

Climate and Weather Summary for October 2024

Temperatures in October averaged well-above normal at Abilene and San Angelo. Precipitation was well-below normal Abilene and San Angelo. Table 1 summarizes October 2024 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 Oct. Precipitation (In.)
Abilene	73.6°	6.6°	67.0°	0.27"	-2.56"	2.83"
San Angelo	72.5°	5.4°	67.1°	Trace	-2.42"	2.42"

Table 1: Oct. 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)	Coolest High Temperature (°F)	Coolest Low Temperature (°F)	Maximum Daily Precipitation (In.)
Abilene	97° on Oct. 13	69° on Oct. 29	69° on Oct. 16	47° Oct. 17	0.27" Oct. 30
San Angelo	99° on Oct. 13	71° on Oct. 30	73° Oct. 16, 18	44° on Oct. 17	Trace Oct. 31

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

- Warmest October on Record at San Angelo and Abilene.
- San Angelo Tied its 3rd driest October, and Abilene set its 11h driest October.
- Maps of total precipitation and percentage of normal precipitation, for October, are shown in Figures 1 and 2 (next page).

Precipitation (in)
10/1/2024 – 10/31/2024

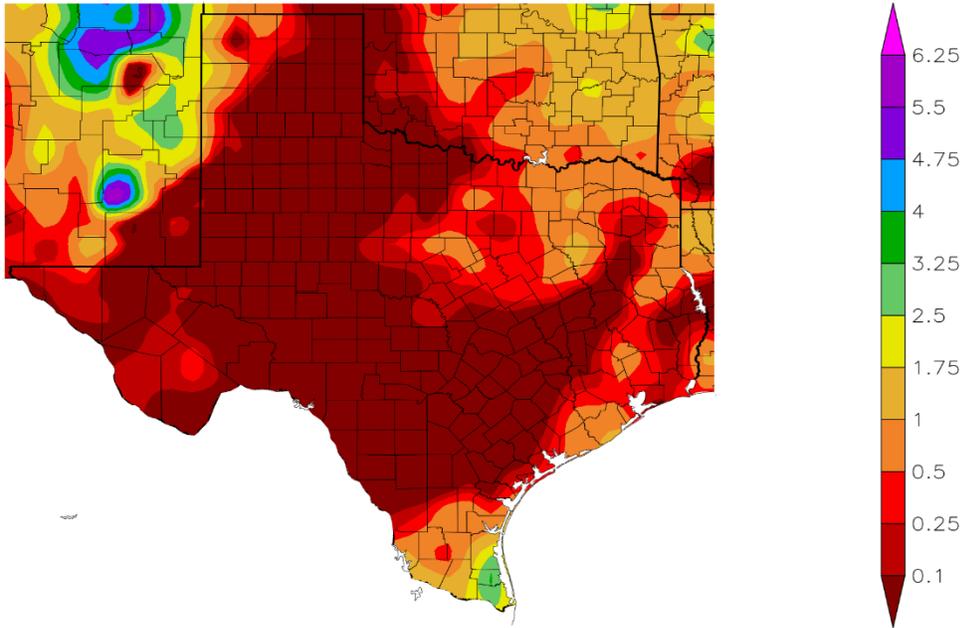


Figure 1: Total Precipitation for October.

Percent of Normal Precipitation (%)
10/1/2024 – 10/31/2024

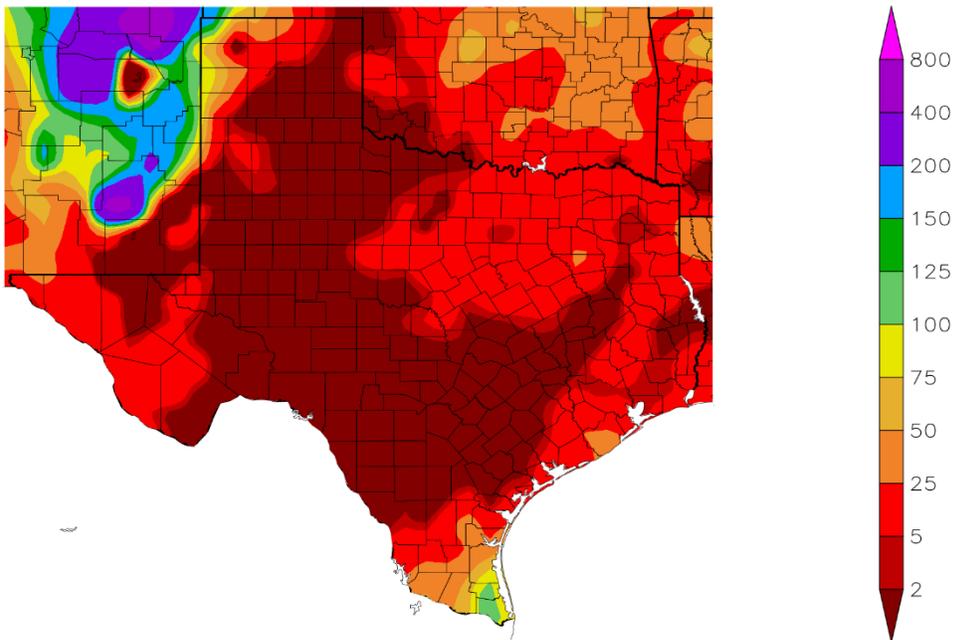


Figure 2: Percentage of Normal Precipitation for October.

October is climatologically one of the wetter months of the year in this area. Precipitation for this October, however, was well-below normal across all of west-central Texas (Fig. 2). The monthly precipitation was less than one tenth of an inch across all except parts of the eastern Big Country and eastern Heartland (Fig. 1).

October 2024 Weather Highlights

Temperatures were above normal with dry conditions during the first half of October (Oct. 1-15). An upper level high pressure system over the southwestern part of the U.S. expanded east into Texas and the southern Plains, and was the dominant weather influence in the area. Skies were mostly clear during this time frame. Afternoon highs were very warm and mostly in the upper 80s and lower 90s. Overnight lows were mostly in the upper 50s to mid 60s. The hottest temperatures occurred Oct. 10-13, when highs were in the mid to upper 90s across some of the area. At Abilene, a record high temperature was tied (97°) Oct. 13. San Angelo's high of 99° on October 13 narrowly missed tying the record latest date in the year with highs of at least 100°. The record latest date remains Oct. 13, 1926, when the high was 102°.

A dry but strong cold front advanced south across west-central Texas from the evening of Oct. 15 into the post-Midnight hours of Oct. 16. This brought much cooler air into the area, accompanied by gusty northeast winds. Highs Oct. were in the mid to upper 60s in the Big Country and northern Heartland areas, and mostly in the lower 70s across the area farther south. Lows Oct. 17 were in the 40s across much of the area. Where the most ideal radiational cooling occurred, a few locations in eastern parts of the area recorded lows in the upper 30s (Albany, Burkett, Brownwood).

With breezy south to southeast winds, moisture and cloud cover increased Oct. 17-19. This resulted in less of a daily temperature range between the morning lows (mostly in the 50s) and afternoon highs (mostly in the 70s).

A warming trend followed and temperatures were well-above normal Oct. 22-24. New daily record highs were set at Abilene (91°) and tied at San Angelo (92°) Oct. 23. Well-above normal temperatures continued Oct. 27-30. At San Angelo, a new daily record high was set (92°) Oct. 27, and a daily record high was tied (90°) Oct. 30. A new daily record warm low was set at San Angelo (71°) Oct. 30. Gusty south winds Oct. 28-29 brought an increase in low-level moisture and more humid conditions. Peak wind gusts were over 40 mph at a number of locations across the Big Country and Concho Valley Oct. 29 (shown in the social media graphic below).



A change to cooler conditions occurred at the end of the month, with a cold frontal passage. Gusty south winds continued Oct. 30 with the approach of the front from the north, and San Angelo recorded a peak wind gust of 42 mph. In the last couple hours of the Oct. 30, isolated to scattered thunderstorms developed along and ahead of the cold front, as it moved across the Big Country. A thunderstorm wind gust of 68 mph wind gust occurred at the Abilene Airport (1051 PM Oct. 30). Other isolated to scattered showers (and storms) occurred with the approach and arrival of the cold front in eastern and southeastern parts of the area (overnight hours of Oct. 30-31).

After cold frontal passage, temperatures were considerably cooler Oct. 31. Highs ranged from the upper 60s to lower 70s in the Big Country, to around 80 degrees along the Interstate 10 corridor.

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