

February 2025 Climate Summary

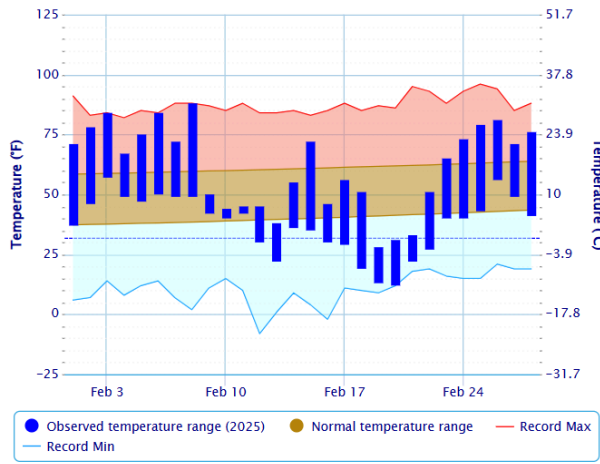
Significant Weather Events:

February opened on the heels of a cold January with a substantial heat spell. Numerous high temperature records were broken across the state in the first week. Temperatures then took a nosedive mid-month, with a series of powerful arctic fronts bringing very cold temperatures to the state. The frigid air mass later retreated to end the month, with temperatures running about 10°F above normal. Precipitation was mainly limited to mid-month, as a stationary boundary resulted in moderate precipitation and embedded thunderstorms. West Texas and the Texas Panhandle saw little to no precipitation, and areas east saw precipitation near or only slightly above normal to make for a drier-than-normal February statewide.

Significant Dates:

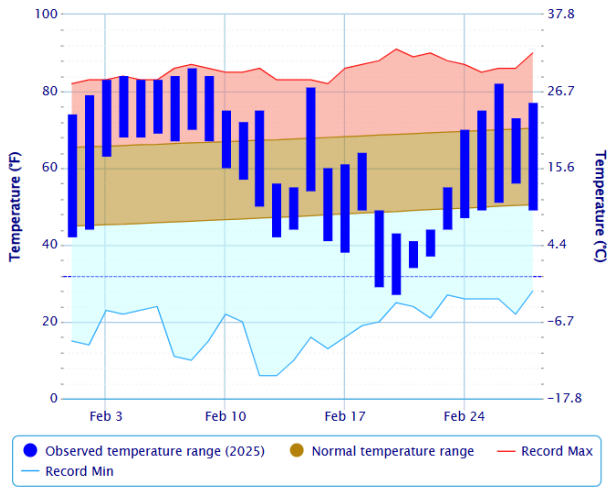
- February 1-8: A quiet weather pattern, combined with southerly flow and ample sunshine, led to the first full week of February being well above normal from a temperature standpoint. Numerous daily heat records were challenged and broken across many Texas stations.
- February 9-12: The first of several cold fronts in February pushed into Texas. This front provided the lift necessary to produce precipitation and ignite thunderstorms across North, Central, East, and Southeast Texas. This front later stalled across south Texas, providing persistent cloud cover across the region and leading to a large temperature contrast between the northern and southern reaches of the state.
- February 13-14: A secondary, more powerful push of arctic air brought even colder conditions across the northern portions of the state and allowed the stalled front that came in on February 9th to be shoved further south into the Gulf of Mexico.
- February 15: A windy day across Texas. Several regions across the state saw some of their strongest winds of the month on this day, with gusts of 35 to 50 mph being common across the state.
- February 18-19: An arctic air intrusion blasted through Texas, bringing the coldest temperatures in over a year for some. The extremely low temperatures combined with wind gusts of 35-45 mph created dangerously low wind chills for all of Texas for the next several days.
- February 23-28: A late-month warm-up brought temperatures to slightly above normal values across Texas to end the month.

Daily Temperature Data – Dallas–Fort Worth Area, TX
(ThreadEx)



Powered by ACIS

Daily Temperature Data – Houston Area, TX (ThreadEx)

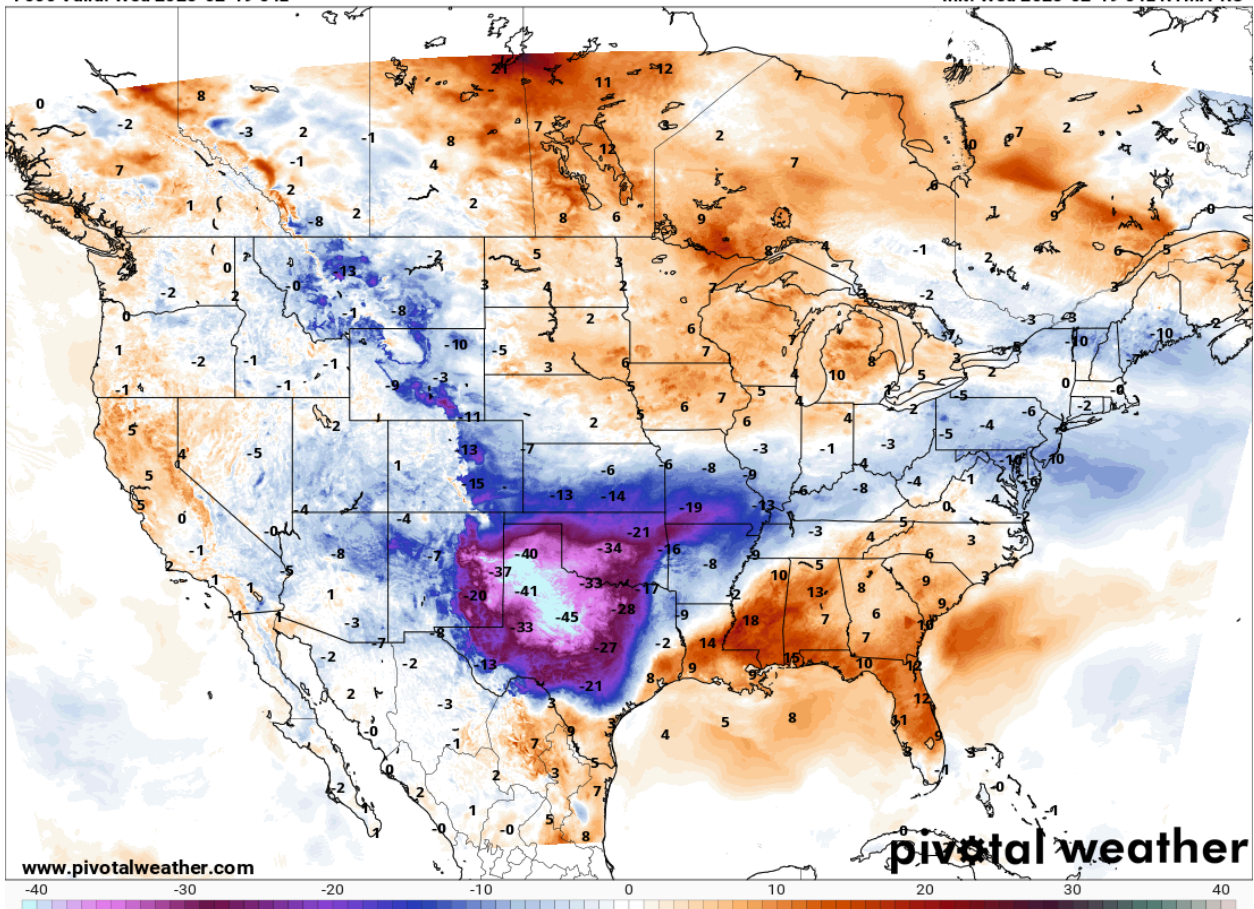


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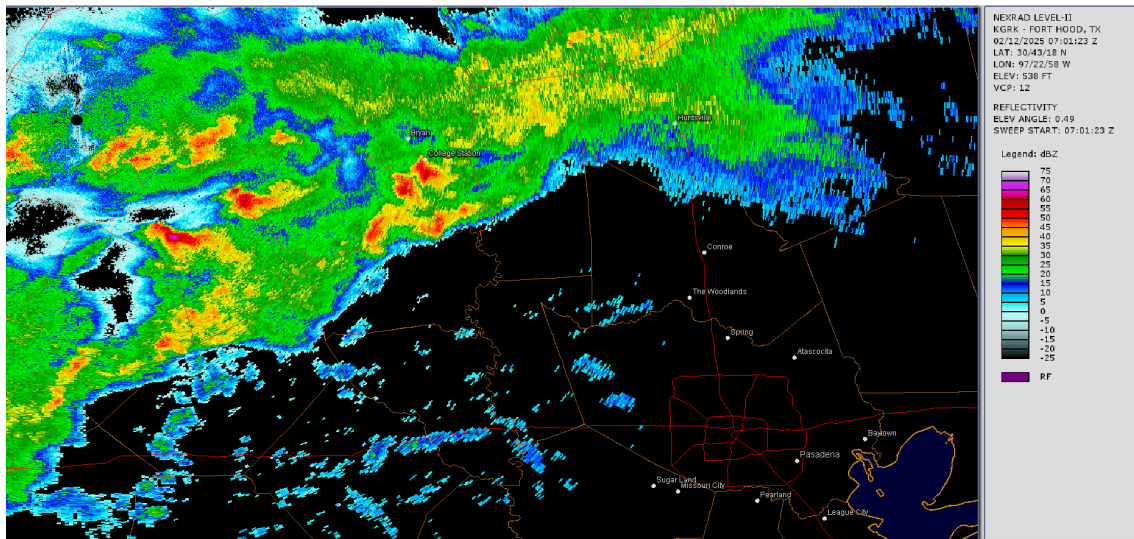
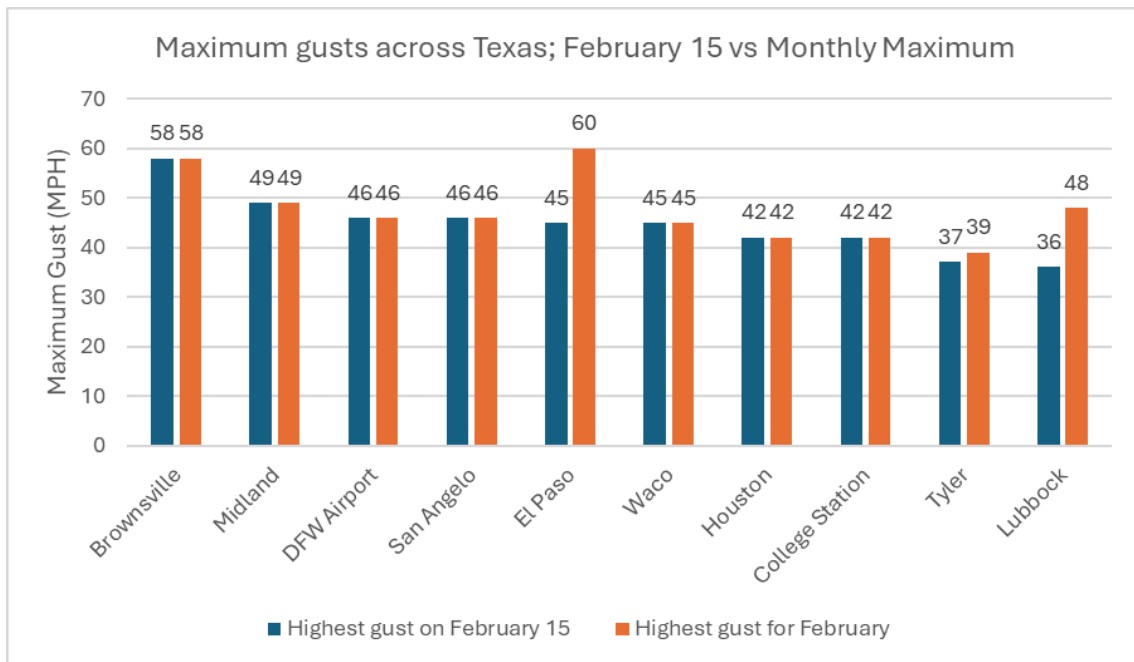
24-hr Change in 2 m AGL Temperature (°F)

F000 Valid: Wed 2025-02-19 04z

Init: Wed 2025-02-19 04z RTMA-RU



Widest Temperature Ranges for February DFW				
Rank	Year	Temperature Spread	Monthly Minimum to Monthly Maximum	
1	1996	87°F	8°F (Feb 4)	95°F (Feb 21)
2	1933	84°F	2°F (Feb 8)	86°F (Feb 23)
3	2021	83°F	-2°F (Feb 16)	81°F (Feb 23)
4	1899	82°F	-8°F (Feb 12)	74°F (Feb 20)
5	1918	81°F	12°F (Feb 1)	93°F (Feb 24 and 25)
6	1917	80°F	13°F (Feb 1 and 2)	93°F (Feb 25)
7	1951	77°F	6°F (Feb 1)	83°F (Feb 12)
8	2025	76°F	12°F (Feb 20)	88°F (Feb 8)
9	1905	74°F	1°F (Feb 13)	75°F (Feb 24)
10	1982	73°F	14°F (Feb 6)	87°F (Feb 22)
10	1904	73°F	23°F (Feb 11 and 19)	96°F (Feb 25)



Above is a collage of some of the significant weather events for February. The first two graphs show impressive temperature swings at two stations: DFW and Houston. Temperature swings like this were the rule for the State of Texas. DFW and Houston recorded temperature spreads for February that are among the largest in their climate record. DFW's 76°F swing from 12°F on February 20 to 88°F on February 8 is the 8th largest February temperature swing in its history, while Houston's 59°F swing from 27°F on February 20 to 86°F on February 8 ties for its 16th largest on record. Graphs courtesy of the Applied Climate Information System (ACIS).

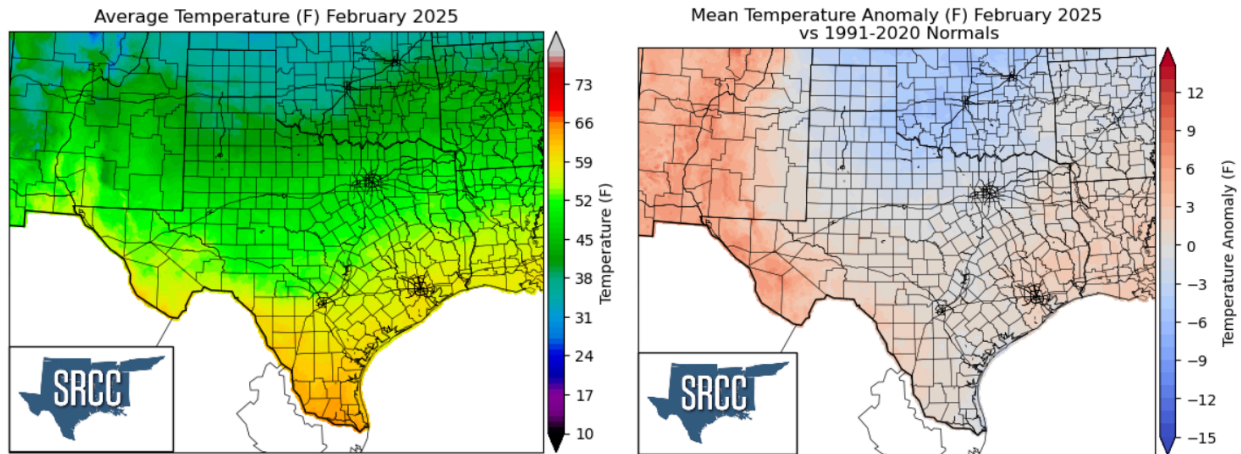
The third image depicts the 24-hour temperature change across the United States between 10 pm CST February 18 and 10 pm CST February 19. Parts of Texas dropped as much as 40 to 50°F in 24 hours due to the passage of an arctic cold front. Image courtesy of Pivotal Weather.

The table shows how the 76°F temperature spread during February 2025 stacks up with other Februaries in the Dallas-Fort Worth area.

The first image on the second page shows the highest wind gusts on February 15, one of the windiest days of the month across Texas. This day saw many stations record their highest gusts of the month, and Brownsville even recorded a wind gust of severe thunderstorm criteria without a thunderstorm present.

The last of the images shows a large area of rain and embedded thunderstorms affecting Central Texas and the Bryan-College Station area during the overnight hours of February 12. Image courtesy of NOAA's weather and climate toolkit.

Temperature:

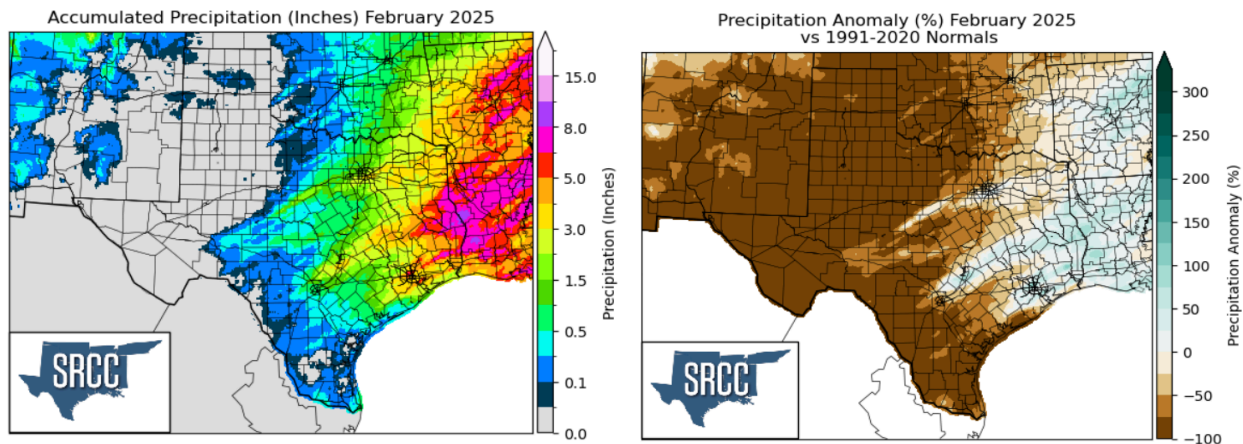


With all the flip-flopping, February ended with a temperature average of **51.8°F** for Texas, the **38th warmest** February on record. Temperatures were slightly below normal for the northern portions of the state due to the more persistent nature of the cooler air and slightly above normal in areas to the south, where colder air masses had a harder time reaching. The mountainous terrain of West Texas acted as a barrier for the colder air, allowing the Trans Pecos to record February 2025 as one of their warmest Februaries on record.

Some at-a-glance temperature statistics for Texas are:

- **35.2°F** - The monthly average at the Gruver Co-op site in Hansford County, the coldest in Texas
- **52.2°F** - The average monthly temperature of the 381 Texas reporting stations
 - 4.9°F **below** that of February 2024
 - 8.6°F **above** that of last month
- **67.6°F** - The monthly average at the McAllen Miller International Airport in Hidalgo County, the warmest in Texas
- The hottest recorded February temperature in Texas was **100°F** at the Rio Grande Village Co-op site in Brewster County on **February 8, 2025**, which is:
 - The first occurrence of a triple-digit temperature in Texas this year
 - The hottest temperature recorded in Texas since November 4, 2024.
 - The second earliest triple-digit temperature in Texas weather records, behind only Rio Grande City on February 5, 2008.
- The coldest recorded February temperature was **-2°F** seen at three different sites on **February 19 and 20, 2025**

Precipitation:

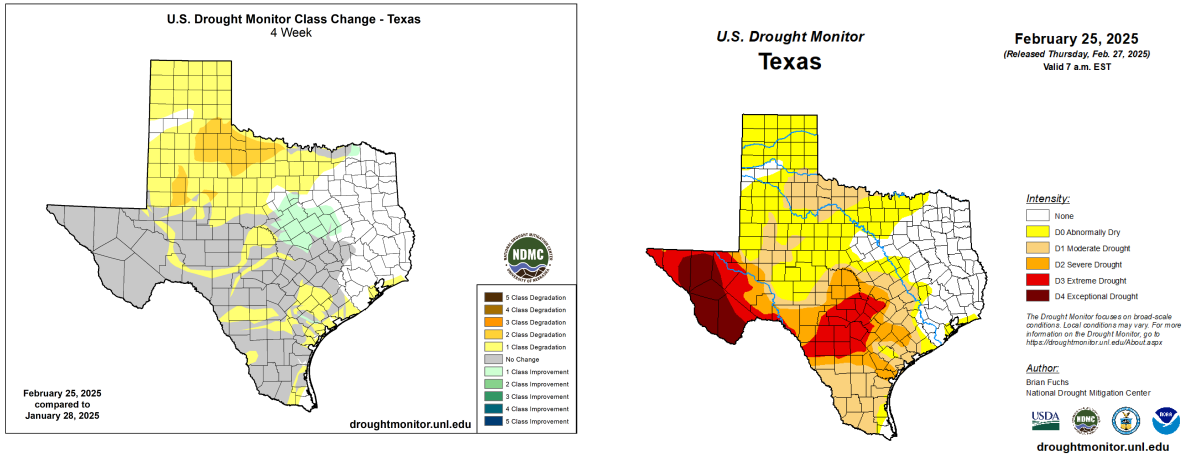


As is typical for the cool season in Texas, we saw lower precipitation amounts to the west and higher precipitation amounts to the east. More persistent moisture in the eastern portions of the state meant that heavier bands of precipitation were favored, and consequently, most, if not all, of the precipitation across the state was seen here. Areas out west saw negligible precipitation amounts, a disheartening tale, as these areas are dealing with extreme to exceptional drought.

Some at-a-glance precipitation characteristics across the state are:

- **1.26"** - Average of the 2,305 Texas stations (not accounting for geographical distribution)
 - 1.12" **below** last month
 - 0.31" **below** February 2024
- **7.66"** - monthly total precipitation at the Broaddus 9.9 SE CoCoRaHS site in San Augustine County, the highest monthly total in Texas

- **4.60”** - The rainiest 24-hour period in Texas during February, which occurred between February 18-19, 2025, at the Silsbee 4.9N CoCoRaHS site in Hardin County.



Drought: The northern portions of Texas saw drought degradation on the order of 1 to 2 drought categories, with much of the rest of the state seeing little change. Much of the Trans Pecos region is already seeing exceptional drought, the most significant drought classification, so that even with the lack of rainfall seen this month, no further degradation can be depicted on the map. As we head into the spring rainy season, hopefully, we will see the drought ease up some, yet with La Niña conditions expected to continue, the hope for this is subdued.

Drought category	End of January (January 28, 2024)	End of February (February 25, 2024)	Change
Abnormally dry or greater	53.1%	79.9%	+26.8%
Moderate drought or greater	42.4%	49.0%	+ 6.6%
Severe drought or greater	24.1%	27.8%	+ 3.7%
Extreme drought or greater	15.7%	17.3%	+ 1.6%
Exceptional drought	6.3%	6.3%	0.0%