

Climate and Weather Summary for October 2021

Temperatures in October averaged above normal at San Angelo and Abilene. Precipitation was slightly above normal at San Angelo, and well-below normal at Abilene. Table 1 summarizes October 2021 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	70.4°	3.4°	67.0°	1.48"	-1.35"	2.83"
San Angelo	69.6°	2.5°	67.1°	2.64"	0.22	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	93° Oct. 7-10	70° on Oct. 8	71° on Oct. 27	42° Oct. 16, 30	0.77" Oct. 13
San Angelo	95° Oct. 10, 25	67° on Oct. 8	70° on Oct. 16	39° on Oct. 17	1.12" Oct. 2

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

- 11th warmest October on record at Abilene (records date back to 1886).
- 16th warmest October on record at San Angelo (records date back to 1907).

A Map of total precipitation for Oct. is shown in Figure 1 (below). Percentage of normal precipitation for October is shown in Figure 2 (next page).

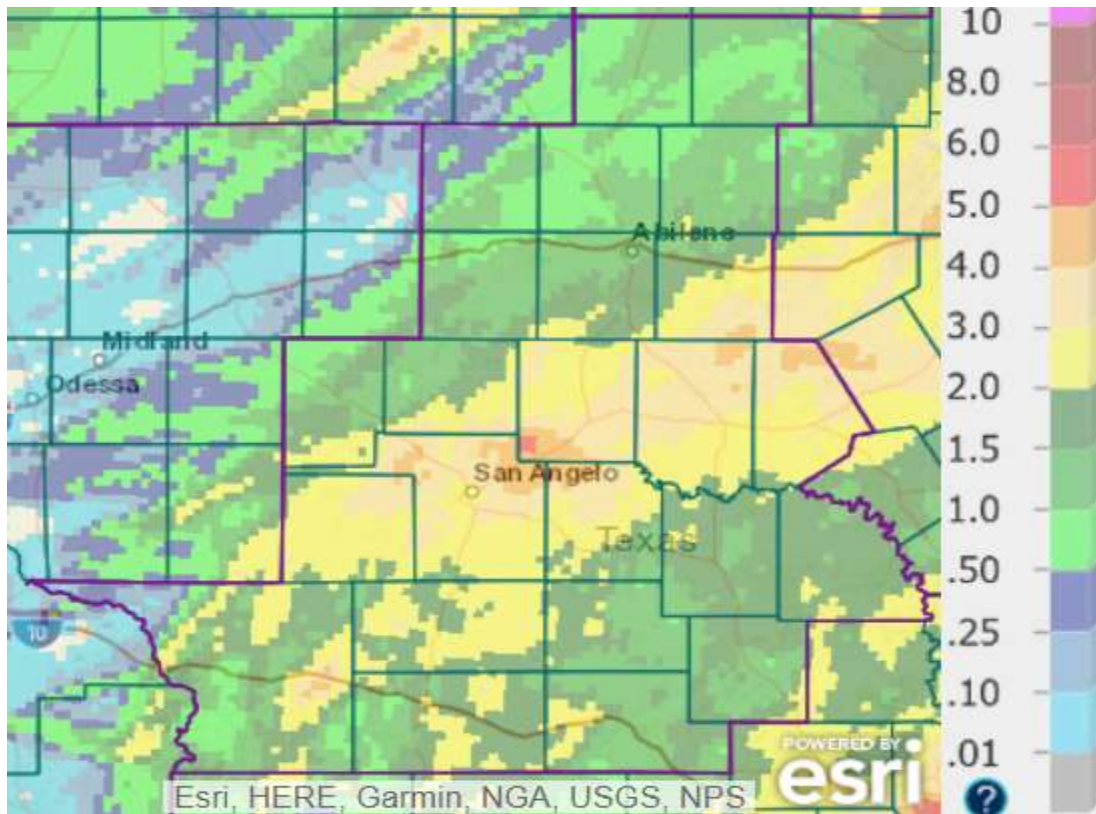


Figure 1: Total Precipitation for October.

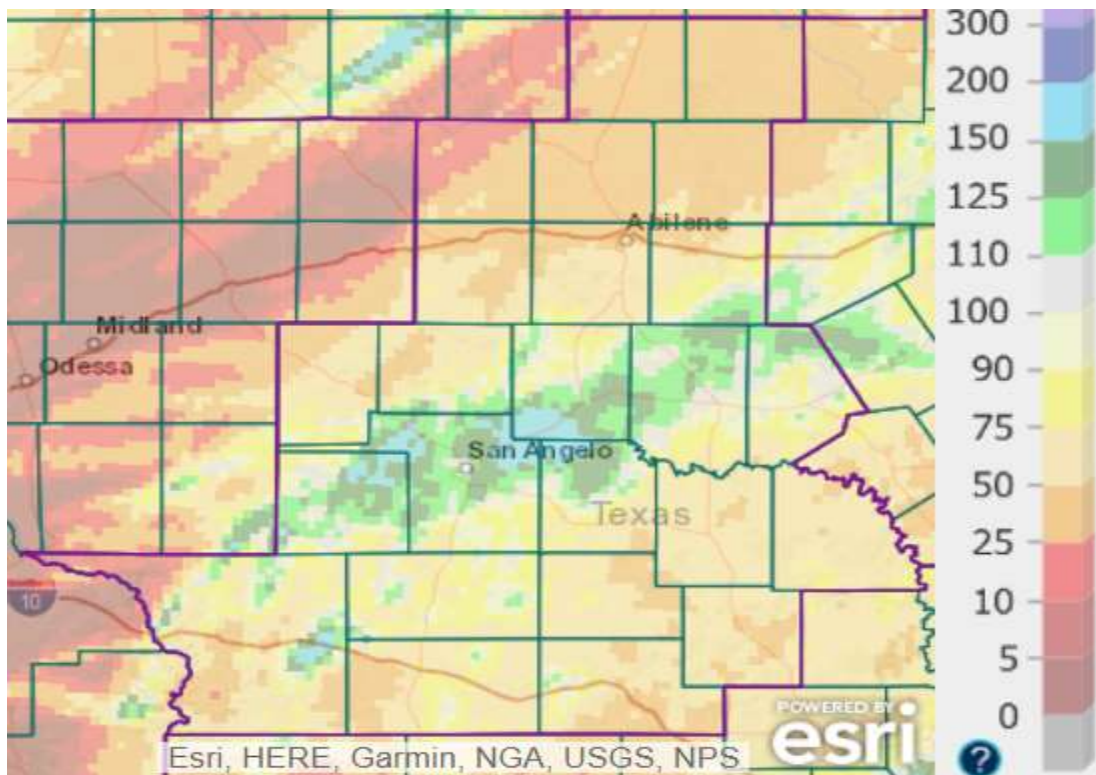


Figure 2: Percentage of Normal Precipitation for October.

Precipitation for October varied from well-above to well-below normal across [west-central Texas](#). October rainfall was above normal in a west-southwest to east-northeast band across the central counties of west-central Texas (green and blue shading in Fig. 2). For most of the rest of the area, rainfall for October was below normal. In the far northwestern Big Country, rainfall for October was less than 25 percent of normal (red shading in Fig. 2).

October 2021 Weather Highlights

With the influence of an upper level disturbance in northeastern New Mexico, showers and thunderstorms with moderate to heavy rainfall affected the southern half of west-central Texas during the post-Midnight hours of Oct. 1.

Showers and thunderstorms with moderate to heavy rain affected the area north of Interstate 10 and south of Interstate 20, on the early morning of Oct. 2. The more concentrated area of showers and storms affected the area from San Angelo to Brownwood.

The rainfall Oct. 1-2 was beneficial in the short term, especially for locations which were dry during most of September.

With an upper level high pressure system over Texas, afternoon temperatures were very warm Oct. 7-10, and were accompanied by breezy south winds. Afternoon highs were in the 90s, with the warmest readings in the northern Big Country. A record high of 93 degrees was tied at Abilene on Oct. 9.

A band of thunderstorms affected much of the northern half of west-central Texas, on the late afternoon and evening of Oct. 10. The band of storms developed along a dryline, which moved east across the area. A few of the storms were strong to severe, with strong winds. A 65 mph wind gust was recorded at a Mesonet site 5 miles east-southeast of Stamford (Jones County). The Abilene Regional Airport recorded a wind gust of 61 mph. In Brown County, a large tree was blown down in Bangs, and a large tree was blown down on power lines near Early. Outside of the storms, gusty south to southwest winds occurred ahead of the dryline, and gusty west winds followed its passage. With the gusty west winds, an area of blowing dust was transported east across some of west-central Texas. This resulted in visibility reductions for a few hours, before the dust settled out. Winds shifted to the northwest during the night as a weak cold front moved across the area.

On Oct. 13, a large area of showers and thunderstorms with heavy rain moved slowly east across west-central Texas. This was associated with the remnants of tropical system Pamela, which made landfall as a hurricane on the west coast of Mexico. The remnants of this tropical system were transported over Texas, in southwest flow aloft. Very heavy rain in a short period of time caused street flooding in San Angelo. Rainfall amounts for Oct. 13 are shown in Figure 3.

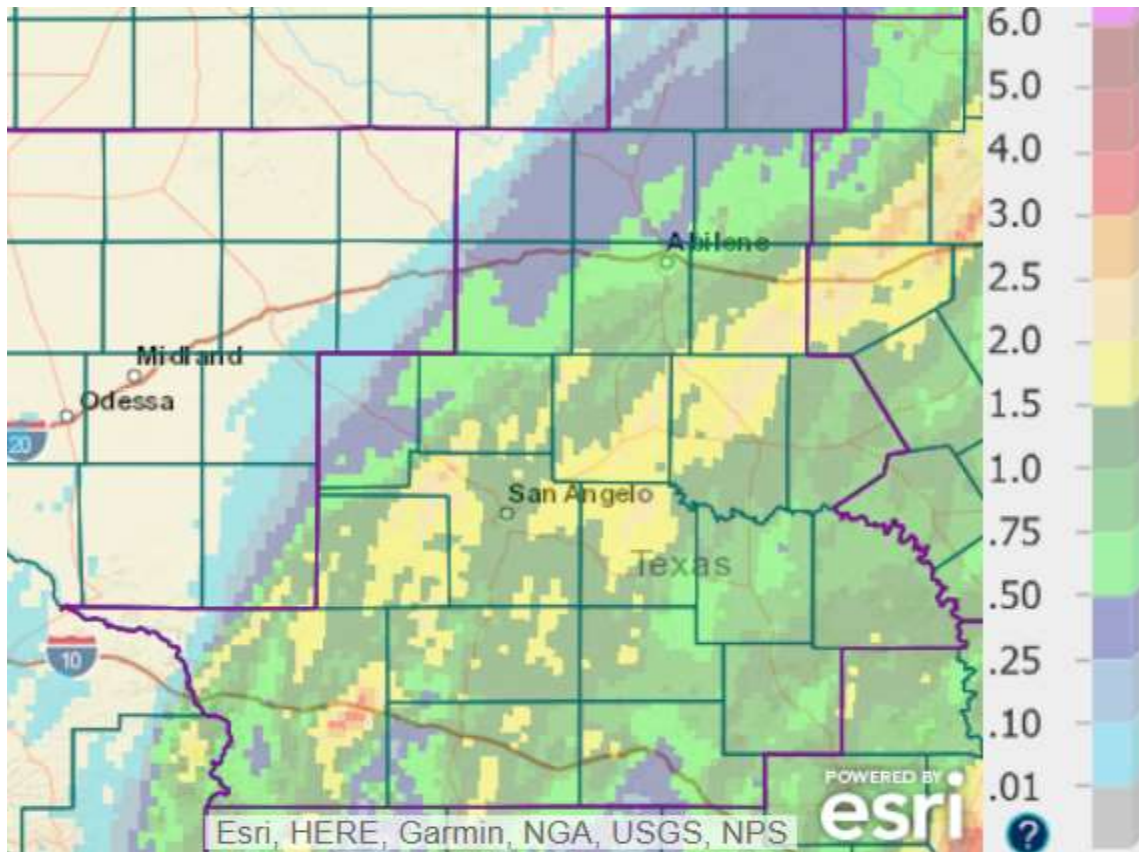


Figure 3: Rainfall for the 24-hour period ending at 7 AM CDT, Oct. 14.

Most of the southern and central parts of west-central Texas, along with the southeastern Big Country, received 1-3 inches of rainfall. The highest rainfall (3-4 inches) occurred in a small area east and south of Ozona (Crockett County). Despite the street flooding in San Angelo, this rainfall was beneficial in the short term for the area.

Much cooler air invaded the area, following a strong cold frontal passage Oct. 15. As a high pressure system settled into the area, a combination of generally clear skies, light winds and dry air allowed temperatures to dip into the mid 30s to mid 40s for early morning lows on Oct. 16-17. The table below shows the colder of the morning lows for Oct. 16-17, for a number of locations across the area. The lows at Abilene and San Angelo were still several degrees above their record lows.

Coollest Morning Low Temperatures (Oct. 16-17)

Location	Low/Date	Location	Low/Date
Abilene	42/16th	Menard	37/17 th
Brady	41/17th	Mertzon	38/16th
Brownwood	37/17th	Rotan (5 W)	39/16th
Clyde	40/16th	San Angelo	39/17th
Fort Lancaster	43/16th	Segovia (7 SSW)	45/16 th
Fort <u>McKavett</u>	37/17th	Sonora	41/17th
Haskell	39/16th	Stamford = (5 ESE)	39/16th
Junction Airport	38/17th	Sterling City = (4 WSW)	29/17th
Wall	39/17th	Weinert	39/16th

Warmer conditions followed Oct. 18-19, with breezy south winds and an increase in low-level moisture. Warm and humid conditions continued Oct. 20-23, with above normal temperatures and south winds. Hot afternoon temperatures occurred Oct. 24-25. New record highs were set at San Angelo (95 degrees) and Abilene (92 degrees) on Oct. 25.

With the arrival of an upper level storm system and strong cold front, a band of thunderstorms with strong winds moved quickly east across the area during the overnight hours of Oct. 26-27. Wind gusts were over 40 mph at a number of locations. The highest recorded wind gusts were 61 mph near Sterling City, and 60 mph at the Abilene Regional Airport.

In the wake of the cold frontal passage, much cooler air invaded the area and was accompanied by fairly strong, gusty northwest winds. A number of locations recorded wind gusts at or above 40 mph on Oct. 27, and across the Big Country and parts of the northern Heartland on Oct. 28.

A warming trend followed with highs back in the 80s on Oct. 30. A dry cold front moved south into the area on Oct. 31.

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