

Climate and Weather Highlights for 2020

Temperatures averaged above normal for the year at Abilene and San Angelo. Precipitation for the year was below normal at both locations. Table 1 summarizes Year 2020 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 Annual Precipitation (In.)	Total Snowfall (In.)
Abilene	66.4°	+1.8°	64.6°	26.40"	1.58"	24.82"	7.9"
San Angelo	67.6°	+2.1°	65.5°	20.06"	-1.19"	21.25"	2.3"

Table 1: Year 2020 Temperature and Precipitation Data for Abilene and San Angelo.

- At Abilene, tied 11th warmest and 51st wettest year on record (records date back to 1886)
- At San Angelo, tied 9th warmest and 50th wettest year on record (records date back to 1907)

Additional annual 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	108° Jul. 13, 14 & Aug. 14	84° Jul. 14	32° Feb. 5, Oct. 27	15° Feb. 6	3.80" on Sep. 9
San Angelo	110° on Jul. 13, 14	83° Jul. 14	34° Oct. 27	20° on Dec. 14, 17	3.53" on Sep. 9

Table 2: Additional Year 2020 Climate Data for Abilene and San Angelo.

The number of days in 2020 with high temperatures 100 degrees or more were: 58 at San Angelo and 29 at Abilene. At San Angelo, this ranked as the 4th highest annual number of days with 100 degree temperatures. For Abilene, this tied as the 17th highest annual number of days with 100 degree temperatures. The *average annual number of days* with high temperatures 100 degrees or more are 18 at San Angelo, and 12 at Abilene.

The growing season information for the year is summarized in Table 2, for Abilene and San Angelo.

Site	Last Spring Freeze	First Autumn Freeze	Length of Growing Season	Normal Length of Growing Season (1981-2010 Average)	Departure from Normal
Abilene	Feb. 28	Oct. 26	240 days	234 days	+6 Days
San Angelo	Apr. 15	Oct. 26	193 days	231 days	-38 Days

Table 3: Growing Season Information for Abilene and San Angelo.

The growing season (number of days between the last spring freeze and the first autumn freeze) was 6 days longer than normal at Abilene, and 38 days shorter than normal at San Angelo. *For San Angelo, this was the 3rd shortest growing season on record.*

Total precipitation for the year is shown in Figure 1.

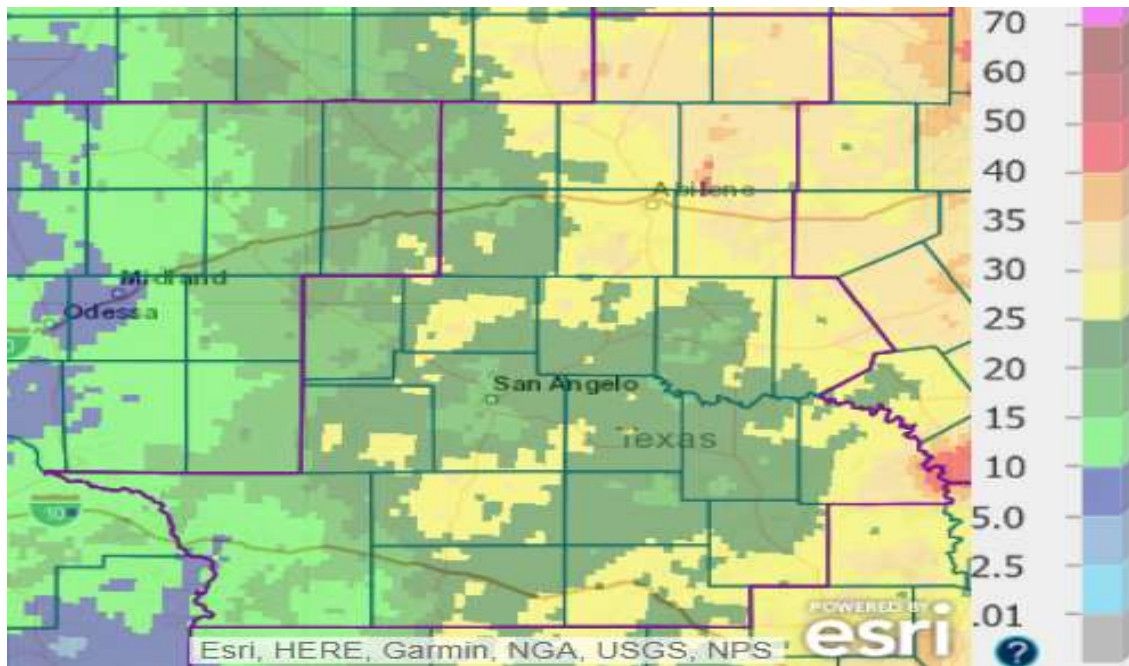


Figure 1: Total Annual Precipitation for Year 2020. Scale on right is in inches.

Percentage of normal precipitation for the year is shown in Figure 2.

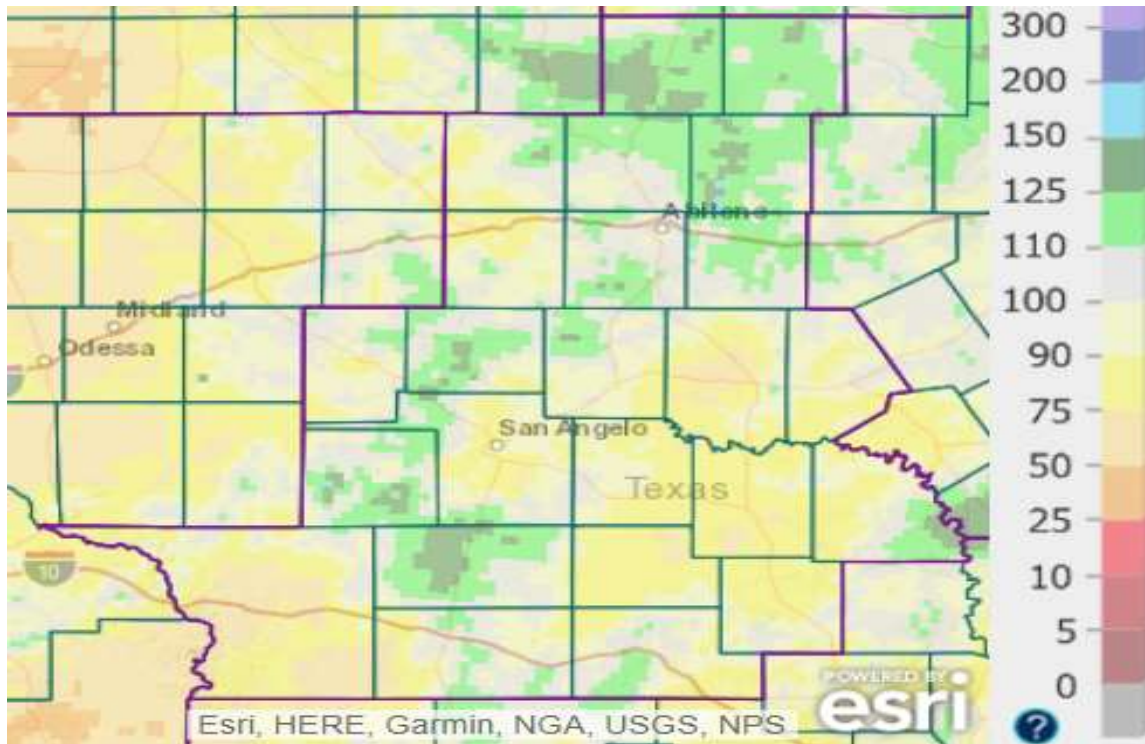


Figure 2: Percentage of Normal Precipitation for Year 2020. Scale on right is in percent.

In Figure 1, annual precipitation ranged from more than 35 inches at a few locations in the Big Country and far southeastern San Saba County (orange shading), to less than 15 inches in some of Crockett County (light green shading). The annual precipitation was above average (green shading in Figure 2) across some of the Big Country, Concho Valley, Northern Edwards Plateau and in southeastern San Saba County). Annual precipitation was below normal (yellow and tan shading in Figure 2) in some of the central, eastern and southern parts of west-central Texas, and in parts of the western Big Country.

Weather Highlights:

Winter Weather

Two of the most significant winter weather events of the year occurred on Feb. 4-5, and on Dec. 30-31. With the early February event, much colder air invaded the area following a strong cold frontal passage. With the approach of a strong upper level storm system from the west, mixed winter precipitation developed on the evening of Feb. 4 and continued on Feb. 5. The precipitation began as a cold rain across central and southwestern parts of west-central Texas, and as a mix of rain, sleet and snow across the Big Country. Overnight, the precipitation transitioned into a snow and sleet mix across the northern third of west-central Texas, and to a

mix of sleet and freezing rain across much of the Concho Valley. Precipitation continued during the day on Feb. 5 as mostly snow. The snowfall was heaviest across the Big Country and northwestern Concho Valley, where 5-10 inches were reported. Lower amounts of 1-3 inches occurred across parts of the Concho Valley, and amounts were less than 1 inch elsewhere. Wind chill values on the morning of Feb. 5 were in the teens, with brisk north winds.

At the end of this winter weather event, the coldest temperatures for the year occurred on Feb. 6. Early morning lows on Feb. 6 were in the single digits and teens across much of the northern and central parts of west-central Texas. The coldest lows occurred in the northern and western Big Country, and northwestern Concho Valley, where snow cover (from the recent winter precipitation event) was deeper.

With the event at the end of December, following a strong cold frontal passage, temperatures on Dec. 30 dropped into the mid 30s to mid 40s. A prolonged period of gusty north winds followed passage of the front and continued on Dec. 31. With the approach of an upper level storm system from northeastern Mexico toward south-central Texas, winter precipitation affected west-central Texas on Dec. 31. A cold rain changed to a mix of freezing rain, sleet, and snow. Ice accumulated mainly on elevated objects (trees and power lines) across central and eastern parts of west-central Texas. This caused power outages in Coleman County. The transition to snow occurred, from west to east across the area, on Dec. 31. Most of West Central Texas received anywhere from 2-5 inches of snow. The highest snowfall amounts (6-9 inches) occurred in Sterling and Irion Counties. A map with snowfall amounts is shown in a [Facebook post](#) from our weather office.

Temperatures in January averaged well-above normal at Abilene and San Angelo. January was the 9th warmest on record for San Angelo, and 13th warmest at Abilene.

February precipitation was well-above normal across the Big Country, along with northern and western parts of the Concho Valley. The monthly precipitation was near to below normal across much of the southern third and some of the east-central parts of west-central Texas. *February was the 6th wettest on record at Abilene.*

An unseasonably early winter precipitation event occurred in late October. With the arrival of an unseasonably cold airmass and the approach of an upper level storm system from southern Arizona and New Mexico, a mix of winter precipitation affected much of the area north of a line from Sonora to Brady to Brownwood on Oct. 27. A mix of freezing rain, freezing drizzle, sleet and snow occurred across the Big Country and Concho Valley, with some light freezing rain and drizzle farther south. Abilene and San Angelo received their earliest (in the cold season) measurable snowfall on record Oct. 27 (0.8 inches at Abilene and 0.3 inches at San Angelo). An

ice storm affected much of the Big Country, and this resulted in damage to trees and power lines.

Spring & Severe Weather

Spring is typically active with severe weather in west-central Texas, and the year 2020 was no exception.

One of the year's most significant severe weather events was a [major hail storm, which affected San Angelo on May 21](#).

Very large hail of tennis ball, baseball, and teacup size (2 to 3 inches in diameter) fell on areas of the city. This caused considerable damage to vehicles and roofs of homes and businesses.

Severe weather occurred on several other occasions in May. An extensive band of thunderstorms moved east-northeast across much of west-central Texas on the evening of [May 15](#), and was accompanied by 60-70 mph winds. A 60 mph gust was recorded at the San Angelo Airport. Wind damage was most extensive in Brown County. At Lake Brownwood, 4 minor injuries were reported with a storm with 70-80 mph wind gusts.

Over some of the [Memorial Day holiday weekend \(May 22-24\)](#), severe weather occurred across various parts of west-central Texas. A peak wind gust of 61 mph was recorded at the San Angelo Regional Airport, with a band of thunderstorms on the evening of May 24.

In April, a [severe weather event occurred on Easter Weekend \(Apr. 11-12\)](#). [Tornadoes occurred](#) in McCulloch and Crockett Counties. From the result of damage surveys, these tornadoes were rated as EF-1 on the Enhanced Fujita Scale.

March also had several days with severe weather. Severe weather occurred on Mar. 13, 17, 18 and 19 across parts of the northern half of west-central Texas. [Tornadoes](#) occurred in Nolan County (approximately 14 miles southeast of Sweetwater), and in the vicinity of Tye (Taylor County) and Hamby (Jones County) on Mar. 19.

In March, temperatures were well-above normal, and precipitation was well-above normal across all of west-central Texas except Crockett County. *San Angelo recorded its 6th wettest and 8th warmest March. Abilene recorded its 2nd wettest and 13th warmest March.*

A wet weather event with rain occurred in early March, when rainfall amounts of 1-3 inches occurred across much of west-central Texas. This rainfall was of short term benefit for soil moisture and the area winter wheat crop.

In May, temperatures averaged above normal while precipitation varied widely across west-central Texas, from well-above to well-below normal. The average temperature for May tied for the 12th warmest on record at San Angelo, and was the 13th warmest on record at Abilene. Several daily record high temperatures and record high minimum temperatures were broken or tied at San Angelo and Abilene in May.

Summer Weather

Uncharacteristic for June, very dry conditions occurred on June 9, along with blowing dust. Following passage of a weak (Pacific) cold front, gusty west to northwest winds occurred, with an invasion of much drier air. Relative humidity values rapidly fell into the 5-10 percent range. Blowing dust developed across parts of northwest Texas, and was transported southeast across much of west-central Texas. Visibilities were occasionally limited to 3-6 miles. Satellite imagery captured these plumes of dust, shown in [one of the social media posts from the National Weather Service in San Angelo](#).

A few notable severe weather events occurred during the summer months. Severe storms affected Abilene on June 19 and San Angelo on June 22. Winds to 60 mph were reported in Abilene on the 19th, while 60-70 mph winds were reported in San Angelo on the 22nd. The San Angelo Regional Airport recorded a peak gust of 69 mph. The winds in San Angelo were strong enough to cause some damage to buildings and trees in the area. With a thunderstorm which moved south-southeast across the Big Country on June 23, mesonet stations recorded peak wind gusts of 66 mph near Clyde and 64 mph near Throckmorton.

Severe weather with widely scattered thunderstorms occurred [June 29-30](#) across various parts of west-central Texas. Mesonet sites recorded peak wind gusts of 71 mph at Ozona, and 59 mph near Stamford. Hail up to quarter and ping-pong ball size was reported in the San Angelo area. Severe weather also occurred [July 1](#), with a similar setup with the weather pattern. Strong thunderstorm downburst winds demolished a barn (40 ft. by 80 ft.) in southwestern Tom Green County, approximately 3 miles southwest of Knickerbocker. In Nolan County, a couple of semi-trucks were partially blown onto adjacent vehicles on Highway 84, approximately 3 miles north of Roscoe. In addition, a couple of semitrucks were jackknifed by strong thunderstorm downburst winds on Interstate 20, in Sweetwater.

In August, [strong and damaging downburst winds occurred in San Angelo during the post-Midnight hours of Aug. 22](#). A cluster of thunderstorms moved south-southwest across the Concho Valley, and one of the storms intensified as it entered the San Angelo area. A peak wind gust of 86 mph occurred at the San Angelo Airport, causing damage to hangars and aircraft.

The hot and dry pattern, which usually occurs during the summer months in west-central Texas, was most prevalent in July and August. *The 4th warmest July on record was tied at San Angelo. In addition, San Angelo recorded its 5th warmest average high temperature for the month of July (100.9 degrees). Abilene recorded its 8th warmest and 9th driest August.*

During much of July, the weather across west-central Texas was dominated by an upper level high pressure system, with hot and dry conditions, and above normal temperatures. Record heat occurred on July 13-14, when highs were 105-111 degrees. *At San Angelo, highs of 110 degrees on July 13-14 were only 1 degree below the all-time record high of 111 degrees (set on several occasions).* New daily record high temperatures were set at San Angelo on July 13-14, and at Abilene on July 13. Rather warm daily low temperatures of 80 degrees or above were recorded on two days in July at Abilene and San Angelo.

Hot and dry conditions with above normal temperatures occurred Aug. 4-14, when an upper level high pressure system was located over Texas. Temperatures were hottest on Aug. 14-15, when highs were 104-109 degrees across most of the area. A few record high temperatures and record high minimum temperatures set or tied at San Angelo and Abilene.

Temperatures were also well-above normal on the last several days of August, with record or near record heat. Afternoon highs were 100-107 degrees across most of the area, with overnight lows in the mid 70s to lower 80s. A few record highs and record high minimums broken/tied at San Angelo and Abilene.

Fall Weather

After the very hot conditions prevalent in July and August, September was considerably cooler and wetter for west-central Texas.

A major change to much cooler and wetter conditions occurred in the second week of September. A significant change in the upper level weather pattern allowed an unusually cold airmass (for so early in September) to plunge south across the Rockies and Plains, and into Texas. The leading edge of this cold airmass was marked by a strong cold front, which moved south across much of west-central Texas during the overnight hours of Sep. 8-9. After highs mostly 90-95 degrees on Sep. 8, temperatures dropped into the upper 40s to lower 50s across the Big Country, and into the mid 50s across the Concho Valley, by the morning of Sep. 9. For southern parts of the area, temperatures dropped into the 50s by early afternoon. Temperatures remained unseasonably cool (upper 40s to lower 50s north, to the 50s south) through Sep. 10 into the morning of Sep. 11, with cloudy skies and periods of rain. New daily record low maximum temperatures were set at Abilene on Sep. 9 (59 degrees), and at San

Angelo on Sep. 11 (66 degrees). On Sep. 10, both Abilene and San Angelo set new daily record low temperatures (49 degrees at Abilene and 50 degrees at San Angelo), and record low maximum temperatures (54 degrees at both locations).

Heavy (and much needed) rainfall occurred on Sep. 8-9. A new daily rainfall record was set at Abilene on Sep. 9 (3.80 inches). While the San Angelo rainfall of 3.53 inches on Sep. 9 was below the daily record rainfall, it was the 8th highest one-day rainfall in the month of September. Total rainfall for Sep. 8-11 are shown in Figure 3.

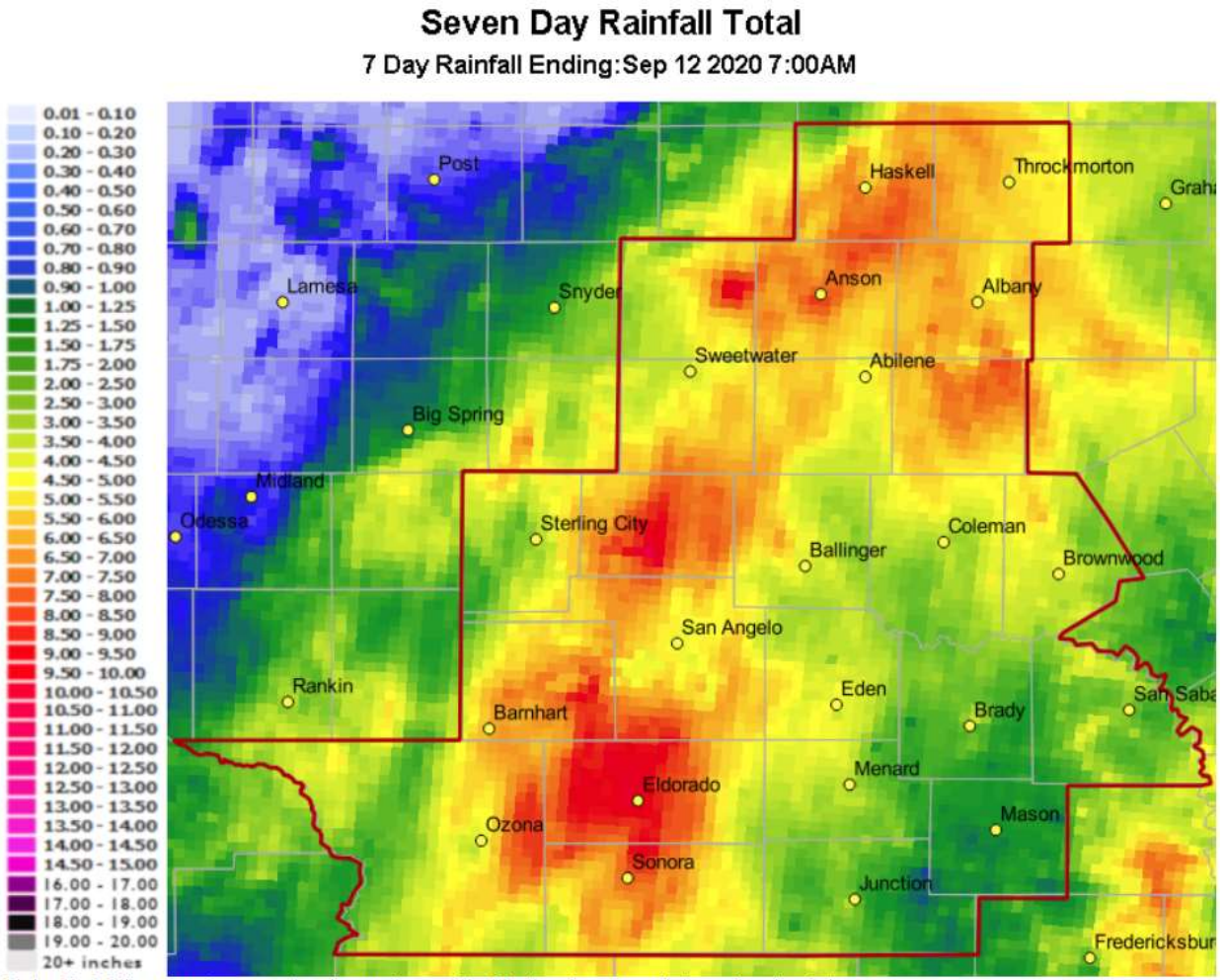


Figure 3: Rainfall for the 7-day period ending at 7 AM CDT, Sep. 12. This encapsulates the rainfall which occurred Sep. 8-11.

The red shaded areas on the map show the highest rainfall amounts (7-10 inches).

The very heavy rainfall led to rapid water rises on area rivers and streams, and there were a few reports of flooding. Unfortunately, 2 fatalities were reported from flash flooding in Jones

County. Flooding from Lake Stamford occurred as water flowed over the spillway and entered several nearby homes. A low water crossing was flooded with water up to 3 feet deep, approximately 4 miles north-northwest of Grape Creek. After a prolonged period of above normal temperatures and below normal precipitation, this rainfall was beneficial in the short term for the area.

October was a month which included summer-like heat, and winter-like cold. *A new record was set at Abilene for the latest occurrence in the year with 100 degree temperatures (Oct. 11).* The monthly temperature range, between the warmest daily high temperature and coldest daily low temperature, was 71 degrees at both Abilene San Angelo. Later in the month, *a new record was established for the coldest daily high temperatures for the month of October at Abilene (32 degrees) and San Angelo (34 degrees) on Oct. 27.*

An unseasonably early winter precipitation event occurred in late October (see details in the Winter Weather section).

Dry and relatively warm conditions prevailed in November. The main precipitation event occurred late in the month (Nov. 28). *The 5th warmest November on record was tied at Abilene.* In addition, the average high temperature for November at Abilene tied for the 4th warmest on record. San Angelo recorded its 11 warmest November on record, and the average high temperature for November at San Angelo tied for the 8th warmest on record.

Temperatures averaged above normal in December, and most of the month was dry. A winter weather event occurred at the end of the month on Dec. 30-31 (see details in the Winter Weather section).

[Links to Individual Monthly Weather and Climate Summaries for 2019](#)