U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU
IN COOPERATION WITH FALL RIVER WATER DEPT.
CLIMATOGRAPHY OF THE UNITED STATES NO. 20 — 19

CLIMATOLOGICAL SUMMARY

LATITUDE 41° 42'
LONGITUDE 71° 10'
ELEV. (GROUND) 190'

STATION FALL RIVER, MASSACHUSETTS

MEANS AND EXTREMES FOR PERIOD 1930–1960

Month	Temperature (°F)					**	Precipitation Totals (Inches)					Mean number of days													Month
	Means			Extremes					Snow, Sleet				Temperatures												
													Max.		Min.										
	Daily maximum	Daily minimum	Monthly	Record highest	Record lowest	Mean degree days	Mean	Greatest daily	Mean	Maximum monthly	Greatest daily	Precipitation .10 inch or more	90° and above	32° and below	32° and below	0° and below	Clear	Partly Cloudy	Cloudy	Precipitation .01 inch or more	Precipitation 1.00 inch or more	Snowfall 1.0 inch or more	Thunderstorms	Heavy Fog	
(a)	30	30	30	30	30	11	30	30	30	30	30	30	30	30	30	30	18	18	18	30	30	30	30	17	
Jan	37.5	21.8	29.7	68	-11	1062	4.12	2.20	8.9	29.7	9.0	8	0	9	26	1	11	8	12	12	1	3	*	3	Jan
Feb	38.6	21.8	30.2	64	-18	922	3.41	1.89	8.5	19.2	11.0	7	0	6	25	*	10	8	10	11	1	3	*	3	Feb
Mar	45.7	28.6	37.2	83	2	866	4.50	2.28	7.3	32.8	14.5	8	0	2	22	0	11	7	13	12	1	2	1	3	Mar
Apr	56.7	37.9	47.3	86	18	494	4.01	2.23	0.5	2.8	2.8	8	0	0	1	0	10	8	12	13	1	*	1	2	Apr
May	68.0	47.5	57.8	92	31	234	3.41	2.06	T	T	T	7	*	0	*	0	11	10	10	12	1	0	3	3	May
Jun	76.4	56.8	66.6	98	38	50	3.20	3.10	0	0	0	7	1	0	0	0	11	9	10	11	1	0	4	3	Jun
Jul	81.8	63.5	72.7	98	47	2	3.01	3.28	0	0	0	6	3	0	0	0	12	11	8	10	1	0	5	2	Jul
Aug	80.6	62.8	71.7	100	42	7	4.47	6.40	0	0	0	6	2	0	0	0	12	12	7	10	1	0	4	1	Aug
Sep	73.7	54.8	64.3	98	34	101	3.52	4.15	0	0	0	5	*	0	0	0	13	8	9	9	1	0	2	3	Sep
Oct	63.9	45.0	54.5	88	24	324	3.23	3.77	T	0.4	0.4	6	0	0	3	0	14	8	9	9	1	0	1	2	Oct
Nov	52.1	35.5	43.8	77	7	612	4.40	3.31	1.1	9.0	6.0	7	0	*	11	0	11	8	11	12	1	*	2	2	Nov
Dec	40.7	25.0	32.9	64	-13	946	4.03	2.24	5.5	23.2	10.5	8	0	6	23	*	10	8	13	12	1	2	*	3	Dec
Year	59.6	41.8	50.7	100 Aug 1949+	-18 Feb 1934	5620	45.31	6.40 Aug 1946	31.8	32.8 Mar 1956	14.5 Mar 1956	83	6	23	111	1	136	105	124	133	12	10	22	30	Year

(a) Average length of record, years.

T Trace, an amount too small to measure.

** Base 65°F

\+ Also on earlier dates, months, or years.

* Less than one half.

CLIMATE OF FALL RIVER

Fall River's climate, or average weather, is temperately warm, with a remarkably even seasonal distribution of annual rainfall. The City is located in the prevailing west to east atmospheric flow. Superimposed on this flow are frequent northward and southward movements of large bodies of air from tropical and polar regions. This results in a variety of weather elements which may change frequently from one to another. Fall River lies in the region favored as a path for centers of low pressure, that is, cyclonic systems. These factors account for the ordinarily dependable precipitation supply the year around as well as freedom from monotony. A moderating influence is the proximity of the Atlantic Ocean. This is an especially enjoyable factor during summer when heat waves over New England are tempered at Fall River by the cooling effect of the ocean. Though winter temperatures are sometimes also moderated, this is much less important than the summer effect.

Favorable summer temperatures are emphasized by the fact that in 70 years of record the highest observed reading is only 100°. Ninety degree temperatures average only 6 per year. The frequency of 90° days varies from season to season. None occurred in 1960 though there were 16 in 1949. Cold waves bring temperatures down to 0° or lower only once per winter, on the average. About one-half the winters have no zero weather. The 1933-34 winter had as many as 8 zero days. The growing season averages 181 days, or about 6 months, from the average date of the last freeze in spring, April 24, to the first in fall, October 22. Of interest for crops able to withstand some freezing, there is a 214 day season between the average dates of occurrence of 28°, from April 6 to November 6. For 24°, the season is 240 days, from March 23 to November 18. For 16°, there are 272 days from March 9 to December 6.

Fall River has no dry season. Normal monthly precipitation totals vary only within the range from 3.0 to 4.5 inches. Seldom does a month receive less than 1.0 inch though in June of 1949 only 0.02 inch fell. Months with 10 inches or more are also rare though 16.10 inches fell in August 1946, the wettest month in 88 years of record. On August 7 of that year, 6.38 inches fell in less than 12 hours in a "torrential rain." Though there is no regular dry season, shorter periods of droughty weather may occur at any time of year and, in the growing season, cause concern for agriculture. These periods may warrant use of irrigation on high value crops grown in the vicinity. Fortunately, the plentifulness of annual precipitation provides water for such irrigation. The abundant and regular supply of rainfall as a source of fresh water is a valuable asset utilized by local industry.

An average of one day per month has 1.0 inch or more of rain. The annual frequency has varied from as few as 5 to as many as 22. Eighty-three days per year is average frequency of days with 0.10 inch or more of rain, with extremes ranging from 60 to 98 days per year. On the average, 133 days have measurable amounts (.01 inch or more), varying from 106 to 153 days. There is little month to month variation in these average frequencies. Days with 1.0 inch or more are, however, somewhat more common in early spring, late summer, and fall, while days with 0.01 and 0.10 inch or more are somewhat less frequent in summer and fall than in winter and spring. Showers and thunderstorm activity provide the heavier rains of the warm season while coastal storms, or "northeasters," are prolific producers of rain and snow during the cool season.

The principal snowfall season is December through March, though sometimes appreciable amounts have fallen in November and April. Though the annual average snowfall total is near 32 inches, the 1936-37 season had only 9.0 inches and the 1947-48 season had a record 63.2 inches. Days with 1 inch or more have varied from only 2 in 1931-32 to 19 in 1947-48. Three days with 4 inches or more is average for the season. The variation of this frequency has been from none to six days in a season. One snowfall of 7 inches or more may be expected in a normal season. Snows of 10 inches or more in one day should be expected only once in 5 or 6 years. The heaviest snowstorm of record was that of March 3-5, 1960, when the three-day total reached 18.9 inches. Snow cover at Fall River does not remain on the ground all winter. In fact, seldom do measurable amounts last over two weeks at a time. The ground is bare of snow most of the time in an average winter.

Relative humidity data are not available but are believed to average between 50% and 60% during midday hours. Humidity is higher during the night, with occurrence of light fog on about 3 to 6 days per month. The greatest frequency of light fog is in summer. Oppositely, heavy fog occurrences are slightly more common in winter.

Glaze (ice) storms resulting from freezing precipitation occur on an average of once or twice a year. These reach serious proportions only rarely. About once a year is average for hail occurrences. Annual thunderstorm frequency has varied from 13 to 36 days. Prevailing winds are from the southwest in the warmer part of the year and from the northwest during the colder part.

In summary, Fall River's climate offers relative freedom from extreme hot or cold weather, yet provides the frequent variation in day to day conditions which is thought to be stimulating to mental and physical activities and favorable to health.

Robert E. Lautzenheiser, State Climatologist
Weather Bureau Office, Boston, Massachusetts

FALL RIVER, MASS.
Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	29.8	30.3	38.0	49.0	59.2	66.2	73.4	72.0	66.9	58.0	48.0	36.8	52.3
1932	38.4	31.2	35.2	46.9	57.9	65.6	70.8	71.8	64.0	55.6	41.7	36.4	51.3
1933	37.0	32.2	35.6	46.4	60.0	67.2	69.2	71.0	64.8	53.2	38.3	27.7	50.2
1934	30.1	17.8	35.3	47.7	59.2	67.0	72.6	67.6	65.7	49.4	45.1	29.4	48.9
1935	24.5	27.8	39.0	45.9	55.4	65.7	73.2	71.2	62.2	53.2	45.9	27.6	49.3
1936	27.8	23.2	43.3	44.2	58.6	65.8	70.6	70.6	62.6	53.8	39.4	35.2	49.6
1937	37.7	33.8	33.8	44.5	59.1	66.2	72.3	74.0	62.8	51.2	42.7	31.0	50.8
1938	27.6	30.6	38.8	47.7	55.0	65.4	72.2	73.5	62.1	56.0	46.0	34.0	50.7
1939	28.1	33.4	33.9	44.4	57.2	65.7	71.2	73.6	63.0	53.8	39.6	33.0	49.7
1940	22.2	29.0	32.6	43.0	55.6	64.2	71.2	66.9	62.4	48.6	41.6	34.2	47.6
1941	25.4	28.5	32.3	50.5	58.2	66.2	70.7	69.3	64.6	55.0	46.8	35.2	50.2
1942	27.0	26.8	39.8	48.6	60.6	66.6	71.0	70.0	64.7	54.7	40.8	28.2	49.9
1943	26.2	30.2	36.4	42.9	57.5	70.2	73.4	71.4	63.2	54.5	42.7	28.9	49.8
1944	30.2	29.0	34.6	44.6	62.2	66.6	74.1	74.0	66.1	53.5	42.8	30.6	50.7
1945	23.6	30.1	45.7	52.3	55.3	66.4	72.4	70.2	67.4	52.2	44.6	27.4	50.6
1946	29.2	27.6	45.2	45.4	56.3	65.6	70.8	67.1	65.3	57.6	46.8	34.3	50.9
1947	32.8	29.3	36.5	45.6	55.8	64.2	74.0	73.0	65.0	60.0	40.6	29.8	50.6
1948	23.2	26.5	37.5	47.0	55.2	63.8	73.6	73.2	65.4	53.4	49.0	35.4	50.3
1949	35.1	34.9	38.6	50.5	59.0	70.6	76.1	73.7	63.6	58.1	43.0	36.1	53.3
1950	36.5	28.4	33.0	45.4	55.5	66.8	72.5	69.8	61.4	55.9	47.0	34.6	50.6
1951	33.9	34.1	39.4	51.1	59.1	65.7	73.5	70.6	65.7	54.9	41.4	35.2	52.0
1952	33.0	32.7	37.2	50.1	56.8	69.3	77.1	72.3	65.5	52.7	44.3	35.1	52.2
1953	34.7	35.5	39.8	48.8	59.1	69.2	72.1	71.1	66.4	55.4	47.5	39.6	53.3
1954	27.3	36.8	38.7	49.6	56.2	67.1	71.2	68.6	62.6	58.5	43.7	34.3	51.2
1955	28.1	32.1	37.8	48.0	60.3	65.8	76.1	73.6	63.2	55.6	41.5	25.8	50.7
1956	30.2	32.7	33.6	44.7	53.4	67.6	70.7	71.5	61.5	53.7	44.7	36.8	50.1
1957	23.4	34.1	38.9	49.4	59.1	71.2	73.5	69.3	65.9	53.7	46.1	38.8	51.9
1958	31.2	25.3	38.3	48.2	54.4	62.9	71.9	71.0	63.5	52.2	45.2	25.8	49.2
1959	28.4	27.0	36.6	48.6	61.4	65.1	73.3	73.7	68.0	55.0	43.8	35.3	51.4
1960	29.6	35.2	31.8	48.3	59.8	67.9	71.9	71.3	63.2	53.7			

FALL RIVER, MASS.
Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1931	3.75	2.56	7.04	2.91	4.60	5.99	4.11	6.72	1.87	3.54	1.10	3.79	47.98
1932	6.02	2.55	5.11	1.68	2.59	3.08	2.54	4.58	6.81	6.64	7.15	2.52	51.27
1933	2.52	3.79	5.59	8.50	2.64	2.40	1.64	3.52	9.51	2.56	3.00	3.64	49.31
1934	3.95	3.49	4.05	4.81	3.56	4.10	1.01	3.35	3.44	5.08	3.80	4.25	44.89
1935	5.59	2.56	1.94	3.35	1.97	4.22	2.72	1.72	3.89	1.49	6.53	1.38	37.36
1936	6.98	2.81	7.47	4.03	.92	4.49	2.67	4.68	6.43	2.99	1.34	11.38	56.19
1937	4.72	1.42	3.94	5.40	2.58	4.85	1.05	3.22	2.55	4.16	5.06	4.58	43.53
1938	4.44	3.25	2.93	3.02	4.70	7.49	4.63	4.66	7.58	4.05	3.39	5.07	55.21
1939	3.42	5.39	5.93	6.18	1.55	3.71	1.09	4.31	3.09	4.67	1.07	2.93	43.34
1940	2.50	5.12	3.82	6.68	5.08	1.62	4.04	1.09	4.07	2.08	7.26	3.12	46.48
1941	3.28	2.05	2.77	1.93	1.92	4.65	4.07	2.63	1.25	2.60	2.27	3.20	32.62
1942	4.22	3.10	7.53	1.16	2.03	2.10	2.88	7.24	1.66	4.00	5.20	4.05	45.17
1943	3.32	2.05	3.48	3.00	3.71	1.26	2.51	3.01	1.14	4.10	2.81	1.36	31.75
1944	2.30	2.12	4.66	3.95	.82	3.97	.90	1.94	6.80	1.68	7.54	3.16	39.84
1945	4.00	3.81	2.41	2.63	4.16	3.33	1.26	2.44	1.33	3.14	8.12	7.23	43.86
1946	3.66	2.61	2.18	2.24	4.39	3.45	1.73	16.10	2.44	1.03	1.04	3.18	44.05
1947	3.51	1.29	2.76	4.54	5.73	3.88	5.06	2.00	3.65	2.97	4.66	3.10	43.15
1948	6.22	2.69	3.92	3.84	10.33	2.93	6.53	1.50	2.06	3.89	5.93	2.42	52.26
1949	4.27	4.35	2.68	5.27	3.39	.02	1.87	2.94	2.92	1.28	3.16	2.52	34.67
1950	4.39	4.05	3.33	2.57	2.23	3.26	1.09	3.72	1.46	1.40	6.24	4.36	38.10
1951	4.31	4.25	4.90	3.25	3.26	1.72	1.79	3.76	1.61	2.78	6.85	5.18	43.66
1952	4.75	4.13	4.18	2.54	3.25	3.48	.32	9.26	2.09	1.13	2.08	3.89	41.10
1953	6.02	5.36	8.80	5.62	2.81	.44	5.92	3.85	2.78	5.62	7.39	4.99	59.60
1954	4.06	3.17	3.77	3.97	6.33	2.48	4.78	10.94	5.87	2.43	4.06	6.99	58.85
1955	.97	4.67	4.81	2.82	1.53	2.68	3.67	9.07	3.67	6.79	4.76	1.30	46.74
1956	4.56	4.38	6.46	3.21	2.23	1.95	5.30	.82	2.14	3.23	4.02	5.68	43.98
1957	2.58	1.76	3.73	4.64	1.34	.76	1.59	2.63	.96	1.70	3.74	5.75	31.18
1958	7.74	3.67	4.26	7.79	5.81	2.95	5.13	8.56	4.02	2.83	3.11	1.88	57.75
1959	2.42	3.76	6.97	3.62	2.98	6.13	4.30	2.53	1.23	4.48	4.96	4.03	47.41
1960	3.05	5.99	3.46	4.02	3.88	2.74	3.98	1.29	7.14	2.69			

HISTORY OF WEATHER OBSERVATIONS AT FALL RIVER, MASS.

Temperature and rainfall observations in cooperation with the U. S. Weather Bureau were begun in Fall River May 1, 1887, by Mr. Patrick Kieran. These continued through July 1890. Mr. Clinton V. S. Remington was the next observer. Over 27 years of Mr. Remington's continuous volunteer service began January 1, 1893, and ended July 31, 1920. Mr. Richard C. Brigham, the third and present observer, has served continually from December 1, 1920, to date. Mr. Brigham's outstanding service was recognized by a special citation presented to him in 1960.

Data presented in this summary are based only upon the last 30 years of record to conform to recommendations of the World Meteorological Organization. Exceptions in the narrative summary include the reference to the entire 70 year period of temperature records. The City of Fall River began precipitation observations at the Water Works Pumping Station in 1873. The narrative therefore also refers to the entire 88 year period of rainfall record.