

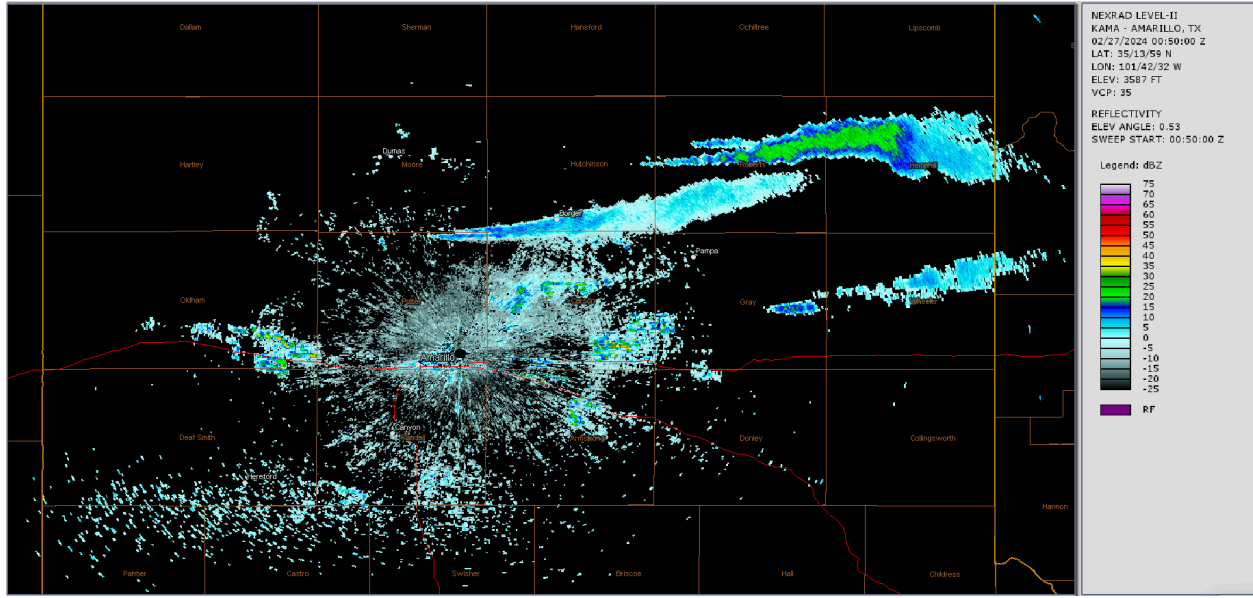
## Weekly Climate Summary: 2/25/2024-3/2/2024

### **Climate in the News:**

A combination of abnormal warmth, dry conditions, and gusty winds manifested itself in a destructive way across the Texas Panhandle. Several large fires scorched across the area, with the Smokehouse Creek fire becoming the largest wildfire in Texas history, burning over 1,000,000 acres. This fire has unfortunately already claimed two lives as of this writing on March 4, 2024, and remains about 15% contained. As of March 4, 2024, several other fires are ongoing across the region, scorching an additional 150,000+ acres. The hot conditions that led to the rapid spread of these wildfires were not confined merely to the Texas Panhandle, as many stations reported record high temperatures on February 26. February closed hot and dry, which solidified the presence of February 2024 among the warmest for many stations and State history.



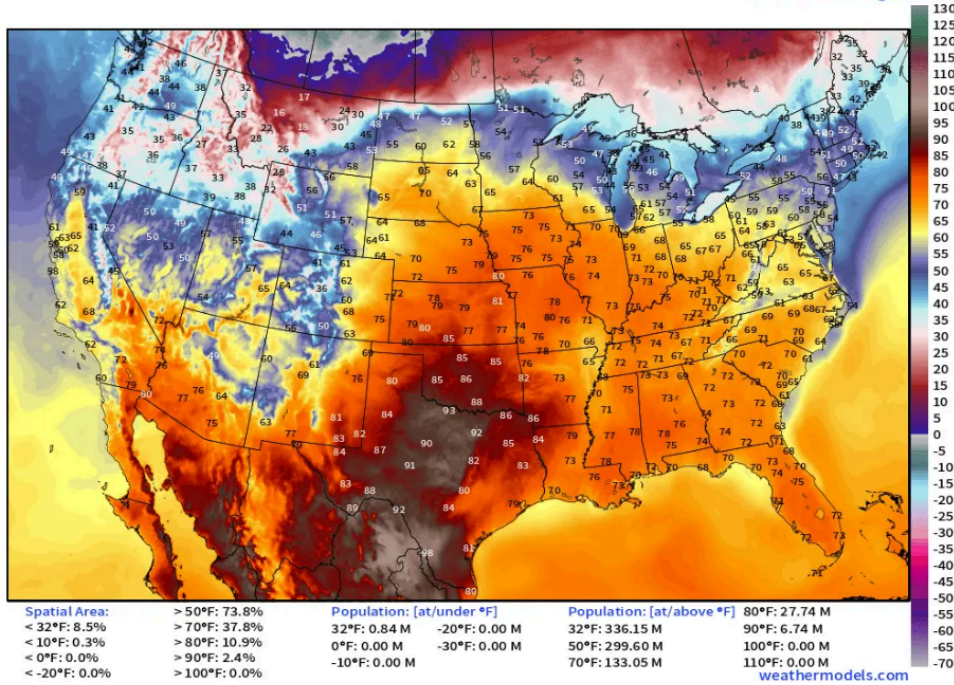
*A view of the Smokehouse Creek fire. Powerful west winds gusting to near 60 mph favored the rapid spreading on February 26. This same day, a strong cold front moved through, shifting the winds out of the north with 40-50 mph gusts. A combination of these elements ensured that this fire became the largest in Texas history. Courtesy People.com and the Greenville Firefighters Association.*



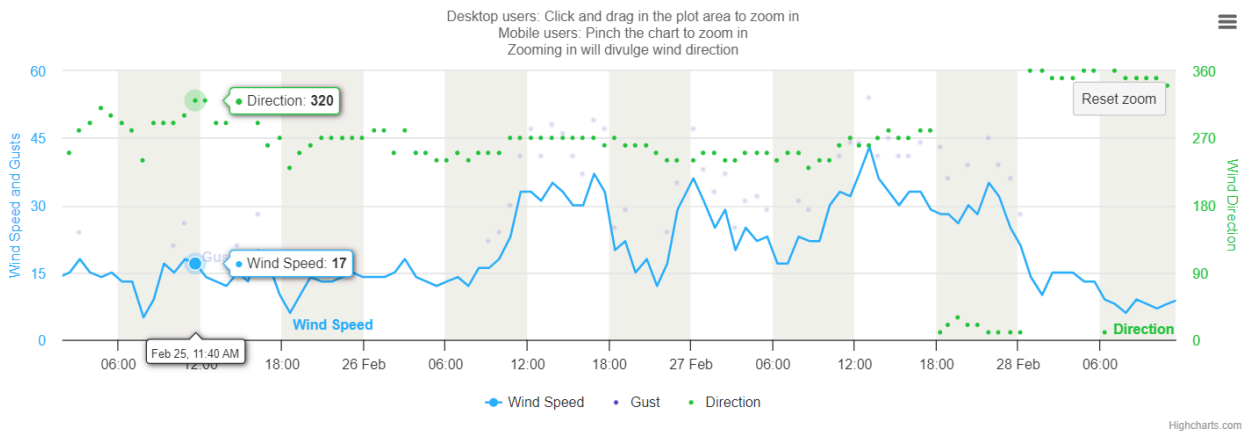
*Smoke plumes from the Wildfires visible on Doppler radar as streaks of reflectivity. This image is from the Amarillo (KAMA) radar, taken at 6:50 pm local standard time on February 26, 2024. Image from NOAA's Weather and Climate Toolkit*

**Weather Synopsis:**

The main weather story of the week of February 25-March 2 was the wildfires in the Texas Panhandle, however, the heat and lack of precipitation responsible for the fires extended beyond the Texas Panhandle. Many stations across the state recorded maximum temperatures over 90°F, with the State seeing its first triple-digit temperature of 2024 on this day. A powerful cold front moved through on the evening of February 26, unfortunately, this cold front passed through dry, which provided no relief to the crews fighting fires. Winds behind this cold front shifted to the north and gusted to between 40 and 50 mph, exacerbating the conditions for those battling the flames. Outside of the Panhandle, this cold front provided some of the strongest winds seen in the month of February and much of the State saw wind gusts exceed 40 mph. The cool down in the wake of this front was fairly drastic, yet short lived, as winds returned to the south, and quickly brought the State above normal temperatures.



A map showing the surface temperatures across the continental United States, at 3:00 pm Central Standard Time on February 26. The hottest temperatures across the Country were seen in the State of Texas. The cold front that moved through the Texas Panhandle is located near the North Dakota/South Dakota border. Courtesy: weather.substack.com.



Graph showing the 2-minute sustained winds for Amarillo Texas. Winds increase substantially early in the morning on the 26th, calming in the evening, before ramping back up on the 27th. The continuous high winds allowed for rapid eastward spreading of the wildfires. At about 6:00 pm on the 27th, a powerful cold front moves through, shifting the winds abruptly to the North, encouraging the fire to propagate southward. Courtesy Weather.gov Time Series Viewer.

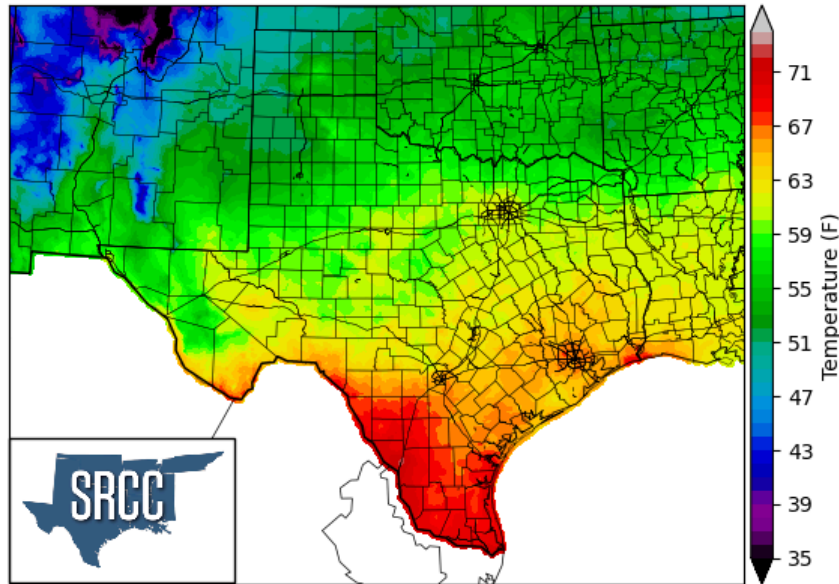
**Temperature:**

The week of February 25- March 2, 2024 opened hot for some, with large portions of the State seeing highs soar into the 90’s, and even to 100°F. The passage of a powerful cold front tumbled

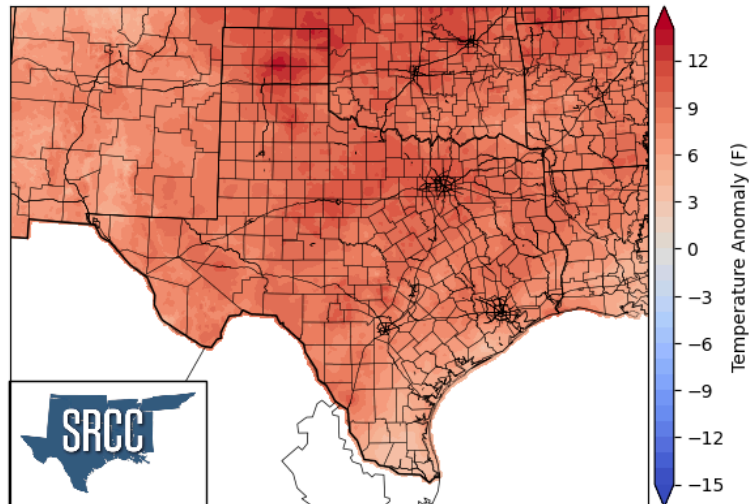
temperatures midweek. This cold front brought a brief intrusion of slightly below normal temperatures into the state, only to be followed by rapid warming to round out the week. The weekly average temperatures across Texas typically ranged from 50°F to 70°F, with colder spots dipping into the 40's. The week was characterized by sizable departures above normal, with very mild departures below normal, leading to temperature anomalies across the state encroaching into the double digits. The statewide weekly average temperature extremes are as follows:

- The Dalhart 2SE co-op site in Hartley County saw the lowest weekly average at 46.1°F
- Laredo International Airport in Webb County saw the highest weekly average at 69.9°F

Average Temperature (F) February 25 - March 2, 2024



Mean Temp Anomaly (F) February 25 - March 2, 2024 vs 1991-2020 Normals

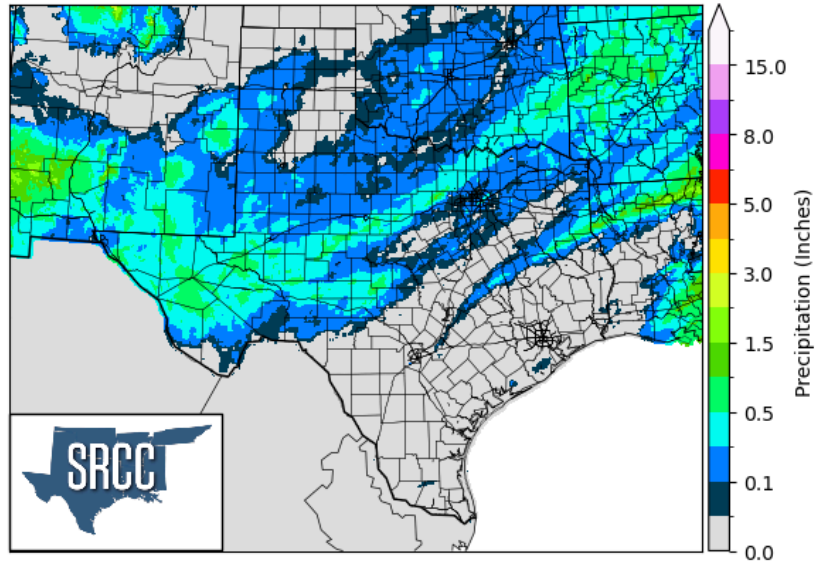




## Precipitation:

Precipitation was scant for much of Texas in the week beginning February 25, though much more plentiful than the week previous week. While not impressive, the locations where the rain fell are congruent with where the most significant drought is located across the State.

Accumulated Precipitation (Inches) February 25 - March 2, 2024



## Statewide extremes:

-The hottest recorded temperature of the week was 100°F at the Robert Gray Army Airfield in Bell County on February 26, 2024.

-The coldest recorded temperature of the week was 14°F at the Bravo Co-Op site in Hartley County on February 29, 2024 .

-The most precipitation recorded in the week of February 25- March 2, 2024 was 1.05” Mount Locke Co-Op site in Jeff Davis County.

-168 stations broke record highs in the week of February 25- March 2, 2024.

-7 stations broke record lows for the same week.