U. S. DEPARTMENT OF COMMERCE
Environmental Science Services 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

LATITUDE 33° 08' N
LONGITUDE 95° 36' W
ELEV. (GROUND) 495 ft.

CLIMATOLOGICAL SUMMARY

STATION SULPHUR SPRINGS, TEXAS

MEANS AND EXTREMES FOR PERIOD 1949-1966

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	Year	Mean number of days: Precip. .10 inch or more	Temperatures: Max. 90° and above	Max. 32° and below	Min. 32° and below	Min. 0° and below	Month
(a)	18	18	18	18		18		11	18	18		18	18		11		11	11	11	11	11	
Jan	54.4	31.7	43.1	83	1952	0	1949	741	3.07	2.26	1949	1.7	9.8	1964	9	1964	4	0	2	21	0	Jan
Feb	58.6	35.6	47.1	84	1959	-1	1951	538	3.50	3.48	1950	0.2	1.5	1960	2	1960	6	0	1	14	0	Feb
Mar	64.7	40.4	52.6	88	1955+	17	1965	423	2.96	2.70	1957	0.2	2.5	1962	3	1962	5	0	*	7	0	Mar
Apr	74.3	50.4	62.4	92	1963	29	1952	133	5.79	4.21	1966	0	0		0		7	*	0	*	0	Apr
May	82.0	60.0	71.0	97	1955	36	1954	21	5.11	3.50	1957	0	0		0		5	3	0	0	0	May
Jun	89.1	67.3	78.2	103	1956+	51	1964+	1	3.62	5.05	1951	0	0		0		6	14	0	0	0	Jun
Jul	94.4	70.9	82.7	111	1954	58	1964+	0	2.99	3.29	1950	0	0		0		4	27	0	0	0	Jul
Aug	95.1	69.2	82.2	110	1964+	53	1956	*	2.54	2.52	1966	0	0		0		4	26	0	0	0	Aug
Sep	88.9	62.4	75.7	108	1951	39	1949	4	4.47	4.38	1958	0	0		0		4	15	0	0	0	Sep
Oct	79.3	51.5	65.4	100	1953	25	1952	96	4.00	5.50	1949	0	0		0		4	3	0	1	0	Oct
Nov	66.5	40.3	53.4	89	1966	14	1950	335	3.37	3.99	1957	T	T	1952+	0		5	0	0	7	0	Nov
Dec	57.0	33.8	45.4	85	1955	8	1963+	608	2.95	3.20	1959	0.3	2.6	1958	1	1963	5	0	1	15	0	Dec
Year	75.4	51.1	63.3	111	Jul. 1954	-1	Feb. 1951	2900	44.37	5.50	Oct. 1949	2.4	9.8	Jan. 1964	9	Jan. 1964	59	88	4	65	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 FOR SULPHUR SPRINGS, TEXAS

Sulphur Springs, the county seat, is the geographic and commercial center of Hopkins County. It is a production and processing center for dairy products. A variety of industries includes clothing, wood products, clay products, sheet metal, fertilizers, feeds, cotton products, meat packing, and steel tanks. Hopkins, a northeastern Blackland-Postoak county, is number one in milk production in Texas and second in the nation. More than 600 dairies dot the countryside of this East Texas county. Soils vary from black waxy to light sandy. Timber include pine, postoak, and pecan. Oil, natural gas, and clays are produced in Hopkins County.

The climate of Sulphur Springs is humid subtropical with hot summers. Rainfall is abundant, averaging 44.37 inches annually, and is fairly evenly distributed throughout the year. Prevailing winds are southerly March through November, and northerly December through February. The Gulf of Mexico plays a dominant role in the climate of the area during the spring, summer, and fall months, while modified polar and arctic air masses contribute significantly to the winter climate.

Winter temperatures are mild with only about four days during each year, on an average, when the daily maximum fails to go above freezing. Arctic or unusually cold polar air masses plunging rapidly southward out of Canada bring sharp drops in temperature, but ordinarily, cold spells are of short duration. In a typical sequence, the weather turns cold one day, reaches the lowest temperature on the second night, then warms up again on the third day. Cloudiness is more prevalent in winter, but the area continues to receive between 50 and 60 percent of the total possible sunshine during this season. Winds accompanying a vigorous cold front may be strong northerly, but these decrease rapidly after the frontal passage.

Daytime temperatures are quite warm in summer, particularly in August. Summer nights are not unpleasant, however, since daily minima average only 60° to 71°F during the warmest months. Except for occasional thundershowers that dissipate the afternoon heat, there is little variation in the day-to-day weather in summer. Refrigerated air-conditioning is recommended for maximum comfort indoors.

The spring and fall seasons are the most delightful. Temperatures are neither too hot nor too cold, and there are sufficient changes to make the weather interesting.

Precipitation falls mostly as thundershowers, resulting from the interaction of cold fronts from the north with the warm moist tropical air moving northward from the Gulf of Mexico. Consequently, rainfall amounts are heaviest in late spring and again in early fall. Slow, general rains are more common in winter, while the predominantly anticyclonic atmospheric circulation over East Texas in summer, and the exclusion of cold fronts from the area, result in a decrease in rainfall during this season. Monthly and seasonal rainfall totals are quite variable. The driest year on record (since 1892) was 1896 when only 22.83 inches fell. The year 1957 was the wettest, resulting from torrential rains in both April and May that boosted the annual total to 71.09 inches.

Snowfall averages 2.4 inches annually; however, average values are misleading. A single snowfall of four or five inches may be followed by several years with no measurable amounts. Usually, snow melts about as rapidly as it falls, and is an unimportant source of moisture. More troublesome than snowfall are the occasional ice storms which do considerable damage to trees, shrubs, and utility lines, and make travel hazardous. These occur during brief periods in January and February.

The growing season (freeze free period) at Sulphur Springs averages 238 days. The average date of the last freeze in the spring is March 23, while the average date of the first freeze in the fall is November 16.

Average annual relative humidity is about 83 percent at 6:00 a.m., 56 percent at noon, and 55 percent at 6:00 p.m. Central Standard Time. Seasonal averages vary only slightly. The area receives about 67 percent of the total possible sunshine annually. Mean annual lake evaporation is estimated at 52 to 54 inches.

Violent wind or hailstorms may accompany the thunderstorms of late spring and early summer, but these are infrequent. Seven tornadoes are known to have touched ground in Hopkins County during the seven-year period 1959-1966. Four of these occurred in one year, 1961. Only minor property damage resulted from these storms.

In summary, the climate of Sulphur Springs is subtropical with mild winters--suitable for year-round outdoor activity. Daytime temperatures are rather hot in summer. Rainfall is abundant, producing lush growth.

SULPHUR SPRINGS, TEXAS

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1949	42.2	49.3	55.5	62.1	73.2	79.6	82.8	79.5	72.7	64.2	55.8	49.0	63.8
1950	49.7	50.3	52.3	59.9	71.5	76.9	78.4	79.3	72.2	68.4	51.8	44.0	62.9
1951	44.7	46.1	54.7	61.5	69.7	77.7	82.9	87.1	75.7	66.6	49.2	48.1	63.7
1952	52.4	51.2	52.1	59.4	69.7	80.4	82.1	85.6	76.3	59.9	51.8	44.0	63.7
1953	47.8	47.2	58.4	58.7	70.5	83.8	80.2	80.1	75.2	68.1	50.9	43.4	63.7
1954	44.9	53.6	53.0	67.2	65.7	79.1	88.0	86.8	79.8	68.2	53.2	47.2	65.6
1955	44.2	46.1	55.4	66.2	73.5	75.8	83.5	80.9	77.0	65.0	52.4	44.2	63.7
1956	42.7	47.0	53.0	61.5	74.9	79.3	87.4	85.6	77.8	68.9	50.8	49.3	64.9
1957	42.1	53.0	50.1	60.4	70.4	77.9	84.4	80.9	73.2	60.5	51.1	50.0	62.8
1958	42.0	42.1	48.1	60.0	70.6	78.7	81.3	81.7	76.3	63.5	55.7	42.4	61.9
1959	40.3	46.6	52.5	59.5	72.9	77.2	79.7	81.1	76.9	64.3	48.1	49.1	62.3
1960	42.7	40.5	45.2	65.0	68.0	78.2	80.9	81.2	76.8	68.0	54.4	42.1	61.9
1961	39.6	49.3	56.7	59.5	69.9	75.1	79.7	78.7	74.7	64.7	51.9	43.7	62.0
1962	37.1	53.3	50.4	60.4	73.2	76.8	81.4	81.9	75.3	68.8	52.0	44.9	63.0
1963	35.1	42.9	57.3	66.7	71.4	79.4	82.9	84.6	77.4	72.0	56.7	38.4	63.7
1964	42.8	42.5	52.1	65.1	72.2	77.6	85.7	83.3	75.5	61.8	57.5	45.1	63.4
1965	45.9	43.6	45.6	66.8	71.8	77.9	83.2	81.9	76.7	63.6	60.4	49.0	63.9
1966	39.6	43.5	53.9	62.9	69.4	76.7	83.4	78.8	72.1	61.2	58.1	43.6	61.9

SULPHUR SPRINGS, TEXAS

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1949	8.74	5.25	2.91	5.75	1.35	1.94	3.65	1.06	5.10	17.06	0.48	3.00	56.29
1950	3.97	9.70	2.52	5.94	8.11	3.44	6.66	3.12	8.89	1.12	0.47	T	53.94
1951	2.60	3.95	0.96	0.99	3.01	8.26	2.09	0.80	4.74	3.56	2.46	1.59	35.01
1952	2.91	2.75	3.02	9.49	6.34	0.88	2.22	T	0.27	0.27	8.11	5.71	41.97
1953	1.28	1.97	4.94	7.20	5.65	0.90	5.85	4.28	1.69	2.14	3.60	5.20	44.70
1954	4.96	2.08	0.94	2.62	4.49	1.20	0.05	1.01	2.66	10.94	2.22	2.34	35.51
1955	1.65	2.60	2.69	3.82	4.85	0.58	1.00	7.58	3.65	0.64	0.61	1.36	31.03
1956	2.10	4.91	0.88	1.59	2.28	1.73	0.18	1.12	0.05	1.88	5.35	1.39	23.46
1957	3.75	1.88	6.58	13.44	13.59	5.73	0.38	2.93	5.55	6.51	7.96	2.79	71.09
1958	3.10	0.98	4.39	10.63	4.54	7.10	3.12	1.75	5.67	2.36	3.83	1.27	48.74
1959	0.51	4.03	4.57	3.94	2.83	5.67	7.44	1.00	1.10	7.91	1.26	7.00	47.26
1960	4.53	2.54	2.18	2.77	2.99	6.37	2.64	2.85	6.16	4.30	1.30	8.11	46.74
1961	3.23	2.86	4.85	1.82	2.87	8.18	2.69	2.78	5.02	2.04	8.19	4.14	48.67
1962	3.28	3.35	2.98	4.36	1.81	7.29	5.67	1.32	8.94	5.79	4.70	1.77	51.26
1963	1.37	0.10	2.49	5.79	4.60	0.62	4.18	0.33	1.20	0.05	2.62	1.20	24.55
1964	1.71	2.46	3.06	6.19	3.82	1.92	0.36	4.49	6.68	0.10	4.52	0.90	36.21
1965	2.44	7.14	2.17	1.50	11.74	2.20	1.31	1.76	6.02	1.52	2.32	1.97	42.09
1966	3.20	4.53	1.17	16.36	7.06	1.22	2.36	7.52	7.09	3.86	0.64	3.32	58.33

T - Trace

STATION HISTORY

Temperature and precipitation records began at Sulphur Springs in April 1892. The station was located at the home of the observer, Mr. William B. Baxter, at 210 Church Street. The station became inoperative in July 1912. It was re-established in July 1922 at 417 Putman Street. Mr. Baxter was again the observer. He continued in this capacity through December 1924. After a brief period of inactivity, the station was moved to 622 Oak Avenue, eight blocks southeast of the post office. Mr. Thomas F. Owen became the new observer and continued to record through June 30, 1945. The Civil Aeronautics Authority established an airway station at Sulphur Springs Airport, two miles north-northeast of the post office in March 1940. A recording rain gauge was added to the station equipment on September 13, 1941. The CAA station was closed January 31, 1947. Mr. Robert C. Connolly took over as climatological observer at the airport location. The station was inactive from July 1947 through mid-March 1948. Mr. Ralph Hill, the present observer, re-established the station at 325 Texas Avenue, one-half mile south-southeast of the post office on March 15, 1948, and records have been continuous since that date. Station equipment consists of Cotton Region Shelter, maximum and minimum thermometers, standard 8-inch rain gauge, and 12-inch recording rain gauge. Instrumental exposure is over sod on slightly rolling terrain. Temperature and precipitation data are published in CLIMATOLOGICAL DATA--TEXAS, and hourly precipitation data are published in HOURLY PRECIPITATION DATA--TEXAS.

Weather Bureau State Climatologist
Environmental Science Services Administration
3600 Manor Road, Austin, Texas 78723
June 1967

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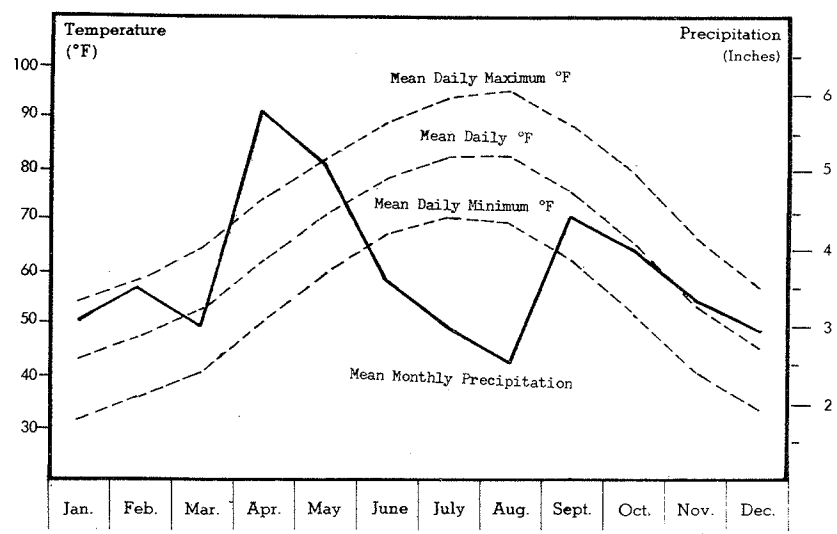
Monthly Temperatures and Precipitation