## Climate and Weather Summary for March 2023

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 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	58.7°	0.6°	58.1°	1.05"	-0.68"	1.73"
San Angelo	60.2°	0.8°	50.4°	0.57"	-0.91"	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	90° Mar. 11, 22	65° on Mar. 23	52° on Mar. 8	32° on Mar. 19	0.40" Mar. 24
San Angelo	93° on Mar. 11	68° on Mar. 23	54° on Mar. 17	34° on Mar. 19	0.39" Mar. 24

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

- Early season severe weather event Mar. 2.
- Gusty winds occurred on numerous days during the month.

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

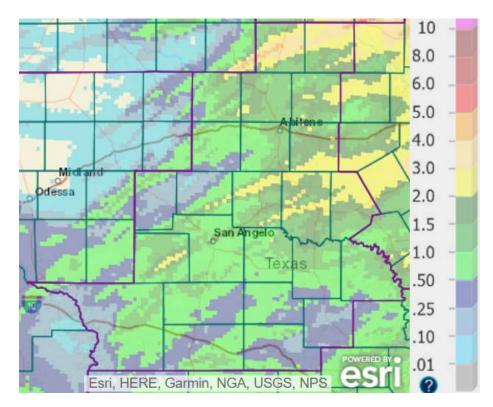


Figure 1: Total Precipitation for March.

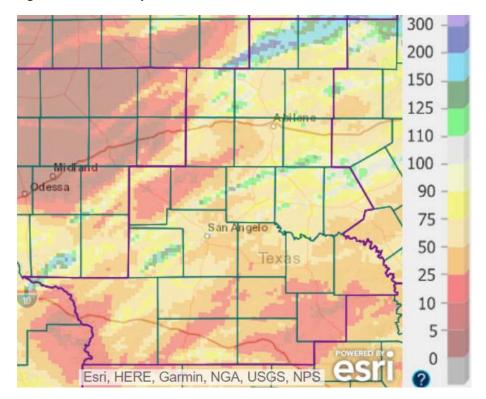


Figure 2: Percentage of Normal Precipitation for March.

March precipitation was below normal for much of west-central Texas, with a few pockets of above normal precipitation (Fig. 2). The highest monthly precipitation (3-5 inches) was in a band across Haskell and Throckmorton Counties (Fig. 1). Where March precipitation was less than one-half inch (blue shading in Fig. 1), the monthly precipitation was less than 25 percent of normal (red shading in Fig. 2).

## March 2023 Weather Highlights

A fairly significant early season severe weather event occurred Mar. 2, with the arrival of a strong upper level disturbance. An extensive band of strong to severe thunderstorms developed along a Pacific cold front and moved quickly east across the area, during the afternoon and early evening hours. Strong and damaging winds accompanied this band of storms. In Taylor County, a semi-truck was blown over onto a pickup truck on Highway 277 near the town of Impact. In Abilene, trees were blown over onto power lines, causing a power outage. In Brownwood, strong winds caused considerable roof and building damage to apartment buildings. Trees were also blown down 2 miles east-southeast of Brownwood. Additional wind damage was reported at Camp Bowie (4 miles south-southeast of Brownwood), where wind speeds were estimated at 90 mph. A West Texas Mesonet station near Menard recorded a 73 mph wind gust. In Menard, telephone lines were blown down on the north side of town, and roof damage was reported with 3 buildings. Several tree limbs were blown down in the Menard area, and strong winds may have caused collapse of an old building. In all, a total of 18 severe weather reports were received for this event.

Strong, gusty west winds followed passage of the Pacific cold front, and this transported blowing dust over western and central parts of west-central Texas. Wind gusts were 50-60 mph at area Mesonet sites across the Concho Valley, and a 59 mph gust was recorded at the San Angelo Airport.

On March 8, clusters of thunderstorms developed across the Big Country in the afternoon, mainly north of Interstate 20. A couple of storms produced quarter size hail (Haskell and Throckmorton Counties). Later in the evening, thunderstorms regenerated over Haskell County, bringing heavy rainfall which caused flooding. Street flooding and road closures were reported in the Haskell vicinity. Hail and flooding reports from March 8.

Considerable temperature fluctuations occurred in the early and middle parts of March. Periods of well-above normal daytime temperatures were interspersed with several strong cold frontal passages, and intrusions of much cooler air. The first day of the year with more widespread 90 degree temperatures occurred Mar. 11. With passage of a dryline, gusty south to southwest winds and ample sunshine, temperatures soared to 90-93 degrees for afternoon highs.

Very windy conditions occurred Mar. 15-16. The stronger winds on the 15<sup>th</sup> occurred in the afternoon and evening hours. Several locations recorded peak gusts over 40 mph, including Abilene (51 mph). On the 16<sup>th</sup>, a dryline advanced east across the area in the afternoon, and was followed by a cold frontal passage from the north in the evening and early nighttime hours. Gusty southwest to west winds occurred behind the dryline, followed by gusty northwest to north winds behind the cold front. Several locations recorded peak gusts over 40 mph, including San Angelo (54 mph). A few isolated thunderstorms occurred along the dryline in southeastern parts of the area. Light rain occurred during the overnight and early morning hours of Mar. 16-17, mainly across central and southern pats of the area. Rainfall amounts generally varied under one quarter of an inch.

Temperatures were colder Mar. 17-20, hen daily highs were well-below normal. This was followed by a strong warming trend Mar. 21-22. With windy conditions Mar. 21, peak wind gusts from the south were 50 mph at Abilene and 43 mph at San Angelo. Highs on Mar. 22 were mostly in the upper 80s to lower 90s, with breezy south to southwest winds.

<u>Severe weather</u> occurred during the post-Midnight hours Mar. 24, after a Pacific cold front overtook a dryline and moved east across the area. Gusty west winds developed during the day Mar. 24, bringing much drier air into the area. A peak gust of 47 mph was recorded at San Angelo.

Gusty south winds occurred Mar. 30, and peak gusts were 48 mph at San Angelo and 43 mph at Abilene. Gusty west-northwest winds occurred Mar. 31, following passage of a pacific cold front. This brought much drier air into the area. A peak gust of 48 mph occurred at Abilene.

Additional Tabular and Graphical Daily Climate Data