Climate and Weather Summary for October 2019

Temperatures in October averaged below normal at Abilene and slightly below normal at San Angelo. Precipitation was well-below normal at Abilene and San Angelo. Table 1 summarizes October 2019 temperature, precipitation, and departure from normal for Abilene and San Angelo.

Site	Average Temperature (°F)	Departure from Normal (°F)	Normal Average Temperature (°F)	Total Precipitation (In.)	Departure from Normal (In)	Normal October Precipitation (In.)
Abilene	64.0°	-1.8°	65.8°	0.35"	-2.63"	2.98"
San Angelo	65.4°	-0.8°	66.2°	0.53"	-2.20"	2.73"

Table 1: October Climate Data for Abilene and San Angelo.

Additional temperature and precipitation data for Abilene and San Angelo is summarized in Table 2.

Site	Warmest High Temperature (°F)	Warmest Low Temperature (°F)	Coldest High Temperature (°F)	Coldest Low Temperature (°F)	Maximum Daily Precipitation (In.)
Abilene	97° on Oct. 6	76° on Oct. 1	39° on Oct. 30	20° on Oct. 31	0.15" Oct. 11
San Angelo	98° on Oct. 6	75° on Oct. 1	47° on Oct. 30	22°on Oct. 31	0.49" Oct. 11

Table 2: Additional October Climate Data for Abilene and San Angelo.

- Coldest October temperature on record set at Abilene (20 degrees on Oct. 31).
- At San Angelo and Abilene, daily record high temperatures and record high minimum temperatures were newly set or tied, on several days in October.
- The monthly temperature range, between the warmest daily high temperature and coldest daily low temperature, was 77 degrees at Abilene and 76 degrees at San Angelo.
- This was the 13th driest October on record at Abilene, and the 21st driest October at San Angelo.

A map of total precipitation for October is shown in Figure 1. Percentage of normal precipitation for October is shown in Figure 2.

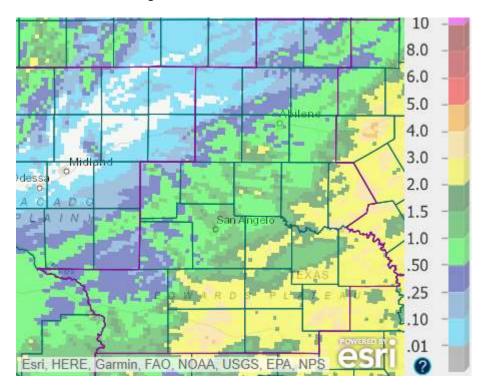


Figure 1: Total Precipitation for October.

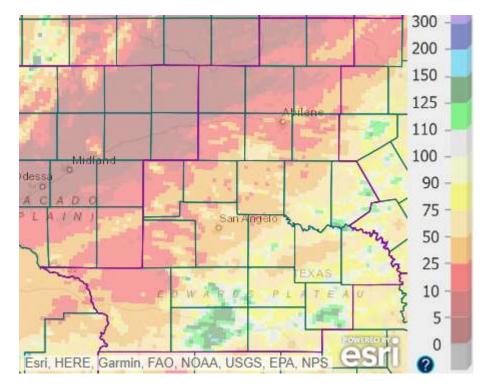


Figure 2: Percentage of Normal Precipitation for October.

Rainfall for October varied from above to well-below normal across <u>west-central Texas</u> (Figures 1 and 2). In general, the area southeast of a Sonora to Eldorado to Brownwood line received slightly above to slightly below normal rainfall for the month, with amounts 2-4 inches. Much of the area northwest of an Ozona to San Angelo to Cross Plains line received less than 25 percent of normal rainfall for the month. The driest areas were north and northwest of Abilene, and in parts of Sterling, Irion and northern Crockett Counties where October rainfall was less than one quarter of an inch.

Weather Highlights:

Despite the change in the calendar from September to October, hot and dry conditions continued, with temperatures well-above normal Oct. 1-6. An upper level high pressure system remained over Texas during this time. On Oct. 6, record high temperatures were set (98 degrees) at San Angelo, and tied (97 degrees) at Abilene. The first strong cold front of the Fall season moved south across west-central Texas on the afternoon and early nighttime hours of Oct. 6. At San Angelo, this ended a record consecutive streak of days with temperatures 90 degrees or above (115 days). Scattered showers and thunderstorms accompanied the front, and additional showers and storms with locally heavy rainfall occurred from the afternoon of Oct. 6 into the early morning of Oct. 7. Rainfall amounts for the 24-hour period from 7 AM, Oct. 6 to 7 AM, Oct. 7 are shown in Figure 3 (below).

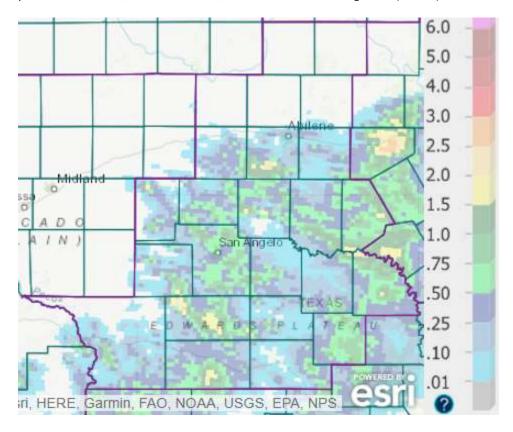


Figure 3: Rainfall for the 24-hour Period ending at 7 AM, Oct. 7.

Gusty north winds followed passage of this front, and temperatures were pleasant and much cooler on Oct. 7.

Following another strong cold frontal passage Oct. 10, scattered to numerous showers and thunderstorms occurred on the early morning of Oct. 11. Rainfall amounts (not shown) varied mostly between one tenth and three quarters of an inch. Ahead of the front, a new record high temperature (95 degrees) was set at San Angelo on Oct. 10. Following the frontal passage, temperatures were **much cooler** (in the upper 30s to lower 40s) and were near record lows at Abilene and San Angelo, on the morning of Oct. 11.

A light freeze, unusually early for the Fall season, occurred on the early morning of Oct. 12 across the Big Country north of Interstate 20, and at a few locations farther south. Low temperatures were mostly 30-32 degrees where the light freeze occurred.

In the warming trend which followed, highs were back in the 80s in southern parts of the area on Oct. 14, and across a larger part of west-central Texas on the 15th. Scattered to numerous showers with very light rainfall occurred on the 14th, mostly south of Interstate 20. Additional showers with light to moderate rainfall occurred in much of the southern half of the area on the 15th.

Strong temperature fluctuations occurred during the second half of the month. With dry airmasses occupying the region and mostly clear skies, daily temperature ranges (between the early morning lows and afternoon highs) were 35-45 degrees on some of the days.

With a cold frontal passage on Oct. 20, showers and thunderstorms occurred across generally the southeastern half of west-central Texas, but were most concentrated in southern parts of the area. The heavier rainfall occurred across the area east of Ozona into Mason County (Figure 4).

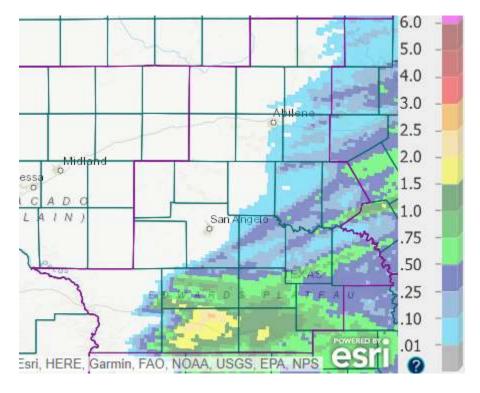


Figure 4: Rainfall for the 24-hour Period ending at 7 AM, Oct. 21.

Temperatures were warm on Oct. 27, just ahead of a cold front. Highs were mostly in the lower to mid 80s across central and southern parts of west-central Texas. Following the cold frontal passage Oct. 27, unseasonably cold conditions occurred on the last few days of the month. For most of the area, temperatures were progressively colder Oct. 28-30. The coldest daytime temperatures occurred on Oct. 30, and were combined with cloudy skies and brisk north winds. Daytime highs on the 30th ranged from the upper 30s across much of the Big Country, to the 40s across central and southern parts of west-central Texas.

Scattered showers and thunderstorms occurred during the post-Midnight hours of Oct. 30, across the area east and southeast of a Sonora to San Angelo to Brownwood line.

A widespread freeze with record cold temperatures occurred on the early morning of Oct. 31. Lows were in the upper teens to lower 20s across the Big Country and Concho Valley, and in the 20s elsewhere. The low of 20 degrees at Abilene set a new record for the coldest temperature in the month of October.

This was the first freeze of the Fall season for most of the central and southern parts of west-central Texas, and occurred 1-2 weeks earlier than average.

Additional Tabular and Graphical Daily Climate Data