Climate and Weather Summary for October 2022

Temperatures in October averaged above normal at Abilene and near normal at San Angelo. Precipitation was above well-normal at Abilene and below normal at San Angelo. Table 1 summarizes October 2022 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	67.9°	0.9°	67.0°	3.86"	1.03"	2.83"
San Angelo	67.2°	0.1°	67.1°	2.31"	-0.11"	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	89° on Oct. 1, 6, 15, 21, 22	68° on Oct. 23	65° on Oct. 29	45° Oct. 18, 25	1.74" Oct. 28
San Angelo	92° on Oct. 15	66° on Oct. 15	66 Oct. 17, 18	37° on Oct. 26	1.20" Oct. 16

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

- A few rain events occurred across the area in October.
- A light freeze occurred late in the month (Oct. 26) at a couple of locations.

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

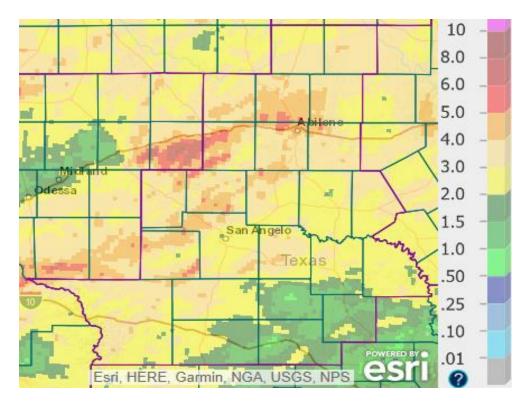


Figure 1: Total Precipitation for October.

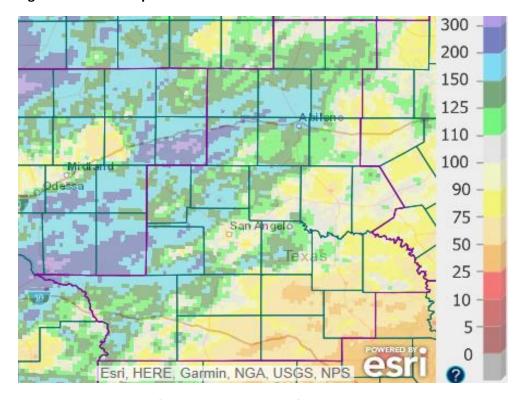


Figure 2: Percentage of Normal Precipitation for October.

Precipitation for October was well-below normal across a few areas in the southeastern part of west-central Texas (orange shading in Fig. 2). The monthly precipitation was above normal in some of the Big Country and Concho Valley (blue and purple shading in Fig. 2). At a few locations in the western Big Country and and western Concho Valley, October precipitation was more than 200 percent of normal (purple shading in Fig. 2). For much of the rest of the area, precipitation for the month was slightly above to slightly below normal.

October 2022 Weather Highlights

Dry conditions prevailed during the first week of October, with mostly clear skies, warm afternoon high temperatures and cool overnight low temperatures. Cooler temperatures followed passage of a dry cold front on the evening and nighttime hours of Oct. 8. With an increase in moisture and the approach and arrival of a few upper level disturbances from Arizona and New Mexico, a few rounds of scattered to numerous showers and thunderstorms occurred Oct. 9-11. Most of the coverage was across the Big Country, and west of a line from Cross Plains to Coleman to Ozona. The rainfall was heavy at times, and a few stronger storms occurred in the northern Concho Valley and southwestern Big Country on Oct. 10. Rainfall for Oct. 9-11 is shown in Fig. 3.

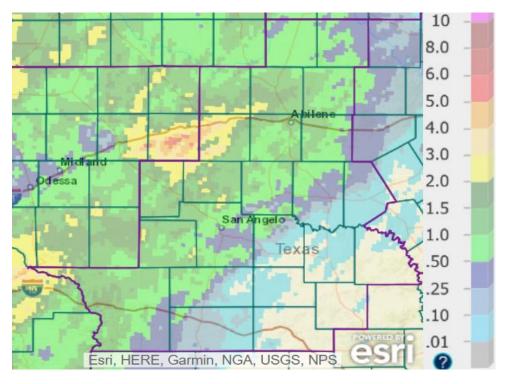


Figure 3: Rainfall Amounts for the 7-day Period ending at 7 AM, Oct. 11.

Afternoon temperatures were very warm on Oct. 14 (highs in the mid to upper 80s, with dry conditions) and Oct. 15 (highs in the upper 80s to lower 90s, with more humid conditions). A strong cold front advanced south across the area Oct. 16. Isolated to scattered showers and thunderstorms occurred during the day, and the coverage increased across central and southern parts of the area during the

evening and early nighttime hours. A few stronger storms occurred south of a Barnhart to Eden to Richland Springs line. Rainfall was moderate to heavy, and brought short-term relief with the ongoing drought conditions. With the approach of a weakening upper level storm system from the west, additional showers occurred across central and southern parts of the area Oct. 17. Figure 4 shows rainfall for Oct. 16-17.

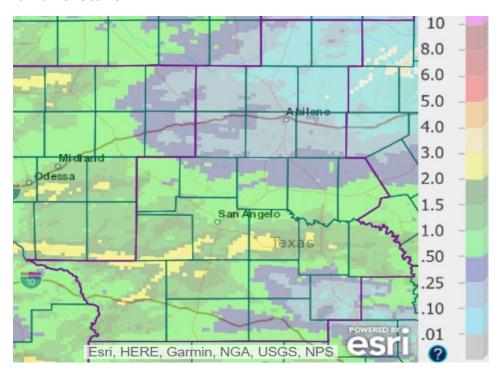


Figure 4: Rainfall Amounts for the 7-day Period ending at 7 AM, Oct. 18.

The higher rainfall amounts (generally 1 to 3 inches) occurred in Crockett and Schleicher Counties, and across the western and southern Concho Valley east through McCulloch and San Saba Counties. A few locations in the southeastern parts of Tom Green and Irion Counties received over 3 inches. Temperatures were much cooler on Oct. 17 in the post-frontal airmass, with the rain and widespread cloud cover. Afternoon highs were in the upper 50s and 60s. The cool airmass remained over the area through Oct. 18. With a combination of clear skies, light winds and dry air, temperatures dropped into the mid to upper 30s for early morning lows Oct. 19 at several locations in the far northern and eastern parts of the Big Country, in the Northwest Hill Country, and in Brown and parts of San Saba County. Elsewhere, lows were in the 40s where cloud cover persisted during the night.

A warming trend followed Oct. 20-23. Increased and gusty south-southwest winds developed Oct. 21 and continued through Oct. 23. Conditions were somewhat humid on Oct. 23, with a return of low-level moisture to the area.

Fairly strong, gusty winds and strong to severe thunderstorms affected the area on Oct. 24.

With an upper level storm system developing over New Mexico and the arrival of a disturbance out ahead of the storm system, gusty south winds occurred during the post-Midnight and early morning hours. Wind gusts were occasionally over 40 mph at San Angelo. While scattered showers occurred

during the night, and a band of showers and thunderstorms moved east across much of the area between 5 AM and 9 AM.

With the arrival of a cold front in the late afternoon and evening hours, a band of strong to severe thunderstorms moved quickly east across the northern half of the area (between 345 PM and 645 PM). Wind damage (tree limbs broken and shingles damaged) was reported 8 miles south-southwest of Throckmorton.

The storm system tracked east into the Lubbock area by late evening, and into the Red River Valley during the overnight hours. With the track of this system and the wind field around it, fairly strong, gusty west winds followed passage of the evening cold front and continued into the overnight hours. Wind gusts were 40-50 mph across much of the area. The highest observed wind gusts were 72 mph at Junction, 60 mph at Ozona, and 54 mph at Fort Lancaster. Wind damage to trees was reported in Junction. After the departure of this system, temperatures were several degrees cooler with much drier conditions Oct. 25.

The following night, a combination of clear skies, dry air and light winds allowed temperatures to drop into the 30s and 40s for early morning lows on Oct. 26. The coldest lows were in the low-lying areas and river valleys of the southern third of the area. A light freeze occurred at a couple of Mesonet sites (Junction 1 SSW and Sterling City 4 WSW). For west-central Texas, these were the coldest low temperatures, overall, since early April.

Showers and thunderstorms occurred on Oct. 28 (between Midnight and 8 AM) with the approach and arrival of an upper level storm system from New Mexico. Several locations recorded peak wind gusts 40-50 mph with a band of storms accompanying a cold front, which moved east across the area. Rainfall was locally heavy. Rainfall for the 24-hour period ending at 7 AM, Oct. 28 (not shown) was between one-half and 1.5 inches across much of west-central Texas. Additional showers occurred across the Big Country, and generally north of a Sterling City to Brownwood line, during the day on Oct. 28. At Abilene, a new daily rainfall record of 1.74 inches was set Oct. 28.

Highlights for the month are shown in graphics (posted on National Weather Service San Angelo social media), for Abilene and San Angelo.

Additional Tabular and Graphical Daily Climate Data