

office of the
state climatologist



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2008

As opposed to 2007, the major story of 2008 was widespread, sustained drought conditions. Most stations received much less than their normal precipitation, including San Antonio's 3rd driest year on record and Austin's 4th driest year. Some of those stations receiving above average annual precipitation are slightly misleading. For example, Brownsville received over 10 inches of rain from Hurricane Dolly, and Houston recorded tens of inches from several tropical systems during hurricane season. Temperatures for the year ran about average to moderately above average.

January

The first month of 2008 saw a strong La Nina event prevail, which warmed average temperatures around the state while limiting precipitation. Central Texas saw relatively normal temperatures, while southern and northern portions of Texas saw relatively warm temperatures.

February

Again, La Nina conditions continued throughout the state, causing average temperatures for February to run much higher than normal. For instance, San Antonio temperatures ran 7°F warmer than its normal mean monthly temperature of 54.7°F. West, South, and Central Texas were especially hit hard by the lack of precipitation for the month, with 5 stations recording no more than a tenth of their normal precipitation and 3 stations recording less than or equal to 3% of their normal precipitation. Far North and East Texas saw roughly average precipitation.

March

Though not as extreme as February, temperatures for the month kept the warm trend, with all first-order stations recording above average mean monthly temperatures. Precipitation varied widely throughout the state, with North Central portions of Texas recording more than four times their normal precipitation. Far North, West, and South Texas were drier, especially the extreme portions of those areas. Severe weather became a factor beginning this month, when several hail and high wind events were reported.

April

For the fourth straight month, mean monthly temperatures remained above average for all but one Texas first-order station. However, departures from the mean temperature were on the mild side with variations of 1-2 degrees from the mean. Precipitation during the month varied from region to region, with North Central and Far South Texas receiving above average rainfall totals. West Texas was especially dry with El Paso receiving a trace of rain for the second month in a row. Severe weather events have become frequent and above average in many respects.

May

Following the trend of the first four months of 2008, May temperatures remained quite warm, with departures from mean monthly temperatures reaching more than four degrees in Central Texas. Precipitation totals were low for the month, with only 2 first-order stations recording above average

precipitation and 5 recording less than a fifth of their normal rainfall. Severe weather activity has dominated the nation and the state with record-breaking severe weather reports.

June

San Antonio, among other stations, began to notice drought conditions for the area, receiving only 0.01 inches of rain for the month. However, northern portions of Texas were relatively normal, lacking no more than a fifth of their normal monthly precipitation. Coastal areas and south-central Texas were the driest areas of Texas, with most reaching less than a third of their normal precipitation. The summer started unusually warm, with temperatures in most areas reaching 4-6 degrees above normal. Coastal regions stayed moderately warm, with most monthly mean departures of less than 2-3 degrees.

July

Hurricane Dolly was the major weather feature of the month, which eased Far South Texas drought worries with over 10 inches of rain for the month. However, other parts of Texas, especially central Texas, continued to see drought conditions with rain totals of only hundredths of inches in some places. Average temperatures were variable throughout the month, with the western half of Texas remaining below average for the month and the eastern half of Texas remained slightly warmer than average, though not the extent seen in the previous months.

August

Another tropical system, in this case Tropical Storm Edouard, moved into Texas through Houston and gave some needed rainfall to portions of East and Central Texas. For the first time this year, rainfall totals were above average for the vast majority of stations; many totals exceeded their average by two, three, or even five times. Temperatures remained relatively normal for East Texas, perhaps slightly warm, and West Texas saw a cool down of a couple of degrees.

September

In the month which will live in infamy, Hurricane Ike made landfall near Galveston and in essence destroyed much of the city with extremely high storm surge of 15-20 feet. Luckily, a cold front which helped to steer Ike arrived to cool down the state in time for hurricane disaster aid. Though rainfall from Ike benefited East Texas, most other portions of Texas, including Central Texas, remained very dry. Temperatures remained relatively cool for the month, with most stations reporting average temperatures a few degrees below normal.

October

Minimum temperatures remained relatively cool during October, while maximum temperatures stayed slightly warmer than normal. North Texas was fairly wet for the month, though Central, South and West Texas received very little rainfall for the second month in a row, continuing the drought seen throughout much of the year. Hurricane activity dwindled during the month and no tropical systems threatened the Texas coast.

November

Noting a trend for several months, maximum monthly temperatures have been above average, while minimum monthly temperatures have averaged cooler than normal. Several cold fronts pushed through the state, though none of the systems produced any substantial precipitation. Precipitation totals were dismally low for most stations. The drought monitor indicates that Central Texas is plagued with the worst drought conditions in the state, labeled as extreme drought.

December

Finally, the last month of 2008 remained very dry for areas of Texas in very critical need of rainfall. The drought in Central Texas worsened such that a large area is now labeled extreme-exceptional drought. December was also a bit warmer than usual, again mostly from very high maximum temperatures. A couple of bitterly cold systems passed through the state, bringing extremely cold temperatures, but the systems lacked any substantial moisture.

2008 Precipitation

Station	Jan.	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual	Normal	Percent of Normal
Abilene	0.08	0.77	4.06	2.44	2.40	2.52	0.01	6.31	2.51	3.15	0.11	0.01	24.37	23.78	102.48
Amarillo	0.24	0.59	0.30	0.38	2.08	4.03	4.96	4.43	1.32	3.87	0.19	0.05	22.44	19.71	113.85
Austin	0.82	0.51	2.86	3.52	1.70	0.74	0.38	2.39	0.02	2.01	0.72	0.40	16.07	34.72	46.28
Brownsville	1.34	0.04	0.28	3.35	0.61	0.62	13.24	2.61	9.57	3.26	2.98	0.47	38.37	27.55	139.27
College Station	2.06	3.29	3.81	2.74	4.30	0.29	0.41	6.69	3.47	1.73	1.35	0.80	30.94	39.67	77.99
Corpus Christi	1.77	0.16	1.58	2.36	1.26	0.70	9.43	6.02	1.94	1.88	0.46	0.43	27.99	32.26	86.76
Dallas/Ft. Worth	0.27	2.30	6.07	3.85	2.21	0.84	0.81	2.82	0.84	2.29	4.53	0.27	27.10	34.73	78.03
Del Rio	0.08	0.02	0.57	0.06	0.59	2.75	0.97	11.32	0.28	0.16	T	0.41	17.21	18.80	91.54
El Paso	0.15	0.16	0.00	0.00	0.03	0.01	4.34	2.61	1.52	0.15	0.17	0.27	9.41	9.43	99.79
Galveston	6.04	1.32	1.88	0.66	0.02	1.06	2.10	7.68	0.33	M	2.96	1.82	25.87	43.84	59.01
Houston	4.62	4.00	2.41	1.46	4.57	2.06	1.09	7.45	12.07	8.67	2.92	1.68	53.00	47.84	110.79
Lubbock	0.07	0.72	0.10	1.07	5.32	2.91	1.77	3.48	8.70	3.77	0.08	0.01	28.00	18.69	149.81
Midland	0.03	0.01	0.37	0.51	0.18	2.02	0.72	2.42	2.16	1.61	T	T	10.03	14.80	67.77
Port Arthur	6.93	1.68	1.98	1.20	4.09	1.96	2.80	11.66	7.70	2.23	3.40	2.55	48.18	59.89	80.45
San Angelo	0.39	0.30	4.64	0.62	1.01	2.19	0.19	3.59	3.99	1.81	0.23	0.04	19.00	20.91	90.87
San Antonio	0.42	0.20	1.82	0.83	0.66	0.01	3.86	4.98	0.46	0.26	0.01	0.25	13.76	32.92	41.81
Victoria	3.52	1.16	3.36	2.35	0.33	0.11	2.21	4.20	1.69	1.36	1.00	0.42	21.71	40.10	54.14
Waco	0.67	1.22	5.00	5.20	4.66	0.18	0.66	10.33	0.61	3.90	0.43	0.68	33.54	33.34	100.60
Wichita Falls	0.01	0.99	2.87	2.83	2.91	3.47	1.05	7.38	1.72	3.41	0.10	1.05	27.79	28.83	96.39
Shreveport, LA	2.65	4.96	3.25	2.62	11.56	3.85	1.08	5.73	3.84	1.42	4.98	3.14	49.08	51.30	95.67

Green - 100% of Normal or Greater Yellow – Less than 100% of Normal

Departures are based on 1971-2000 normals

* T = Trace (<0.005")

M: Information not available.

2008 Temperatures

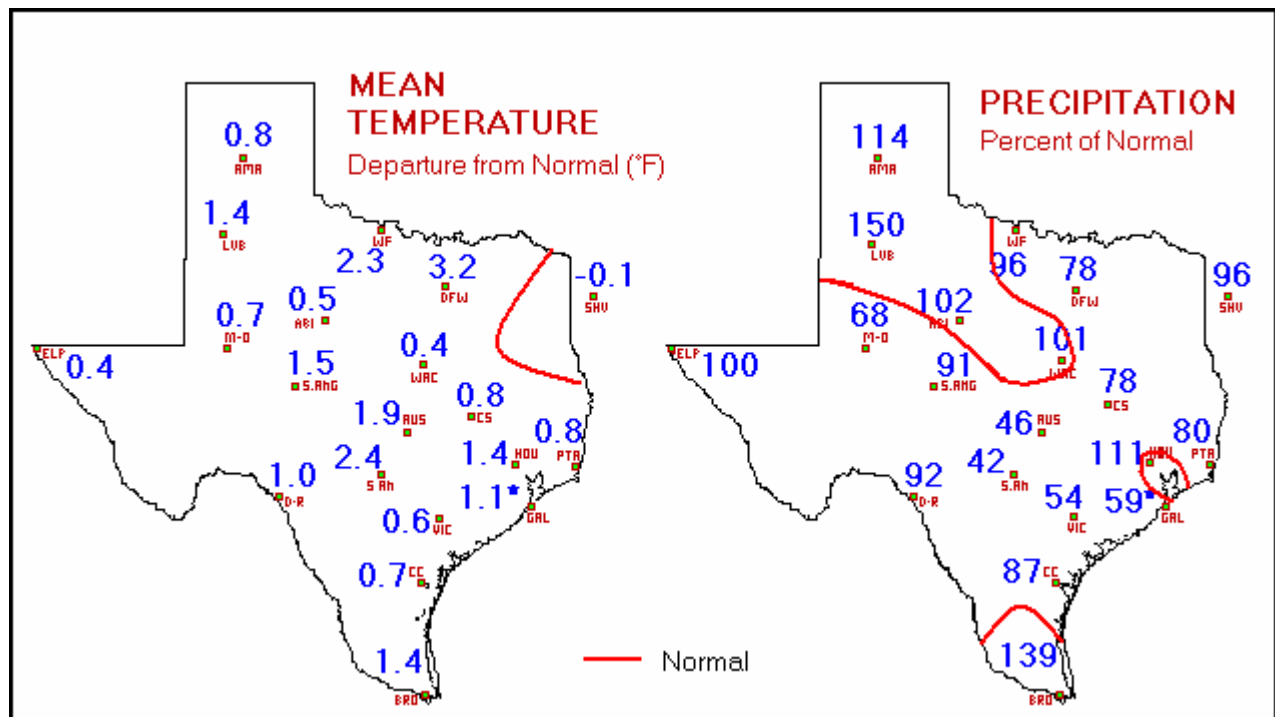
Station	January			February			March		
	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean
Abilene	57.2	31.5	44.4	67.2	37.1	52.2	70.6	43.5	53.9
Amarillo	52.6	23.1	37.8	57.8	25.9	41.8	64.5	31.8	45.2
Austin	60.9	39.8	50.4	73.2	45.5	59.4	75.4	51.2	60.5
Brownsville	70.3	52.3	61.3	79.0	58.7	68.8	81.3	59.1	70.0
College Station	60.3	39.5	49.9	71.0	45.4	58.2	73.6	50.9	59.5
Corpus Christi	65.8	46.8	56.3	76.9	52.7	64.8	78.3	54.6	65.5
Dallas/Ft. Worth	57.4	36.4	46.9	67.3	40.7	54.0	72.8	49.1	56.8
Del Rio	62.6	39.1	50.8	75.1	46.0	60.6	79.4	51.0	62.7
El Paso	56.5	34.0	45.2	66.9	38.6	52.7	72.5	43.3	55.6
Galveston	61.1	49.0	55.0	68.4	54.0	61.2	71.4	58.2	62.7
Houston	62.0	42.4	52.2	72.1	48.0	60.1	75.0	52.1	61.5
Lubbock	55.5	25.4	40.5	64.2	30.5	47.3	69.1	36.4	49.8
Midland	57.5	28.0	42.8	69.4	32.7	51.1	72.6	39.5	52.7
Port Arthur	60.8	43.1	52.0	70.2	48.1	59.2	73.1	52.0	60.6
San Angelo	59.1	30.5	44.8	71.8	36.7	54.3	74.2	44.3	55.5
San Antonio	63.2	40.5	51.8	76.3	47.0	61.7	77.4	51.3	62.2
Victoria	64.2	40.9	52.6	73.9	48.4	61.2	75.9	51.4	62.2
Waco	57.6	34.2	45.9	68.3	39.5	53.9	71.3	46.4	55.4
Wichita Falls	58.8	29.8	44.3	64.6	33.5	49.0	71.8	42.6	52.7
Shreveport, LA	55.1	35.8	45.5	66.1	39.6	52.9	71.7	47.8	55.7

Station	April			May			June		
	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean
Abilene	78.8	50.9	64.8	86.4	61.8	74.1	94.4	70.9	82.6
Amarillo	73.2	40.1	56.6	81.4	51.2	66.3	92.4	62.0	77.2
Austin	81.4	58.0	69.7	90.6	68.8	79.7	99.4	75.4	87.4
Brownsville	85.0	66.1	75.6	87.8	73.2	80.5	94.0	76.1	85.0
College Station	79.5	57.7	68.6	85.8	67.4	76.6	96.3	74.6	85.4
Corpus Christi	83.4	62.1	72.7	88.1	71.6	79.9	92.0	74.2	83.1
Dallas/Ft. Worth	77.9	55.0	66.4	87.0	67.0	77.0	96.7	76.3	86.5
Del Rio	85.4	59.6	72.5	92.6	68.8	80.7	98.7	75.5	87.1
El Paso	79.9	50.8	65.3	88.1	60.2	74.1	99.6	72.6	86.1
Galveston	78.0	65.5	71.8	84.0	73.8	78.9	90.8	78.9	84.9
Houston	80.4	58.4	69.4	87.1	68.5	77.8	95.1	74.0	84.5
Lubbock	76.3	45.1	60.7	84.5	55.9	70.2	94.9	66.9	80.9
Midland	81.8	49.2	65.5	90.6	59.7	75.2	97.8	71.0	84.4
Port Arthur	79.4	59.3	69.3	85.4	68.6	77.0	91.0	74.0	82.6
San Angelo	82.1	50.7	66.4	91.0	61.2	76.1	97.4	72.1	84.8
San Antonio	83.0	58.3	70.6	91.6	68.6	80.1	98.0	75.6	86.8
Victoria	81.7	58.3	70.0	88.2	69.8	79.0	96.2	73.5	84.8
Waco	77.5	54.0	65.8	86.0	64.7	75.4	95.2	72.8	84.0
Wichita Falls	77.8	49.8	63.8	87.5	61.9	74.7	98.7	72.8	85.8
Shreveport, LA	76.1	53.5	64.8	83.6	62.7	73.2	91.2	71.2	81.2

Station	July			August			September		
	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean
Abilene	95.7	71.1	83.4	91.1	69.7	80.4	84.6	61.3	72.9
Amarillo	89.8	65.1	77.4	85.7	63.5	74.6	79.3	54.5	66.9
Austin	99.1	74.0	86.6	97.5	74.9	86.2	92.7	68.5	80.6
Brownsville	89.3	75.9	82.6	92.7	77.7	85.2	88.3	71.6	79.9
College Station	97.5	73.8	85.6	94.4	75.5	85.0	88.2	67.5	77.8
Corpus Christi	89.5	73.0	81.2	91.4	75.2	83.3	90.0	70.1	80.1
Dallas/Ft. Worth	99.8	78.2	89.0	96.5	76.9	86.7	88.2	68.8	78.5
Del Rio	94.6	74.1	84.3	93.5	74.3	83.9	87.1	67.4	77.2
El Paso	90.7	70.2	80.5	89.6	68.7	79.2	83.1	60.7	71.9
Galveston	90.3	79.1	84.7	89.4	78.7	84.0	89.6	78.0	83.8
Houston	95.6	74.2	84.9	92.6	75.3	84.0	88.1	68.4	78.2
Lubbock	90.6	67.9	79.2	89.3	65.8	77.5	80.8	56.6	68.7
Midland	92.7	70.0	81.4	90.6	67.8	79.2	82.9	58.9	70.9
Port Arthur	92.7	73.6	83.2	91.0	74.1	82.5	87.0	68.6	77.8
San Angelo	96.2	69.9	83.0	93.1	69.4	81.3	85.7	58.9	72.3
San Antonio	94.3	73.8	84.1	93.9	74.8	84.4	90.9	68.0	79.5
Victoria	95.0	71.9	83.5	94.8	74.1	84.4	91.3	66.3	78.8
Waco	98.7	73.9	86.3	95.2	73.6	84.4	88.3	62.5	75.4
Wichita Falls	99.0	74.4	86.7	96.1	73.1	84.6	87.2	63.4	75.3
Shreveport, LA	95.8	72.6	84.2	91.7	73.5	82.6	83.6	65.5	74.6

Station	October			November			December		
	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean
Abilene	78.2	51.4	64.8	68.4	41.6	55.0	60.2	32.7	46.5
Amarillo	71.7	44.7	58.2	62.4	34.0	48.2	55.2	23.4	39.3
Austin	84.0	58.1	71.0	74.6	50.9	62.7	65.6	41.3	53.5
Brownsville	84.6	64.5	74.5	79.2	58.9	69.0	73.5	53.3	63.4
College Station	81.4	56.7	69.0	72.6	49.6	61.1	64.6	40.6	52.6
Corpus Christi	84.3	61.4	72.9	78.4	54.7	66.6	70.6	48.7	59.7
Dallas/Ft. Worth	81.3	57.9	69.6	70.7	48.6	59.7	61.1	36.8	49.0
Del Rio	83.0	58.5	70.7	75.2	48.1	61.6	66.1	39.9	53.0
El Paso	80.2	51.1	65.7	68.4	39.7	54.1	61.7	33.8	47.8
Galveston	M	M	M	72.5	58.1	65.3	64.5	50.5	57.5
Houston	81.3	57.8	69.5	73.8	51.1	62.4	66.2	45.1	55.6
Lubbock	75.1	47.5	61.3	66.4	35.8	51.1	57.5	27.7	42.6
Midland	77.8	50.3	64.0	67.8	37.5	52.7	61.5	30.3	45.9
Port Arthur	79.9	57.5	68.7	73.2	50.7	61.9	65.4	46.0	55.7
San Angelo	80.7	50.1	65.4	71.4	39.4	55.4	64.0	33.0	48.5
San Antonio	84.6	58.3	71.4	76.5	50.8	63.7	67.8	42.2	55.0
Victoria	84.7	55.6	70.2	77.1	49.6	63.3	68.3	43.6	56.0
Waco	80.8	53.4	67.1	71.5	45.5	58.5	62.5	34.6	48.5
Wichita Falls	79.9	52.1	66.0	68.3	40.1	54.2	56.7	29.1	42.9
Shreveport, LA	77.5	52.5	65.0	66.5	43.3	54.9	59.5	36.9	48.2

Station	2008 Annual			Annual Normals			Departures from Normal		
	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean	Avg Max	Avg Min	Mean
Abilene	77.7	52.0	64.8	76.1	52.7	64.4	1.7	-0.7	0.5
Amarillo	72.2	43.3	57.7	70.3	43.6	57.0	1.9	-0.4	0.8
Austin	82.9	58.9	70.9	79.5	58.4	69.0	3.4	0.4	1.9
Brownsville	83.8	65.6	74.7	82.0	64.6	73.3	1.8	1.1	1.4
College Station	80.4	58.3	69.3	79.4	57.7	68.6	1.0	0.6	0.8
Corpus Christi	82.4	62.1	72.3	80.9	62.1	71.5	1.5	0.0	0.7
Dallas/Ft. Worth	79.7	57.6	68.7	75.8	55.1	65.5	3.9	2.6	3.2
Del Rio	82.8	58.5	70.6	80.9	58.5	69.7	1.9	0.1	1.0
El Paso	78.1	52.0	65.1	77.1	52.1	64.6	1.0	-0.1	0.4
Galveston	78.4	66.1	72.2	76.6	65.7	71.2	1.8	0.3	1.1
Houston	80.8	59.6	70.2	79.4	58.2	68.8	1.4	1.4	1.4
Lubbock	75.4	46.8	61.1	73.2	46.2	59.7	2.2	0.6	1.4
Midland	78.6	49.6	64.1	77.0	49.9	63.4	1.6	-0.3	0.7
Port Arthur	79.1	59.6	69.4	78.1	59.2	68.6	1.0	0.5	0.8
San Angelo	80.6	51.4	66.0	77.1	51.8	64.4	3.4	-0.4	1.5
San Antonio	83.1	59.1	71.1	79.8	57.5	68.7	3.3	1.6	2.4
Victoria	82.6	58.6	70.6	79.6	60.4	70.0	3.0	-1.8	0.6
Waco	79.4	54.6	67.0	77.9	55.3	66.6	1.5	-0.7	0.4
Wichita Falls	78.9	51.9	65.4	75.3	50.9	63.1	3.5	1.0	2.3
Shreveport, LA	76.5	54.6	65.6	76.3	55.1	65.7	0.3	-0.5	-0.1



* 11 Month total only

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