

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 **HEBBRONVILLE, TEXAS**

LATITUDE 27° 18' N
 LONGITUDE 98° 40' W
 ELEV. (GROUND) 559 ft.

MEANS AND EXTREMES FOR PERIOD 1953-1970

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	32° and below		0° and below				
																		Max.		Min.	Max.	Min.		
(a)	7	9	9	9		9		9	16	16		17	16		16		13	9	9	9	9			
Jan.	64.5	41.8	53.2	93	1969	12	1972	338	1.15	3.80	1958	-	-		4	1967	2	*	*	0	0	0	Jan	
Feb.	67.0	46.7	57.9	93	1963+	28	1963	240	1.44	1.53	1958	0	0		0		3	1	0	2	0	0	Feb	
Mar.	71.2	52.4	64.4	97	1967	31	1968	136	0.55	1.16	1957	0	0		0		1	3	0	1	0	0	Mar	
Apr.	87.4	73.1	75.3	109	1973+	44	1970	13	1.55	3.70	1962	0	0		0		2	12	0	0	0	0	Apr	
May	91.0	67.3	79.3	104	1967	48	1970	1	1.64	3.50	1969	0	0		0		3	22	0	0	0	0	May	
Jun.	95.3	71.7	83.7	109	1979	50	1970+	0	2.13	5.78	1954	0	0		0		3	28	0	0	0	0	Jun	
Jul.	98.2	73.3	85.8	105	1969	55	1977	0	0.64	1.26	1961	0	0		0		3	30	0	0	0	0	Jul	
Aug.	99.5	74.0	86.8	107	1969+	50	1977	0	1.54	2.31	1953	0	0		0		2	29	0	0	0	0	Aug	
Sep.	92.9	71.5	82.2	105	1959	48	1967	2	4.05	7.00	1967	0	0		0		5	23	0	0	0	0	Sep	
Oct.	87.1	62.1	74.1	100	1969	37	1970	18	2.11	2.83	1958	0	0		0		3	11	0	0	0	0	Oct	
Nov.	77.2	53.6	65.4	95	1973	29	1970+	109	1.20	2.67	1961	0	0		0		2	3	0	1	0	0	Nov	
Dec.	69.7	45.2	57.4	91	1968	25	1964+	247	0.66	0.98	1957	0	0		0		2	*	0	2	0	0	Dec	
Year	83.9	60.8	72.4	109	June 1969	12	Jan. 1972	1124	18.66	7.00	Sep. 1967	-	-		4	1967	30	162	*	12	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 HEBBRONVILLE, TEXAS

Hebbronville, county seat of Jim Hogg County, is a banking, supply and shipping center for a large oil and ranching area. The town was established in 1881 by W. R. Hebbron as a stop on the Texas-Mexican Railroad. In its early years, Hebbronville was credited with shipping more cattle annually than any other point in the United States.

Jim Hogg County is dominated by oil and large-scale cattle ranching. Cultivated crops are limited. The county is rolling plain except for a few areas that are hilly and broken. Soils are sandy and sandy loam types, and covered with heavy brush. Elevations range from 300 to 800 feet above mean sea level.

The climate of Hebbronville is a subtropical steppe type with low summer humidity. Rainfall averages 18.66 inches annually. A primary rainfall maxima occurs in early fall and a secondary maxima occurs in early summer. In most years, March is the driest month, but July and December are dry also. Rainfall, which is most often the result of thunderstorm activity, is extremely variable from month-to-month and from year-to-year. Periods of drought are not uncommon. Since 1907, the driest year recorded at Hebbronville is 1917: only 7.00 inches fell that year. The wettest year is 1941, when a total of 37.58 inches fell. The September mean rainfall data are biased by the torrential rains that fell during Hurricane Beulah in September 1967. Total rainfall for that particular month was 19.35 inches. Thunderstorms occur on about 28 days annually at Hebbronville. Free water (latent evaporation exceeds precipitation by 44 inches, in an average year.

The climate of Hebbronville is essentially continental, characterized by a considerable range in annual extremes of temperature; however, air masses of continental origin play only a minor role in determining the weather in the area. The prevailing winds are southeasterly throughout the year, so that warm Tropical

Maritime air masses from the Gulf of Mexico are partially responsible for mild winter temperatures.

The warm season (freeze free period) at Hebbronville is exceptionally long, and averages 303 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 15 and December 15, respectively.

Winters are pleasantly mild at Hebbronville. Polar Canadian air masses invade South Texas about once each week, but these undergo considerable warming by the time they reach the Hebbronville area. In January, the coldest month, minima of 32°F or below only occur on about five nights during the month, and these low temperatures are restricted usually to an hour or two before sunrise. Winter precipitation most often falls as light rain or drizzle. Cloudiness is most prevalent in winter, and reduces the amount of sunshine received to about 50 percent of the total possible. Mean relative humidity at noon, Central Standard Time, is estimated at 62 percent in January.

Summer daytime temperatures are consistently high and refrigerated type air conditioning is recommended for maximum comfort indoors and also while traveling. Mid-summer is a relatively dry period with little variation in the day-to-day weather. The area receives about 76 percent of the total possible sunshine in summer, while mean relative humidity, measured at noon, Central Standard Time, is 48 percent in July.

Spring and fall are delightful seasons at Hebbronville. Temperatures are moderate, and the weather has greater variety than in summer. Precipitation is usually of the shower type. Long periods of mild dry weather are characteristic of late fall.

HEBBRONVILLE, TEXAS

Average Temperature (°F)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1958	52.8	57.1	60.0	72.9	78.1	-	86.1	87.2	83.0	70.1	65.7	55.2	-
1959	52.8	57.1	60.0	72.9	78.1	-	86.1	87.2	83.0	70.1	65.7	55.2	-
1960	51.5	-	60.7	75.0	81.1	84.2	87.0	87.5	83.6	78.9	64.7	56.2	-
1961	-	-	68.6	73.7	80.4	83.5	86.1	88.7	84.1	70.5	68.7	57.2	-
1962	50.4	56.9	68.5	80.6	80.9	-	-	-	-	-	-	-	-
1963	51.4	55.3	65.6	76.9	81.6	-	-	-	-	-	-	-	-
1964	55.3	55.7	60.5	-	-	-	-	-	-	-	-	-	-
1965	-	-	-	-	-	-	-	-	-	-	-	-	-
1966	-	-	-	-	-	-	-	-	-	-	-	-	-
1967	55.5	58.1	71.3	81.2	80.9	85.2	86.9	83.1	76.8	70.0	64.9	55.7	72.5
1968	52.3	53.6	60.7	73.0	79.2	83.1	83.0	84.8	79.5	75.0	63.4	58.4	70.5
1969	58.4	60.1	59.9	74.0	76.9	84.7	88.5	86.7	81.3	74.1	63.8	60.1	72.4
1970	50.8	59.1	62.2	75.4	75.0	80.8	80.4	85.7	80.3	70.5	62.6	66.5	71.0

HEBBRONVILLE, TEXAS

Total Precipitation (Inches)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Ann'l
1953	0	1.33	0.88	1.16	0.97	0.08	0.64	5.00	3.42	2.49	0.05	0.76	16.78
1954	0.06	0.35	0.50	1.93	2.30	6.73	0.70	1.42	1.22	1.66	0.65	0	17.52
1955	0.39	1.45	0.18	0.10	0.61	0.80	0.27	1.27	7.67	0.95	1.63	0	15.32
1956	0.02	0.73	0.11	2.53	3.24	0.90	0.44	1.18	0.05	4.56	0	0.32	14.08
1957	0.11	1.56	1.50	3.87	3.50	2.52	0	0.19	3.76	0	2.42	1.80	18.23
1958	6.86	3.75	0.35	0.45	0.12	0.35	1.31	0.12	3.77	8.76	0.76	0.38	28.58
1959	0.75	2.72	0	1.37	0.12	2.23	0	1.05	4.50	1.28	1.02	0.58	14.70
1960	2.17	-	1.10	1.45	0.05	-	-	3.20	0.75	3.85	1.75	-	-
1961	1.58	1.46	0	1.45	1.92	1.84	1.84	1.90	2.99	0.45	4.12	0.14	17.90
1962	0.26	0	0.65	5.02	0.23	5.83	0	0.55	2.68	0.40	1.12	1.05	17.79
1963	0.35	0.74	0	0.75	1.72	2.09	0.73	0.84	2.14	3.23	1.12	1.25	14.96
1964	0.53	1.68	0.95	0.02	2.78	0.53	0.44	0.80	2.49	1.25	0	-	11.47
*1965	-	-	-	-	-	-	-	-	-	-	-	-	-
*1966	-	-	-	-	-	-	-	-	-	-	-	-	-
1967	1.28	0.74	0.53	3.51	0.21	0.55	0.94	4.58	19.35	1.23	2.37	1.15	36.44
1968	1.93	1.60	0.79	1.45	1.09	3.29	0.96	0.48	3.45	1.81	0.17	0.96	17.98
1969	1.69	1.79	0.22	0.32	4.94	0.46	0	1.34	2.38	1.21	2.06	1.06	16.15
1970	1.81	1.65	1.01	0.64	4.28	3.64	1.38	0.66	4.11	0.55	0	0.39	20.12

* Data missing for 1965 & 1966 (Station inactive)

STATION HISTORY

Rainfall observations began at Hebronville on September 1906; temperature equipment was added on May 1, 1916. There are several breaks in both the rainfall and temperature records so that the data are not complete. While the station has been relocated several times, it has remained within a distance of 0.5 mile from the Hebronville Post Office. The present observer, Mr. Don E. Meyer, was appointed December 12, 1966, and the station is located at 111 South Mesquite Street, 0.5 mile east-northeast of the Post Office. 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: 41-4058-09.

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Monthly Temperatures and Precipitation

