

Climate and Weather Summary for September 2020

Temperatures in September averaged below normal at Abilene and San Angelo. Precipitation was well-above normal at both locations. Table 1 summarizes September, 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 September Precipitation (In.)
Abilene	72.5°	-3.0°	75.5°	5.51"	3.27"	2.24"
San Angelo	73.3°	-2.3°	75.8°	4.87"	2.41"	2.46"

Table 1: September 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	99° September 27	73° September 1, 7	54° on September 10	42° on September 29	3.80" on September 9
San Angelo	103° on September 1	77° on September 1	54° on September 10	39° on September 29	3.53" on September 9

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

The number of days in September with high temperatures 100 degrees or more were 1 at San Angelo, and zero at Abilene.

A Map of total precipitation for September is shown in Figure 1 (below). Percentage of normal precipitation for September is shown in Figure 2.

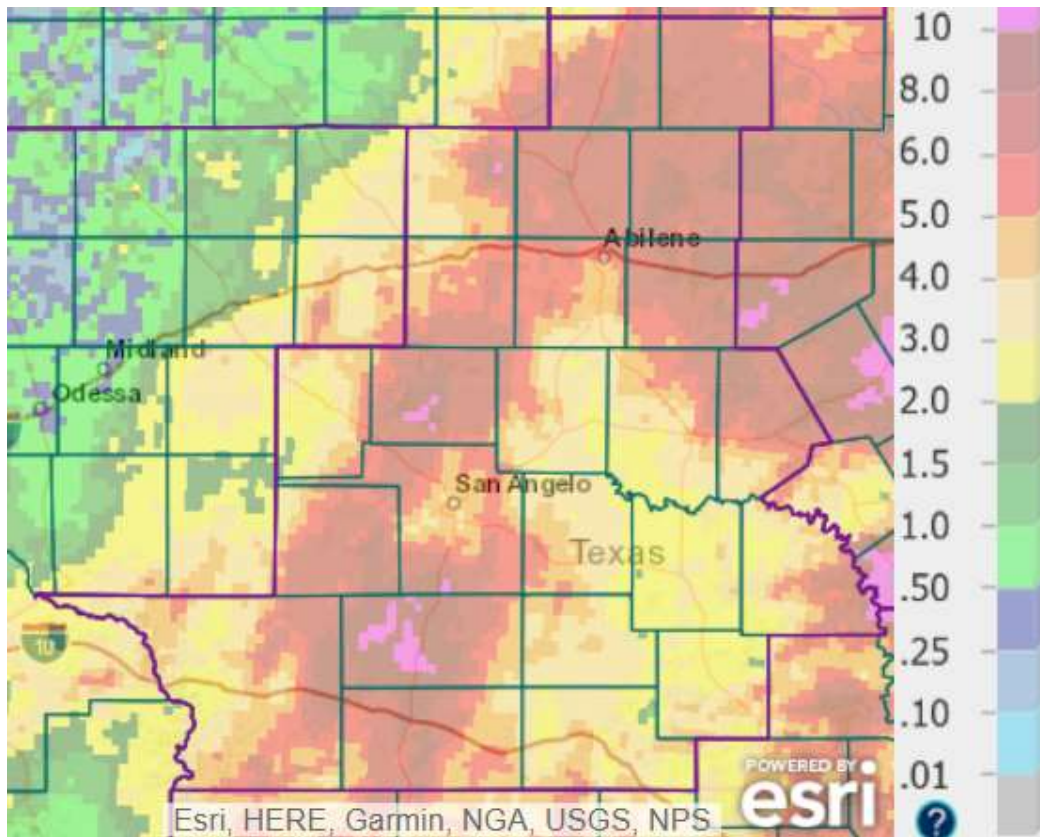


Figure 1: Total Precipitation for September.

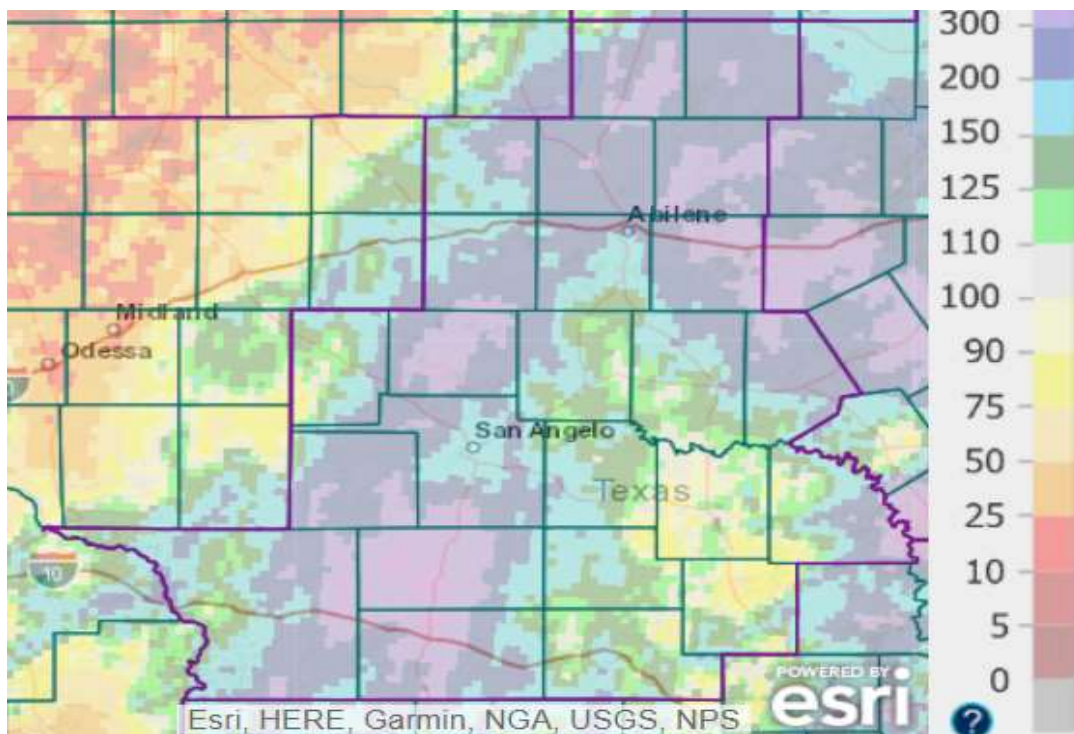


Figure 2: Percentage of Normal Precipitation for September.

Precipitation for September varied from slightly below normal in southeastern parts of [west-central Texas](#), to well-above normal across most of the [Northern Edwards Plateau, Concho Valley, and Big Country areas along with some of the northern Heartland](#) (Fig. 2). Most of the September rainfall occurred with a significant rain event in the second week of the month.

Weather Highlights:

With the approach of an upper level disturbance from New Mexico on Sep. 1, showers and thunderstorms occurred across mainly the northern and eastern parts of west-central Texas. A few of the storms were severe in the afternoon and evening. Strong thunderstorm winds caused damage to trees and power lines, 2 miles west-northwest of Brownwood. Thunderstorm winds also damaged trees and caused other minor damage in Hawley (Jones County). Very heavy rainfall (3-4 inches) occurred in parts of the [eastern Big Country and northern Heartland](#).

A somewhat unsettled pattern continued Sep. 3-6 with isolated to scattered showers and thunderstorms each day. This occurred as a weak upper level disturbance lingered over the area. Temperatures were seasonably hot during the first week of September.

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 the 9th. For southern parts of the area, temperatures dropped into the 50s by early afternoon.

Heavy (and much needed) rainfall occurred on Sep. 8-9. Thunderstorms, a few strong, occurred across the Big Country on the afternoon and early evening hours of the 8th. One of the storms was severe, producing a 63 mph wind gust at a Mesonet site 1 mile northwest of Haskell. 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.

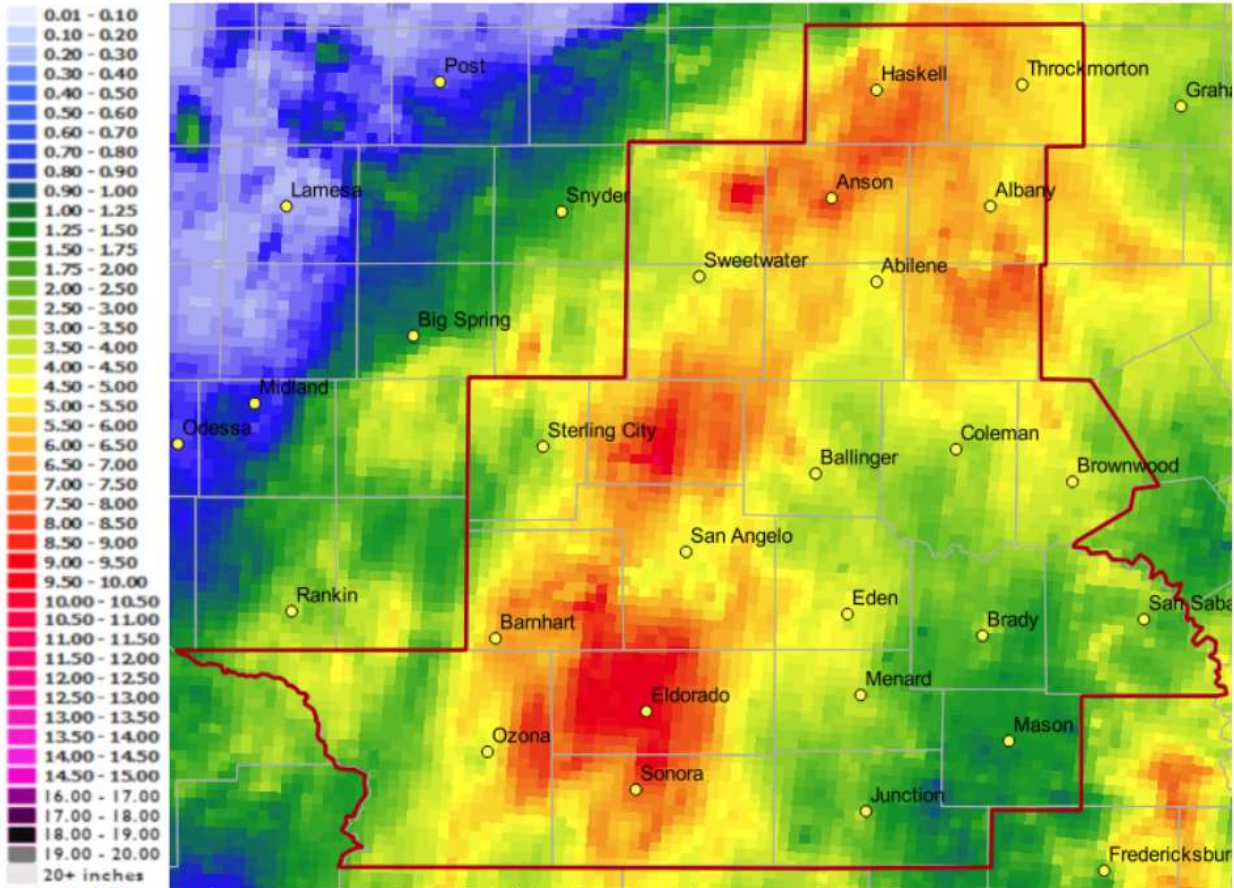
Temperatures remained unseasonably cool (upper 40s to lower 50s north, to the 50s south) through the 10th into the morning of the 11th, with cloudy skies and periods of rain.

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).

Total rainfall amounts for Sep. 8-11 are shown in Figure 3.

Seven Day Rainfall Total

7 Day Rainfall Ending: Sep 12 2020 7:00AM



Note: Rainfall amounts are estimates and consist of both rain gauge data and radar data.

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 lowest rainfall amounts (generally 1-2 inches) are denoted by the darker green shaded areas. In general, the highest rainfall amounts occurred across the [Big Country, Concho Valley, and Northern Edwards Plateau](#) areas.

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 the prolonged period of above normal temperatures and below normal precipitation, this rainfall was beneficial in the short term for the area.

Warmer temperatures followed and daily highs were back in the 80s on Sep. 12. Scattered to numerous slow-moving showers and thunderstorms with heavy rain occurred on Sep. 13, across central and southwestern parts of west-central Texas. Rainfall of 1-3 inches occurred at scattered locations.

The weather pattern was mostly quiet Sep. 14-24, with temperatures near to slightly below normal. Winds each day were from the northeast to east during this time frame. Widely scattered showers and a few thunderstorms occurred generally southeast of a Brownwood to Ozona line, on the afternoon and early evening of Sep. 16. Scattered showers occurred across the southern two-thirds of west-central Texas on Sep. 21.

With a return to south and southwest winds, temperatures were considerably warmer on Sep. 25-26 with afternoon highs in the upper 80s to lower 90s. The hottest day was Sep. 27, when temperatures soared into the 95-100 degree range for highs.

A strong cold frontal passage on the evening and nighttime hours of Sep. 27 was followed by gusty north winds. Peak wind gusts were 40-45 mph at a number of locations across the northern half of west-central Texas. Temperatures were much cooler on Sep. 28, with breezy north winds and sunny skies.

In the wake of the Sep. 27 cold frontal passage, rather dry air was situated over the area through the end of the month. With clear skies, this resulted in much larger daily temperature ranges between the early morning lows and afternoon highs. Strong nighttime radiational cooling allowed temperatures to dip into the upper 30s to lower 40s for early morning lows on Sep. 29. A new record low was set at Abilene (42 degrees), and a record low was tied at San Angelo (39 degrees).

[Additional Tabular and Graphical Daily Climate Data](#)