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

LATITUDE 29° 03' N
LONGITUDE 96° 11' W
ELEV. (GROUND) 70 Ft.

STATION DANEVANG, TEXAS

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)	30	30	30	30		30		14	30	30		30	30		14		14	14	14	14	14	
Jan	64.2	44.2	54.2	83	1952+	7	1940	371	2.53	3.66	1965	0.2	3.0	1940	0		4	0	0	6	0	Jan
Feb	67.1	47.3	57.2	89	1962+	12	1951	266	3.21	3.45	1969	T	T	1964+	0		5	0	0	2	0	Feb
Mar	73.4	52.0	62.7	94	1946	23	1943	150	2.31	4.55	1944	T	T	1959+	0		3	0	0	1	0	Mar
Apr	80.3	60.7	70.5	96	1953+	33	1962+	21	2.97	3.32	1949	0	0		0		3	1	0	0	0	Apr
May	85.9	66.8	76.4	98	1964	42	1954	*	3.73	6.90	1947	0	0		0		5	7	0	0	0	May
Jun	90.5	71.8	81.2	100	1956	57	1964+	0	4.37	12.96	1960	0	0		0		6	18	0	0	0	Jun
Jul	93.4	73.4	83.4	108	1954	63	1967	0	3.10	3.28	1942	0	0		0		4	28	0	0	0	Jul
Aug	94.0	73.1	83.6	105	1962	58	1967	0	4.61	4.33	1966	0	0		0		6	27	0	0	0	Aug
Sep	89.6	69.4	79.5	102	1948	44	1942	0	4.56	6.80	1941	0	0		0		6	17	0	0	0	Sep
Oct	83.9	60.7	72.3	98	1956+	34	1957+	16	3.98	5.02	1949	0	0		0		4	5	0	0	0	Oct
Nov	74.0	52.0	63.0	92	1963	25	1959+	128	2.84	4.55	1940	0	0		0		4	*	0	1	0	Nov
Dec	67.3	46.5	56.9	95	1964	16	1950	282	3.06	2.80	1944	0	0		0		5	0	0	2	0	Dec
Year	80.3	59.8	70.1	108	July 1954	7	Jan. 1940	1234	41.27	12.96	June 1960	0.2	3.0	1940	0		55	103	0	12	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 DANEVANG, TEXAS

Located in southern Wharton County, Danevang is 11 miles south of El Campo. Wharton County is partly timbered, but is mostly low coastal prairie bisected by the Colorado River. Soils are fertile blackland, alluvial, and sandy looms. The economy of the county is based on large incomes from minerals and agriculture, and on a variety of industries. Since 1925 oil production has totaled 200 million barrels· sulphur, gas, and clays are produced also. Wharton County is the second largest beef producing county in Texas. Other agricultural income is derived from cotton, rice, and sorghums: 70,000 acres are irrigated.

The climate of Danevang is humid subtropical with warm summers. Prevailing winds are southeasterly to south-southeasterly except in February, November, and December, when frequent invasions of polar air masses into Southeast Texas cause northerly winds to predominate. The nearness of the Gulf of Mexico and the persistency of the circulation from off this warm body of water give the area many of the characteristics of a mild marine climate. Rainfall averages 41.27 inches annually, and it is rather evenly distributed throughout the year: however, large variations do occur from month to month and from year to year. The year 1960 was the wettest of record, with a total of 66.75 inches. Only 18.85 inches fell at Danevang during the drought year, 1954, the driest year of record. In an average year, March is the driest month. Most of the precipitation is of the convective, or shower type, and since an abundant supply of moisture is usually available, high intensity rains are rather frequent, particularly during the warm season. Generally, the most persistent, steady rains are associated with warm fronts and stationary fronts during the cool season, and with tropical lows during the summer and early fall.

mean annual relative humidity at Danevang is 87 percent at 6:00 a.m., 60 percent at noon, and 66 percent at 6:00 p.m., Central Standard Time. The area receives about 64 percent of the total possible sunshine annually, while mean annual free water (lake) evaporation is estimated at 54 inches.

Winters are mild at Danevang. In an average year, temperature minima of 32°F or below occur only on 12 nights. Maxima of 80°F or above have occurred in January, the coolest month. The day-to-day weather is quite variable, and conditions may change rapidly as cold fronts move southward through the area, and are then pushed back northward by the warm air circulating over the Gulf of Mexico. Cloudiness is most prevalent during the winter season, limiting sunshine to about 50 percent of the total possible. Snow almost never falls at Danevang: measurable amounts have been recorded only twice in the 30-year period 1940-1969: 3.0 inches fell in January 1940 and 1.5 inches fell in January 1949. The lowest temperature of record at Danevang is 3°F, and occurred February 12, 1899.

Spring is characterized by mild days, brisk winds and frequent showers. Strong southeasterly winds begin in March and diminish toward the end of May. Considerable cloudiness continues throughout the spring months with more than 50 percent of the days having overcast or nearly overcast skies.

Summer days are warm and humid, and some hot nights are experienced occasionally. While Gulf breezes diminish in summer and early fall, the flow of moist Tropical Maritime air from off this water surface moderates the temperature maxima. The hottest days of summer are associated with the rare presence of drier, Tropical Continental air over South Texas. The highest temperature of record at Danevang is 108°F, and occurred July 26, 1954. Refrigerated-type air conditioning is recommended for maximum comfort indoors, or while traveling.

Fall is a most enjoyable season. The first "norther" usually arrives in late September. October and November weather is ideal with long periods of clear days with mild temperatures and crisp, cool nights. Changes in the weather are frequent enough to make it stimulating.

The area is subjected to occasional tropical disturbances during the summer and early fall. Torrential rains, and very rarely, destructive winds, may accompany these storms.

The warm season (freeze free period) at Danevang is long, averaging 266 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 5, and November 26, respectively.

DANEVANG, TEXAS

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1940	44.2	56.1	64.0	68.5	75.0	79.9	82.6	83.5	77.8	71.6	62.3	58.0	68.6
1941	57.8	53.6	58.2	70.0	76.3	81.2	82.4	83.2	80.8	76.8	60.2	57.9	69.9
1942	51.6	55.0	61.2	69.1	77.0	81.7	81.2	82.7	76.7	72.8	65.0	59.0	69.4
1943	53.6	60.2	60.2	71.6	77.9	81.7	82.8	83.9	77.4	69.6	60.6	54.3	69.5
1944	53.6	63.0	63.3	71.3	73.2	82.0	83.4	84.4	79.6	70.4	63.6	54.2	70.2
1945	55.1	60.6	70.0	70.6	74.9	81.6	82.8	83.4	-	70.0	67.4	55.0	-
1946	53.0	58.4	65.3	72.0	77.4	78.8	82.2	82.6	79.2	73.4	64.0	59.2	70.5
1947	52.6	50.8	58.0	70.2	75.8	81.6	82.5	81.6	79.4	75.9	60.8	57.7	68.9
1948	49.2	57.4	63.6	72.1	77.8	83.0	85.0	86.0	79.1	71.2	63.7	61.8	70.8
1949	54.3	60.6	64.5	67.8	79.3	82.9	83.9	82.6	81.4	73.4	64.1	60.2	71.3
1950	63.9	62.0	62.6	69.4	79.6	82.0	83.6	83.6	81.5	75.1	62.9	57.2	71.9
1951	56.0	57.0	64.3	68.3	76.0	81.3	84.5	86.0	80.4	73.9	61.0	60.2	70.7
1952	62.8	60.0	61.7	66.2	73.6	80.3	82.7	84.1	78.4	66.2	60.1	54.4	69.2
1953	57.6	55.3	69.1	70.3	76.4	83.1	84.0	82.8	78.3	72.6	62.0	52.7	70.3
1954	58.8	61.5	62.5	72.7	73.6	81.5	85.7	85.5	82.4	73.5	61.4	58.7	71.5
1955	56.0	57.3	64.9	72.2	77.4	79.1	83.7	83.2	80.3	70.9	63.2	57.1	70.4
1956	55.3	60.3	63.4	69.4	77.3	80.7	83.8	84.2	80.3	75.0	62.1	60.8	71.0
1957	59.2	64.7	63.1	69.6	76.2	80.9	84.5	83.7	77.5	68.4	61.1	58.7	70.7
1958	51.8	52.7	59.5	70.5	77.4	83.1	84.6	84.4	80.1	70.6	64.2	53.4	69.3
1959	52.1	56.9	61.4	66.8	77.6	82.2	83.2	82.8	79.9	72.7	58.2	56.5	69.2
1960	53.6	52.7	58.4	70.7	74.4	81.7	83.2	82.0	78.5	73.8	65.6	53.7	69.0
1961	50.0	57.9	66.8	67.7	76.3	79.4	81.8	81.1	79.2	71.8	61.0	57.6	69.2
1962	48.7	63.8	60.3	68.8	75.9	80.1	83.5	85.4	80.9	76.2	61.8	55.7	70.1
1963	48.2	53.9	66.7	75.2	77.9	82.2	83.5	84.8	80.9	75.6	65.4	48.7	70.2
1964	54.8	51.9	62.3	72.2	78.0	80.7	82.9	83.8	80.1	68.5	65.6	57.3	69.8
1965	57.9	55.7	59.5	73.9	77.0	81.0	83.8	82.9	80.9	69.7	79.2	60.1	70.9
1966	50.3	53.2	62.5	70.9	74.9	79.0	83.8	82.5	79.2	70.3	65.9	55.5	69.0
1967	54.3	55.0	67.7	75.7	76.2	82.2	82.5	81.2	77.4	71.0	65.2	56.2	70.4
1968	53.6	50.7	60.1	71.6	76.1	79.6	82.0	83.7	78.1	73.8	61.3	56.9	69.0
1969	57.3	58.1	56.7	70.5	74.8	80.3	85.1	84.8	80.3	73.5	62.3	59.3	70.3

STATION HISTORY

Temperature and precipitation observations began at Danevang on March 1, 1896. While there are a few missing data prior to 1925, records have been excellent since that time. On January 1, 1925, Peter Harton was appointed Cooperative Weather Observer, and the climatological station was relocated to a site at the observer's residence, 1.8 miles southeast of the Post Office building in Danevang. Mrs. Johanna H. Allenson was appointed Cooperative Weather Observer on January 1, 1950, replacing Mr. Harton. The equipment was relocated 800 feet west of the previous site, to the new home of the observer, on February 24, 1960. Station equipment consists of a cotton region shelter, maximum and minimum thermometers, and standard 8-inch rain gage. Daily temperature and precipitation data are published monthly in Climatological Data-Texas as Danevang 2E, index no. 41-2266-08.

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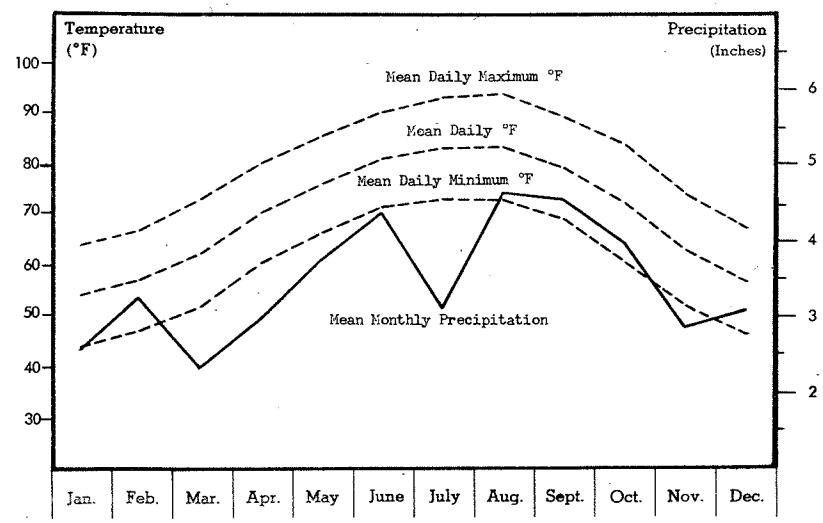
Single copies of this summary are available without charge from the Bureau of Business Research, The University of Texas, Austin, Texas 78712. Quanity rates upon request.

DANEVANG, TEXAS

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1940	0.84	4.33	1.01	2.09	1.37	4.60	2.45	2.06	2.26	9.37	9.31	5.21	44.90
1941	2.85	3.15	5.32	4.20	4.63	3.77	7.00	3.58	11.88	8.39	1.72	2.66	59.15
1942	1.85	3.54	2.37	2.26	0.26	5.41	12.30	3.15	3.88	2.80	2.50	1.50	41.82
1943	3.15	1.84	3.61	0.69	2.43	1.78	4.77	0.34	3.85	1.14	4.90	3.80	32.30
1944	8.45	1.06	8.82	0.18	10.64	0.98	2.58	5.38	6.29	0.24	1.99	3.95	50.56
1945	0.49	2.57	4.49	3.93	1.85	4.64	2.90	24.01	2.46	2.87	0.40	3.94	54.55
1946	5.15	2.87	3.29	3.30	6.00	6.01	8.30	5.45	7.38	9.47	4.22	1.70	63.14
1947	2.42	0.74	2.27	2.00	10.34	1.53	0.76	6.67	1.28	2.61	5.47	4.08	40.17
1948	3.21	5.45	1.50	1.51	2.69	1.22	2.43	0.97	4.41	0.42	1.41	0.20	25.42
1949	1.96	4.90	1.57	7.82	0.21	1.61	2.65	3.68	0.79	22.66	0.20	7.24	55.29
1950	1.96	3.95	0.42	6.13	1.37	2.45	3.91	1.91	2.09	0.24	1.26	0.75	26.44
1951	2.78	0.53	3.45	1.01	2.94	1.61	1.34	0.30	5.71	2.29	1.02	0.88	23.86
1952	0.84	4.47	2.38	4.00	3.64	0.69	3.33	2.87	3.07	0	7.47	2.51	35.27
1953	0.96	3.00	0.64	0.44	10.66	4.34	0.34	11.43	2.20	2.86	1.33	3.46	41.66
1954	0.82	0.17	0.83	1.91	1.31	1.31	0.28	2.61	2.44	4.59	1.58	1.00	18.85
1955	3.02	4.02	0.07	1.54	3.03	5.33	1.49	5.40	4.03	1.32	0.69	1.02	30.96
1956	3.76	1.40	0.70	1.75	0.82	3.39	0.84	1.58	2.73	0.61	0.66	2.14	20.38
1957	0.48	5.08	10.28	8.12	5.41	3.13	1.61	5.31	4.70	5.51	4.94	1.29	55.86
1958	5.39	4.07	1.87	1.07	1.90	1.94	1.10	3.96	10.00	3.91	1.28	4.50	40.99
1959	0.26	7.10	1.13	4.68	4.81	4.30	2.12	9.32	2.96	7.91	1.17	3.46	49.22
1960	1.80	4.29	1.30	2.97	0.62	19.78	5.60	7.08	1.25	8.96	4.72	8.38	66.75
1961	3.81	3.70	0.30	2.69	1.43	11.72	4.96	2.58	15.74	0.70	5.92	1.86	55.41
1962	0.70	1.82	0.68	6.45	2.79	6.13	T	1.53	2.95	0.92	2.43	4.40	30.80
1963	0.66	1.93	0.41	1.30	0.75	6.00	2.01	1.45	1.27	0.20	4.36	2.95	23.29
1964	2.52	3.11	2.80	0.21	1.74	3.57	2.23	3.48	7.59	3.81	1.42	3.46	35.94
1965	4.00	2.91	0.97	1.59	4.18	4.03	0.80	2.21	2.81	2.58	5.17	4.69	35.94
1966	4.71	3.72	1.04	5.38	7.00	6.42	1.36	9.37	3.16	3.15	0.29	2.05	47.65
1967	2.51	1.56	0.83	1.38	1.22	0.02	5.15	5.31	9.76	3.89	2.10	3.12	36.85
1968	3.85	2.49	2.12	2.42	9.28	11.32	6.02	1.15	4.12	4.18	3.62	1.21	51.78
1969	0.57	6.55	2.91	6.05	6.62	2.00	2.27	4.13	3.74	1.71	1.72	4.26	42.53

Monthly Temperatures and Precipitation