

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 31° 36' N
LONGITUDE 94° 39' W
ELEV. (GROUND) 308 ft.

CLIMATOLOGICAL SUMMARY

STATION NACOGDOCHES, TEXAS

MEANS AND EXTREMES FOR PERIOD 1937-1966

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	Year	Mean					Maximum monthly	Year	Greatest Depth	Year		90° and above	32° and below	32° and below	0° and below	
(a)	30	30	30	30		30			11	30	30		30	30		11	11	11	11	11			
Jan	58.0	36.6	47.3	84	1950	5	1962	613	4.46	4.12	1966	0.6	7.6	1949	1	1964	6	0	1	17	0	Jan	
Feb	63.0	40.1	51.6	87	1957	0	1951	414	3.98	2.81	1941	0.1	1.1	1965	1	1965	6	0	*	11	0	Feb	
Mar	69.5	45.1	57.3	93	1946	15	1943	299	3.59	3.15	1965	0.1	2.0	1954	1	1965	5	0	0	5	0	Mar	
Apr	77.1	54.4	65.8	94	1963	27	1962	78	4.74	5.90	1953	T	T	1938	0		6	1	0	*	0	Apr	
May	84.1	62.2	73.2	100	1958	39	1960	6	5.07	4.28	1949	0	0	0	0		5	9	0	0	0	May	
Jun	90.1	68.8	79.5	103	1960	51	1955+	*	3.99	3.33	1958	0	0	0	0		7	22	0	0	0	Jun	
Jul	93.7	71.4	82.6	107	1954	57	1947	0	3.29	4.60	1959	0	0	0	0		5	29	0	0	0	Jul	
Aug	94.5	70.6	82.6	110	1954	55	1956+	0	2.69	3.32	1944	0	0	0	0		5	29	0	0	0	Aug	
Sep	89.2	64.9	77.1	105	1947	41	1942	1	3.53	4.83	1958	0	0	0	0		6	18	0	0	0	Sep	
Oct	81.3	54.1	67.7	99	1938	27	1957	64	3.08	9.13	1941	0	0	0	0		3	6	0	*	0	Oct	
Nov	68.5	43.9	56.2	88	1955	18	1938	261	4.50	8.85	1940	0.1	2.0	1937	0		6	0	0	6	0	Nov	
Dec	60.8	38.3	49.6	85	1956	12	1963+	521	4.94	5.90	1939	*	0.2	1963	T	1963	8	0	*	13	0	Dec	
Year	77.5	54.2	65.4	110	Aug. 1954	0	Feb. 1951	2257	47.86	9.13	Oct. 1941	0.9	7.6	Jan. 1949	1	Mar. 1954	68	114	1	52	0	Year	

(a) Average length of record, years.

+ Also on earlier dates, months, or years.

T Trace, an amount too small to measure.

* Less than one half.

** Base 65°F

THE CLIMATE OF NACOGDOCHES, TEXAS

Few cities can match the quiet charm of this East Texas town. Named after the Nacogdoche Indians, its antiquity is indicated by the presence of four Indian mounds within the city limits. The Mission of Nuestra Senora de Guadalupe was erected in 1716 and by 1779 early white settlers had settled around the mission, permanently establishing what is today Nacogdoches. At the beginning of the Nineteenth Century, Nacogdoches was the state's second largest city. Some of Texas' most historic landmarks are in Nacogdoches. Gaceta de Tejas, Texas' first newspaper, was published here. The Nacogdoches University was founded in 1845, the first nonsectarian university founded by the Republic of Texas. The Adolphus Sterne Home, still well preserved and occupied by the Hoya Memorial Library and museum, was built in 1828 with a store in one end and was often a refuge for women and children during Indian raids. Old Stone Fort, originally built in 1779 as a Spanish trading post and fort to store supplies for trading with the Indians, was headquarters for four unsuccessful attempts to establish the Republic of Texas.

Today, Nacogdoches is a marketing center for poultry, dairying, truck crop and wood products. It is the county seat of Nacogdoches County. Stephen F. Austin State College is located here. Sixty-seven percent forested in pine and hardwoods, Nacogdoches County has a diversified economy: lumbering, wood products, education, poultry, dairying and beef cattle are major contributors. Texas' first oil well was drilled at Oil Springs, near Nacogdoches, in 1867. County elevations vary from 150 to 600 feet.

The climate of Nacogdoches is humid subtropical with warm summers. Rainfall is abundant, averaging 47.86 inches annually and is fairly evenly distributed throughout the year. A total of 74.27 inches fell in 1957, the wettest year of record, while 28.09 inches fell in 1954, the driest year. Prevailing winds are southerly, except in the winter months when northerly winds predominate. Mean annual relative humidity is 85 percent at 6:00 a.m., 58 percent at noon, and 60 percent at 6:00 p.m., Central Standard Time. The area receives 64 percent of the total possible sunshine annually.

Winter: Nacogdoches winters are mild; the daily maximum temperature averages 61°F during this season. Cold polar, and occasionally arctic, air masses push down through the region, producing sudden temperature changes. When these cold air masses stagnate, and are overrun by moist air from the south, several days of cold, cloudy, rainy weather follow. Ordinarily these occasional cold spells are of short duration, rarely lasting longer than 48 to 72 hours. Snowfalls are rare in Nacogdoches, and one may experience several winters in succession with no measurable amounts. On rare occasions, heavy snows may occur, such as the 7.6 inches that fell in January 1949. These bias the data and make the arithmetic mean a poor estimate of expected snowfall. The lowest temperature ever recorded at Nacogdoches is -4°F and occurred on January 18, 1930.

Summer: This season is warm and humid. August is the driest month of the year, although there is sufficient thundershower activity to produce a mean monthly rainfall of 2.69 inches. Refrigerated type home air-conditioning is recommended for maximum comfort indoors. The highest temperature of record at Nacogdoches is 110°F and occurred on June 28, 1918, and again on August 31, 1954.

Spring and Fall: These are the most pleasant seasons of the year. Thundershower activity is most frequent in the spring. Early morning cloudiness and fog, characteristic of many days of winter, often are present in early spring. The weather is quite changeable during both seasons, but long periods of fair weather are more common in the fall than in the spring.

Nacogdoches has an average growing season (freeze free period) of 243 days. The mean date of the last 32°F temperature in the spring and the first in the fall is March 15 and November 13, respectively. Departures from these mean values may exist locally due to differences in topography, soil type, soil condition and vegetative cover. The mean annual lake evaporation is 51 to 52 inches.

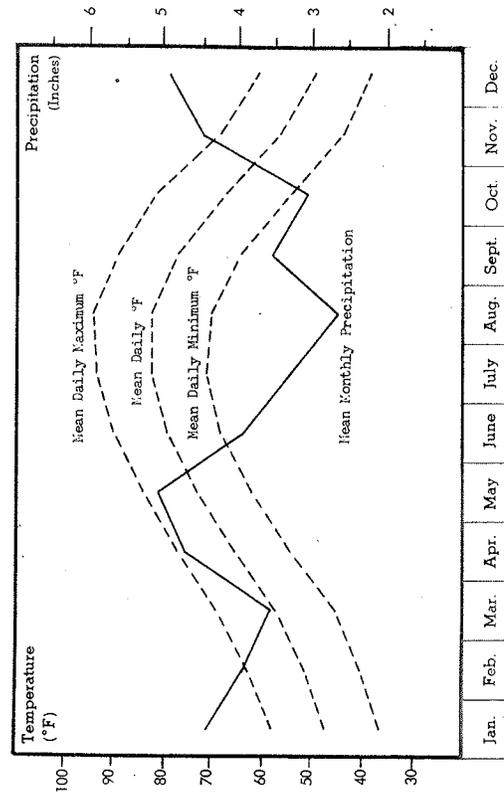
Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1937	51.7	52.1	53.5	63.0	72.4	80.0	81.6	83.0	75.8	65.0	51.8	48.8	64.9
1938	48.5	57.5	64.5	64.0	71.8	78.8	81.2	81.2	76.8	70.2	55.2	49.8	66.8
1939	51.4	51.9	59.8	64.3	71.8	79.6	81.0	83.2	80.6	69.1	53.6	53.2	66.9
1940	36.4	49.0	59.1	64.4	69.8	75.5	81.0	78.4	72.8	67.6	56.0	53.9	63.7
1941	51.4	47.2	53.0	66.3	72.5	77.9	80.8	82.0	78.0	72.4	60.8	51.8	65.2
1942	45.6	48.4	56.0	66.0	71.4	77.8	80.7	81.9	74.2	67.3	53.4	50.8	65.2
1943	48.4	54.6	55.5	67.3	74.9	81.4	82.5	82.9	74.0	64.6	53.2	45.6	65.9
1944	47.4	57.0	58.4	65.2	70.9	80.0	82.6	83.2	76.4	67.2	57.2	45.6	65.9
1945	46.3	53.0	65.4	67.1	71.8	80.4	81.4	82.1	79.1	65.4	62.3	48.4	67.1
1946	47.9	56.3	62.7	69.8	72.6	77.7	81.8	81.6	80.4	75.0	60.6	55.4	67.3
1947	48.7	45.6	53.2	68.0	72.0	79.8	81.2	83.8	80.4	76.2	66.4	52.4	66.3
1948	42.6	51.8	60.2	69.9	73.9	80.9	83.1	83.8	76.2	66.4	55.0	52.4	66.3
1949	46.7	53.1	56.9	62.2	75.0	79.4	81.4	78.7	75.2	66.6	53.0	47.7	65.3
1950	55.5	54.3	55.6	62.5	73.9	77.5	79.3	80.1	74.5	68.8	53.9	47.3	65.3
1951	48.4	50.0	58.3	63.9	72.7	79.9	83.5	83.7	77.3	69.1	53.8	51.4	65.6
1952	56.7	53.7	55.5	62.2	71.4	80.9	81.7	83.5	76.3	62.0	55.7	47.4	65.6
1953	51.7	50.2	63.8	63.7	73.9	83.1	80.7	81.0	77.1	69.6	54.2	45.6	66.2
1954	49.5	56.7	55.5	68.4	68.3	79.3	85.2	85.4	80.2	70.5	54.6	49.9	67.0
1955	46.8	49.7	60.3	68.9	75.6	79.4	83.2	81.8	80.3	66.7	55.5	46.9	66.3
1956	48.2	53.2	57.1	63.9	75.8	79.4	85.1	84.7	77.7	70.2	53.8	53.6	66.2
1957	48.8	48.2	55.4	64.4	73.9	82.9	82.9	82.9	75.4	63.6	57.6	46.5	65.0
1958	44.8	44.5	55.0	64.9	76.2	80.3	82.9	82.9	76.7	66.3	57.6	50.4	65.0
1959	43.4	51.7	49.9	62.9	76.2	80.1	83.7	83.4	77.6	70.5	58.3	45.2	64.9
1960	46.3	44.1	63.9	66.7	72.2	80.1	83.7	80.3	77.1	69.3	51.6	49.0	64.8
1961	42.6	53.2	61.5	62.1	72.8	77.1	80.8	80.3	77.9	70.3	54.8	47.5	64.0
1962	39.4	48.4	53.4	64.2	75.8	81.1	83.7	83.5	77.4	71.9	59.8	43.4	64.2
1963	46.3	45.8	57.8	69.2	75.5	80.6	84.3	85.0	77.4	64.4	59.6	49.4	66.3
1964	50.8	-	50.3	70.5	75.1	79.9	84.1	82.8	78.5	65.3	53.7	51.8	66.3
1965	43.2	47.8	56.7	66.6	72.9	78.2	85.1	81.0	76.1	64.6	60.0	47.7	65.6

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1937	7.75	2.70	3.91	5.11	1.44	3.86	3.15	3.34	2.96	3.65	4.18	5.13	47.18
1938	4.13	2.47	5.88	5.32	2.46	3.60	3.81	0.43	0.56	1.72	4.64	2.57	37.59
1939	5.62	1.86	1.86	2.64	4.20	1.38	2.88	0.94	0.58	2.55	3.84	9.05	42.43
1940	1.85	8.09	2.44	6.67	3.96	5.78	0.80	0.76	0.58	0.67	1.85	8.87	67.97
1941	2.25	4.95	3.65	1.61	6.66	7.56	2.46	4.09	5.89	12.79	3.47	3.70	62.68
1942	2.58	1.51	3.04	5.51	4.23	5.74	2.00	4.09	3.40	1.02	1.94	3.67	38.73
1943	2.94	1.90	2.15	0.64	2.46	1.37	3.89	2.80	2.03	0.76	3.19	4.39	30.37
1944	3.38	5.49	5.57	5.23	12.57	3.60	1.93	5.15	2.07	0.76	7.74	8.89	66.58
1945	3.90	4.68	4.65	5.69	4.80	4.11	1.94	2.51	4.48	6.74	1.62	4.46	52.27
1946	5.45	5.55	7.78	3.17	8.80	3.14	4.29	4.75	2.92	1.82	9.14	3.51	62.67
1947	4.45	2.06	5.07	4.49	5.96	3.29	2.28	0.76	0.80	1.19	5.08	5.17	40.24
1948	3.95	4.20	2.28	5.16	4.10	0.99	3.11	0.40	1.02	1.04	5.98	4.30	36.89
1949	7.16	3.37	4.36	5.05	5.47	2.47	3.23	1.40	3.27	13.24	2.37	6.30	58.30
1950	5.91	4.51	1.72	5.34	10.61	6.09	4.78	0.72	8.84	1.09	2.37	4.32	54.18
1951	3.84	3.56	4.31	1.53	1.40	3.59	2.94	0.46	5.45	0.64	3.06	6.02	37.08
1952	2.79	3.16	3.71	5.12	5.34	1.01	4.21	0.82	0.94	T	6.35	6.02	59.17
1953	3.09	4.14	7.57	8.71	11.82	5.43	6.15	3.23	1.94	3.05	3.21	6.02	64.32
1954	3.59	0.82	1.15	2.68	6.04	1.00	1.08	0.54	0.54	5.30	2.74	2.07	28.09
1955	3.51	4.59	2.02	3.06	5.95	0.39	0.27	0.28	1.47	0.66	1.25	2.11	35.14
1956	3.51	4.59	2.02	3.06	5.95	0.39	0.27	0.28	1.47	0.66	1.25	2.11	35.14
1957	4.71	2.60	3.39	13.96	6.23	4.10	3.23	1.35	6.74	9.97	0.73	2.72	74.42
1958	4.71	2.60	3.39	13.96	6.23	4.10	3.23	1.35	6.74	9.97	0.73	2.72	74.42
1959	0.87	4.87	1.84	5.33	1.79	3.10	7.71	3.55	3.77	3.83	3.11	6.53	46.80
1960	3.64	5.33	1.52	3.41	1.03	4.41	7.71	3.55	3.77	3.83	3.11	6.53	46.80
1961	8.12	1.59	3.53	1.48	1.79	5.50	3.07	1.19	4.69	2.84	3.89	8.06	54.23
1962	1.06	1.59	1.82	4.89	4.84	4.95	4.13	2.15	6.64	2.10	4.77	3.81	40.78
1963	1.09	2.91	0.67	4.64	1.00	6.75	2.61	1.90	0.04	4.63	4.63	2.53	38.51
1964	5.23	2.40	3.56	4.64	3.41	2.04	0.10	2.43	4.27	1.91	2.21	3.39	50.21
1965	3.93	4.61	5.13	1.87	9.87	5.24	3.02	1.44	5.54	0.29	2.55	6.72	50.21
1966	7.54	4.44	1.75	8.55	7.16	2.38	1.58	6.05	2.50	2.58	1.08	5.36	50.98

Monthly Temperatures and Precipitation



STATION HISTORY

Temperature and rainfall observations began in Macogoches in 1892, on the roof of the post office building. The instruments were moved one-half mile west on January 1, 1906, to the observer's residence, located on the highest hill in the city. On February 1, 1915, the equipment was moved 2.7 miles north-northeast to the Texas A&M University Agricultural Experiment Station. The station was moved to the tower site of Radio Station KSPA, 1.7 miles east-northeast of the post office, on April 22, 1948. The station was moved to the KSPA Studio site, 1.2 miles north-northeast of the post office on August 16, 1954. On May 16, 1962, the equipment was moved to a new location, 600 feet northwest of the post office, on a parking lot across the street from the Macogoches Savings and Loan Building. On February 5, 1965, the equipment was moved 140 feet north-east of the new post office building. Temperature and precipitation data are published monthly in CLIMATOLOGICAL DATA-TEXAS. Station index number, 41-6176-04.

Weather Bureau State Climatologist
 Environmental Science Services Administration
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