# Climate and Weather Summary for March 2017

Temperatures averaged well-above normal for the month. Table 1 summarizes March 2017 temperature, precipitation, and departure from normal for Abilene and San Angelo.

| Site          | Average<br>Temperature<br>(°F) | Departure<br>from<br>Normal<br>(°F) | Normal<br>Average<br>Temperature<br>(°F) | Total<br>Precipitation<br>(In.) | Departure<br>from<br>Normal<br>(In) | Normal<br>March<br>Precipitation<br>(In.) | Total<br>Snowfall<br>(In.) |
|---------------|--------------------------------|-------------------------------------|--|---------------------------------|-------------------------------------|---|----------------------------|
| Abilene       | 62.7°                          | +6.3°                               | 56.4°                                    | 0.42"                           | -1.32"                              | 1.74"                                     | 0.0"                       |
| San<br>Angelo | 64.7°                          | +6.8°                               | 57.8°                                    | 0.25"                           | -1.25"                              | 1.50"                                     | 0.0"                       |

## Table 1: March 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<br>Temperature<br>(°F) | Warmest Low<br>Temperature<br>(°F) | Coolest High<br>Temperature<br>(°F) | Coolest Low<br>Temperature<br>(°F) | Maximum Daily Precipitation (In.) |
|---------------|-------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-----------------------------------|
| Abilene       | 92° Mar. 21                         | 63° Mar. 20,<br>21                 | 54° Mar. 12                         | 30° Mar. 2                         | 0.35" on<br>Mar. 28               |
| San<br>Angelo | 95° Mar. 21                         | 64° Mar. 9,<br>17                  | 59° Mar. 12                         | 27° Mar. 3                         | 0.21" on<br>Mar. 28               |

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

- 4<sup>th</sup> Warmest March on record at San Angelo
- Tied for 7<sup>th</sup> warmest March on record at Abilene
- San Angelo: 6<sup>th</sup> warmest average high temperature for March (79.3 degrees), tied for 4<sup>th</sup> warmest average low temperature for March (50.0 degrees).
- Abilene: tied for 8<sup>th</sup> warmest average high temperature for March (75.8 degrees), tied for 8<sup>th</sup> warmest average low temperature for March (49.5 degrees).

A map of total precipitation for March is shown in Figure 1. Percentage of normal precipitation for March is shown in Figure 2.

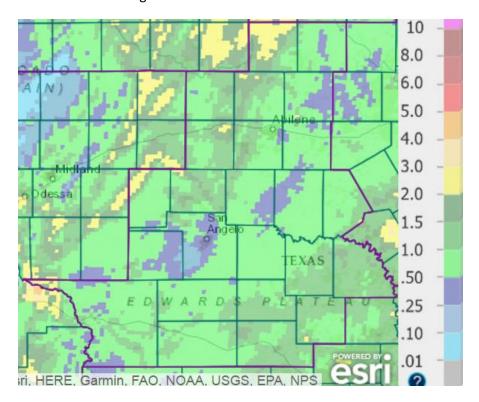
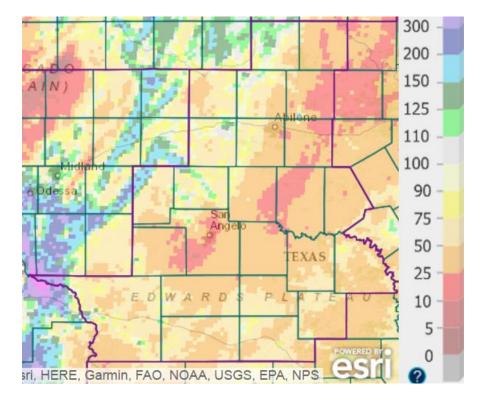


Figure 1: Total Precipitation for March.



#### Figure 2: Percentage of Normal Precipitation for March.

Precipitation for March was well-below normal across much of the northwestern two-thirds of west-central Texas (orange and red shading in Figure 2). In areas where the monthly precipitation was less than 25 percent of normal (red shading in Figure 2), the precipitation amounts were less than one-half inch (blue shading in Figure 1). March precipitation was above normal (green. blue and purple shading in Figure 2) in widely scattered areas from Haskell to Nolan Counties, and south to Coke and Sterling Counties. Extreme northwestern Crockett County received more than 2 inches (yellow shading in Figure 1) for the month, and this precipitation was well-above normal for that area.

#### Weather Highlights:

The weather pattern was quiet during the first few days of the month. Light rain showers occurred on the 4<sup>th</sup> into the post-Midnight hours of the 5<sup>th</sup> across the area generally southeast of an Ozona to Coleman line, as an upper level disturbance moved into South Texas from Mexico. Rainfall amounts of one tenth to one quarter of an inch occurred across the far southeastern part of west-central Texas.

Warm temperatures on March 5-6 were accompanied by increasing and gusty south winds. Temperatures were briefly cooler following a dry cold frontal passage on the morning of the 7<sup>th</sup>. Large wildfires occurred in the Texas and Oklahoma Panhandles into southwestern Kansas on the 6<sup>th</sup>, and continued during the 7<sup>th</sup>. With gusty north winds behind the cold front, the smoke was carried south into west-central Texas by the early morning of the 7<sup>th</sup>. Several area observing stations recorded visibility reductions with hazy conditions.

South winds resumed on the 8<sup>th</sup> and continued on the 9<sup>th</sup>. Low-level moisture from the Gulf of Mexico was transported north across west-central Texas, resulting in somewhat humid conditions with warm temperatures and increased cloud cover. A record high minimum temperature (64 degrees) was tied at San Angelo on the 9<sup>th</sup>.

The pattern was somewhat unsettled March 10-13. A cold front moved south into west-central Texas on the 10<sup>th</sup> before stalling. A few isolated showers and thunderstorms occurred in the vicinity of the front. A stronger cold front advanced south into the Big Country on the evening of the 11<sup>th</sup>, and across the rest of west-central Texas during the night. Gusty north winds followed passage of this front. High temperatures on the 12<sup>th</sup> were around 20 degrees cooler than on the 11<sup>th</sup>. Another cold front pushed south across west-central Texas on morning of the 13<sup>th</sup>. Patchy light rain and drizzle occurred behind this front across central and southern parts of west-central Texas. With mostly clear skies and light winds, temperatures dropped into the 30s and 40s for early morning lows on the 14<sup>th</sup>, as high pressure settled south into Texas. The coldest readings (lower to mid 30s) occurred across eastern and central parts of west-central Texas. A warming trend followed on Mar. 15-17.

Temperatures were well-above normal on Mar. 18-22, when an upper level ridge of high pressure remained in place over Texas. Afternoon highs were in the 80s to lower 90s, with overnight lows in the 50s to lower 60s.

Strong, gusty winds occurred on Mar. 23-24, as an upper level storm system approached from the southern Rockies and tracked across the Texas Panhandle. Winds were mostly from the southeast and south on the 23<sup>rd</sup>, and mostly from the southwest to west on the 24<sup>th</sup>. Peak wind gusts for each day are shown in Table 3 below.

| Location            | Peak Wind Gust | Peak Wind gust |  |
|---------------------|----------------|----------------|--|
|                     | (mph) March 23 | (mph) March 24 |  |
| Cludo               | 49             | 43             |  |
| Clyde               | 49             | 43             |  |
| Fort Chadbourne     | 44             | 41             |  |
| Fort Lancaster      | 51             | 34             |  |
| Fort McKavett       | 40             | 38             |  |
| Haskell             | 43             | 50             |  |
| Junction            | 36             | 34             |  |
| Menard              | 44             | 34             |  |
| Mertzon             | 46             | 37             |  |
| San Angelo 7NW      | 41             | 36             |  |
| Stamford 5ESE       | 52             | 51             |  |
| Sterling City 4 WSW | 43             | 43             |  |
| Sweetwater 11SW     | 50             | 42             |  |
| Throckmorton        | 44             | 46             |  |
| Wall                | 53             | 45             |  |
| Weinert             | 51             | 43             |  |
| Abilene             | 51             | 41             |  |
| San Angelo          | 50             | 46             |  |
| Brownwood           | 45             | 40             |  |
| Coleman             | 40             | 41             |  |
| Junction            | 42             | 37             |  |

| Sonora     | 39 | 30 |
|------------|----|----|
| Sweetwater | 49 | 40 |

Table 3: Peak Wind Gusts for March 23 and 24, from Automated Weather Stations.

A few showers and thunderstorms occurred just ahead of a dryline, during the overnight hours of the 23<sup>rd</sup> and 24<sup>th</sup>. Rainfall amounts of one tenth to one quarter of an inch occurred across parts of the area southeast of a line from Baird to Coleman to Brownwood. Parts of Brown County received quarter to half inch amounts.

Warm, dry and breezy conditions occurred on Mar. 26. A <u>severe weather event</u> occurred on March 28, affecting nearly all of west-central Texas. Temperatures were cooler on the 29<sup>th</sup>, followed by a warming trend at the end of the month. Gusty south to southeast winds occurred on the 31<sup>st</sup>, when the Abilene Regional Airport recorded a peak gust of 42 mph.