# Climate and Weather Summary for January 2018

Temperatures for the month averaged above below normal at Abilene and San Angelo. Table 1 summarizes January 2018 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 (ln.)	Departure from Normal (In)	Normal January Precipitation (In.)	Total Snowfall (ln.)
Abilene	42.7°	-2.2°	44.9°	Tr	-1.02″	1.02"	Trace
San Angelo	44.5°	-1.9°	46.4°	0.01″	-0.92″	0.93″	Trace

## 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	77° on Jan. 31	48° on Jan. 21	23° on Jan. 1	5° on Jan. 17	Tr on Jan. 2, 7, 15, 25
San Angelo	77° on Jan. 20, 21	47° Jan. 10, 26	24° on Jan. 1	10° on Jan. 17	0.01" Jan. 27

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

- Monthly precipitation was well-below normal at Abilene and San Angelo.
- Monthly temperature range (from warmest high temperature to coldest low temperature) was 72 degrees at Abilene and 67 degrees at San Angelo.
- At Abilene, a record low of 9 degrees was tied on Jan. 1.
- At San Angelo, a new record low maximum temperature of 25 degrees was set on Jan. 2. A record low temperature of 10 degrees was set on Jan. 17.

A map of total precipitation for January is shown in Figure 1.



### Figure 1: Total Precipitation for January.

Precipitation for January was varied under one quarter of an inch for the vast majority of west-central Texas. Only the far northwestern and far southeastern parts of the area, with isolated other locations, received higher (quarter to half inch) amounts. While January is climatologically one of the driest months of the year in west-central Texas, these amounts were well-below normal.

### Weather Highlights:

Dry conditions were prevalent during the month.

An arctic airmass gripped the region during the first couple of days in January. Cloud cover was persistent across much of the area, and scattered snow flurries occurred with no accumulation.

With a combination of brisk north-northeast winds and <u>very cold temperatures on the early morning of</u> <u>New Year's Day</u>, wind chill values were in the zero to 5 below zero range across the Big Country area, and in the single digits farther south. Abilene tied the record low of 9 degrees on Jan. 1, and San Angelo set a new record low maximum temperature of 25 degrees on Jan. 2.

Temperatures moderated across the area Jan. 3-5. With dry air and generally clear skies, daily temperature ranges (between the early morning lows and afternoon highs) were 35-45 degrees across some of the area. Afternoon high temperatures were well-above normal on Jan. 9-10. The anomalously warm temperatures on the 10<sup>th</sup> were accompanied by gusty south-southwest winds.

With the approach of an upper level storm system and arrival of a Pacific cold front, gusty west winds occurred across western parts of the Big Country and Concho Valley on the evening of Jan. 10. A few

locations recorded 45-50 mph wind gusts. Visibility was reduced to some extent, as dust from West Texas was transported into the area with these west winds.

Winds were gusty again on Jan. 11 and were from the north, following passage of a secondary cold front.

An arctic airmass invaded the area on Jan. 15, following passage of a strong cold front during the afternoon and evening hours. In the wake of this frontal passage, fairly strong, gusty north winds occurred and lasted through the overnight into the morning of Jan. 16. Peak wind gusts on Jan. 15 were in the 35-45 mph range across most of the area. Temperatures dropped sharply into the 15-25 degree range, and wind chill values ranged from zero to 5 degrees across the northern third of west-central Texas, to the teens south. A little patchy light winter precipitation (freezing rain, sleet and snow) occurred across mainly the central and southern parts of the area.

The very cold airmass remained in place through Jan. 17. Early morning low temperatures on the 17<sup>th</sup> were in the single digits across much of the Big Country, and parts of the Concho Valley and Heartland areas. A new record low of 10 degrees was set at San Angelo.

A strong temperature recovery occurred by Jan. 19, with ample sunshine and gusty south-southwest winds. Daytime temperatures warmed into the 70s for highs on Jan. 20-21, and were well-above normal for the time of year.

Gusty west winds followed passage of a dryline and weak cold front on Jan. 21. The higher gusts (mostly in the 35-45 mph range) occurred across the Big Country. The highest recorded gust was 51 mph at a TTU Mesonet station 11 miles southwest of Sweetwater. These winds transported blowing dust across the Big Country, reducing visibilities to 2-4 miles at times. These conditions occurred as a result of a potent upper level storm system, which tracked from the border of Colorado and New Mexico, into Kansas on the 21<sup>st</sup>.

The weather pattern was tranquil on Jan. 23-24, with generally clear skies and light winds under the influence of a high pressure system over the southern Plains and Texas. With very dry air in place, rather cold early mornings were followed by strong daytime temperatures recoveries. Dry conditions continued through the end of the month. Temperatures were well above normal on Jan. 31, with highs in the 70s.

Additional Tabular and Graphical Daily Climate Data