

office of the  
state climatologist



## TEXAS CLIMATIC BULLETIN

Office of the Texas State Climatologist  
College of Geosciences  
Department of Meteorology  
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Most stations once again recorded below-normal precipitation, with drought conditions worsening for much of the state. Only three stations, Amarillo and Lubbock in the Panhandle and El Paso in extreme West Texas, had rainfall above their 30-year normal. A region extending from Del Rio northeastward across Central Texas was most lacking in precipitation. Del Rio (0%), San Antonio (2%), Austin (14%), Waco (14%), and College Station (15%) saw the least amounts. In August of 1999, all twenty stations recorded above-normal temperatures, whereas only eleven stations were above normal during September. The Panhandle was generally one to three degrees below normal for the month, and all of the Gulf Coast experienced mean monthly temperatures slightly below normal, as well.

A cold front extending from a low in the northern Central Plains passed through the Panhandle on the 5th, causing a few reports of severe weather. Reese Village in Lubbock County reported hail up to 1.75" in diameter. Another weak cold front, associated with a low pressure system near the Great Lakes, moved across Texas from the 12th to the 16th. Again, Lubbock, as well as Lynn County, reported hail up to 1.75" in diameter on the evening of the 12th.

Cold, dry air settled into much of the state behind a cold front that moved southward from the 19th through the 21st. Record low temperatures were set on the 23rd in Victoria (50°F), Austin (45°F), and Houston (49°F), and tied in College Station (47°F). The morning lows on the 24th were records in Austin (50°F) and Waco (45°F).

Another cold front associated with a low in the northern Great Lakes moved southward across Texas from the 26th through the 30th. It brought significant rainfall to the Gulf Coast including Beaumont/Port Arthur (0.68"), Corpus Christi (0.90"), and Galveston (1.28") on the 28th. High pressure behind the cold front again allowed temperatures to fall to near record lows. Austin set another record low on the 30th of 46°F.

## SEPTEMBER 1999

Station	TMAX			TMIN			Mean Temp		No. Days	Precipitation			HDD*	CDD*
	Avg.	Dep.	Abs. Max	Avg.	Dep.	Abs. Min	Avg.	Dep.		Total (In.)	Percent Avg.	Gr'st 24 hr. (In.)		
Abilene	88.2	1.5	97	64.1	-1.2	43	76.2	0.2	6	1.60	50%	1.47	18	358
Amarillo	77.8	-4.0	93	54.6	-1.8	33	66.2	-2.9	8	2.54	128%	1.12	93	135
Austin	93.7	3.2	101	69.1	-0.7	54	81.4	1.2	3	0.28	8%	0.16	0	500
Brownsville	90.0	-0.4	96	70.5	-2.7	58	80.2	-1.6	10	3.99	67%	1.38	0	465
College Station	92.9	4.5	101	65.4	-3.3	47	79.2	0.6	4	0.73	15%	0.63	0	431
Corpus Christi	89.7	0.0	95	69.5	-2.8	56	79.6	-1.4	6	3.88	70%	2.37	0	444
Dallas-Fort Worth	90.0	2.2	99	67.9	1.0	51	78.9	1.5	5	2.30	68%	1.02	0	425
Del Rio	92.3	1.9	100	69.8	0.7	51	81.0	1.2	0	0.00	0%	0.00	0	491
El Paso	86.9	-0.2	94	63.9	2.3	49	75.4	1.0	7	1.94	114%	0.92	4	324
Galveston	M	M	M	M	M	M	M	M	1	0.03	1%	M	M	M
Houston	91.6	3.2	99	64.3	-3.6	49	77.9	-0.3	3	1.36	28%	1.00	0	395
Lubbock	81.9	-1.0	96	58.0	-1.4	38	70.0	-1.1	5	3.27	126%	1.98	46	204
Midland	87.2	1.8	97	62.7	1.6	45	75.0	1.7	5	0.95	36%	0.75	16	320
Port Arthur	89.4	2.1	97	67.0	-2.7	52	78.2	-0.4	6	3.25	52%	1.56	0	403
San Angelo	90.7	3.9	98	64.0	0.0	42	77.3	1.9	6	0.76	22%	0.33	5	382
San Antonio	92.2	2.9	99	68.3	-0.9	49	80.3	1.0	2	0.05	1%	0.03	0	467
Victoria	91.4	2.5	98	66.1	-4.2	50	78.7	-0.9	7	3.78	68%	1.28	0	419
Waco	92.4	2.8	100	66.7	-0.9	45	79.6	1.0	4	0.51	14%	0.21	2	449
Wichita Falls	89.1	2.3	100	62.7	-1.2	44	75.9	0.5	4	1.76	46%	1.05	14	348
Shreveport, LA	86.4	-0.9	93	64.1	-1.9	47	75.2	-1.5	8	4.90	157%	2.27	2	317

\* ***Bold italics*** indicate a monthly record.

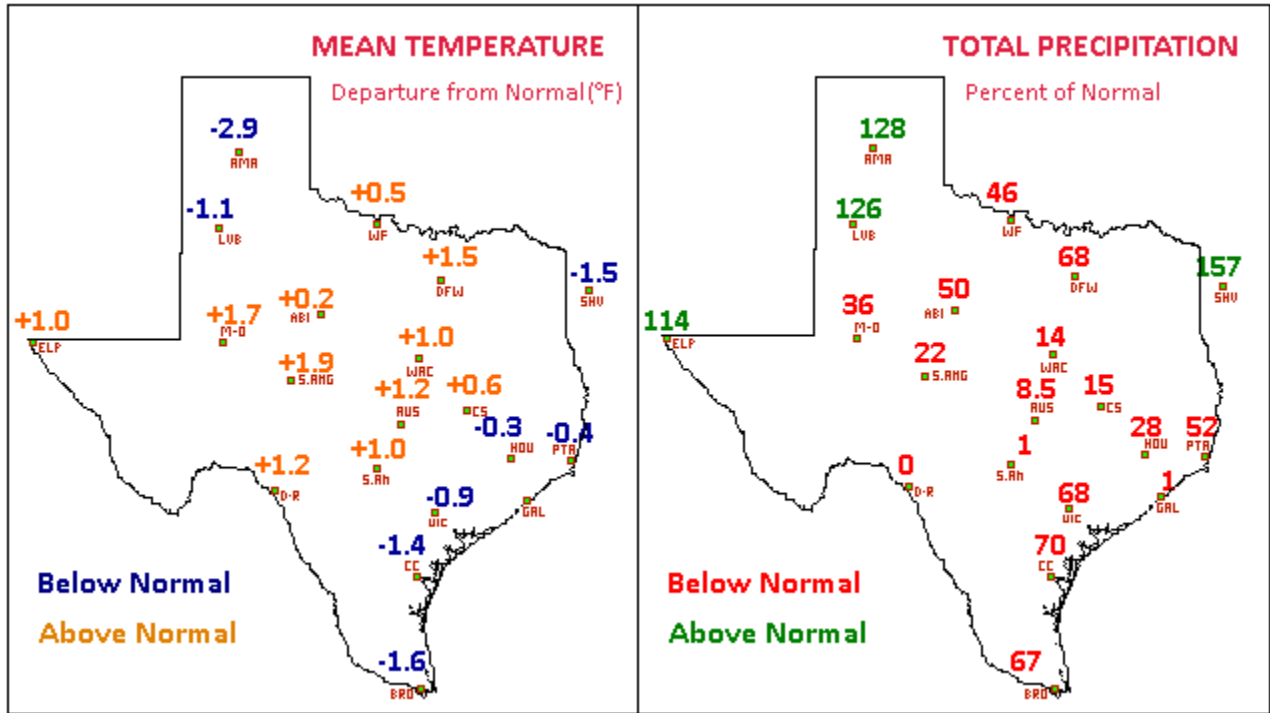
\* Complete temperature data were unavailable. Temperatures are rounded to the nearest whole degree.

\*HDD - Heating degree-day: Refer to the Monthly Average chart for a definition

T = Trace (<0.005")

\*CDD - Cooling degree-day: Refer to the Monthly Average chart for a definition

M: Information not available.



### CLIMATIC AVERAGES FOR OCTOBER

Station	TMAX		TMIN		Precipitation (In.)			Mean Number of Days in Month				
	Avg.	Record	Avg.	Record	Avg.	Gr'st Mon. Total	Gr'st 24 hr. Total	TMAX > 90°F	TMIN < 32°F	Days PRCP ≥ 0.01"	HDD*	CDD*
Abilene	77.9	103	54.8	23	2.5	10.88	6.08	2.0	0.3	5.6	75	118
Amarillo	72.5	95	44.5	12	1.4	7.64	3.45	1.0	1.8	4.7	226	25
Austin	82.1	100	60.0	30	3.4	12.63	7.22	4.2	0.0	6.4	17	206
Brownsville	85.3	99	66.1	35	2.8	17.12	6.67	5.5	0.0	6.5	0	332
College Station	80.2	102	58.6	29	3.8	18.77	13.39	2.5	0.0	6.5	31	167
Corpus Christi	83.9	98	63.9	28	3.0	12.03	7.96	5.2	0.0	6.5	0	281
Dallas-Fort Worth	78.5	106	55.8	24	3.5	14.18	5.91	2.7	0.1	6.1	51	119
Del Rio	81.7	106	59.7	28	2.2	11.69	7.60	4.3	0.1	5.0	19	196
El Paso	78.4	96	49.6	25	0.8	5.15	1.77	1.8	0.4	4.1	88	57
Galveston	77.5	94	68.0	39	2.8	17.78	14.10	0.1	0.0	6.4	7	248
Houston	81.6	99	57.6	29	4.3	17.64	9.31	3.0	0.1	7.4	31	174
Lubbock	74.7	98	48.1	18	1.9	10.80	5.82	1.0	0.9	4.8	154	42
Midland	77.3	100	50.6	24	1.7	7.45	3.59	2.2	0.3	4.5	106	75
Port Arthur	80.2	99	59.2	30	4.3	15.09	8.06	1.8	0.1	6.3	26	172
San Angelo	78.8	100	53.6	26	2.4	8.68	5.11	2.9	0.2	5.0	71	108
San Antonio	81.7	99	58.8	27	3.2	18.07	13.35	4.6	0.0	6.3	30	191
Victoria	82.4	109	60.9	31	3.5	17.25	8.15	4.7	0.0	6.2	15	223
Waco	80.3	101	56.8	25	3.4	10.51	5.72	4.2	0.0	6.0	38	146
Wichita Falls	76.9	102	52.2	21	2.7	11.77	5.61	3.6	0.2	6.0	104	91
Shreveport, LA	78.7	99	54.3	28	3.7	14.02	3.88	2.5	0.2	6.7	63	110

\*CDD - Cooling degree-day: The difference between the mean individual daily temperature and 65°F, with one CDD resulting for each degree above the standard 65°F during one day.

\*HDD - Heating degree-day: The difference between the mean individual daily temperature and 65°F, with one HDD resulting for each degree below the standard 65°F during one day.

## **Climate-related Agricultural Information**

<http://agnews.tamu.edu>

### **Past Weather Events in October**

October 8th, 1970: A record early, heavy snow whitened much of Eastern Nebraska with totals of 3-6 inches. Many trees still in full leaf collapsed due to the weight of the heavy wet snow and high winds. In Lincoln alone about 4000 power lines broke.

October 16th, 1984: A major early season snowstorm hit Eastern Colorado; Foothill locations received 2-3 feet. At Woodland Hills 40 inches fell. The Air Force Academy closed for the first time in 17 years. Interstates east, west, north and south of Denver were closed.

October 22nd, 1988: Hurricane Joan made landfall at Bluefields, Nicaragua, with sustained winds of 145 mph. 216 people died and there was 2-billion-dollars in damage.

October 25th, 1997: Easterly winds to 120 mph roared down the west side of the Continental divide and blew down more than 20,000 acres of old-growth forest from about 5 miles north to 26 miles north of Steamboat, Colorado. Downed trees blocked roads, trapping hunters for up to 2 days.

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