Climate and Weather Summary for March 2024

Temperatures in March averaged above normal at Abilene and San Angelo. Precipitation was below normal at Abilene and well-below normal at San Angelo. Table 1 summarizes March 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 Mar. Precipitation (In.)
Abilene	59.9°	1.8°	58.1°	1.94"	0.21"	1.73"
San Angelo	61.4°	2.0°	59.4°	0.40"	-1.08"	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	86° on ar. 13	66° on Mar. 31	54° on Mar. 16	33° Mar. 10, 26, 28	1.41" Mar. 7
San Angelo	90° on Mar. 31	65° on Mar. 31	56° on Mar. 17	30° on Mar. 26	0.24" Mar. 17

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

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

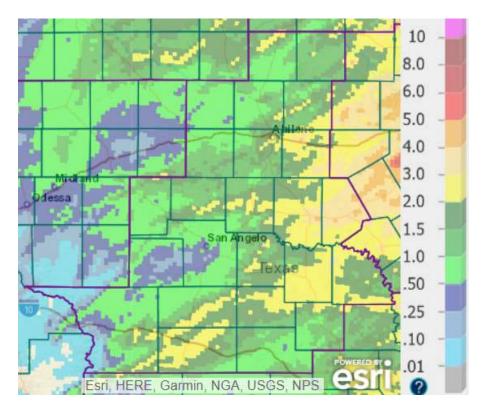


Figure 1: Total Precipitation for March.

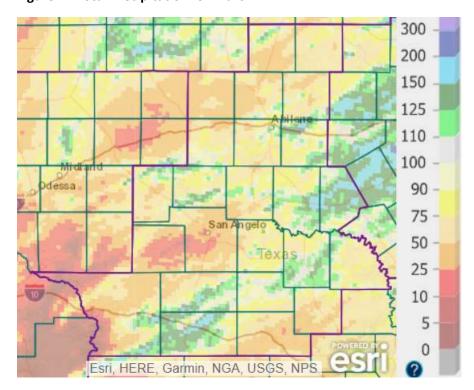


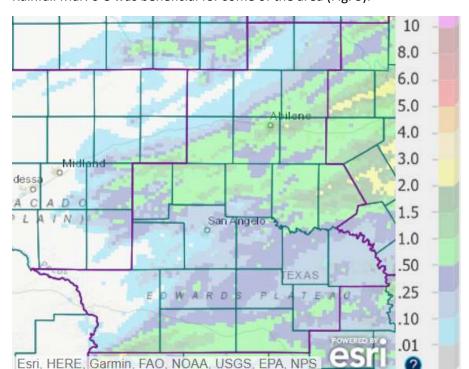
Figure 2: Percentage of Normal Precipitation for March.

March precipitation varied from much above to much below normal (Fig. 3). The monthly precipitation amounts varied from less than one quarter of an inch (medium blue shading in Fig. 1) to more than 4 inches (orange shading in Fig. 1).

March 2024 Weather Highlights

After a cold start to the day Mar. 1 (lows 30-35 degrees), temperatures rebounded into the mid 70s to near 80 for afternoon highs. With a warming trend in the following days, temperatures were well-above normal Mar. 3-4. At San Angelo and Abilene, lows were in the mid to upper 50s with highs in the lower to mid 80s. A weak cold front moved south across some of west-central Texas Mar. 5. Temperatures were a little cooler north of the front with highs in the 70s. South of the front, highs were in the 80s. The front briefly moved south of the area before retreating north as a warm front in the afternoon and evening of Mar. 6. Widely scattered showers and thunderstorms developed near this front across the Concho Valley and Heartland, north into the Big Country. Small hail accompanied a few of the storms.

With the approach of upper level disturbances from the west, showers and storms affected various parts of the area Mar. 7-8. Around midday into the early afternoon, a band of showers and storms with heavy rain occurred across Taylor and Callahan Counties (Abilene, Clyde and Baird areas). Localized flooding was reported. In the late afternoon into the evening hours, widely scattered thunderstorms occurred in the northern Concho Valley and northern Heartland areas (mostly from Coke County east across Coleman and Brown Counties). Quarter size hail was reported in the Coleman vicinity. During the post-Midnight hours (Mar. 8), an expansive area of showers and thunderstorms moved across southern and eastern parts of west-central Texas. These occurred mostly south of an Ozona to San Angelo to Cross Plains line.



Rainfall Mar. 6-8 was beneficial for some of the area (Fig. 3).

Figure 1: Rainfall for the 7-day Period Ending at 7 AM, March 10.

Far southern parts of the area, along with the northern Concho Valley, northern Heartland, and southern and eastern Big Country received 0.5 to 1.5 inches of rainfall, with a few localized higher amounts. At Abilene, a new daily rainfall record was set Mar. 7 (1.41 inches).

A fairly strong cold front moved south across the area Mar. 8 during day and early evening. Temperatures were much cooler behind the front with gusty north winds. A chilly airmass was over the area Mar. 9, with considerable cloud cover in the morning and early afternoon. Afternoon highs were in the mid to upper 50s across most of the area. A high pressure system settled across the area, and the setup brought a light freeze to numerous locations Mar. 10. A combination of clear skies and light winds allowed temperatures to drop into the upper 20s to mid 30s for morning lows Mar. 10 across most of the area.

A strong warming trend followed Mar. 11-13, as south winds returned and strengthened.

The overall weather pattern was unsettled Mar. 14-21. An upper level storm system was over the southwestern part of the U.S. In the southwest flow aloft ahead of this system, a series of disturbances moved into Texas.

With a strong cold frontal passage, golf ball size hail was reported with a severe storm in Ballinger Mar. 14 prior to Midnight. Other severe storms with large hail (size ranging from quarter to ping pong ball) affected southern and southeastern parts of the area on the morning of Mar. 15. From the results of a storm damage survey in McCulloch County (4 miles south-southwest of Rochelle), a tornado caused damage to a private property. A total of <u>9 severe weather reports (including the tornado)</u> were received with the Mar. 15 storms.

Following the cold frontal passage, temperatures were much cooler 15-17. Considerable cloud cover limited daytime highs to the mid 50s to mid 60s across most of the area on the 16th and 17th. Showers occurred in various parts of the area Mar. 16-17. Temperatures were warmer Mar. 20-22 and highs ranged mostly from the lower 70s to lower 80s on the 22nd. Scattered showers and thunderstorms occurred in mainly the northern and central parts of the area on the afternoon and evening of March 21. Quarter size hail was reported with a storm in Brown County (5 miles east-northeast of Lake Brownwood).

With the approach of a strong upper level disturbance from the southwestern states, showers and thunderstorms expanded in coverage and moved east across the area, from the evening of Mar. 24 into the early morning of Mar. 25. Small hail accompanied some of the storms, but no severe weather was reported. Windy conditions occurred Mar. 24 (gusty south winds) and Mar. 25 (gusty west winds). Peak wind gusts on the 25th were 40-45 mph at several locations, including Abilene (44 mph) and San Angelo (43 mph).

With clearing skies and winds becoming light, a light freeze occurred Mar. 26, with early morning lows in the upper 20s to lower 30s across much of the area. This occurred as a high pressure system settled south into Texas. The month ended with a warming trend Mar. 28-31, and temperatures were well-above normal with breezy south winds on Easter weekend. Record warm low temperatures for Mar. 31 were set at Abilene (66 degrees) and tied at San Angelo (65 degrees).

Additional Tabular and Graphical Daily Climate Data