Climate and Weather Summary for January 2021

Temperatures in January averaged near to slightly above normal at San Angelo and Abilene. Precipitation was above normal at both locations. Table 1 summarizes January, 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 January Precipitation (In.)
Abilene	45.7°	0.8°	44.9°	1.20”	0.18”	1.02”
San Angelo	46.7°	0.2°	46.4°	1.17”	0.24”	0.93”

Table 1: January 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	75° on Jan. 18	49° on Jan. 24	41° Jan. 8, 10-11	25° on Jan. 12	0.74” Jan. 10
San Angelo	76° on Jan. 18	58° on Jan. 24	40° on Jan. 11	22° on Jan. 16	0.58” Jan. 10

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

- Total snowfall for January was 5.3 inches at Abilene, and 3.8 inches at San Angelo.

A Map of total precipitation for January is shown in Figure 1 (below).

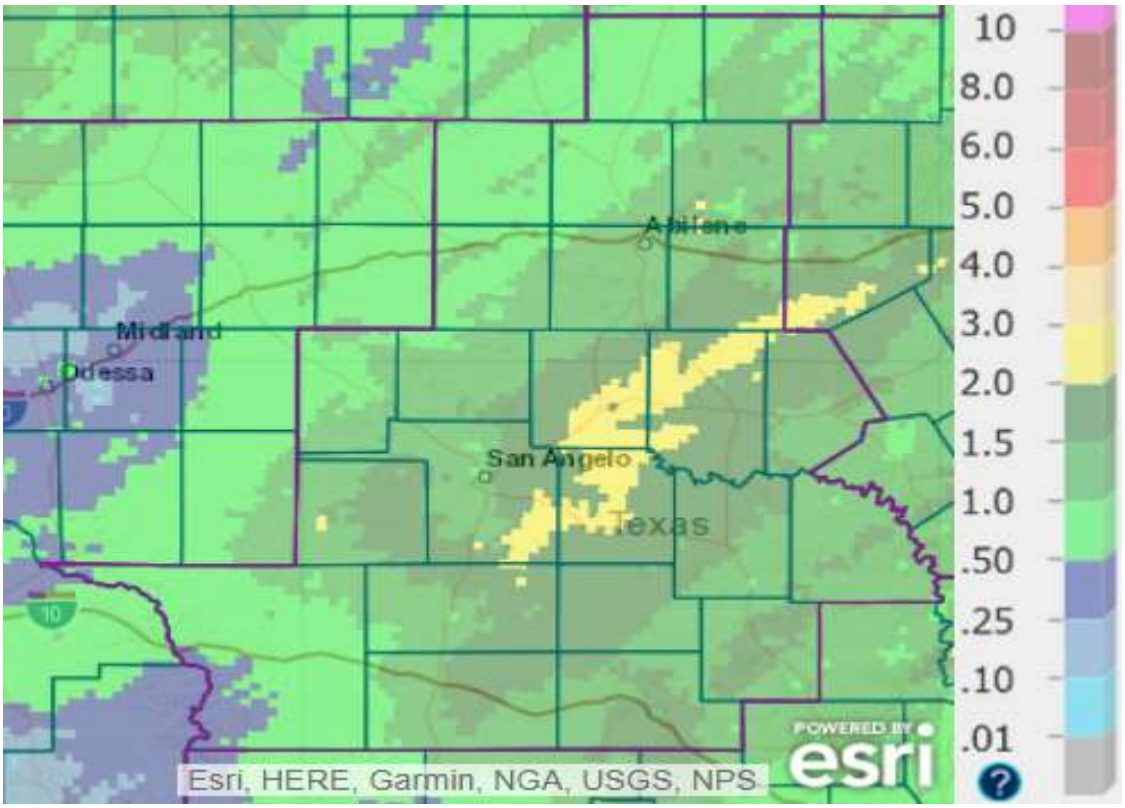


Figure 1: Total Precipitation for January.

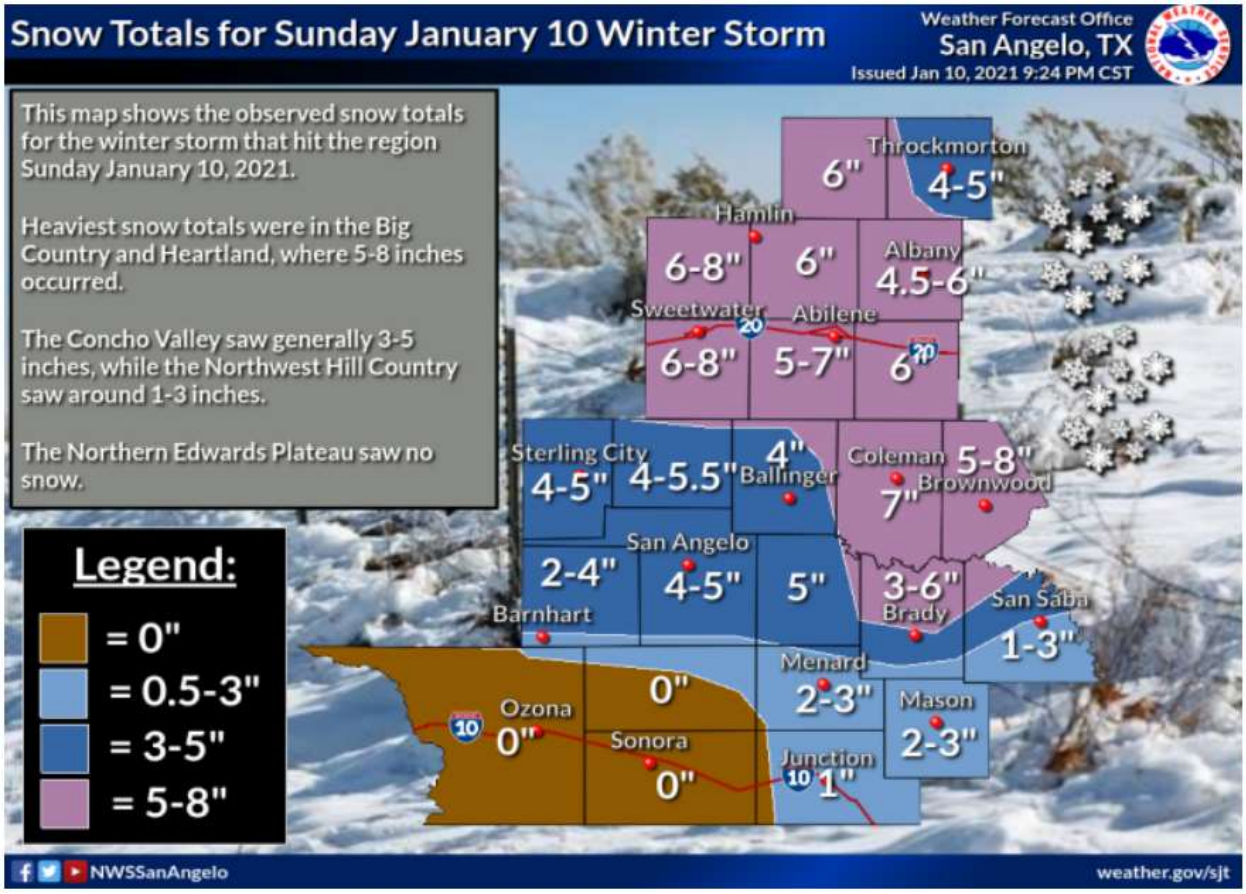
January total precipitation was 1-3 inches across a large part of west-central Texas (medium to dark green and yellow shading in Fig. 1). Parts of the area (northern and western Big Country, some of Crockett County, and part of Sterling County) recived less than one inch (light green shaded areas). Precpitation for January was near to slightly below normal across the northern and western Big Country, and across central and southern parts of Crockett County. The monthly precipitation generally above normal across the rest of west-central Texas.

Weather Highlights:

The weather pattern was quiet with dry conditions during the first week of January.

With considerable cloud cover and northeast winds on Jan. 8, temperatures were colder with highs mostly in the lower to mid 40s across northern and central parts of west-central Texas. On the early morning of Jan. 9, patchy fog and freezing fog, locally dense, occurred across the area generally west of a Rotan to Junction line.

A winter weather event occurred on Jan. 10, with the approach and arrival of an upper level storm system from southeastern New Mexico. Heavy snow occurred across most of the northern and central parts of west-central Texas. A cold rain changed to snow across southeastern parts of the area, where snow accumulations were lower. The precipitation was just rain across most of the Northern Edwards Plateau. Total snow accumulations for this event are shown on the map below.



This was the second winter weather event to affect west-central Texas in only 10 days (previous event was on New Year's Eve).

Dry conditions occurred Jan. 11-18, with a couple of cold frontal passages. In the wake of the Jan. 14 cold frontal passage, north wind gusts of 40-50 mph occurred across the Big Country and much of the Concho Valley. Gusty northwest winds occurred across northeastern parts of the area on Jan. 15, when Abilene Regional Airport recorded a peak gust of 45 mph.

A quick warmup on Jan. 18 was accompanied by gusty south winds. Across southern and central parts of the area north to Interstate 20, highs were in the lower to mid 70s. A peak wind gust of 42 mph was recorded at Abilene.

Wet and much cooler conditions occurred Jan. 19-20. With southwest flow aloft over the area, an upper level disturbance brought numerous showers on Jan. 20-21. Rainfall amounts are shown in Figure 3.

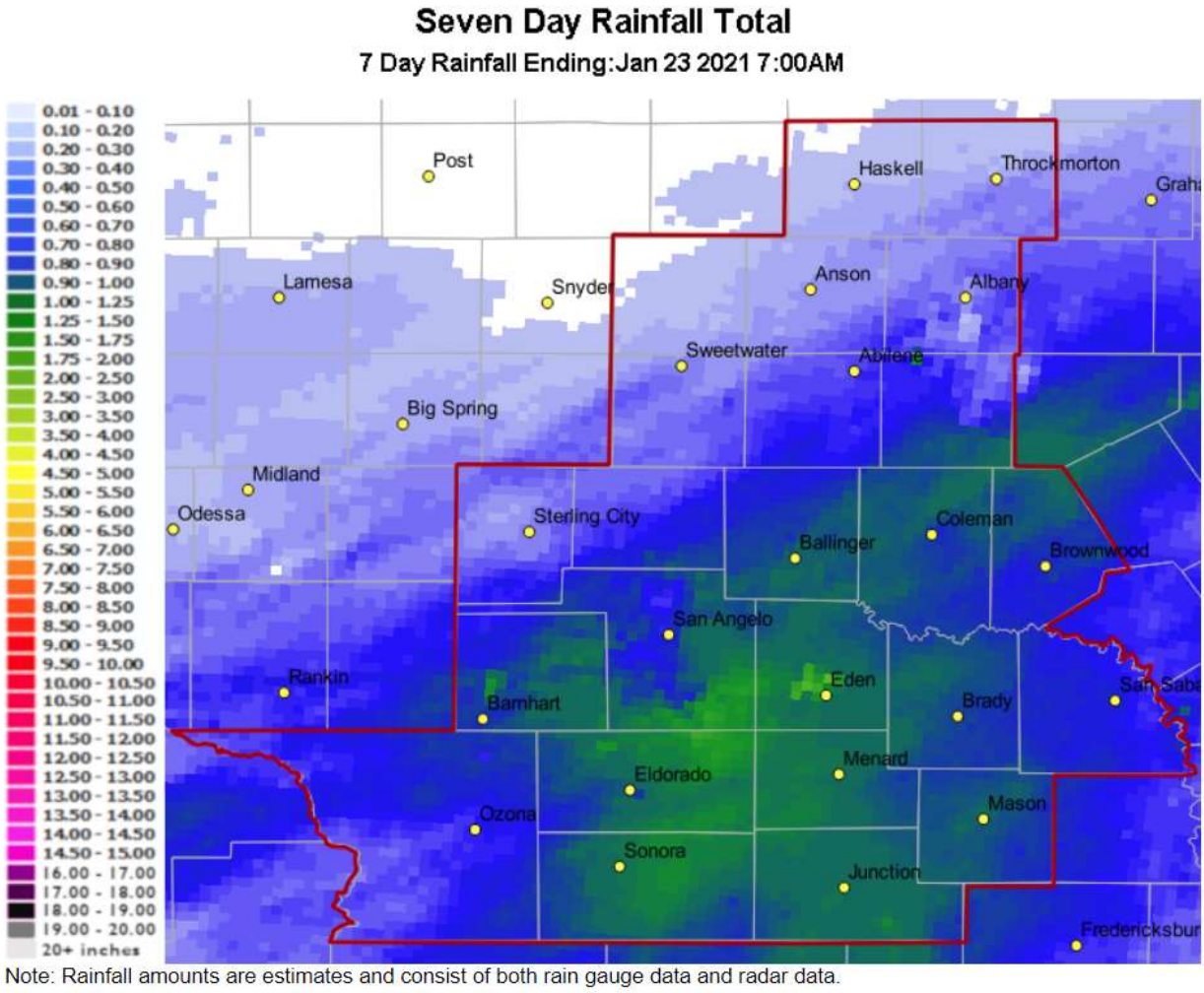


Figure 3: Rainfall for the 7-day period ending at 6 AM, Jan. 23. This captured the rain event Jan. 20-21.

The higher rainfall amounts (1-2 inches) occurred across some of the central and southern parts of west-central Texas (green shading in Fig. 3).

With considerable low-level moisture remaining in the area, occasional fog (locally dense) occurred across various parts of west-central Texas Jan. 21-24. Isolated to scattered showers and thunderstorms occurred on Jan. 24 with the approach of an upper level disturbance from New Mexico, and with the arrival of a cold front from the northwest. The coverage was a little higher across the Big Country, eastern Concho Valley, and Heartland areas. A few locations received rainfall amounts between one quarter and three quarters of an inch.

Gusty west-northwest winds occurred on Jan. 25, following an overnight cold frontal passage. Peak wind gusts were over 40 mph at several locations across the northern half of west-central Texas, including San Angelo (47 mph) and Abilene (42 mph).

Jan. 30, isolated thunderstorms, strong, gusty west winds, area of blowing dust. Intrusion of much drier air with afternoon relative humidity values dropping to between 10 and 20 percent.

Active weather occurred on Jan. 30 with isolated thunderstorms, strong and gusty west winds, and blowing dust. An upper level storm system moved from New Mexico northeast across the northwestern part of Texas, and across the southern Plains. With the approach of this system, a few showers and thunderstorms occurred during the post-Midnight hours of Jan. 30. Rainfall amounts varied under one quarter of an inch, and were mostly less than one tenth of an inch. Gusty west winds followed a morning passage of a Pacific cold front, and continued through the afternoon. The table below shows where peak wind gusts of at least 40 mph were recorded.

Location	Peak Wind Gust (mph)
Rotan (5 W)	54
Abilene (Airport)	54
Haskell	50
Stamford	50
Throckmorton	50
Sweetwater (11 SW)	48
Clyde	47
Sterling City (4 WSW)	46
San Angelo (Airport)	46
Wall	43
Fort Chadbourne	42
Fort Lancaster	42
Mertzon	40

With this setup, an area of blowing dust overspread approximately the northern half of west-central Texas during the afternoon and early evening hours. Visibility was reduced to 2-4 miles, and less than 2 miles in localized areas. A satellite loop, showing the east-southeast transport of this blowing dust, was included in a social media post from our office. The west winds brought an intrusion of much drier air, and afternoon relative humidity values dropped into the 10-15 percent range across the area.

Additional Tabular and Graphical Daily Climate Data