

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

CLIMATOLOGICAL SUMMARY

STATION SAN BENITO, TEXAS

LATITUDE 26° 08' N
 LONGITUDE 97° 38' W
 ELEV. (GROUND) 37 ft.

MEANS AND EXTREMES FOR PERIOD 1901-1967

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)	17	17	17	17		17		12	17	17		17	17		12								
Jan	70.8	48.8	59.8	89	1963	16	1962	245	1.01	4.15	1958	0	0		0	2	0	*	1	0	0	Jan	
Feb	74.2	51.7	63.0	96	1962	18	1951	143	1.38	4.15	1958	0	0		0	3	1	0	*	0	0	Feb	
Mar	78.9	57.7	68.3	100	1954	34	1962+	66	0.65	1.57	1951	0	0		0	2	1	0	0	0	0	Mar	
Apr	85.8	66.0	75.9	102	1953	46	1960	7	1.49	3.09	1954	0	0		0	2	7	0	0	0	0	Apr	
May	89.6	70.2	79.9	104	1953	53	1960	*	2.34	2.90	1966	0	0		0	3	18	0	0	0	0	May	
Jun	93.5	73.8	83.7	101	1956	62	1952	0	2.58	4.78	1963	0	0		0	4	27	0	0	0	0	Jun	
Jul	95.4	74.7	85.1	106	1954	63	1951	0	1.39	1.86	1951	0	0		0	3	31	0	0	0	0	Jul	
Aug	95.9	74.8	85.4	104	1962	66	1967	0	3.08	6.67	1953	0	0		0	3	29	0	0	0	0	Aug	
Sep	92.6	72.0	82.3	100	1965	58	1967	0	4.97	5.29	1967	0	0		0	6	24	0	0	0	0	Sep	
Oct	86.6	64.5	75.6	100	1962	47	1957	8	3.09	3.09	1959	0	0		0	4	12	0	0	0	0	Oct	
Nov	78.4	57.1	67.8	94	1959	33	1959+	63	1.43	2.18	1959+	0	0		0	3	1	0	0	0	0	Nov	
Dec	71.5	50.2	60.9	90	1951	27	1963+	181	1.14	1.93	1967	0	0		0	3	0	0	1	0	0	Dec	
Year	84.4	63.5	74.0	106	Jul. 1954	16	Jan. 1962	713	24.55	6.67	Aug. 1953	0	0		0	38	151	*	2	0	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 SAN BENITO, TEXAS

Located in the Lower Rio Grande Valley, 19 miles northwest of Brownsville, San Benito is known as "The Resaca City." The Resaca De Los Fresnos, a former course of the Rio Grande, loops and winds through the town, edged by attractive residential areas. Fifteen miles northeast of San Benito, bordering Laguna Madre, lies the 42,000 acre Laguna Atascosa National Wildlife Refuge, administered by the U.S. Fish and Wildlife Service and more than 300 species of birds have been identified in the area. Some 35 miles to the east of San Benito awaits the fun and recreation of Padre Island National Seashore, while a few minutes drive to the southeast brings the charm and excitement of the land south of the border.

The climate of San Benito is subtropical with dry winters and hot humid summers. While situated near the Gulf Coast, the city does not have a truly marine climate. Annual variations in temperature are more characteristic of a continental type of climate. Tropical maritime air masses predominate throughout the spring, summer and fall months, while in winter, modified polar air masses frequent the area. Temperature extremes have ranged from 16°F on January 12, 1962 to 107°F, which occurred in April, 1922 and 1924, and in August, 1923 and 1924. Mean annual rainfall at San Benito is 24.55 inches. Peak rainfall occurs in September; March is the driest month. Prevailing winds are southeasterly off the Gulf of Mexico throughout the year, except in December, when northerly winds predominate. The mean annual relative humidity is estimated at 88 percent at 6:00 a.m., 60 percent at noon, and 68 percent at 6:00 p.m., Central Standard Time. The area receives about 61 per cent of the total possible sunshine annually.

Winters at San Benito are exceptionally mild, thus contributing to the town's attractiveness as a resort and retirement area. Nighttime lows average 50.2°F, while daily maxima average 72.2°F. Freezing temperatures, 32°F or below, occur only on two nights each season, on an average, and the duration of these freeze periods is usually confined to an hour or two before sunrise. Severe freezes have occurred however, resulting in heavy losses

to citrus production and to flowers and shrubs in the area. These occurred on January 29-31, 1949, January 29- February 3, 1951, and January 9-12, 1962. Winter is the dry season in San Benito; precipitation is usually in the form of light rain or drizzle. No measurable snow has fallen at San Benito since the beginning of weather records in 1920.

Summer: Daytime temperatures are hot, particularly in July and August. July is a transitional month between the late spring weather regimes imbedded in the prevailing westerlies and those of early fall, imbedded in the tropical easterlies; consequently, less rainfall occurs in July than in either June or August. Refrigerated air conditioning is recommended for maximum comfort indoors.

Spring and fall are delightful seasons at San Benito. The area is far enough south so as to escape the harshness of the early spring weather that may occur in more northern sections of the State. Hurricanes are a threat to the area in the fall, but major storms are rare. Flooding from torrential rains accompanying these tropical storms is the most likely cause of property damage. Prior to Hurricane Beulah, September 18-23, 1967, the last major hurricane to strike the Lower Rio Grande Valley directly was on September 4-5, 1933.

The growing season (freeze free period) at San Benito is a phenomenal 341 days. The mean dates of the last freeze in the spring and the first in the fall are February 4 and December 12, respectively.

The climate of San Benito and the surrounding area favors outdoor work and recreation the year round. The warm winters and the proximity to the Gulf of Mexico attracts tourists and retirees, while the long growing season and rich soil has made the area one of the most productive agricultural sections in Texas.

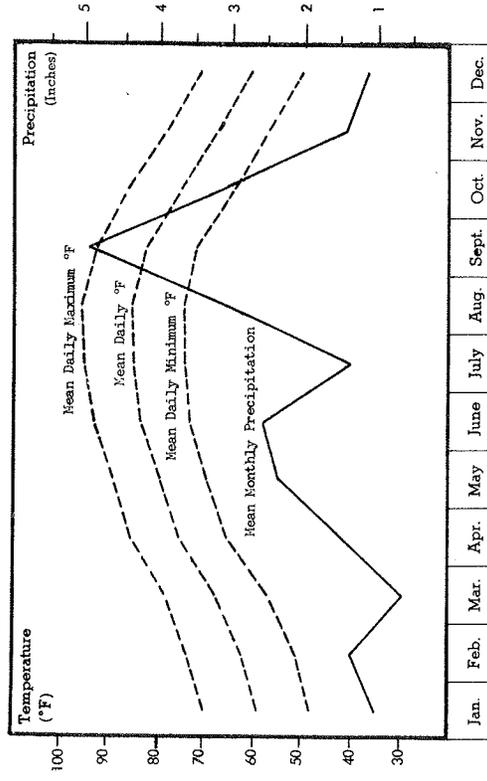
SAN BENITO, TEXAS

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	0.15	0.45	2.35	0.43	2.96	1.56	2.37	1.96	7.23	2.97	0.13	0	22.57
1952	0.35	0.10	0.15	0.52	5.35	2.45	0.44	0	4.76	0	5.19	0.41	19.72
1953	0.17	0.89	0.29	0.53	0.08	0.15	1.57	17.33	1.45	3.00	0.23	4.76	26.40
1954	0.29	0.45	0.10	4.63	0.03	3.61	0.18	7.19	2.34	7.17	0.86	0.01	23.17
1955	1.07	0.25	0	0.50	0.03	0.82	0.82	7.42	6.38	3.31	0.77	0.17	23.78
1956	0	0.73	0.19	2.72	0.62	4.24	0.89	0.03	2.28	0.67	0.39	0.02	12.73
1957	0.14	3.07	2.80	2.47	0.80	7.61	0	0.44	0.66	11.06	1.75	1.34	21.80
1958	6.48	8.85	0.37	0.04	1.47	5.88	1.60	0.18	3.59	0	3.16	0.15	37.31
1959	1.55	1.98	0.30	0.73	1.53	3.27	1.85	0.76	0.10	4.28	2.78	0.39	31.59
1960	0.19	1.02	1.22	2.23	1.00	2.44	2.00	4.43	10.72	4.82	0.81	2.45	21.66
1961	0.97	0.12	0	1.82	0.58	0.92	0	0.12	0.75	0.75	1.14	0.41	26.06
1962	0.50	0	0.93	1.26	0.74	2.78	0	0.12	5.12	2.19	0.52	0.41	15.75
1963	0.17	0.37	0.10	0	6.67	6.58	1.99	2.23	5.41	3.71	2.37	2.36	31.96
1964	0.11	1.35	0	2.49	6.27	0.45	0.10	0.41	4.19	0.28	0.58	1.91	18.17
1965	0.19	2.31	0.29	0.23	1.40	0.36	2.09	0.98	2.46	0.90	1.90	4.64	17.75
1966	3.14	0.84	0.69	1.73	7.67	5.17	1.02	2.28	0.77	2.31	0.03	0.15	25.80
1967	1.48	0.66	1.11	0	1.91	0.56	0.38	4.99	19.71	5.07	1.73	2.74	40.34

T - Trace

Monthly Temperatures and Precipitation



SAN BENITO, TEXAS

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1951	60.0	59.5	67.7	72.7	78.7	82.8	84.2	85.2	80.9	78.3	66.9	64.0	73.6
1952	62.1	70.8	73.2	76.2	78.6	82.5	85.1	86.8	80.4	77.5	67.2	59.4	75.2
1953	62.1	62.9	73.9	77.0	81.0	86.8	87.1	84.7	81.5	74.0	66.5	57.8	74.8
1954	64.9	67.4	68.5	78.4	80.2	85.7	86.9	86.5	84.3	76.6	67.6	59.6	76.1
1955	63.1	64.5	70.5	77.2	82.7	84.3	83.2	84.7	81.8	74.6	66.7	59.6	74.4
1956	63.2	65.9	69.0	75.4	80.7	83.1	84.4	85.9	84.3	76.5	67.6	55.5	76.1
1957	64.9	69.2	68.9	75.4	80.8	82.5	86.1	86.5	82.8	75.3	66.4	63.4	75.2
1958	66.7	60.5	63.3	75.2	78.9	84.4	85.4	87.0	83.0	73.0	67.4	58.7	72.8
1959	65.4	59.8	65.0	71.8	81.3	83.2	84.4	84.7	84.7	76.4	61.9	62.5	72.6
1960	60.8	58.8	63.4	74.4	77.7	84.5	85.6	85.5	79.9	68.9	68.9	55.3	72.8
1961	63.4	62.7	72.3	73.4	80.6	83.2	83.9	83.7	81.2	74.5	65.8	61.3	73.0
1962	64.1	71.4	66.5	73.2	79.2	83.7	85.1	86.7	84.2	80.5	67.8	58.6	74.2
1963	64.2	60.2	69.8	79.1	80.7	81.9	83.7	85.5	82.5	75.8	69.5	53.2	73.1
1964	68.9	59.1	68.5	77.6	80.6	81.9	86.1	86.7	83.8	73.1	70.7	59.5	73.9
1965	63.6	60.1	63.8	78.6	80.6	84.3	85.4	83.4	83.6	72.7	73.6	55.0	74.6
1966	64.4	57.0	66.4	75.1	77.9	81.5	84.7	85.9	83.5	74.2	70.3	61.4	72.7
1967	57.6	61.6	71.2	79.5	79.1	83.5	84.8	82.4	79.3	74.0	69.7	61.4	73.7

STATION HISTORY

A climatological station was established at San Benito on March 11, 1920. The equipment was privately owned until weather bureau maximum and minimum thermometers were installed about 1939. The equipment was moved to the Cameron County Water Improvement District 2 office, 0.4 mile southwest of the San Benito Post Office on June 1, 1924. Mr. Jesus Villafraza was appointed Cooperative Weather Observer, November 1, 1931. Station equipment consists of a cotton region shelter, maximum and minimum thermometers and a standard 8-inch rain gage. The rain gage is privately owned. Daily temperature and precipitation data are published monthly in CLIMATOLOGICAL DATA-TEXAS. Station index number, 41-7952-10.

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