

## Climate and Weather Summary for March 2022

Temperatures in March averaged slightly below normal at San Angelo and Abilene. Precipitation was well-below normal at both locations. Table 1 summarizes March 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 Mar. Precipitation (In.)
Abilene	57.5°	-0.6°	58.1°	0.40"	-1.33"	1.73"
San Angelo	58.6°	-0.8°	59.4°	0.51"	-0.97"	1.48"

**Table 1: Mar. 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)	Coldest High Temperature (°F)	Coldest Low Temperature (°F)	Maximum Daily Precipitation (In.)
Abilene	95° on Mar. 28	63° on Mar. 28	39° on Mar. 11	17° on Mar. 12	0.30" Mar. 29
San Angelo	95° on Mar. 28	62° on Mar. 27	44° on Mar. 11	15° on Mar. 12	0.50" Mar. 29

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

- The monthly temperature range, between the warmest daily high temperature and coldest daily low temperature, was 80 degrees at San Angelo and 78 degrees at Abilene.

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

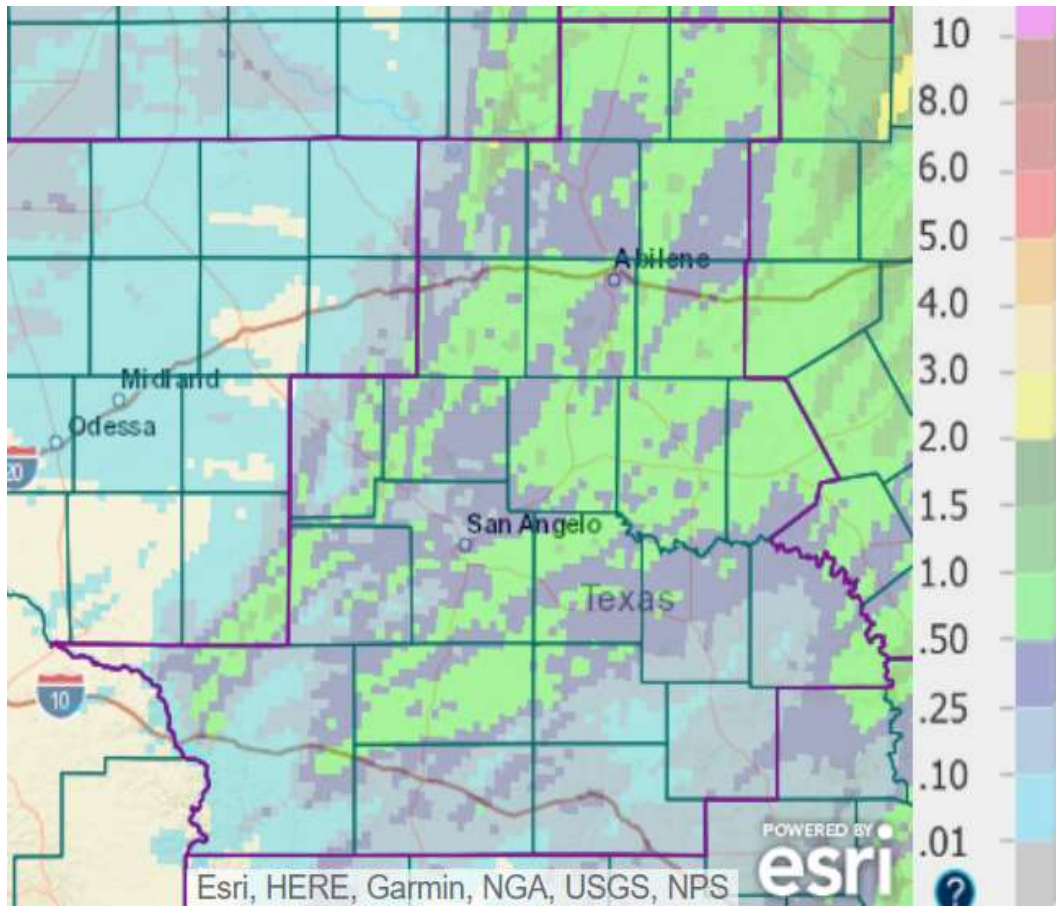
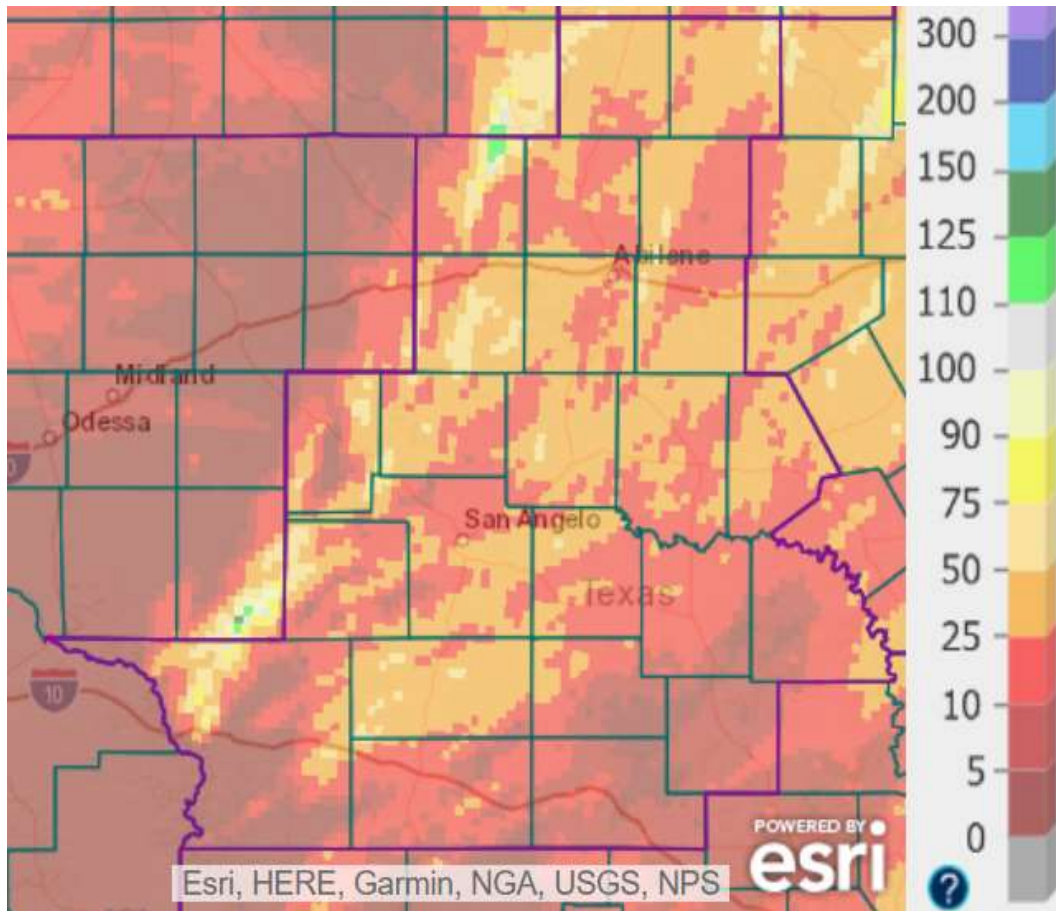


Figure 1: Total Precipitation for March.



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

Precipitation for March varied was well-below normal across nearly all of west-central Texas. Numerous locations received less than 25 percent of normal precipitation for the month (red shading in Fig. 2).

### **March 2022 Weather Highlights**

Early March was marked by a roller coaster pattern with the temperatures.

The pattern was spring-like with warm daytime temperatures Mar. 3-7. Daily highs were mostly in the upper 70s to lower 80s Mar. 3-4, and in the upper 70s to mid 80s on the March 5. Also on the 5<sup>th</sup>, a dryline advanced east across the northwestern half of the area. Afternoon relative humidity dropped to 5-15 percent behind the dryline.

A wide variety of weather occurred on Mar. 6. With a dryline retreat to the west during the previous night, moisture quickly returned to the area. The day started with widespread cloud cover and patchy drizzle. A strong cold front sagged south across the Big Country during the morning, reaching the northern Concho Valley and northern Heartland areas in the afternoon. Behind the front, temperatures were much colder in the upper 30s and 40s across the Big Country, with cloudy skies. Ahead of the front, temperatures warmed into the 70s and 80s. By 455 PM, there was a 46 degree temperature difference between Abilene (40 degrees) and San Angelo (86 degrees). A dryline entered San Angelo from the west

and southwest, bringing a brief intrusion of very dry air. Conditions were more humid in southeastern parts of the area, where some cloud cover lingered.

The strong cold front moved south across the rest of the area during the evening, and gusty north winds followed its passage. Between 8 PM and Midnight, a narrow band of showers with a few thunderstorms moved across the area east of a Throckmorton to Sonora line. By daybreak on Mar. 7, temperatures were in the upper 20s and 30s, with wind chill values in the upper teens and 20s across northern and central parts of the area.

The much cooler airmass remained over the area through Mar. 8. Temperatures were warm on Mar. 10 just ahead of a strong cold front, which moved south into the Big Country. Highs on Mar. 10 ranged from the lower 70s to lower 80s ahead of the front. In the wake of the strong cold frontal passage, temperatures were much colder on Mar. 11 (upper 20s to mid 30s), and accompanied by brisk north to northeast winds. With some cloud cover during the day, afternoon highs on Mar. 11 were in the upper 30s to mid 40s. Skies cleared and winds became light as a high pressure system settled across the area during the night. This resulted in very cold early morning lows on Mar. 12 (mostly in the teens to lower 20s).

During the middle of March, very dry airmasses were over west-central Texas. When combined with very dry vegetation and stronger and gusty winds at times, several grass and brush fires occurred. A dryline intrusion across central and southern parts of the area on the afternoon of Mar. 14 was followed by a cold frontal passage, and gusty northwest winds. Warm afternoon temperatures (in the lower to mid 80s) on Mar. 16 were combined with gusty south winds and minimum relative humidity values of 5-15 percent.

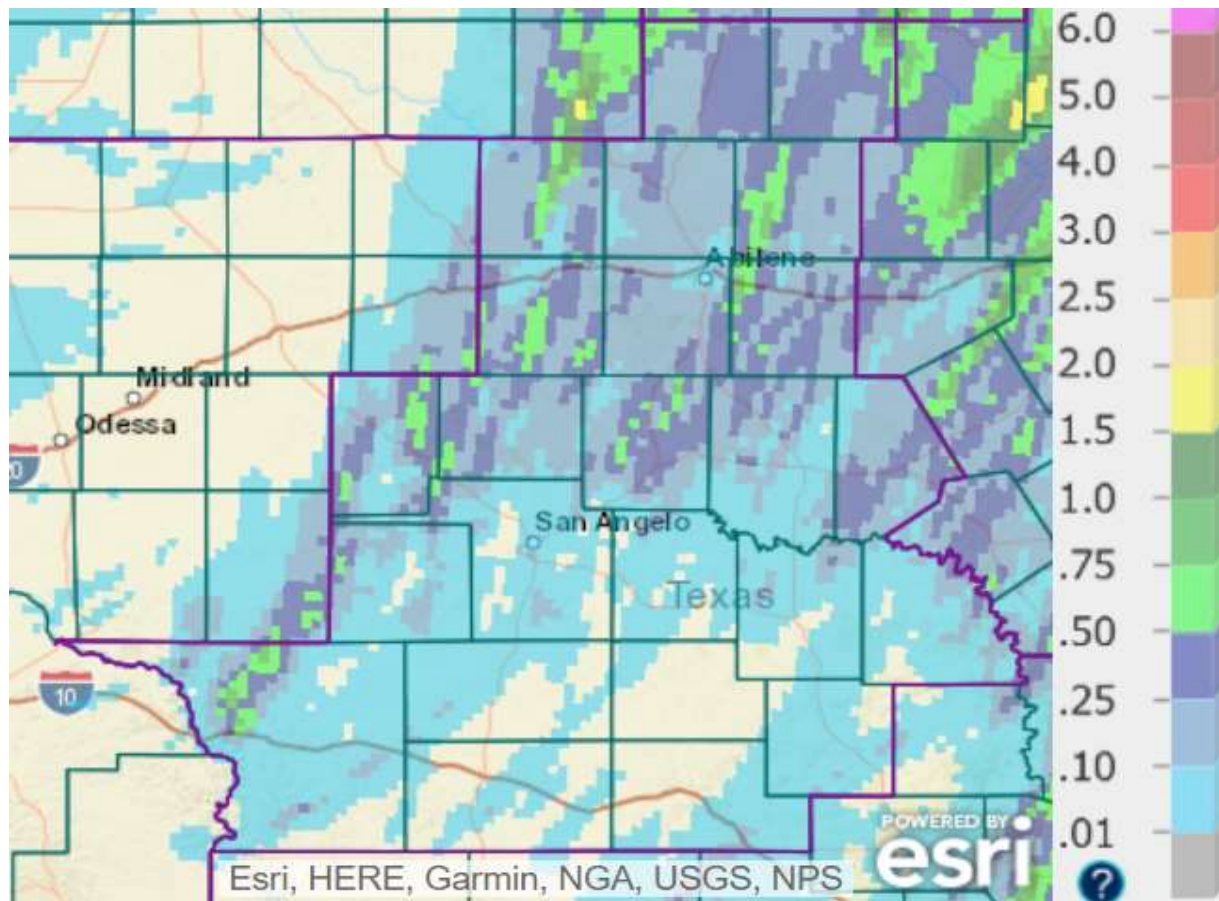
Critical to extreme fire weather conditions occurred Mar. 17, and this was facilitated by the passage of an upper level storm system just north of the area. Strong, gusty west winds were combined with warm afternoon temperatures (in the 80s) and very dry air. Relative humidity values dropped to 8-15 percent, and west winds of 40-55 mph were recorded. Peak recorded wind gusts were 56 mph at Abilene and 55 mph at San Angelo. Gusty northwest winds followed passage of a cold front late in the day.

This led to the development of new grass fires west of Barnhart (Chico Lane Fire in Reagan County), and in Sterling County (Edmunson Fire). In addition, the Crews Fire along the border of Runnels and Coleman Counties was reignited. With the strong and gusty winds, blowing dust was also transported aloft over the area.

Critical fire weather conditions occurred Mar. 20 with gusty south winds, afternoon highs in the upper 70s to lower 80s, and minimum relative humidity 10-20 percent. Peak recorded wind gusts were 46 mph at San Angelo and Abilene. With these conditions, the Ramsey Fire developed in Brown County, and expanded to the north. The area affected by this fire was from near Blanket north to near May. A few evacuation notices were posted for that area.

The arrival of an upper level storm system from New Mexico brought another active weather day, with thunderstorms, gusty winds, and an intrusion of very dry air to the Concho Valley and southern parts of the area. With the approach of this system, south winds brought a quick surge of moisture into the area in the morning. As a dryline entered the area from the west, showers and thunderstorms occurred, mostly in scattered bands. The coverage and rainfall amounts were higher across the northern half of

the area, and from Sterling County south-southwest into northern Crockett County. Rainfall amounts for Mar. 21 are shown in Figure 3.



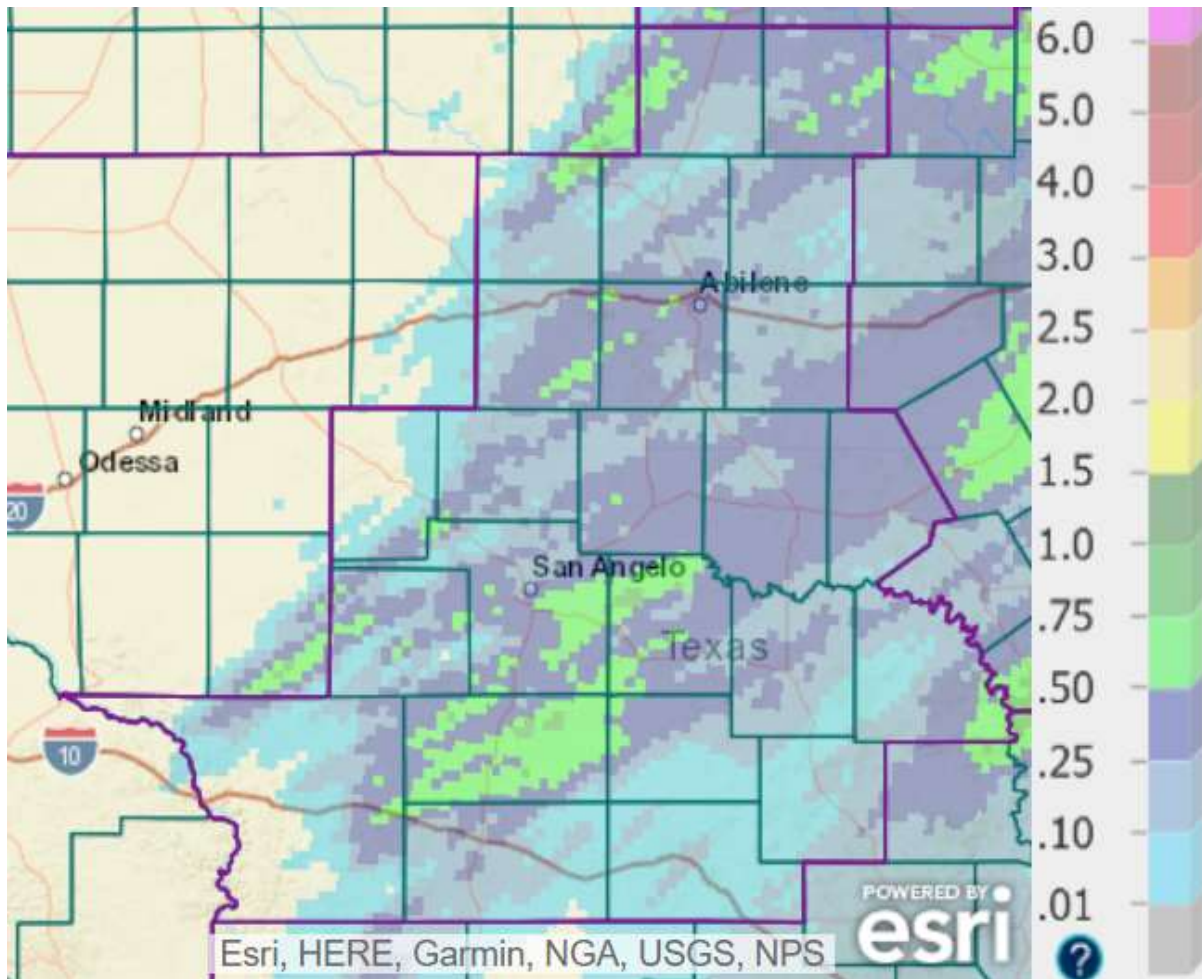
**Figure 3: Rainfall amounts for the 24-hour Period ending at 7 AM, Mar. 22.**

Small hail accompanied some of the storms, and localized wind damage to trailers and structures was reported at Lake Stamford. A small wildfire was reported near the town of Knickerbocker in Tom Green County, but this fire was subsequently extinguished. Peak wind gusts for Mar. 21 were 52 mph at Abilene, and 47 mph at San Angelo.

Dry conditions prevailed late in the month. Cooler temperatures Mar. 22-23 were followed by a strong warming trend. Afternoon temperatures were very warm Mar. 25-28. Afternoon highs were in the upper 80s to lower 90s on Mar. 26, and afternoon relative humidity values dropped to less than 10 percent across the area south of Interstate 20.

Strong to severe storms occurred during the night of Mar. 29. With the approach of an upper level storm system from New Mexico and the arrival of a Pacific cold front, thunderstorms developed, organized into a line, and moved quickly east across west-central Texas. The strongest storms occurred along a portion of the line which moved across the Concho Valley. Hail up to quarter size was reported near San Angelo and Ballinger, and hail to golfball size broke windows in some homes in Eldorado. Mesonet sites recorded wind gusts of 67 mph 2 miles north of Sherwood (Irion County) and 61 mph 2 miles east-northeast of Wall (Tom Green County). A total of [8 severe weather reports](#) were received for

this event. The line of storms contained brief heavy rain, and this was welcome given the worsening drought conditions across the area. Figure 4 shows the rainfall for the 24-hour period ending at 7 AM, Mar. 30.



**Figure 4: Rainfall amounts for the 24-hour Period ending at 7 AM, Mar. 30.**

Rainfall amounts were between one-quarter and three quarters of an inch across much of the area. Widely scattered locations received heavier amounts (one-half to one inch).

Windy and much cooler conditions followed Mar. 30, with passage of a secondary cold front. Peak recorded wind gusts were 44 mph at Abilene and 43 mph at San Angelo.

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