

Climate and Weather Summary for October 2023

Temperatures in October averaged above normal at Abilene and San Angelo. Precipitation was above normal at Abilene, and to a greater extent at San Angelo. Table 1 summarizes October 2023 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	68.2°	1.2°	67.0°	2.97"	0.14"	2.83"
San Angelo	68.2°	1.1°	67.1°	3.25"	0.83"	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)	Coollest High Temperature (°F)	Coollest Low Temperature (°F)	Maximum Daily Precipitation (In.)
Abilene	96° on Oct. 4	72° on Oct. 1	47° on Oct. 30	31° Oct. 31	1.49" Oct. 25
San Angelo	95° on Oct. 20	72° on Oct. 4	44 Oct. 30	29° on Oct. 31	2.18" Oct. 25

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

- Significant rainfall occurred late in October.
- First freeze of the Fall season occurred Oct. 31 in northern and central parts of the area.

Maps of total precipitation and percentage of normal precipitation, for October, are shown in Figures 1 and 2 (next page).

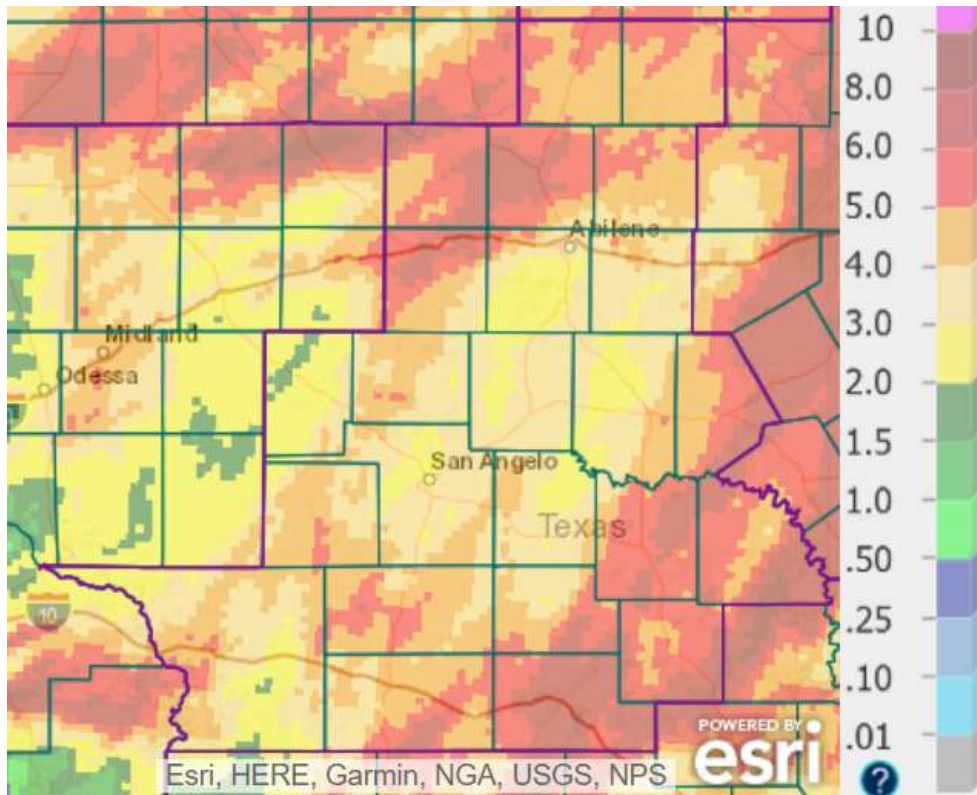


Figure 1: Total Precipitation for October.

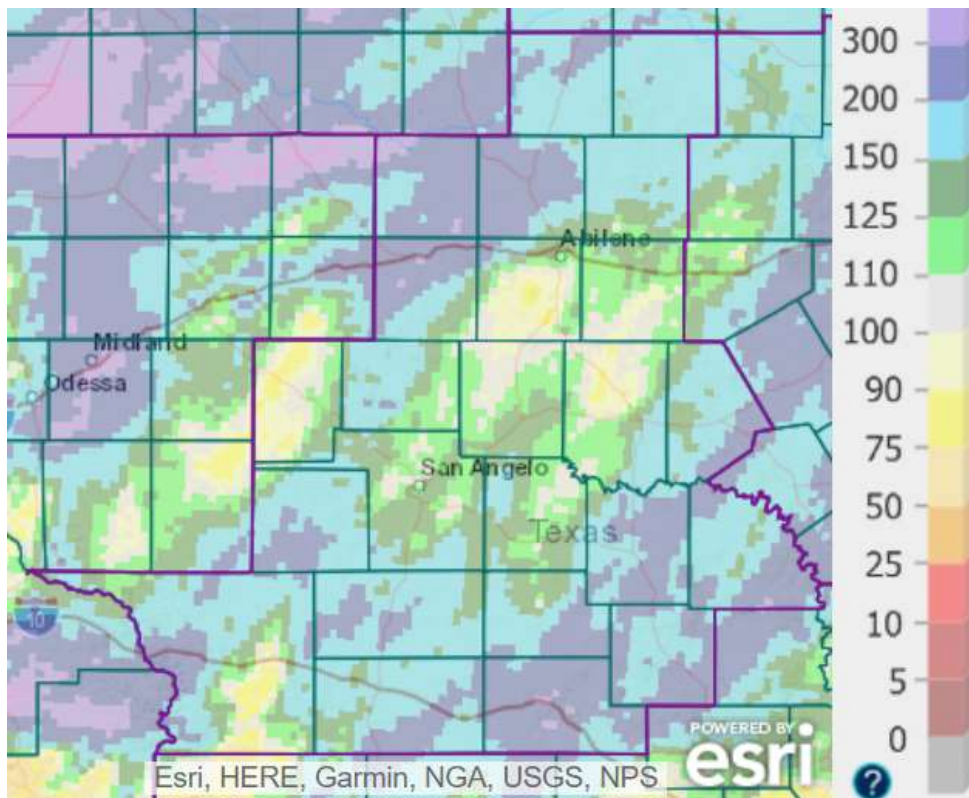


Figure 2: Percentage of Normal Precipitation for October.

Precipitation for October varied from well-above normal to below normal across west-central Texas (Fig. 2). The highest precipitation amounts for the month (6-8 inches) occurred in parts of the Big Country west and northwest of Abilene, and in southeastern parts of the area (east of a Sonora to Brownwood line).

October 2023 Weather Highlights

Warm and humid conditions occurred during the first few days of October. Afternoon highs were generally in the mid 80s to lower 90s, while morning lows were in the mid 60s to lower 70s.

As an upper level trough gradually moved from the southern and central Rockies into the Plains, thunderstorms occurred across various parts of west-central Texas Oct. 3-4. Clusters of thunderstorms moved across the Big Country on the evening and early nighttime hours of Oct. 4, and across much of west-central Texas from the late afternoon of Oct. 4 into the early morning of Oct. 5. Several of the storms were severe. At a mesonet site 5 miles west of Rotan in Fisher County, a 59 mph wind gust was recorded on Oct. 3, and a 63 mph gust occurred Oct. 4. In Nolan County on Oct. 3, hen egg size hail was reported 1 mile south-southeast of Champion, and a 67 mph wind gust was recorded 5 miles east of Champion. At the Fort Lancaster mesonet site (near the western border of Crockett County), a 61 mph wind gust was recorded Oct. 4.

Heavy rain accompanied the thunderstorms Oct. 3-4. Rainfall for those 2 days is shown in Fig. 3.

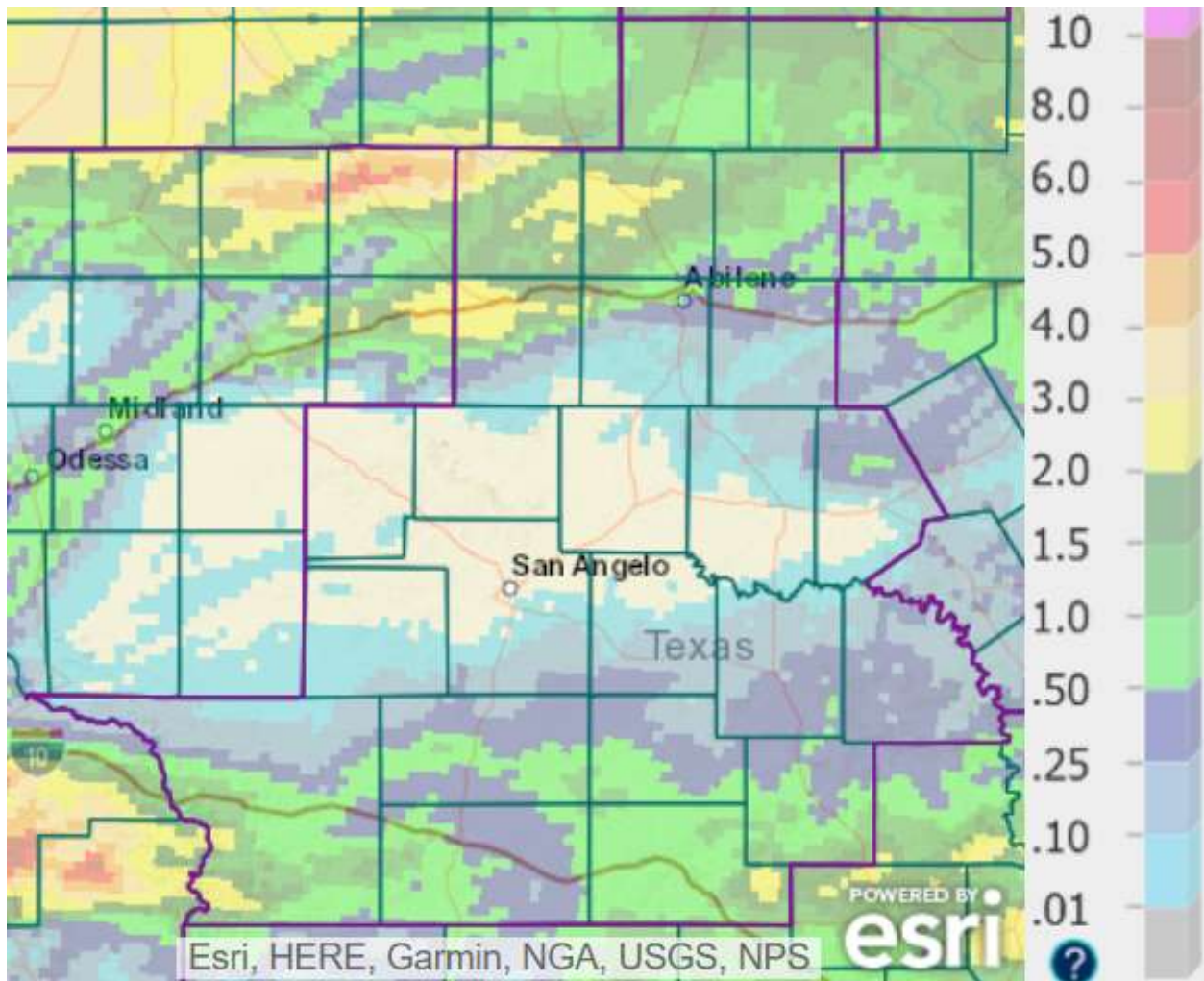


Figure 3: Total Rainfall for the 7-Day Period ending at 7 AM, Oct. 7. This captures the rainfall which occurred across the area Oct. 3-4.

Scattered areas of the Big Country and southern parts of west-central Texas received 1-2 inches of rainfall, with pockets of higher amounts (2-3 inches). For a west-east band across the central third of west-central Texas (including most of the Concho Valley), little to no rainfall occurred.

Following an overnight cold frontal passage, temperatures were cooler and closer to normal Oct. 5-6. A reinforcement of cooler air arrived with a cold frontal passage during the overnight hours of Oct. 6-7. Morning lows Oct. 7 ranged from the upper 40s in much of the Big Country, to the upper 50s in far southern parts of west-central Texas. These were the coolest lows since Apr. 29 at Abilene and Apr. 30 at San Angelo. Highs were considerably cooler as well, in the 70s across the area and with lower humidity.

Morning lows were even cooler Oct. 8, when a high pressure system settled south into the area. A combination of clear skies, dry air and light winds allowed temperatures to drop into mostly the mid 40s to around 50 degrees for lows.

With a return of south winds and considerable sunshine, a warming trend followed Oct. 8-9. Warm and humid conditions with breezy south winds occurred Oct. 11-12.

Much cooler air was ushered into the area, following a strong cold frontal passage Oct. 13. A few days with pleasant afternoon temperatures and cool night followed, as a high pressure system remained over the area from the Plains states into Texas. Highs were in the 70s across much of the west-central Texas, with upper 60s in northern parts of the area Oct. 15-16. Early morning lows were mostly in the 40s to lower 50s Oct. 15, and mostly in the upper 30s to lower 40s Oct. 16. The coldest lows Oct. 16 occurred in favored low-lying areas (mid 30s near Mertzon, Menard and Fort McKavett, and 33° at a Mesonet site 4 miles west-southwest of Sterling City).

A warming trend followed Oct. 17-18 with a return of south winds. Temperatures were only slightly cooler Oct. 19, following a weak cold frontal passage.

Temperatures were very warm and well-above normal Oct. 20-21, when an upper level high pressure system moved into the area from the west. At San Angelo, a record high temperature was tied (95°) Oct. 20. With south winds and increased moisture and cloud cover over the area Oct. 22-24, morning low temperatures were well-above normal. New record warm lows were set at San Angelo Oct. 23 (68°) and Abilene Oct. 24 (69°). A record warm low temperature (69°) was tied at San Angelo Oct. 24.

The remnants of Hurricane Norma tracked northeast across Mexico and into West Texas Oct. 23 into the early morning of Oct. 24. Bands of showers and thunderstorms with heavy rainfall occurred in western and northwestern parts of west-central Texas, where rainfall amounts were 1.5 to 3 inches.

With the approach of a strong upper level disturbance from northern Mexico and southern New Mexico, bands of showers and thunderstorms with very heavy rain moved east across west-central Texas Oct. 25 into the morning of Oct. 26. Rainfall amounts (not shown) were generally 1-4 inches across much of west-central Texas, with pockets of higher amounts (4-6 inches) in southeastern parts of the area. This rainfall was of short-term benefit to the area, following a period with little rainfall during the first 3 weeks of October.

Following passage of a strong cold front, temperatures were much colder Oct. 29. With brisk north-northeast winds, temperatures dropped into the mid 30s to around 40 degrees across west-central Texas in the afternoon. By the early morning of Oct. 30, with temperatures in the mid to upper 30s and continued brisk north winds, wind chill values were in the 20s. As a fairly strong high pressure system settled into the area, clearing skies and diminishing winds set the stage for the first freeze of the Fall season. Early morning lows Oct. 31 were in the upper 20s to lower 30s in northern and central parts of the area. Abilene and San Angelo recorded their first freeze, and this occurred 10-11 days earlier than the average date. The average date of the first Autumn freeze is November 10 at San Angelo, and November 11 at Abilene.

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