Climate and Weather Summary for August 2023

Temperatures in August averaged well-above normal at San Angelo and Abilene. Precipitation was well-below normal at both locations. Table 1 summarizes August 2023 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 Aug. Precipitation (In.)
Abilene	90.8°	6.6°	84.2°	0.46"	-2.07"	2.53"
San Angelo	89.5°	5.4°	84.1°	0.29"	-2.13"	2.42"

Table 1: Aug. 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	111° on Aug. 17	84° on Aug. 8	94° on Aug. 27	67° on Aug. 29	0.32" Aug. 10
San Angelo	111° on Aug. 10	81° Aug. 6,7	97° Aug. 23, 28	61° on Aug. 29	0.29" Aug. 10

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

- Average temperature for August was the <u>warmest of any month on record</u> at Abilene (90.8°).
- Average high temperature for August was the <u>warmest of any month on record</u>, at San Angelo (104.4°) and Abilene (104.5°).
- Abilene tied the all-time record high temperature (and month of August record high) of 111° on Aug. 17.
- San Angelo tied the record high for the month of August with 111° on Aug. 10.
- At Abilene, a new record warm low temperature for the month of August was set on Aug. 8 (84°).

 New record high number of days in August with low temperatures 80° or above at San Angelo (10 days) and Abilene (13 days).

Maps of total precipitation and percentage of normal precipitation, for June, are shown in Figures 1 and 2 (next page).

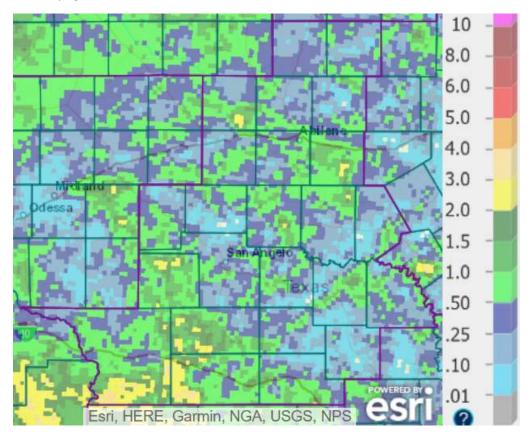


Figure 1: Total Precipitation for August.

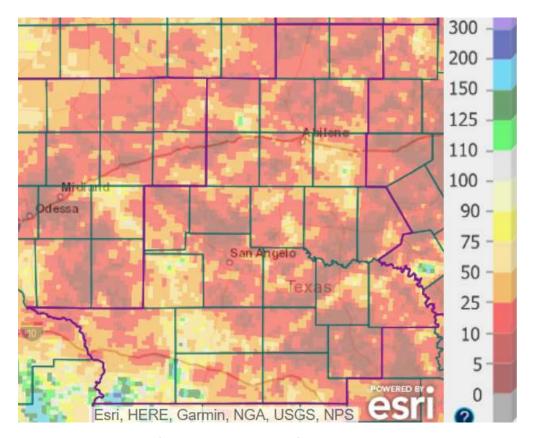


Figure 2: Percentage of Normal Precipitation for August.

Precipitation for August was well-below normal across most of the area. The only exception was in a small part of Crockett and western Sutton Counties. The monthly rainfall ranged from less than one-tenth of an inch (light blue shading in Fig. 1) to over 3 inches (beige shading in Fig. 1 in a small part of Crockett and Sutton Counties). For most of the area, August rainfall was less than 25 percent of normal (red shading in Fig. 2).

August 2023 Weather Highlights

August 2023 was marked by numerous heat-related records.

A strong upper level high pressure system was over Texas during much of August. This setup resulted in intense and record-breaking heat Aug. 1-13, and again Aug. 17-21.

The tables below (and on the next page) show the numerous daily record high and record warm low temperatures which were set or tied during the month, at San Angelo and Abilene.

San Angelo

Date	Temperature	Type of Temperature Record
Aug 5	108°	Tied Record High
Aug 6	81°	Tied Record Warm Low
Aug 6	108°	New Record High
Aug 7	81°	Tied Record Warm Low
Aug 7	109°	New Record High
Aug 8	109°	New Record High
Aug 9	110°	New Record High
Aug 10	111°	New Record High
Aug 11	108°	New Record High
Aug 12	80°	New Record Warm Low
Aug 12	108°	New Record High
Aug 13	80°	Tied Record Warm Low
Aug 14	80°	Tied Record Warm Low
Aug 17	109°	New Record High
Aug 18	108°	New Record High
Aug 19	107°	New Record High
Aug 21	107°	New Record High

Abilene

Date	Temperature	Type of Temperature Record
Aug 2	80°	Tied Record Warm Low
Aug 5	108°	New Record High
Aug 6	108°	New Record High
Aug 7	81°	Tied Record Warm Low
Aug 7	108°	New Record High
Aug 8	84°	New Record Warm Low
Aug 8	108°	New Record High
Aug 9	83°	New Record Warm Low
Aug 9	109°	New Record High
Aug 10	110°	New Record High
Aug 12	83°	New Record Warm Low
Aug 13	81°	Tied Record Warm Low
Aug 13	107°	New Record High
Aug 17	80°	Tied Record Warm Low
Aug 17	111°	New Record High
Aug 18	81°	Tied Record Warm Low
Aug 18	109°	New Record High
Aug 19	106°	New Record High
Aug 20	106°	Tied Record High
Aug 21	106°	New Record High
Aug 25	105°	New Record High

Isolated to scattered showers and thunderstorms occurred in mainly the northern half of the area Aug. 7-11. This was a result of slight weakening of the upper level high pressure system, the arrival of a few weak, embedded disturbances in the flow aloft, the brief arrival of a couple of weak cold fronts, and a few outflow boundaries. A few locations received over an inch of rainfall during this time frame, but temperatures remained very hot across west-central Texas.

A disruption to the record heat occurred in the middle of the month, when the trailing portion of a weak cold front moved south across west-central Texas Aug. 14. Behind this front, highs were in the mid to upper 90s in the Big Country on the 14th, and across most of the area on the 15th.

With very dry vegetation, a combination of dry and very hot conditions, with occasionally breezy winds, led to critical fire weather conditions on several days in August. Several grass/brush fires were reported during the month. Among the most significant of these was the Hill Top Fire in Taylor County. This fire was approximately 10 miles south of Abilene, and was started by lightning on Aug. 18. Approximately 200 acres were burned.

Tropical Storm Harold made landfall on the Texas coast (South Padre Island) on the morning of Aug. 22. The system subsequently weakened to a depression, and its remnants moved west-northwest into the Big Bend area, on the morning of Aug. 23. Circulation around this tropical system brought an increase in moisture to west-central Texas. Showers occurred Aug. 22 along and south of the Interstate 10 corridor. In addition, widely scattered showers and a few thunderstorms occurred Aug. 23 southwest of a line from Snyder to Eden to Fredericksburg. With increased cloud cover, temperatures were slightly cooler with highs in the 90s across much of the southwestern half of the area Aug. 22-23.

Isolated to scattered showers and thunderstorms occurred, mostly in the afternoon and evening hours, Aug. 25-28. This occurred as an upper level high pressure system weakened over the area and retreated to the west.

Dry conditions with hotter temperatures (triple digit heat) returned to the area Aug. 30-31. An upper level high pressure system gradually shifted east over New Mexico, with its position in closer proximity to west-central Texas.

The following graphics for Abilene and San Angelo (courtesy of Abby Pettett), forecaster at National Weather Service San Angelo), show daily highs and lows compared to normal and the records.

