U. S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration

in cooperation with
Cotton Economic Research and
Bureau of Business Research of
The University of Texas at Austin

CLIMATOGRAPHY OF THE UNITED STATES NO. 20-41

CLIMATOLOGICAL SUMMARY

LATITUDE 29° 41' N
LONGITUDE 97° 08' W
ELEV. (GROUND) 425 ft.

STATION Flatonia, Texas

MEANS AND EXTREMES FOR PERIOD 1942 - 1971

Month	Temperature (°F) Means: Daily maximum	Daily minimum	Monthly	Extremes: Record highest	Year	Record lowest	Year	** Mean degree days	Precipitation Totals (Inches): Mean	Greatest daily	Year	Snow, Sleet: Mean	Maximum monthly	Year	Greatest Depth Daily	Year	Mean number of days: Precip. .10 inch or more	Temperatures Max.: 90° and above	32° and below	Min.: 32° and below	0° and below	Month
(a)	30	30	30	30		30		16	30	30		30	30		16		16	16	16	16	16	
Jan	62.5	41.6	52.1	88	1971	7	1949	432	2.06	2.50	1945	0.3	4.0	1949	0		5	0	*	7	0	Jan
Feb	66.8	45.7	56.3	87	1962+	12	1951	293	2.98	4.20	1949	0.3	6.0	1964	6	1964	5	0	*	4	0	Feb
Mar	73.1	49.9	61.5	98	1971	19	1943	193	1.87	3.00	1943	0	0		0		3	1	0	2	0	Mar
Apr	80.3	59.3	69.8	98	1963	31	1971	30	3.74	3.25	1953	0	0		0		4	2	0	*	0	Apr
May	85.7	65.3	75.5	97	1963	43	1954	3	3.86	3.31	1957	0	0		0		6	8	0	0	0	May
Jun	91.7	70.8	81.3	104	1967	54	1970	0	3.72	4.62	1961	0	0		0		5	21	0	0	0	Jun
Jul	95.1	72.9	84.0	110	1954	57	1967	0	1.95	3.28	1958	0	0		0		3	29	0	0	0	Jul
Aug	95.8	72.7	84.3	107	1962	57	1967	0	2.21	3.50	1944	0	0		0		3	29	0	0	0	Aug
Sep	89.7	68.0	78.9	103	1956	41	1942	1	4.72	8.20	1961	0	0		0		6	19	0	0	0	Sep
Oct	82.7	59.2	71.0	97	1966+	34	1970+	27	2.82	6.40	1960	0	0		0		4	5	0	0	0	Oct
Nov	72.5	50.1	61.3	92	1969	23	1970+	159	2.61	5.22	1965	T	T	1959	0		4	*	0	1	0	Nov
Dec	65.6	43.4	54.5	85	1970	16	1950	329	2.62	2.70	1956	0	0		0		5	0	*	5	0	Dec
Year	80.1	58.2	69.2	110	July 1954	7	Jan. 1949	1467	35.16	8.20	Sept. 1961	0.6	6.0	Feb. 1964	6	Feb. 1964	53	114	*	19	0	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.

THE CLIMATE OF FLATONIA, TEXAS

Flatonia is a marketing center in southern Fayette County. It is located on the level to rolling Gulf Coastal Plains, about 104 miles west of Houston, reached via Interstate 10. Fayette County is agricultural, with about 90 percent of farm income from livestock and poultry; it is a leading county in poultry and hog production. Cotton, feed grains and pecans are principal crops. Businesses are mostly agriculturally oriented, but there is some manufacturing also. Oil, gas, sand, gravel and stone are produced in Fayette County. Hunting and fishing provide recreation, and there are many historical sites to visit, including Monument Hill State Park at La Grange. Elevations in Fayette County range from about 200 to 500 feet above sea level.

The climate of Flatonia is humid subtropical with hot summers. Rainfall averages 35.16 inches annually with peak monthly totals in May and September. In most years, March and July are the driest months. The climate is essentially continental, characterized by a considerable range in annual extremes of temperature. Tropical Maritime air masses predominate throughout the spring, summer and early fall months, while modified polar air masses are frequent in late fall, winter, and early spring. Prevailing winds are southerly throughout the year. Rainfall, most often in the form of thundershowers, is variable from month to month and from year to year. The year 1919 was the wettest of record at Flatonia. A total of 13.69 inches in May, followed by 14.25 inches in June, swelled the years total to 68.74 inches. The driest year of record was two years earlier, 1917, when only 16.31 inches fell.

Annually, Flatonia receives about 61 percent of the total possible sunshine. Seasonally, sunshine varies from about 49 percent in winter to 73 percent in summer. Mean relative humidity, at noon c.s.t., is estimated at 63 percent in January, 62 percent in April, 52 percent in July and 54 percent in October.

Winter temperatures are mild and cause little or no interference with outdoor work or recreation. The season is not marked by any prolonged periods of cold weather but rather by short spans of 36 to 72 hours. There is considerable variety in the day-to-day weather as conditions fluctuate between mild, sunny, less humid days and those with cool, cloudy, drizzly weather. The temperature drops to 32°F or below about 19 days each year, but usually these freezing temperatures are confined to an hour to two just before sunrise.

Summers at Flatonia are most often hot and humid with little change in the day-to-day weather, except for an occasional thundershower. Refrigerated-type air conditioning is recommended for maximum comfort indoors and while traveling.

Spring and fall are pleasant seasons characterized by mild days and cool nights. While March is the driest month of the year, thundershower activity increases significantly in April. Considerable early morning cloudiness continues in the spring but dissipates more quickly than in winter. Early fall is a relatively wet period, but precipitation gradually decreases through October and November. Often in the fall there are long periods of clear days of mild temperatures and cool nights.

The warm season (freeze free period) at Flatonia averages 277 days. The mean dates of the last occurrence of 32°F or below in the spring, and the first occurrence of 32°F or below in the fall, are March 2, and December 4, respectively. Mean annual lake (free water) evaporation is 55 inches and in an average year, exceeds precipitation by about 20 inches.

Flatonia, Texas

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1942	50.9	54.0	61.5	68.6	75.3	82.9	81.6	83.0	76.2	71.9	65.4	58.4	69.1
1943	53.6	61.6	58.0	72.2	77.6	81.0	84.0	85.4	78.3	68.9	59.4	51.5	69.3
1944	51.2	60.6	61.4	68.7	72.7	81.3	85.2	85.4	78.4	70.0	61.2	50.2	68.9
1945	52.6	56.4	68.4	69.2	75.8	82.6	83.3	84.0	79.4	68.4	65.6	53.3	69.9
1946	51.1	57.8	64.8	71.4	76.4	79.0	84.1	84.2	77.8	72.0	60.9	56.1	69.6
1947	49.0	49.5	57.4	69.2	75.3	82.6	84.4	83.8	80.4	77.0	59.0	54.0	68.4
1948	46.0	53.0	61.4	72.5	76.9	83.2	84.7	85.6	76.7	70.5	60.1	58.6	69.1
1949	48.9	58.7	64.3	66.4	79.3	82.8	84.2	82.6	80.1	70.8	63.2	56.6	69.8
1950	57.2	58.7	60.9	67.2	77.8	79.9	83.2	83.2	77.3	72.7	59.6	54.4	69.4
1951	52.2	55.6	64.8	70.1	76.8	82.0	85.7	86.7	79.5	71.9	58.1	57.4	70.1
1952	61.3	60.4	60.2	65.1	73.6	81.2	82.8	85.5	77.7	65.5	59.0	52.1	68.7
1953	57.6	54.5	68.5	68.6	75.8	84.5	85.1	83.6	78.1	70.9	58.4	49.7	69.6
1954	54.6	60.8	60.9	72.2	73.6	83.0	86.4	86.3	82.4	73.5	61.1	58.9	71.1
1955	54.5	55.3	64.0	72.5	77.6	76.9	83.8	83.6	81.5	72.6	62.2	55.1	70.0
1956	53.5	59.2	62.4	69.4	78.4	83.3	85.5	85.6	81.2	74.5	60.1	58.7	71.0
1957	54.1	62.3	61.8	67.2	74.4	79.6	84.9	85.0	76.9	66.8	58.9	57.8	69.1
1958	50.3	50.3	57.8	68.1	74.0	82.1	83.6	84.8	79.1	68.3	61.5	51.1	67.6
1959	49.4	55.5	61.2	65.3	76.4	81.0	82.9	82.2	79.2	71.0	55.7	54.7	67.9
1960	51.6	49.9	56.0	70.2	73.1	81.6	82.9	82.5	78.4	72.6	62.5	51.0	67.7
1961	48.9	57.1	-	68.4	76.0	79.2	80.3	80.9	78.2	70.2	58.4	54.5	-
1962	46.4	62.2	59.3	68.4	76.0	79.5	85.0	87.3	81.2	75.1	60.4	53.0	69.5
1963	45.6	53.8	64.6	74.1	78.3	83.2	84.9	85.7	81.0	76.6	63.5	46.8	69.8
1964	53.8	-	-	71.3	77.5	80.7	84.1	85.3	79.3	67.9	64.8	54.6	-
1965	55.6	52.7	56.6	72.1	73.9	79.1	81.4	82.4	80.4	68.5	66.5	57.4	68.9
1966	47.5	51.4	61.3	70.7	74.4	79.2	83.2	83.4	78.3	70.2	66.5	54.1	68.4
1967	54.1	54.4	67.2	76.2	74.9	83.0	84.6	83.1	74.9	69.8	62.4	52.7	69.8
1968	48.1	49.3	59.2	69.7	75.3	79.2	81.7	83.6	76.0	73.4	57.8	52.9	67.2
1969	55.3	55.6	55.8	69.0	73.1	80.5	87.2	85.8	80.1	71.6	62.0	57.0	69.4
1970	47.6	55.8	57.5	70.5	72.4	80.1	84.1	85.8	79.5	68.7	59.4	62.6	68.7
1971	58.8	58.2	64.7	69.1	76.1	83.5	85.7	81.4	79.7	73.0	63.4	60.3	71.2

Flatonia, Texas

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1942	0.41	0.95	-	6.58	1.13	1.38	6.49	2.75	2.94	2.98	1.63	1.76	-
1943	1.96	0.81	3.26	0.48	5.69	1.50	3.65	0.23	2.23	0.71	3.12	2.27	25.91
1944	6.10	1.66	4.16	1.15	5.99	0.67	1.80	5.17	2.77	0.07	5.22	2.72	37.48
1945	3.04	3.73	4.49	3.00	0.94	5.00	3.54	2.72	1.48	3.53	0.37	2.45	34.29
1946	4.46	2.90	4.53	5.18	5.19	3.96	1.48	4.70	4.64	2.48	5.61	1.40	46.53
1947	3.25	0.47	3.22	3.51	1.76	3.19	1.42	3.05	0.65	0.28	3.46	3.90	28.16
1948	0.97	3.10	0.86	1.47	6.07	1.58	0.39	1.28	2.29	0.11	1.98	0.16	20.25
1949	4.10	7.46	1.48	8.88	1.60	1.86	6.47	1.67	2.89	8.80	0.05	4.01	49.27
1950	1.46	2.87	0.46	4.69	3.15	6.84	1.04	0.46	5.49	0.15	0.81	0.60	28.02
1951	0.29	1.27	1.83	1.80	2.20	9.50	0.11	0.68	4.61	0.69	3.68	0.54	27.20
1952	0.87	2.93	1.68	4.78	4.48	3.91	4.07	0	5.50	0	6.07	5.78	40.07
1953	0.73	2.95	0.51	7.40	3.20	1.45	0.57	5.26	1.64	3.40	0.23	3.04	30.38
1954	1.49	0.20	0.25	4.90	3.17	0.12	1.48	0.42	1.20	2.55	0.45	0.83	17.26
1955	2.05	5.05	0.65	0.63	8.25	3.73	1.05	4.36	0.65	0.91	0.75	1.90	29.98
1956	1.32	3.06	1.25	0.60	2.46	0.90	2.48	0.65	1.58	2.21	0.42	5.17	22.10
1957	0.85	2.22	5.50	7.96	6.20	3.82	0.89	0	18.41	6.99	5.71	1.71	60.26
1958	4.07	5.86	1.15	2.87	2.86	2.67	3.28	0.86	6.89	3.76	2.79	1.90	38.96
1959	0.33	4.35	0.19	8.23	3.60	4.93	0.34	5.52	4.70	6.15	1.88	3.90	44.12
1960	1.34	3.18	1.05	5.22	1.72	8.95	2.15	2.42	0.72	15.07	4.30	4.76	50.88
1961	1.81	3.19	1.29	1.39	1.44	10.98	4.63	2.00	10.38	1.75	4.82	0.52	44.20
1962	1.92	1.56	0	5.01	1.68	4.04	0.15	0	6.02	0.85	0.64	5.01	26.88
1963	0.47	2.93	0.26	0.85	0	1.05	1.43	2.05	2.48	0.26	4.55	2.27	18.60
1964	2.43	2.81	3.06	2.17	0.85	5.08	0.52	2.27	6.24	0.63	1.34	2.50	29.90
1965	3.17	6.50	0.91	2.15	9.99	5.25	0.76	2.32	3.22	4.48	7.94	5.59	52.28
1966	1.90	4.08	0.78	4.38	6.13	4.69	1.57	3.11	1.29	0.46	0.12	1.92	30.43
1967	0.70	1.17	1.21	3.37	5.16	0	2.13	2.03	12.17	4.17	2.24	1.09	35.44
1968	7.11	1.49	1.65	3.91	6.40	9.92	2.68	0.74	10.25	1.52	4.50	3.35	53.52
1969	0.65	5.25	4.01	5.92	4.05	1.65	0.26	0.98	4.42	3.17	1.58	2.36	34.30
1970	2.42	4.16	3.30	2.18	6.45	0.92	1.42	2.26	4.35	3.63	0	1.11	32.20
1971	0.06	1.16	1.18	1.52	4.09	1.93	0	6.22	9.45	2.80	1.99	4.00	34.40

STATION HISTORY

Temperature and precipitation observations began at Flatonia on January 1, 1908. Except for a few short breaks, records have been continuous since that date. Throughout most of its history, until November 13, 1967, the station remained within about three city blocks of the post office building at Flatonia. On that date the station was moved to a new location, 2.1 miles west of Flatonia, and the station name changed from Flatonia to Flatonia 2W. Station equipment consists of a cotton region shelter, maximum and minimum thermometers, and a standard, eight-inch, non-recording rain gage. Daily temperature and precipitation data are published monthly in Climatological Data - Texas. Station index number: 41-3183-07.

Climatologist for Texas
National Weather Service
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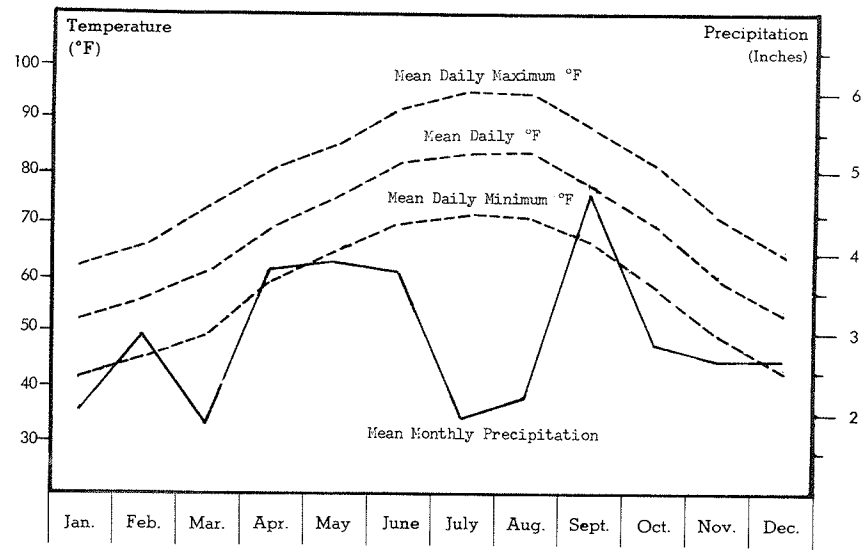
Monthly Temperatures and Precipitation