

## Climate and Weather Summary for October 2017

Table 1 summarizes October 2017 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	64.9°	-0.9°	65.8°	0.11"	-2.87"	2.98"
San Angelo	66.6°	0.4°	66.2°	0.81"	-1.92"	2.73"

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

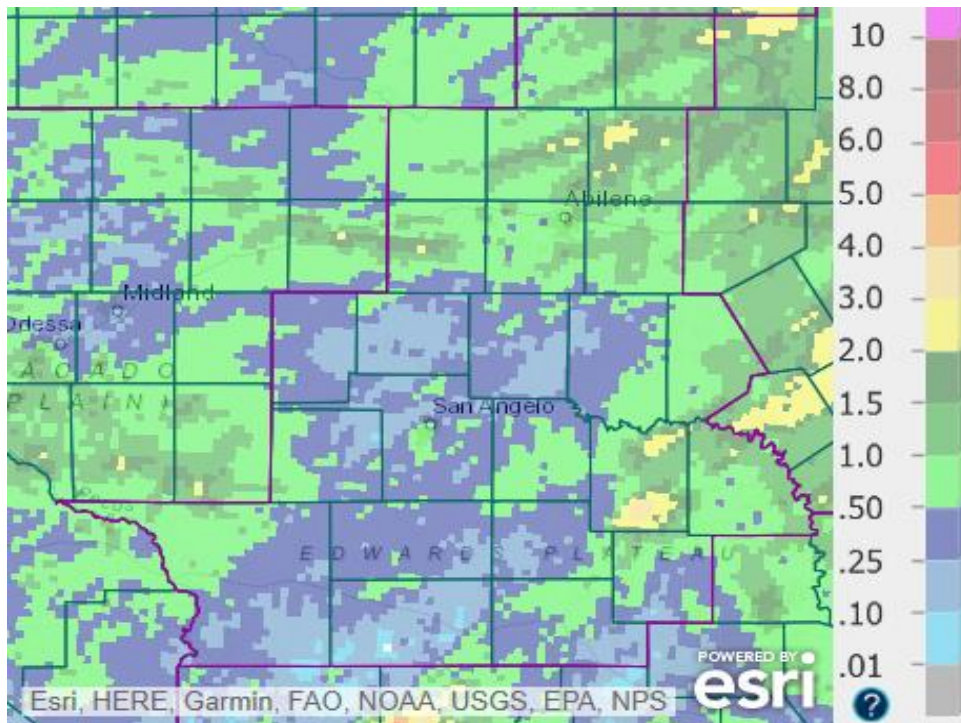
Additional temperature and precipitation data for Abilene and San Angelo is summarized in Table 2.

Site	Warmest High Temperature (°F)	Warmest Low Temperature (°F)	Coollest High Temperature (°F)	Coldest Low Temperature (°F)	Maximum Daily Precipitation (In.)
Abilene	89° Oct. 13	71° Oct. 4	51° Oct. 31	29° Oct. 28	0.05" Oct. 31
San Angelo	97° Oct. 9	72° Oct. 4	51° Oct. 31	30° Oct. 28, 29	0.77" Oct. 15

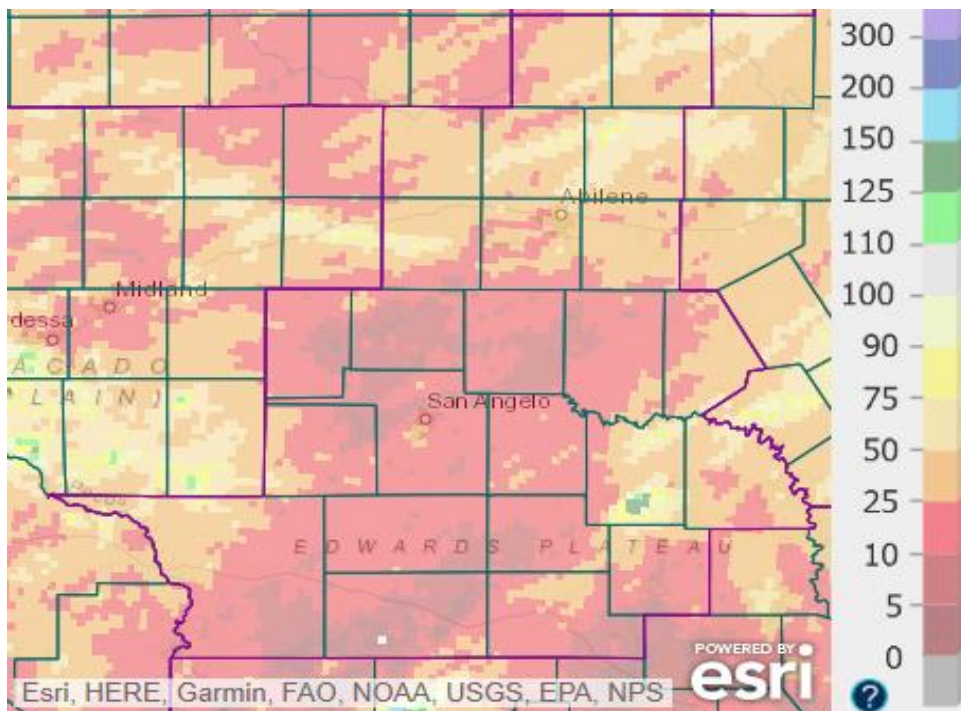
**Table 2: Additional October Climate Data for Abilene and San Angelo.**

- Temperatures for the month averaged slightly below normal at Abilene, and slightly above normal at San Angelo.
- At San Angelo, a record high temperature of 97 degrees was tied on Oct. 9. A record low temperature of 30 degrees was tied on Oct. 30.
- At Abilene, this was the 6<sup>th</sup> driest October on record. Climate records for Abilene data back to 1886.

Rainfall for the month was well-below normal across nearly all of [west-central Texas](#). On the next page, a map of total precipitation for October is shown in Figure 1. Percentage of normal precipitation for October is shown in Figure 2. The only exception was in a small part of southern Mcculloch County just south of Brady, where the monthly rainfall was above normal (green shading in Figure 2).



**Figure 1: Total Precipitation for October.**



**Figure 2: Percentage of Normal Precipitation for October.**

Across most of the central and southern parts of west-central Texas, October rainfall was less than 25 percent of normal (red shading in Figure 2).

**Weather Highlights:**

Warm and relatively humid conditions occurred early in the month, with winds mostly from the south-southeast. Isolated to scattered showers and thunderstorms occurred on Oct. 3-4, as weak disturbances moved northwest across the area.

A few showers and thunderstorms accompanied a cold frontal passage across the [Big Country area](#), during the post-Midnight hours of Oct. 7. With one of the storms, a wind gust of 49 mph was recorded at Texas Tech Mesonet site, 11 miles southwest of Sweetwater. Behind this front, the air was much drier and a little cooler. A strong rebound in temperatures followed a cool start to the day on Oct. 8. Early morning lows were mostly 50-55 degrees, and afternoon highs were in the upper 80s to mid 90s.

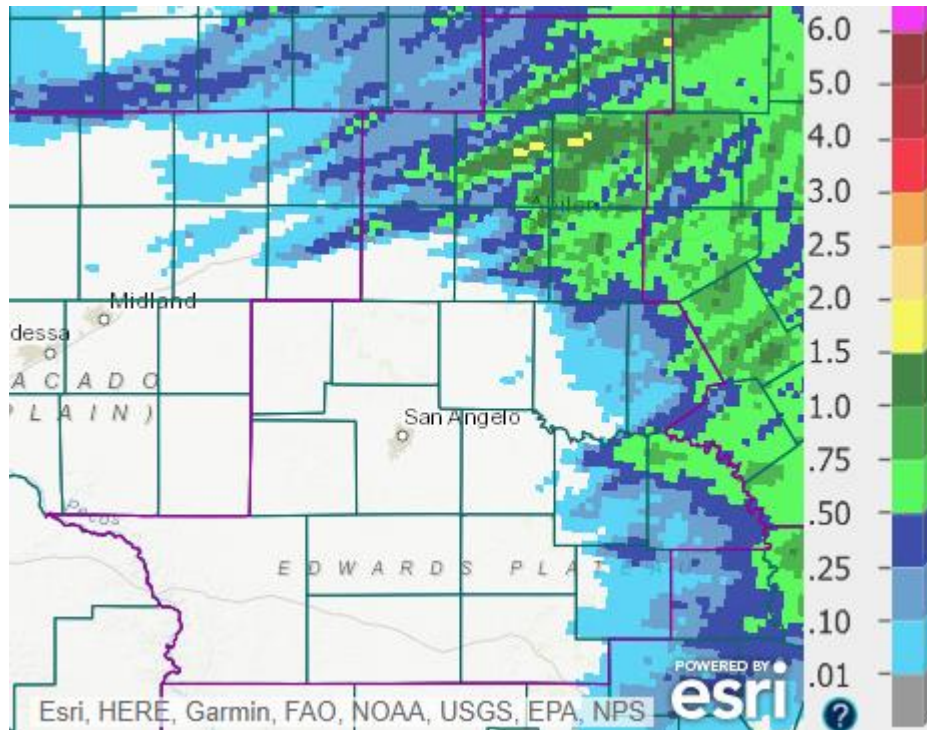
A stronger cold front advanced south across approximately the northern half of west-central Texas on Oct. 9 during the day. Ahead of this front, temperatures soared into the lower to mid 90s for highs. A record high of 97 degrees was tied at San Angelo. Isolated to scattered showers and thunderstorms occurred along and just behind this front across the area south of a line from Brownwood to Sonora. Much cooler air followed passage of this front, and was accompanied by gusty north winds. Temperatures were much cooler the following day (Oct. 10) with some cloud cover. Afternoon highs were in the mid 60s to lower 70s. Clear skies, dry air and light winds allowed temperatures to dip into the mid to upper 40s for early morning lows on Oct. 11, across northern and eastern parts of west-central Texas.

Above normal temperatures returned Oct. 12-14, with more humid conditions. Highs were in the lower 90s at a few locations, and in the mid to upper 80s elsewhere.

Scattered showers and thunderstorms accompanied a strong cold frontal passage (between Midnight and 10 AM) on the 15<sup>th</sup>. For most locations, rainfall amounts varied under one half inch. Temperatures were much cooler on the 15<sup>th</sup>, accompanied by gusty north-northeast winds. Afternoon highs were mostly in the upper 60s to lower 70s. Cold early morning temperatures occurred Oct. 16-17 with a combination of clear skies, dry air and light winds. On these dates, lows were in the 30s across much of west-central Texas. A light freeze (first of the fall season) was recorded at a few locations (mainly in low-lying areas and along river valleys) on Oct. 16-17.

A warming trend occurred in the following days with temperatures returning to above normal. The next weather change came with a deepening upper level trough and cold front Oct. 21-22.

Several severe thunderstorms, with large hail ranging from quarter to golfball size, occurred across the Big Country on the evening of Oct. 21. Showers and thunderstorms, associated with the cold front, occurred across northern and eastern parts of west-central Texas. Where the showers and storms occurred, rainfall amounts (shown in Figure 3 on the next page) ranged from one-half inch to 1.5 inches, with isolated higher amounts.



**Figure 3: Rainfall Amounts for the 24-hour Period ending at 7 AM, Oct. 22.**

With a dry northwest flow pattern aloft Oct. 23-28, temperatures fluctuated considerably across the area. Quick warmups with south to southwest winds were interrupted by cold frontal passages and gusty north winds. The strongest cold frontal passage occurred during the evening and nighttime hours of Oct. 26. Rather windy and chilly conditions followed passage of this front. Wind gusts were in the 35-45 mph range across the Big Country area late on Oct. 26, and across much of west-central Texas on Oct. 27. Temperatures were confined to the 50s for highs during the day Oct. 27. The first freeze of the fall season occurred across most of west-central Texas on Oct. 28, when a combination of clear skies, light winds and very dry air allowed temperatures to dip into the upper 20s to lower 30s for early morning lows. Another freeze was recorded early the next morning (Oct. 29) at numerous locations across central and southern parts of west-central Texas, where conditions were similar to the previous night with light winds and dry air. A record low temperature of 30 degrees was tied at San Angelo on Oct. 30.

Following a warmup on Oct. 29-30, chilly and rainy conditions occurred on Halloween (Oct. 31). Skies were cloudy with scattered to numerous rain showers, as an upper level disturbance moved east into the area and interacted with a cool airmass. Rainfall amounts varied under one-half inch. Daytime temperatures on the 31<sup>st</sup> were confined to the mid to upper 40s across Coleman and Brown Counties, and in the 50s across the rest of west-central Texas.

Additional information with daily climate data in tables and graphs can be accessed at the link below. Select October, 2017 for Abilene or San Angelo (official climate data sites) or Junction (unofficial climate data site).

[Additional Tabular and Graphical Daily Climate Data](#)