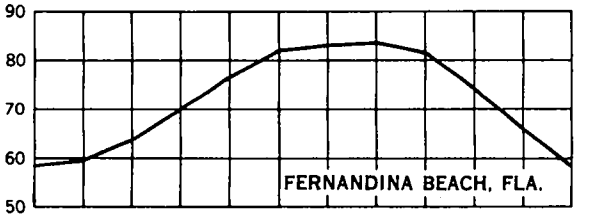


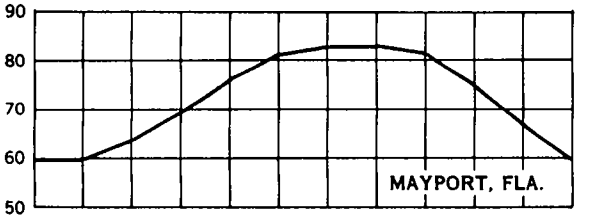


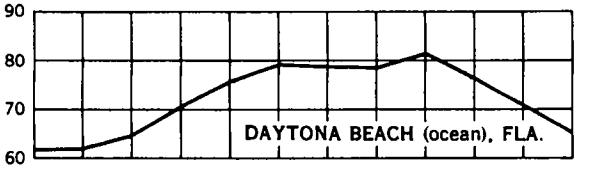
Mean Temperature Curves-*Continued*

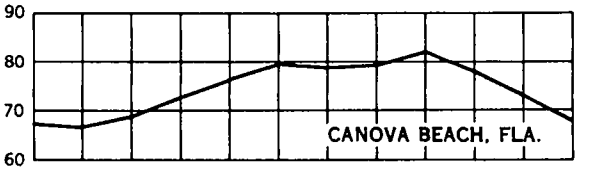


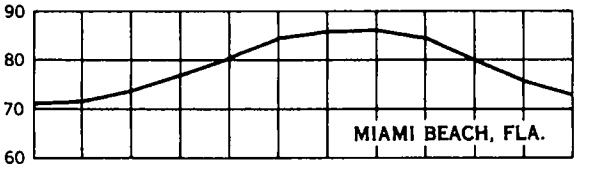


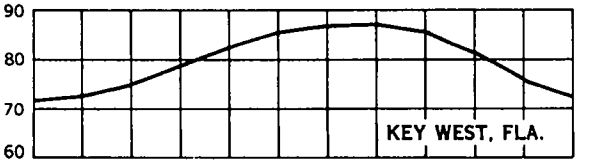


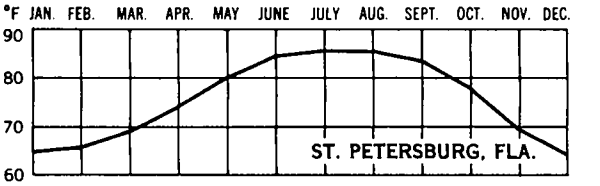


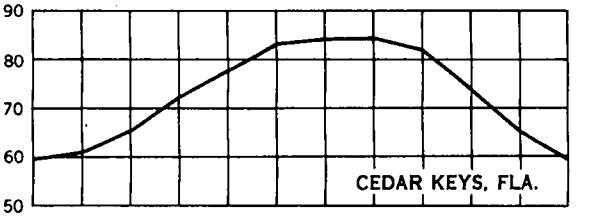


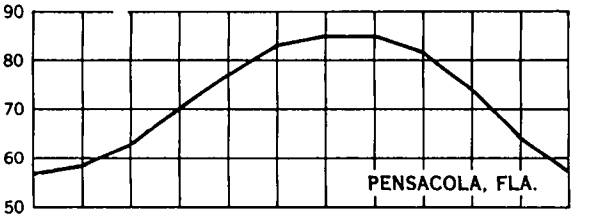


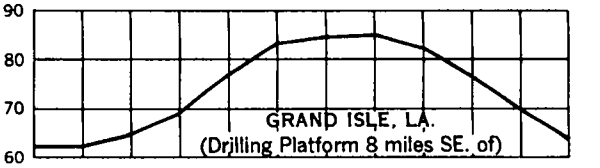


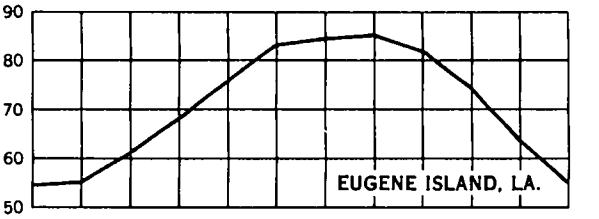


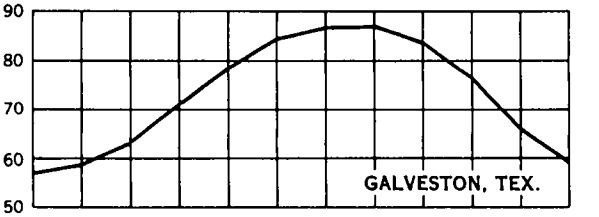


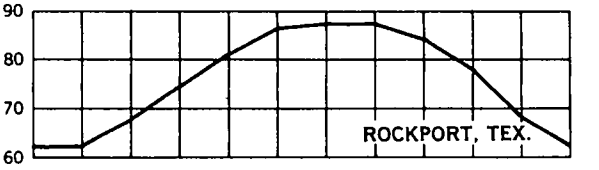


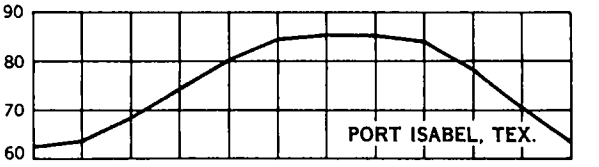












Mean Temperature Curves-*Continued*

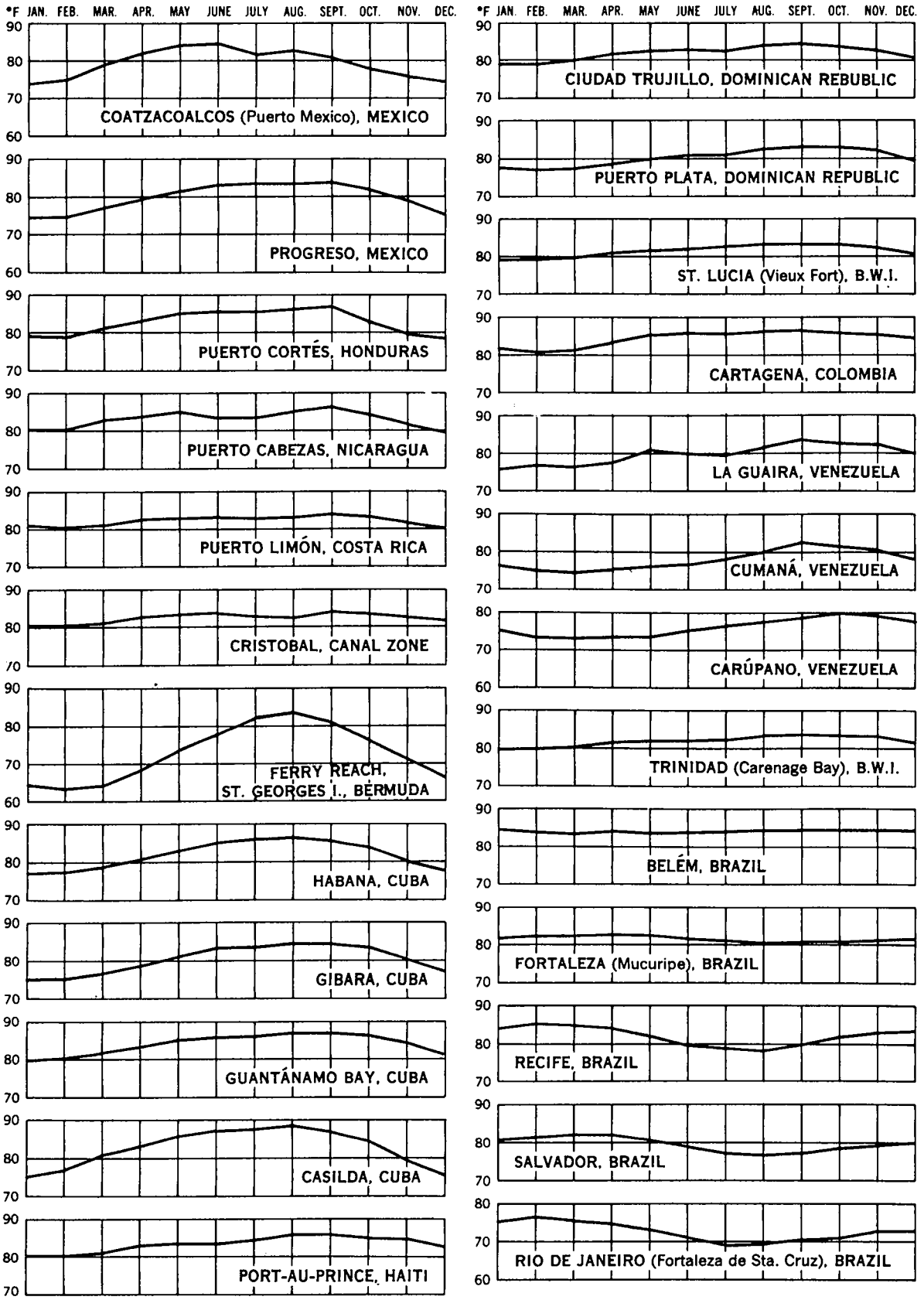


Table 3 - Conversion of Fahrenheit to Centigrade

°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	4.1	49.4	9.7	59.4	15.2	69.4	20.8	79.4	26.3	89.4	31.9
29.6	-1.3	39.6	4.2	49.6	9.8	59.6	15.3	69.6	20.9	79.6	26.4	89.6	32.0
29.8	-1.2	39.8	4.3	49.8	9.9	59.8	15.4	69.8	21.0	79.8	26.6	89.8	32.1
30.0	-1.1	40.0	4.4	50.0	10.0	60.0	15.6	70.0	21.1	80.0	26.7	90.0	32.2
30.2	-1.0	40.2	4.6	50.2	10.1	60.2	15.7	70.2	21.2	80.2	26.8	90.2	32.3
30.4	-0.9	40.4	4.7	50.4	10.2	60.4	15.8	70.4	21.3	80.4	26.9	90.4	32.4
30.6	-0.8	40.6	4.8	50.6	10.3	60.6	15.9	70.6	21.4	80.6	27.0	90.6	32.6
30.8	-0.7	40.8	4.9	50.8	10.4	60.8	16.0	70.8	21.6	80.8	27.1	90.8	32.7
31.0	-0.6	41.0	5.0	51.0	10.6	61.0	16.1	71.0	21.7	81.0	27.2	91.0	32.8
31.2	-0.4	41.2	5.1	51.2	10.7	61.2	16.2	71.2	21.8	81.2	27.3	91.2	32.9
31.4	-0.3	41.4	5.2	51.4	10.8	61.4	16.3	71.4	21.9	81.4	27.4	91.4	33.0
31.6	-0.2	41.6	5.3	51.6	10.9	61.6	16.4	71.6	22.0	81.6	27.6	91.6	33.1
31.8	-0.1	41.8	5.4	51.8	11.0	61.8	16.6	71.8	22.1	81.8	27.7	91.8	33.2
32.0	0.0	42.0	5.6	52.0	11.1	62.0	16.7	72.0	22.2	82.0	27.8	92.0	33.3
32.2	0.1	42.2	5.7	52.2	11.2	62.2	16.8	72.2	22.3	82.2	27.9	92.2	33.4
32.4	0.2	42.4	5.8	52.4	11.3	62.4	16.9	72.4	22.4	82.4	28.0	92.4	33.6
32.6	0.3	42.6	5.9	52.6	11.4	62.6	17.0	72.6	22.6	82.6	28.1	92.6	33.7
32.8	0.4	42.8	6.0	52.8	11.6	62.8	17.1	72.8	22.7	82.8	28.2	92.8	33.8
33.0	0.6	43.0	6.1	53.0	11.7	63.0	17.2	73.0	22.8	83.0	28.3	93.0	33.9
33.2	0.7	43.2	6.2	53.2	11.8	63.2	17.3	73.2	22.9	83.2	28.4	93.2	34.0
33.4	0.8	43.4	6.3	53.4	11.9	63.4	17.4	73.4	23.0	83.4	28.6	93.4	34.1
33.6	0.9	43.6	6.4	53.6	12.0	63.6	17.6	73.6	23.1	83.6	28.7	93.6	34.2
33.8	1.0	43.8	6.6	53.8	12.1	63.8	17.7	73.8	23.2	83.8	28.8	93.8	34.3
34.0	1.1	44.0	6.7	54.0	12.2	64.0	17.8	74.0	23.3	84.0	28.9	94.0	34.4
34.2	1.2	44.2	6.8	54.2	12.3	64.2	17.9	74.2	23.4	84.2	29.0	94.2	34.6
34.4	1.3	44.4	6.9	54.4	12.4	64.4	18.0	74.4	23.6	84.4	29.1	94.4	34.7
34.6	1.4	44.6	7.0	54.6	12.6	64.6	18.1	74.6	23.7	84.6	29.2	94.6	34.8
34.8	1.6	44.8	7.1	54.8	12.7	64.8	18.2	74.8	23.8	84.8	29.3	94.8	34.9

$$^{\circ}C = \frac{^{\circ}F - 32}{1.8}$$

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