

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

STATION TILDEN, TEXAS

LATITUDE 28° 28' N
 LONGITUDE 98° 33' W
 ELEV. (GROUND) 256 ft.

MEANS AND EXTREMES FOR PERIOD 1958-1970

Month	Temperature (°F)									** Mean degree days	Precipitation Totals (Inches)							Mean number of days					Month		
	Means			Extremes			Mean	Greatest daily	Year		Snow, Sleet				Precip. .10 inch or more	Temperatures									
	Daily maximum	Daily minimum	Monthly	Record highest	Year	Record lowest					Year	Mean	Maximum monthly	Year		Greatest Depth	Year	90° and above	Max.		Min.				
																			32° and below	32° and below	0° and below	0° and below			
(a)	13	13	13	13		13		13		13		13		13		13		13		13					
Jan	62.7	39.5	51.1	89	1969	9	1962	455	1.34	2.95	1968	0	0		0		3	0	*	9	0				Jan
Feb	67.8	43.2	55.5	95	1960	21	1960	281	1.99	1.77	1969	0	0		0		4	1	0	3	0				Feb
Mar	74.0	49.4	61.7	98	1967	26	1962	168	0.78	1.31	1964	0	0		0		2	1	0	1	0				Mar
Apr	85.1	61.2	73.2	107	1963	35	1961	22	1.66	3.20	1961	0	0		0		2	10	0	0	0				Apr
May	89.2	66.5	77.9	105	1967	43	1970	1	2.70	2.70	1965	0	0		0		4	17	0	0	0				May
Jun	95.0	72.0	83.5	105	1969	58	1970	0	2.56	3.70	1960	0	0		0		3	26	0	0	0				Jun
Jul	98.2	73.8	86.0	109	1960	61	1961	0	1.18	2.23	1967	0	0		0		3	30	0	0	0				Jul
Aug	98.5	73.4	86.0	108	1962	59	1967	0	1.71	3.10	1960	0	0		0		3	29	0	0	0				Aug
Sep	92.5	69.9	81.2	105	1959	48	1967	1	3.91	6.93	1967	0	0		0		5	22	0	0	0				Sep
Oct	84.6	60.2	72.4	98	1962	33	1970	26	2.26	2.89	1960	0	0		0		3	10	0	0	0				Oct
Nov	75.4	50.8	63.1	93	1963	23	1959	140	1.52	2.12	1960	0	0		0		3	1	0	2	0				Nov
Dec	67.1	43.0	55.1	89	1964	21	1966	325	1.47	1.93	1958	0	0		0		3	0	0	5	0				Dec
Year	82.5	58.6	70.6	109	July 1960	9	Jan. 1962	1419	23.08	6.93	Sept. 1967	0	0		0		38	147	*	20	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 TILDEN, TEXAS

Tilden is located in a bend of the Frio River in the north central part of McMullen County. It was originally called Dog Town from the local ranchers' habit of using packs of dogs to round up cattle in the brush country of the area. It's believed that Tilden, now the county seat of McMullen County, probably was named for Samuel J. Tilden, who was the Democratic Party's candidate for President in 1876. Today, Tilden is an oil and ranching supply center, and has a natural gas processing plant.

McMullen County has an oil-ranching economy. Agricultural income is mostly from cattle, produced on large ranches. Some grain and cotton also are produced. The county is brushy plain, sloping to the Frio and Nueces Rivers and tributaries. Soils are sandy and loam types. Elevations range from 150 to 500 feet above mean sea level.

Tilden has a subtropical climate with dry winters and hot humid summers. Winter temperatures are quite mild while daytime temperatures in summer are rather hot. Rainfall averages 23.08 inches annually, but amounts vary considerably from month to month and from year to year. Seventy percent of the average annual precipitation falls during the seven-month period April through October. Most rainfall is in the form of thundershowers, and heavy downpours may occur at any time, but are least likely to occur during the cooler portion of the year, November through March. A total of 6.93 inches fell within a 24-hour period as a result of Hurricaneulah in September 1967.

The mean length of the warm season (freeze free period) at Tilden is 291 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 February 19 and December 7, respectively. The pre-

vailing winds at Tilden are southeasterly throughout the year. Measured at noon, Central Standard Time, the relative humidity averages 62 percent in January, 57 percent in April, 50 percent in July and 57 percent in October. In an average year, free water (lake) evaporation exceeds precipitation by 36 inches. Thunderstorms occur on about 33 days each year.

The cool season, beginning about the first of November and extending through the end of March, also is the dry season. Usually, March is the driest month. The small amounts of precipitation that do fall in winter most often are in the form of light rain or drizzle. Cloudiness is more prevalent in winter, reducing the amount of sunshine received to about 51 percent of the total possible for the three-month period. The mornings are often cloudy, while afternoons are sunny. Winter temperatures are quite mild. Minima of 32°F or below occur on about one night in five, and freezing temperatures usually are restricted to an hour or two before sunrise. The lowest temperature of record at Tilden is 9°F, and occurred on January 12, 1962.

The May-June and September-October periods are the wettest in Tilden. Mid-summer is relatively dry. Daytime temperatures are consistently high in summer; however, the low afternoon humidity and a steady southeasterly breeze help prevent the heat from becoming oppressive. Refrigerated-type air conditioning is recommended for maximum comfort indoors or while traveling. The highest temperature of record at Tilden is 109°F and occurred on July 31, 1960.

Both spring and fall seasons are very pleasant. Long periods of mild sunny weather are characteristic of October and November.

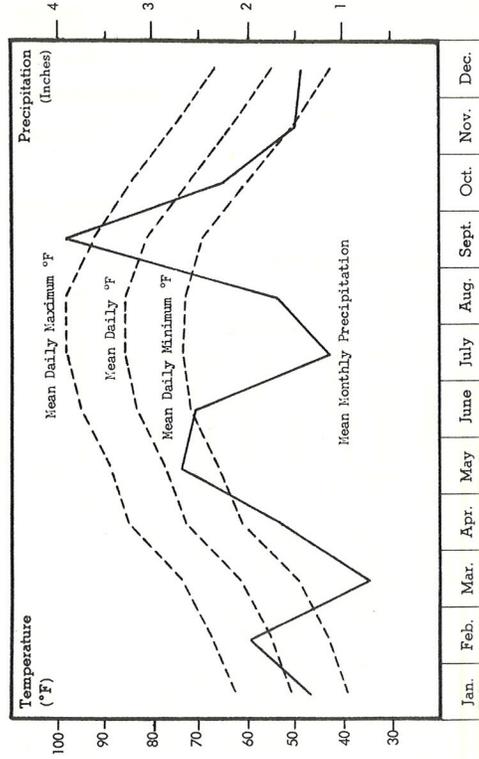
TILDEN, TEXAS

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1958	0.21	3.41	1.35	0.88	1.79	2.88	0.54	0.38	7.77	6.87	1.14	2.17	38.03
1959	0.48	2.11	0.02	1.52	1.38	1.41	1.75	0.80	2.55	2.06	1.37	1.15	35.55
1960	0.48	2.11	1.32	2.85	1.80	5.56	0.94	4.98	4.41	7.47	3.81	3.82	52.65
1961	0.97	1.77	0.48	3.29	0.44	7.30	2.80	0.46	0.22	0.82	1.59	0.46	11.90
1962	0.32	0.03	0.31	2.35	1.20	2.29	0	0.70	1.98	0.43	0.85	1.71	17.23
1963	0.30	1.57	0.12	0.86	2.09	4.10	0.57	0.33	1.54	0.73	3.30	0.71	15.11
1964	1.09	1.60	1.40	0.07	2.09	1.70	0.72	2.11	1.43	0.60	1.59	3.61	24.47
1965	0.75	2.97	0.30	1.00	6.23	0.20	0.84	0.86	3.32	2.64	1.45	3.52	24.86
1966	1.73	3.13	1.77	3.59	5.44	2.62	0.53	2.61	5.18	0.67	0	0.52	30.10
1967	0.95	1.49	0.73	1.49	1.13	0.14	2.44	4.03	15.54	0.80	1.14	0.52	30.10
1968	6.88	1.87	0.97	0.96	5.92	2.70	1.68	0.08	4.59	1.96	1.50	1.71	21.15
1969	0.37	2.22	0.71	2.41	1.36	1.08	0.26	2.59	1.67	4.69	2.05	1.71	21.15
1970	1.97	1.52	1.41	0.28	7.04	1.36	2.10	2.30	4.61	0.02	1	0.15	22.76

T - Trace

Monthly Temperatures and Precipitation



TILDEN, TEXAS

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1958	51.0	55.1	58.5	71.0	76.7	85.0	87.0	87.7	82.0	69.4	62.6	51.9	69.6
1959	52.3	53.0	57.4	67.3	79.7	84.2	86.0	85.9	83.7	73.2	56.4	56.4	69.6
1960	48.7	57.3	65.9	72.7	76.6	84.8	85.9	85.2	79.4	75.9	64.3	51.2	69.6
1961	46.9	66.5	61.8	72.3	80.1	83.2	87.9	88.5	81.4	72.6	60.7	55.6	72.2
1962	47.7	54.1	68.1	78.7	80.3	85.5	86.3	87.7	82.5	75.4	66.0	48.3	71.7
1963	52.9	52.5	62.8	75.0	80.2	84.1	87.2	87.4	83.1	70.4	57.5	55.3	71.9
1964	58.5	53.9	59.1	75.7	78.7	84.4	86.9	86.2	83.9	69.6	68.4	57.7	69.6
1965	48.0	52.2	62.4	72.9	75.8	80.4	85.1	85.9	81.1	71.4	68.9	55.0	69.6
1966	53.3	55.5	69.7	79.3	80.1	85.3	86.7	83.1	76.3	68.9	63.0	54.1	71.3
1967	50.9	51.2	59.5	70.8	77.1	81.6	83.3	84.9	77.7	74.5	60.5	55.4	69.0
1968	55.5	58.0	58.1	75.7	75.7	84.3	88.7	86.9	80.9	71.9	60.8	57.7	69.6
1970	47.9	57.1	59.5	73.5	73.4	80.5	84.0	85.3	81.3	69.6	60.2	63.4	69.6

STATION HISTORY

A rainfall station was established in Tilden on October 1, 1956. The rain gage was located on the Court House lawn. Temperature equipment was added on March 1, 1958. Station equipment consists of a cotton region shelter, maximum and minimum thermometers, and a standard 8-inch non-recording rain gage. Daily temperature and precipitation data are published monthly in Climatological Data—Texas. Station index number: 41-9031-09.

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Single copies of this summary are available without charge from the Bureau of Business Research, The University of Texas, Austin, Texas, 78712. Quantity rates upon request.