

February 2024 Climate Summary

Significant Weather Events:

After the cold month that was January 2024, cold weather was largely absent from February as much of Texas saw a very warm month. February 2024 had more of a personality than just abnormally warm temperatures, as the month experienced severe weather events on the 2nd, 10th, 11th, a snowstorm in the Panhandle on the 11th, and the largest wildfire in State history to round out the month. Some notable events in February 2024 were:

- February 2- A bout of severe weather rolled across Texas, with 21 out of the 23 total reports across the county being in the State of Texas.
 - Peak wind gusts to 64 mph were measured near Hackberry, Tx in Cottle County and Cotulla, Tx, in La Salle county.
 - Hail up to 1.25” in diameter was reported.
 - There were two tornado reports from Haskell, Tx.
- February 10-11- A second round of severe weather targeted the State
 - February 10 saw mainly hail reports with sizes up to 1.75”
 - February 11 saw a mixture of wind, hail, and tornado reports, mainly across East Texas. Hail up to 2.75” in diameter was reported near Noonday and Longview in Smith and Gregg Counties respectively
 - A tornado touched down two miles NNE of Richards in Grimes county
- February 11 - The same storm system responsible for the severe weather brought heavy snowfall for the Panhandle.
 - Widespread snowfall totals of over six inches were reported
 - The highest reports were up to 14” in Plainview, TX
- February 26 - The Smokehouse Creek fire began charring the Northeastern portions of the Texas Panhandle. This fire became the largest fire in Texas history, and among the largest in U.S history. This was one of several large fires that affected the region.
 - The Smokehouse Creek fire has burned 1,078,000 acres and is 15% contained as of 1:30 pm Central Standard Time on March 1, 2024
 - Intense west wind gusts up and over 60 mph across the Texas Panhandle allowed the flames to grow quickly.
 - A powerful cold front moved through in the evening of February 27, with widespread gusts of 45-50 mph, causing the fires to grow from north to south after having propagated eastward much of the day.
- February 26 - Hot temperatures affected much of the State of Texas. The State registered its first triple-digit day.
 - The state reported its highest temperature on this day, 100°F at an airport in Bell County

- In a notable population hub, the Dallas-Fort Worth International Airport saw a high temperature of 94°F. This is the 3rd highest temperature the site has seen in the month of February.



A view of some of the major meteorological events that occurred in February 2024. At top left, a view in Tulia, Tx after 5” of snow blanketed the ground (courtesy: weather.gov and Storm Search 7). At top right, A section of a destroyed fence lays on the I-45 frontage road as a tornado tore through Grimes County (courtesy: KBTX news). At bottom, a view of the Smokehouse Creek fire as it engulfs a highway in Hutchinson County (courtesy: Brownwood news).

Temperature:

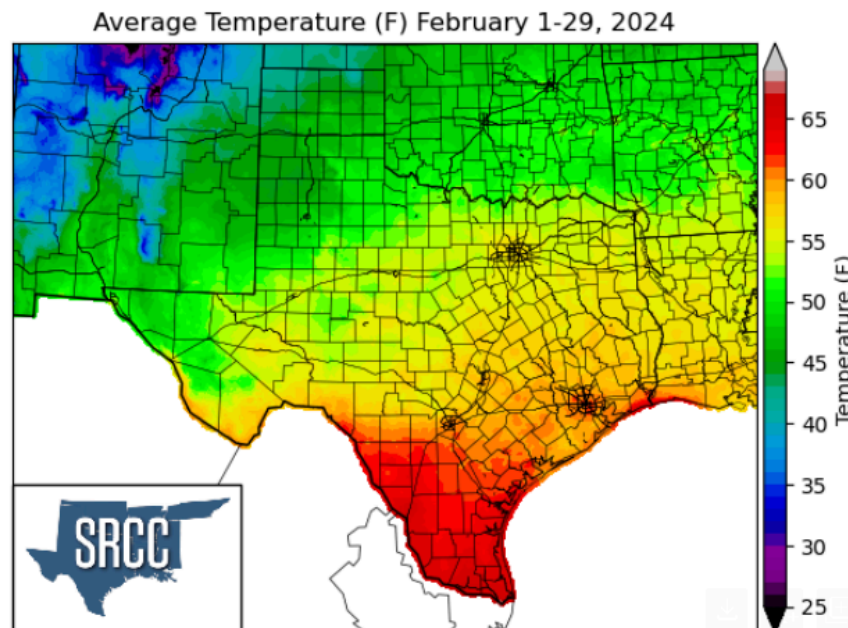
After the mid-January arctic outbreak, temperatures swung to be above normal to end the month. Picking up where January left off, February began anomalously warm, a precursor to what the rest of the month had in store. February 2024 was characterized by extended periods of abnormally warm temperatures, with periodic cool downs. This being said, the month was

devoid of any significant arctic outbreaks. This combined with extended periods of above normal temperatures led to monthly average temperatures being well above normal for the entire State. Several populous cities saw February 2024 sneak into their top 10 warmest Februaries on record. February 2024 ranked as follows by average temperature in the following locations:

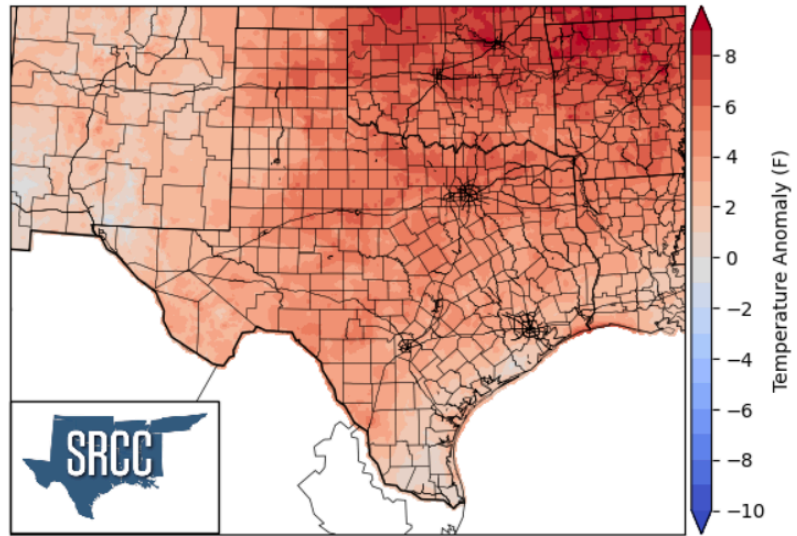
- El Paso saw its 9th warmest February with an average temperature of 53.9°F
- Lubbock saw its 7th warmest February with an average temperature of 49.7°F
- San Angelo saw its 4th warmest February with an average temperature of 56.5°F
- DFW saw its 3rd warmest February with an average temperature of 57.7°F
- Houston tied its 8th warmest February with an average temperature of 61.9°F

The extremes across the State for February 2024 are as follows:

- The coldest monthly average temperature was 42.9°F in Bravo, Tx located in Hartley county
- The warmest monthly average temperature was 68.3°F at the McAllen Miller International Airport in Hidalgo County
- The hottest reported temperature across the State was 100°F at the Robert Gray AAF WBAN site in Bell County on February 26, 2024.
- The coldest reported temperature across the State was 8°F at the Hart co-op site in Castro County on February 12, 2024



Mean Temp Anomaly (F) February 1-29, 2024 vs 1991-2020 Normals

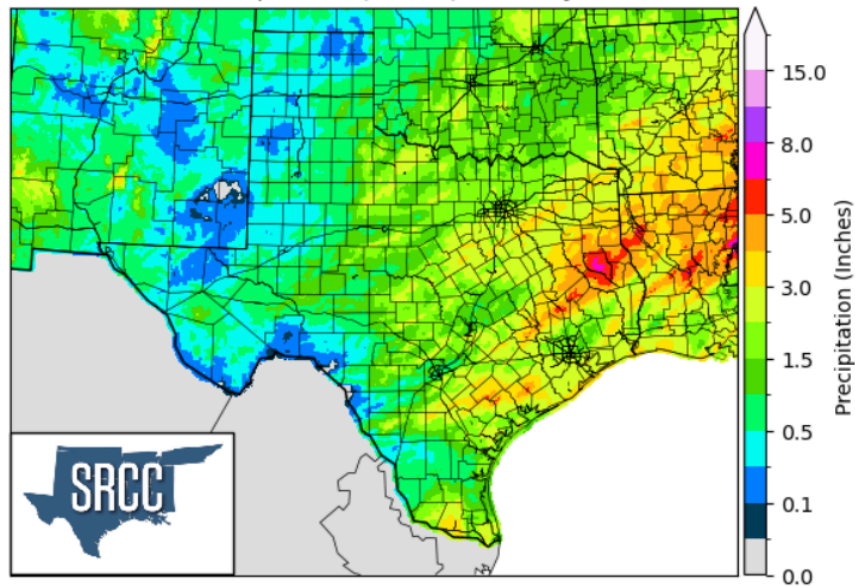


Precipitation:

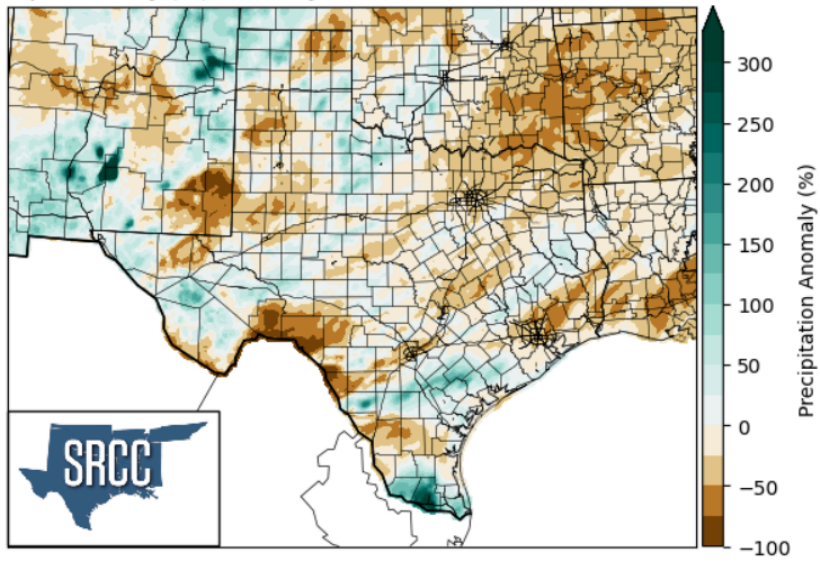
January 2024 was a very wet month for much of the State. As January transitioned into February, precipitation across Texas was plentiful, but less extreme, particularly when it comes to large totals. Overall, about equal parts of the State experienced precipitation anomalies of wetter and drier than normal.

- The highest monthly precipitation total was 6.76” at the Nacogdoches Arbor Oaks CoCoRahs site in Nacogdoches County
- The lowest monthly precipitation totals (of the stations that reported all 29 days in February) were at the Spofford Auxiliary Airfield Laughlin Air Force Base site in Kinney County with 0.00” of rain for the month.

Accumulated Precipitation (Inches) February 1-29, 2024



Precip. Anomaly (%) February 1-29, 2024 vs 1991-2020 Normals



Drought:

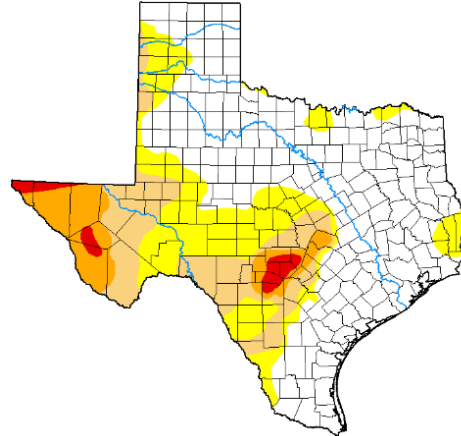
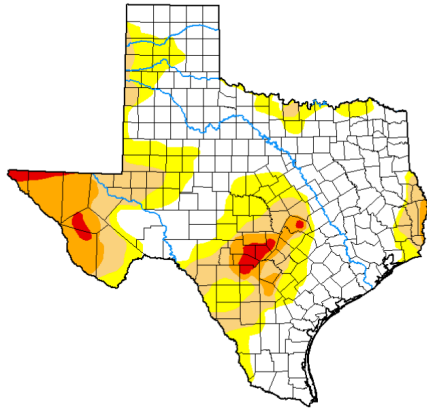
The month of February saw drought conditions mainly stay consistent across Texas. No notable areas of extreme precipitation were present across the State, so no major improvements were seen. While February was not particularly rainy, it was not overly dry either, keeping drought degradation at bay. The drought classifications as well as the change in the coverage of each drought classification through the month of February are summarized in the table below:

| Drought category | End of January (January 30, 2024) | End of February (February 27, 2024) | Change |
|-----------------------------|--|--|---------------|
| Abnormally dry or greater | 42.7% | 42.7% | 0.0% |
| Moderate drought or greater | 22.8% | 22.7% | -0.1% |
| Severe drought or greater | 9.7% | 8.9% | -0.8% |
| Extreme drought or greater | 1.9% | 2.0% | +0.1% |
| Exceptional drought | 0.0% | 0.0% | 0.0% |

**U.S. Drought Monitor
Texas**

January 30, 2024
(Released Thursday, Feb. 1, 2024)
Valid 7 a.m. EST

February 27, 2024



Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

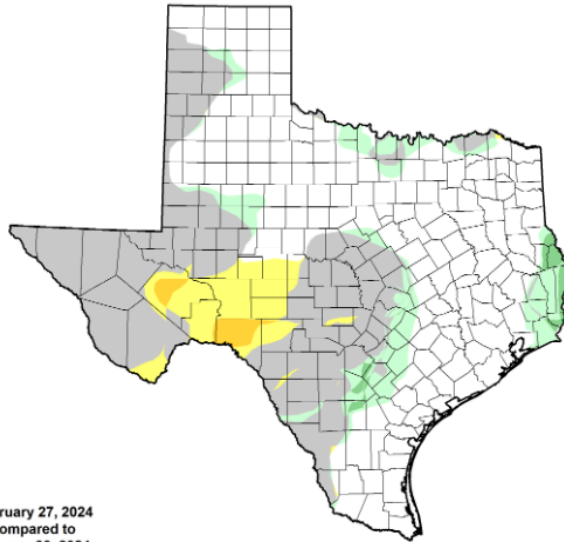
Author:

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National Drought Mitigation Center



droughtmonitor.unl.edu

**U.S. Drought Monitor Class Change - Texas
4 Week**



February 27, 2024
compared to
January 30, 2024



- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

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