

## Climate and Weather Summary for December 2016

Temperatures averaged slightly above normal for the month. Table 1 summarizes December 2016 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 December Precipitation (In.)	Total Snowfall (In.)
Abilene	46.5°	+1.2°	45.3°	1.39"	0.16"	1.23"	Trace
San Angelo	49.5°	+2.8°	46.7°	0.74"	-0.11"	0.85"	Trace

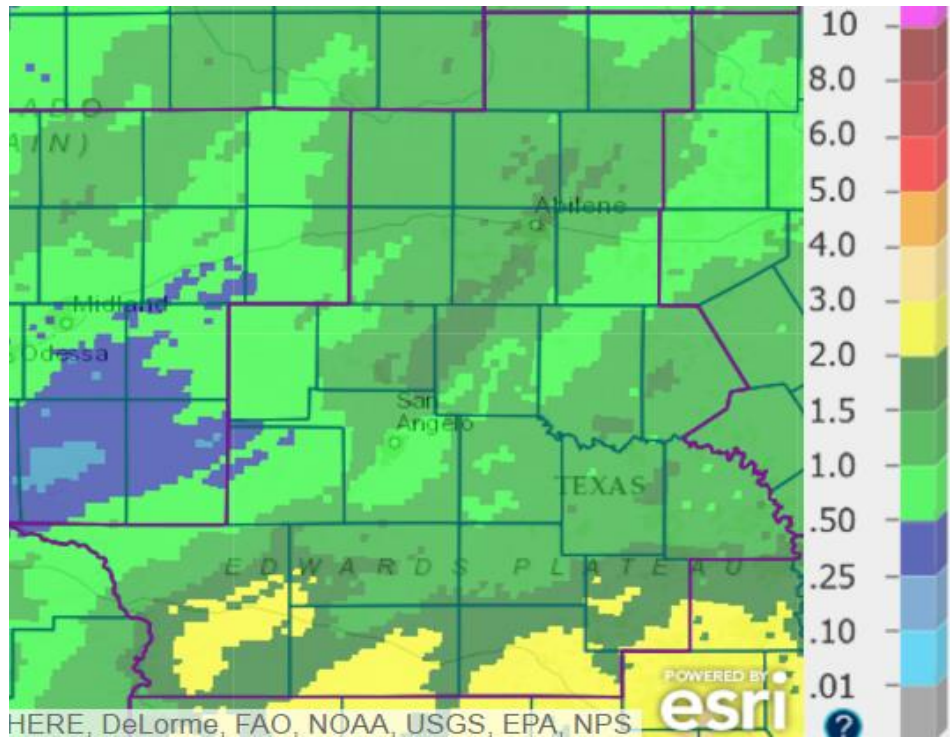
**Table 1: December Climate Data for Abilene and San Angelo.**

Additional temperature and precipitation data for Abilene and San Angelo is summarized in Table 2.

Site	Warmest High Temperature (°F)	Warmest Low Temperature (°F)	Coolest High Temperature (°F)	Coolest Low Temperature (°F)	Maximum Daily Precipitation (In.)
Abilene	78° on Dec. 28	54° on Dec. 25	26° on Dec. 18	10° on Dec. 18	0.78" on Dec. 2
San Angelo	84° on Dec. 17, 28	53° on Dec. 25	31° on Dec. 18	17° on Dec. 18	0.38" on Dec. 3

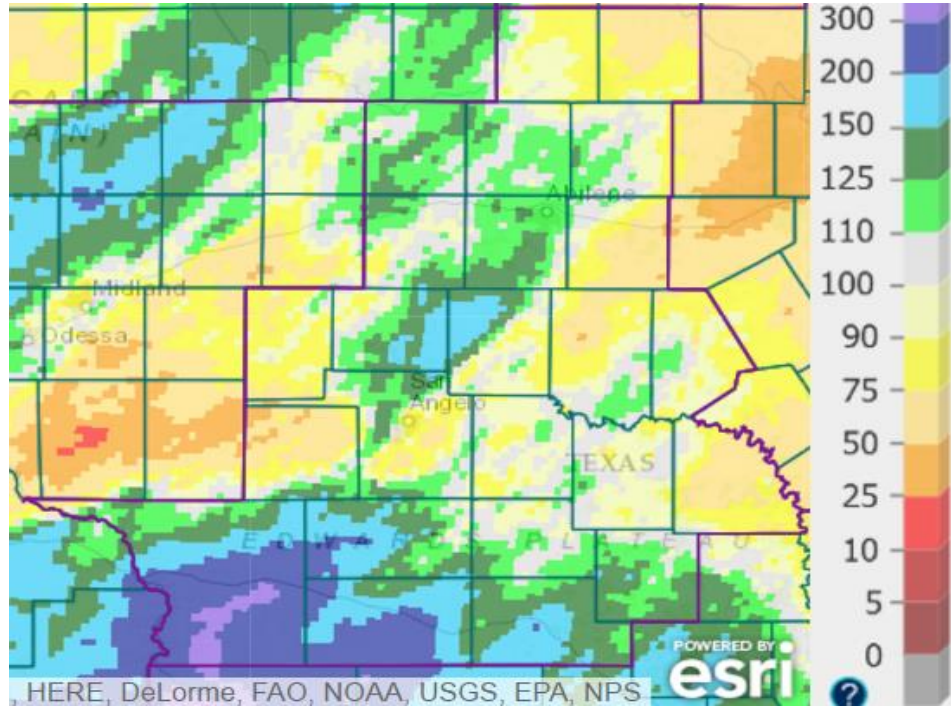
**Table 2: Additional December Climate Data for Abilene and San Angelo.**

Maps of total precipitation for December (Figure 1) and percent of normal precipitation for the month (Figure 2) are shown below. Much of the precipitation in Figure 1 occurred in the December 2-5 time frame.



**Figure 1: Total Precipitation for December.**

December precipitation varied considerably from one quarter to one-half inch in parts of the western [Concho Valley](#), to between 2 and 3 inches in some of the southern parts of west-central Texas.

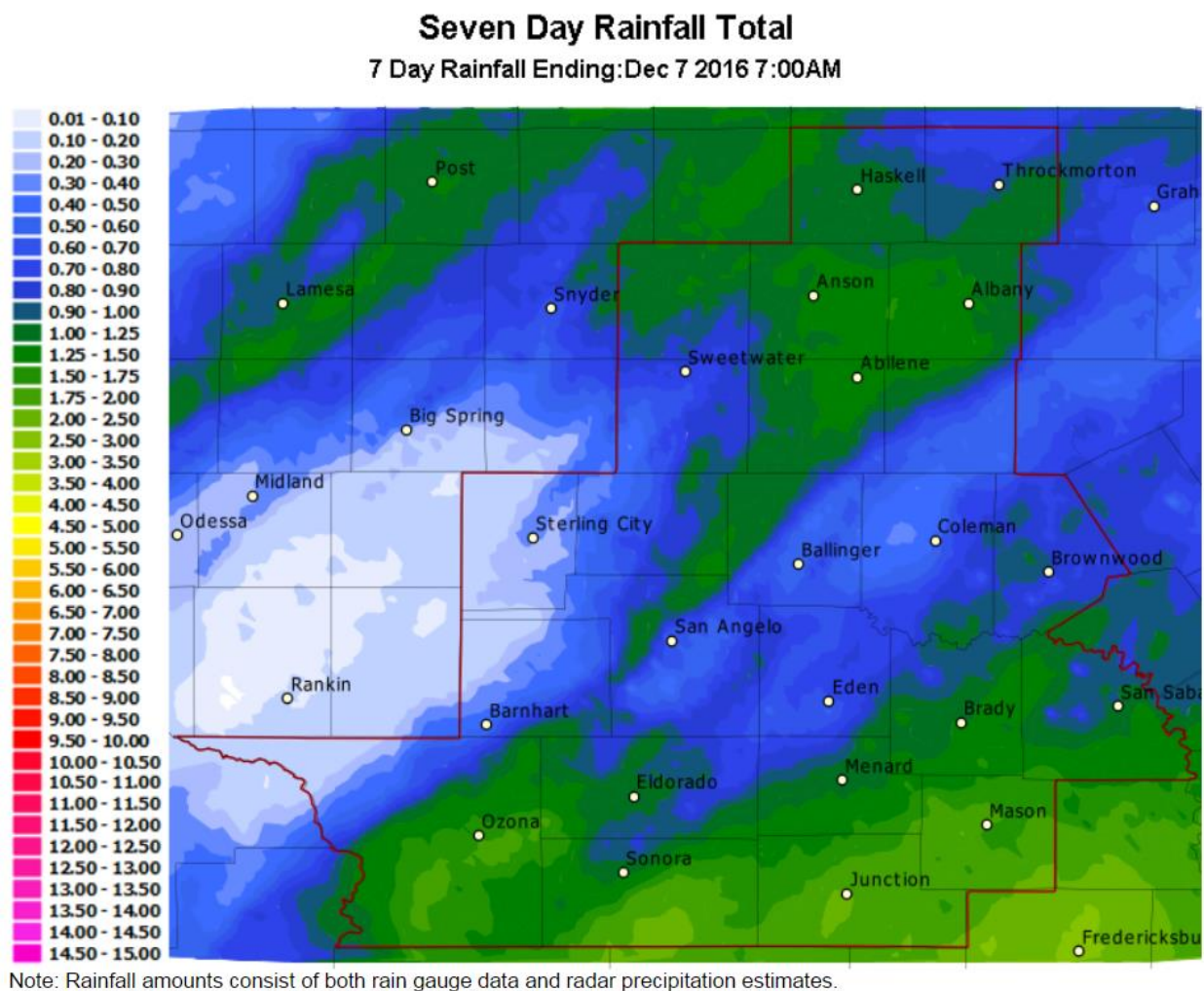


**Figure 2: Percentage of Normal Precipitation for December.**

The monthly precipitation was below normal across parts of the [Big Country](#) and [Concho Valley](#), and across much of the [Heartland](#). December precipitation was well-below normal across northwestern Irion County. The monthly precipitation was above normal across most of the southern third of west-central Texas, across the area from around Abilene to just north of San Angelo, and across [Fisher](#) and northern [Nolan](#) Counties.

**Weather Highlights:**

After mild and dry conditions on the 1<sup>st</sup>, a period of wet and chilly weather occurred on December 2-5. Periods of rain occurred, most notably on the 2<sup>nd</sup> and 5<sup>th</sup>. An upper level storm system slowly approached from Mexico, and then lifted northeast across southeastern parts of west-central Texas on the 5<sup>th</sup>. Rainfall amounts for December 2-5 are shown in Figure 3.



**Figure 3: Precipitation for the 7-day Period ending December 7, 2016.**

Rainfall amounts were in the 1-2 inch range across much of the southern and southeastern parts of west-central Texas, and were between 1 and 1.5 inches across some of the [Big Country](#) and smaller

parts of the [Concho Valley](#). Daily high temperatures on December 2-6 were in the upper 40s to lower 50s with considerable cloud cover.

Much colder air followed a strong, polar cold frontal passage on the 7<sup>th</sup>. Wind chill values on the morning of the 8<sup>th</sup> were in the teens to lower 20s, with brisk north-northeast winds and cloudy skies. Occasional light wintry precipitation occurred during the morning across the area from San Angelo and Brownwood north to Sweetwater and Abilene. The precipitation was mostly light snow from Sterling and Robert Lee north to the Interstate 20 corridor, and mostly sleet in the San Angelo and Brownwood areas. Snowfall amounts ranged from a trace to less than one-half inch. Icy spots developed on a few bridges and overpasses. Daytime temperatures only climbed a few degrees, and were in the upper 20s to mid 30s during the afternoon.

A significant warming trend occurred on December 10-11, with mostly sunny skies and breezy conditions. Afternoon highs were in 50s on the 10<sup>th</sup> with south winds, and in the 70-75 degree range on the 11<sup>th</sup> with southwest winds.

Well-above normal temperatures and windy conditions occurred on the 16<sup>th</sup>. Highs were in the 70s across much of west-central Texas, with 80 at Sweetwater and 82 at Stamford. Abilene Regional Airport recorded a peak wind gust of 43 mph.

A major temperature change occurred on the 17<sup>th</sup>, as an arctic cold front swept south across the area. Ahead of the front, temperatures reached the upper 70s to lower 80s across central and southern parts of west-central Texas, with mostly sunny skies. A new record high of 84 degrees was set at San Angelo. The arctic front moved south of Interstate 20 by early afternoon, and then surged south across the rest of west-central Texas during the late afternoon and evening hours. Behind the front, temperatures dropped rapidly and were accompanied by brisk north winds. At San Angelo, the temperature dropped 37 degrees in one hour (80 degrees at 4 PM to 43 at 5 PM). In addition, the range in temperatures for Dec. 17 was 62 degrees at San Angelo (high of 84 degrees and low of 22). Temperatures plunged into mostly the teens overnight. Record low temperatures were tied at Abilene on the 17<sup>th</sup>, and set at Abilene on the 18<sup>th</sup> (10 degrees).

Very cold air remained over the area on the 18<sup>th</sup>. Early morning lows were mostly in the teens, and afternoon highs ranged from the mid 20s to lower 30s. With brisk north winds in the morning, wind chill values were in the zero to 5 below zero range across the Big Country.

A moderation in temperatures on the 19<sup>th</sup> was followed by a rapid warmup on the 20<sup>th</sup>, when south to southwest winds developed and increased. Highs were well-above normal on the 21<sup>st</sup> (mid to upper 60s across the Big Country, and 70-75 farther south). A weaker cold frontal passage followed during the overnight hours of the 21<sup>st</sup> and 22<sup>nd</sup>.

Temperatures were well-above normal on Dec. 24-28, with windy conditions on Christmas. A record high temperature was tied at Abilene on Christmas Day (76 degrees). Gusty south winds on Christmas morning shifted to the west with a weak cold frontal passage. Peak wind gusts were 44 mph at San Angelo, 46 mph at Abilene and 47 mph at Sweetwater.