Climate and Weather Summary for February 2023

Temperatures in February averaged well-above normal at Abilene and San Angelo. Precipitation was below normal at both locations. Table 1 summarizes February 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 Feb. Precipitation (In.)
Abilene	50.8°	0.7°	50.1°	1.36″	0.07″	1.29"
San Angelo	51.0°	-0.5°	51.5°	0.91″	-0.29"	1.20"

Table 1: Feb. 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	88° on Feb. 21	56° Feb. 20-22	30° on Feb. 1	20° on Feb. 11	0.38" Feb. 14
San Angelo	89° on Feb. 21	53° on Feb. 22	31° on Feb. 1	23° on Feb. 17	0.30" Feb. 8

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

- Freezing rain and ice at the beginning of the month (Feb. 1).
- Considerable temperature fluctuations occurred during the month.

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



Figure 1: Total Precipitation for February.



Figure 2: Percentage of Normal Precipitation for February.

February precipitation varied from less than one quarter of an inch in the far southern part of the area (light blue shading in Fig. 1), to 2-3 inches in much of the <u>Big Country</u>, much of Brown and southeastern

Coleman Counties (yellow shading in Fig. 1). Precipitation for February was above normal across most of the <u>Big Country</u>, and in the northwestern <u>Concho Valley</u> (Fig. 3). For the area generally south of an Ozona to San Angelo to Richland Springs line, the monthly precipitation was generally below normal (Fig. 3).

February 2023 Weather Highlights

The winter weather event, which began at the end of January (Jan. 30-31), continued into the first couple of days in February. With temperatures below freezing and upper level disturbances tracking northeast across the area, occasional freezing precipitation continued Feb. 1. The precipitation was mostly light freezing rain, which was mixed with sleet at times. This precipitation caused a glaze of ice to form on area roads, bridges and overpasses, along with tree branches and elevated objects. Travel conditions were very hazardous across the area. Conditions finally began to improve Feb. 2 as temperatures climbed above freezing and allowed the ice to melt.

During the month, a series of upper level storm systems tracked from the southwestern states across the southern Plains. The arrival of these systems brought showers and some thunderstorms to the area. Temperatures fluctuated considerably, with warmups ahead of these systems and much cooler conditions following several of the cold frontal passages. The weather patterns also resulted in gusty winds on a number of days during the month.

With a strong warming trend, temperatures climbed into the mid to upper 70s for highs Feb. 5, and in the 70s to around 80 degrees for highs Feb. 6. Breezy south-southwest winds accompanied the warm temperatures Feb. 6.

Cooler temperatures followed Feb. 7, with passage of a cold front. Isolated to scattered light rain showers occurred behind the front. With the approach of a strong upper level storm system from New Mexico, scattered to numerous showers and a few thunderstorms occurred between Midnight and 10 AM on Feb. 8. Rainfall amounts for Feb. 7-8 are shown in Fig. 3.



Figure 3: Rainfall Amounts for the 7-day Period ending at 6 AM, Feb. 10.

Gusty north-northwest winds followed a dry cold frontal passage Feb. 9. Temperatures were colder Feb. 10 with highs in the mid 40s to lower 50s.

Fairly strong, gusty winds occurred Feb. 13-15. Peak gusts were around 40 mph from the south on Feb. 13. Showers and isolated thunderstorms occurred across mainly the northern and central parts of the area, during the post-Midnight hours of Feb. 14 with the approach of an upper level disturbance. Rainfall amounts (not shown) varied from one tenth to one half inch, with localized higher amounts. Gusty west-southwest winds followed passage of a Pacific front. Peak gusts were 58 mph at Abilene and 48 mph at San Angelo. Temperatures were warm on Feb. 15, and passage of a dryline brought an intrusion of very dry air. Highs were in the lower to mid 80s, and minimum relative humidity values were in the single digits and teens. Following a cold frontal passage in the evening and nighttime hours, temperatures were much colder Feb. 16-17. Afternoon temperatures were generally in the 40s on Feb. 16, and highs were mostly in the 50-55 degree range on Feb. 17. A combination of clear skies, light winds and dry air aided in temperatures dropping into mostly the 20-25 degree range for morning lows on Feb. 17. This occurred as a high pressure system settled into the area. Temperatures remained chilly through Feb. 17 with highs in the lower to mid 50s.

A strong warming trend Feb. 19-21 was accompanied by gusty southwest winds. Highs were mostly in the 80-85 degree range Feb. 20, and in the mid to upper 80s Feb. 21. With the approach of another upper level disturbance, scattered showers occurred in the early morning hours Feb. 22. Following a Pacific frontal passage, gusty west-southwest winds occurred Feb. 22.

Temperatures trended much cooler following a cold frontal passage from the north Feb. 23. Temperatures were colder and more winter like area wide with cloudy skies Feb. 24. Afternoon temperatures ranged from the mid to upper 30s across the Big Country, to 50-55 degrees along the Interstate 10 corridor.

With the approach of a strong upper level storm system from the southwestern states, much warmer temperatures Feb. 26 were accompanied by fairly strong, gusty south winds.

Strong, gusty west winds followed passage of a Pacific front in the evening.

Additional Tabular and Graphical Daily Climate Data