

# North Dakota Annual Climate Report

# 2025

North Dakota State Climate Office  
School of Natural Resource Sciences  
North Dakota State University



# From the Office of the State Climatologist

The North Dakota State Climate Office (NDSCO) runs in conjunction with the North Dakota Agricultural Weather Network (NDAWN), to bring high quality climate data to citizens and businesses in North Dakota. NDSCO is located within the School of Natural Resource Sciences at the North Dakota State University. If you have any questions, comments, or concerns, please contact the State Climate Office or the North Dakota State Climatologist.

## 2025 Summary

It is difficult to summarize an entire year in a paragraph or two, but 2025 will likely be remembered the most for the derecho/high wind event on the night of June 20-21 (see the June 2025 summary for a detailed description). NDAWN recorded the highest wind gust in the network's history with 101 mph at the Linton 5NW station that evening. 2025 also recorded the highest number of tornadoes in a year for the state with over 70 being recorded. Although, such statistics need to be tagged with the reminder that with so many recreational storm chasers, sometimes totaling in hundreds during a given storm day, many of the tornadoes were brief spin ups that would have never been recorded in the past.

The annual temperatures were pretty close to average and rain varied greatly as it usually does across the state. The year may have started dry in many areas, but the abundant rain in many locations eliminated the dryness across the state. Even with an early freeze in many areas, crop production was quite good during the 2025 growing season.



Figure 1: A rainbow rises above a sunflower field in south central North Dakota at the Carson NDAWN station

# Precipitation Summary

**2025 Statewide Average: 20.87"**

**Normal Statewide Precipitation: 19.73"**

Precipitation varied greatly across the state throughout the year, as it typically does in the state of North Dakota. Oftentimes, the cut-off from a rain shower or storm was very tight. One example of this is the Wirch NDAWN station in eastern McIntosh County recording 7.20 inches on August 5, whereas the neighboring stations in McIntosh, LaMoure, and Dickey Counties recorded 0-3 inches.

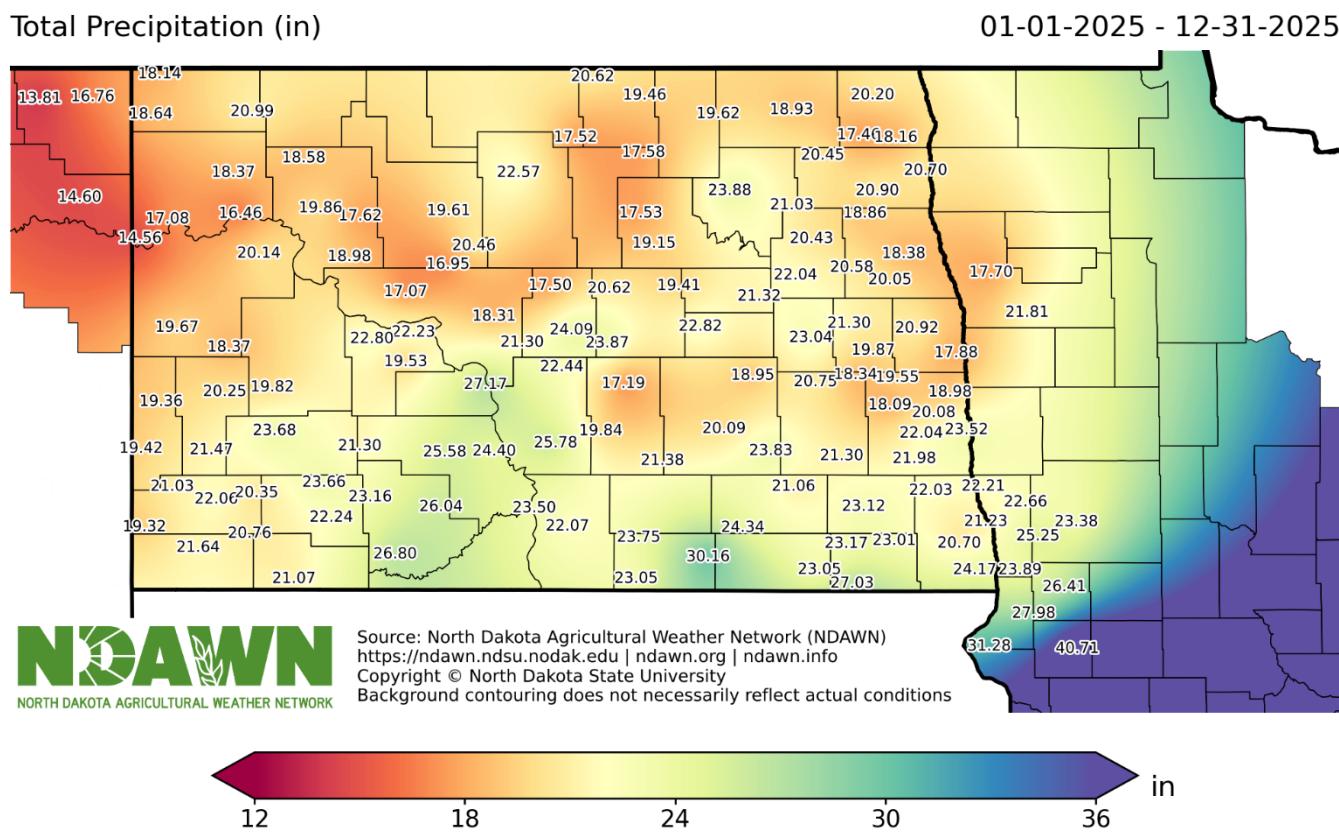
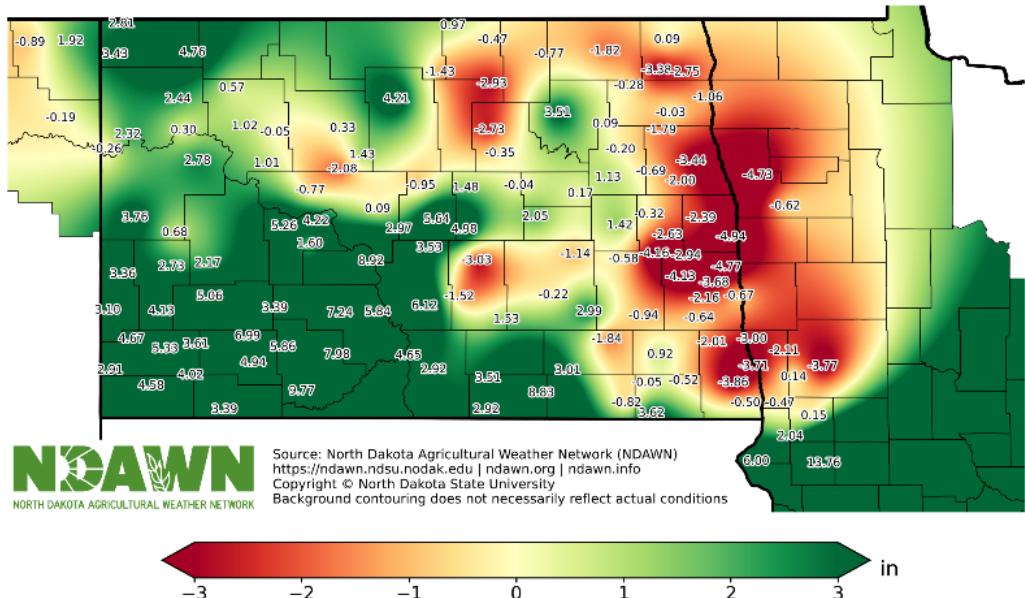


Figure 2: Total Precipitation measured at NDAWN stations in 2025. Precipitation maps from NDAWN include winter precipitation ensuring an accurate measurement of the liquid water content year-round.

The Wirch NDAWN station measured the highest precipitation total annually in the state with 30.16" which is 141% of normal (+8.83"). Of course, normal precipitation varies greatly throughout the state with averages in the low-20 inches in eastern North Dakota and mid-teen inches in western North Dakota. The Pretty Rock NDAWN station in southern Grant County had the highest precipitation above normal with 26.80" which is 157% of normal (+9.75").

The lowest precipitation total for 2025 was in northern McKenzie County at the Buford NDAWN station with 14.56" which is 98% of normal (-0.26"). The lowest precipitation below normal was at the Hillsboro NDAWN station in southeastern Traill County with 17.88" which is 78% of normal (-4.98").

### Departure from Normal Precipitation (in)



### Percent of Normal Precipitation (%)

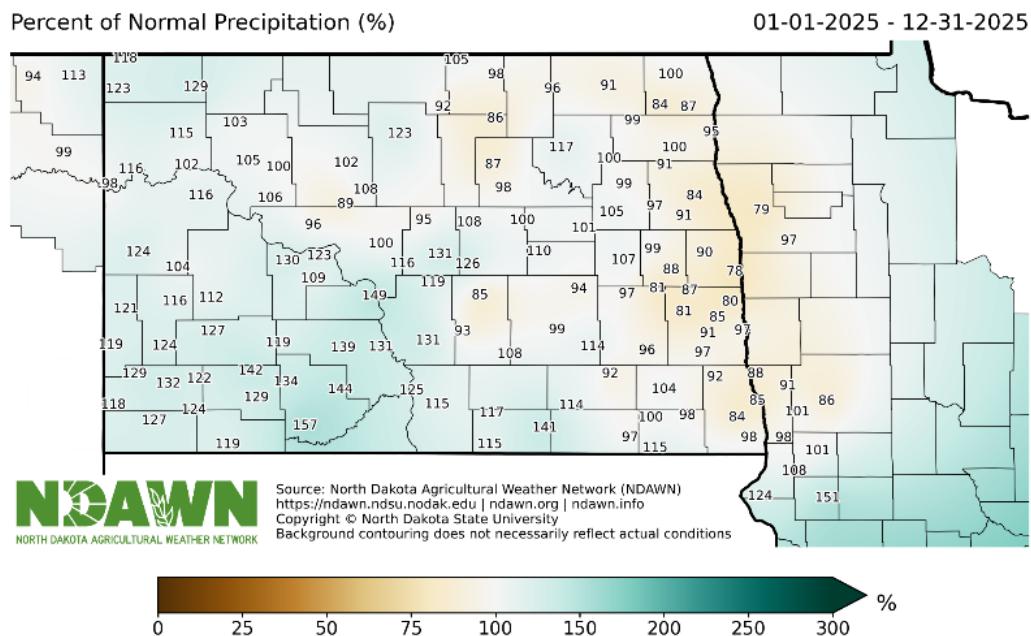


Figure 3: Departure from Normal Precipitation (top) and Percent of Normal Precipitation (bottom) measured at NDAWN stations with all-season precipitation gauges in 2025.

### North Dakota Precipitation January-December

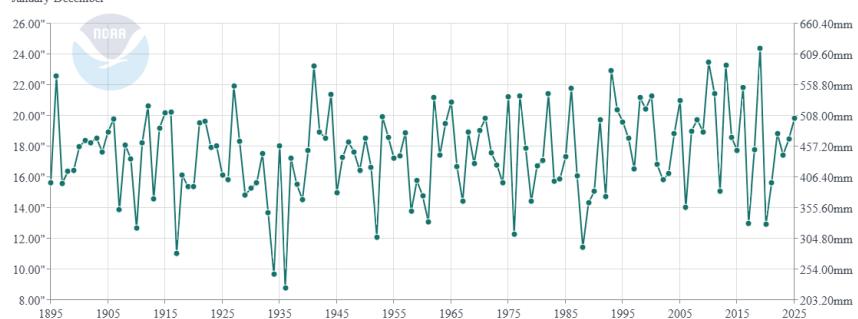


Figure 4: Average Annual Precipitation in North Dakota. 2025 was the 20<sup>th</sup> wettest year (wettest: 24.39" in 2019; driest: 8.81" in 1936) (via NCEI)



# U.S. Drought Monitor

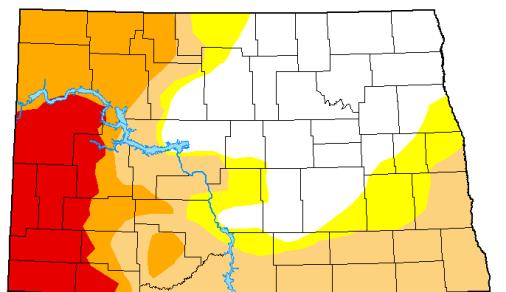
	None	D0	D1	D2	D3	D4
<b>Jan. 7, 2025 Conditions</b>	32.9%	12.2%	26.1%	15.8%	13%	0%
<b>Dec. 30, 2025 Conditions</b>	98.0%	2.0%	0%	0%	0%	0%

The western half of the state had been in a drought intensity stage (D0 – D4) since August 9, 2022, but above average precipitation finally eradicated dry conditions by August 19, leaving only a small part of D0 in northeastern North Dakota. A drier than average end to the year in East Central North Dakota led to Traill and parts of Cass County being placed in the Abnormally Dry category. North Dakota has been drought-free (D1 – D4) since August 5.

## U.S. Drought Monitor North Dakota

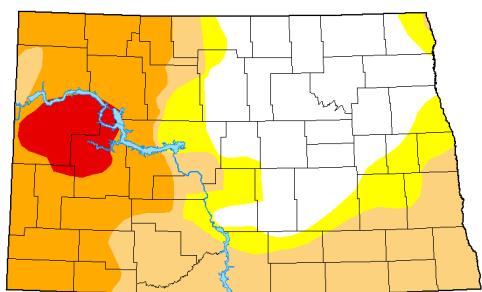
January 7, 2025  
(Released Thursday, Jan. 9, 2025)  
Valid 7 a.m. EST

April 22, 2025



*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:*  
 Brad Pugh  
 CPC/NOAA



August 12, 2025

December 30, 2025

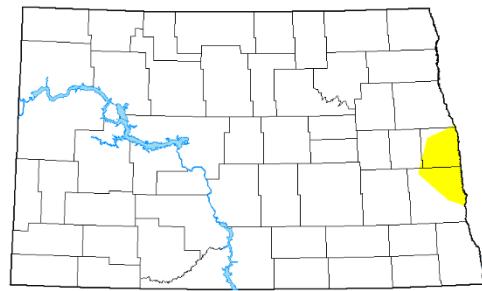
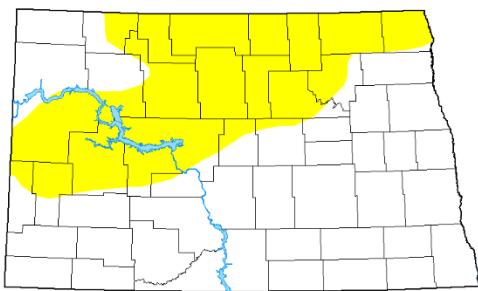


Figure 5: U.S. Drought Monitor Conditions throughout 2025

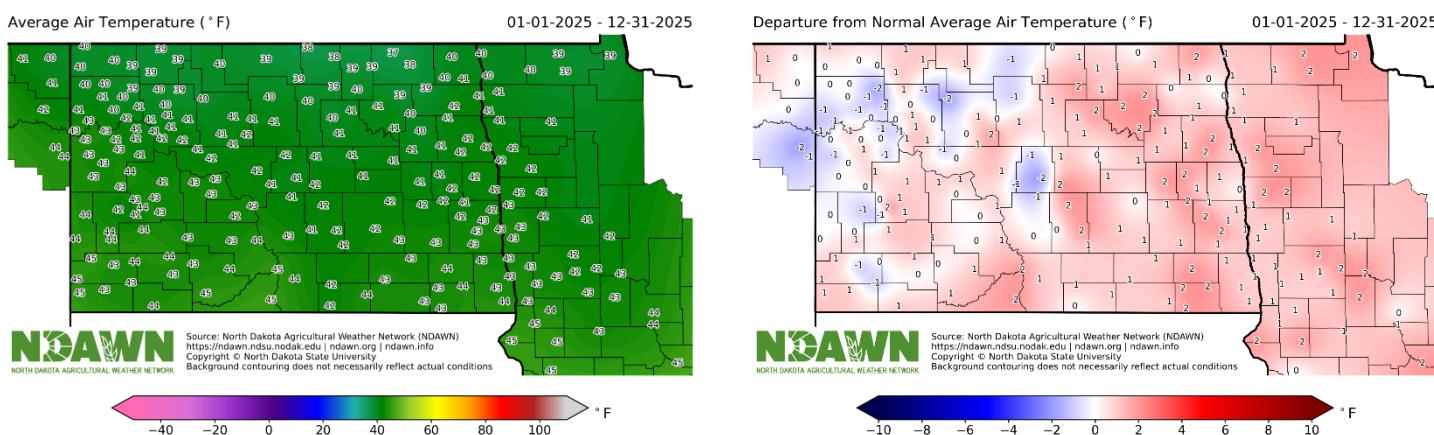
# Temperature Summary

**2025 Statewide Average: 41.8°F**

**Normal Statewide Temperature: 41.0°F**

Temperature varied greatly throughout the year and across the state. From a cold winter to a warm spring, cool summer, and hot fall, North Dakota temperatures were classically all over the board. Overall, the statewide average temperature was recorded as 41.8°F, just 0.8°F warmer than normal, coldest since 2022.

Winter (December 2024 – February 2025) temperatures averaged 11.0°F, 2.4°F below normal, also the coldest since 2022. Spring (March – May) temperatures averaged 43.3°F, 2.7°F above normal, warmest since 2016. Summer (June – August) temperatures averaged 66.2°F, 0.7°F below normal, coldest since 2014. Autumn (September – November) temperatures averaged 47.5°F, 4.3°F above normal, warmest since 2021.



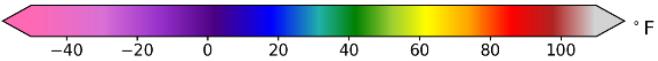
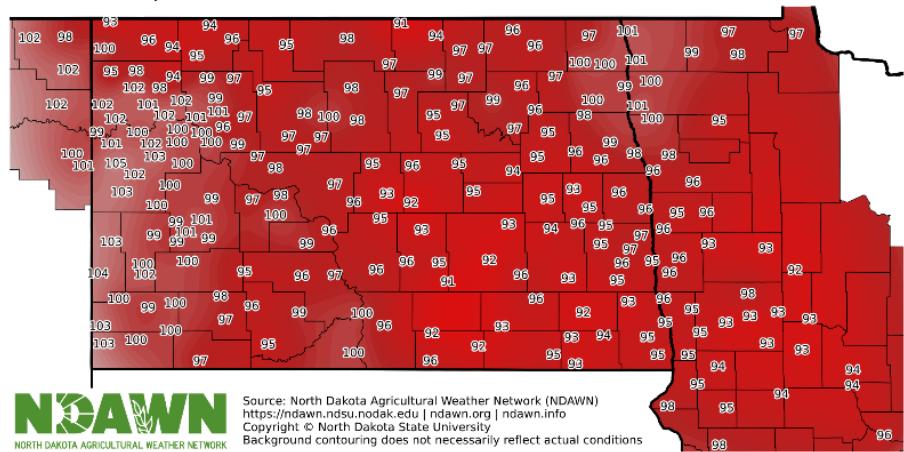
*Figure 6: Average Air Temperature (left) and Departure from Normal Average Air Temperature (right) measured at NDAWN stations in 2025.*

The highest temperature recorded at an NDAWN station in 2025 was 104.5°F at the Alexander station in McKenzie County on July 9. Temperatures in the 100s were a rare occurrence in 2025, with 1-2 days in western ND and generally none in central and eastern ND. Some stations in the northern Red River Valley did record a 100°F reading in early May. On the other hand, every NDAWN station recorded at least 1 day at 90°F+. The Sunny Slope NDAWN station in Bowman County recorded the most with 26 days.

The coldest temperature recorded at an NDAWN station in 2025 was -47.1°F at the New Hradec station in southern Dunn County on February 19. This was the coldest temperature at an NDAWN station since 2019. In the northeastern part of the state, the Wales NDAWN station in Cavalier County recorded the most days with a minimum temperature below 0°F with 63 days.

Maximum Temperature ( ° F)

01-01-2025 - 12-31-2025



Minimum Temperature ( ° F)

01-01-2025 - 12-31-2025

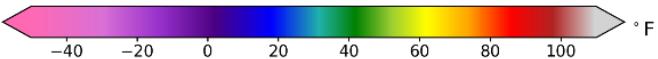
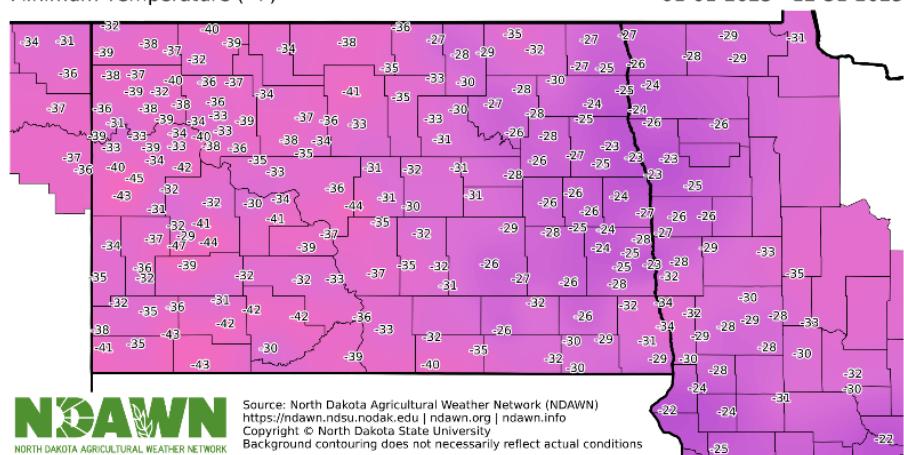


Figure 7: Maximum (top) and Minimum (bottom) Temperatures measured at NDAWN stations in 2025.

#### North Dakota Average Temperature

January-December

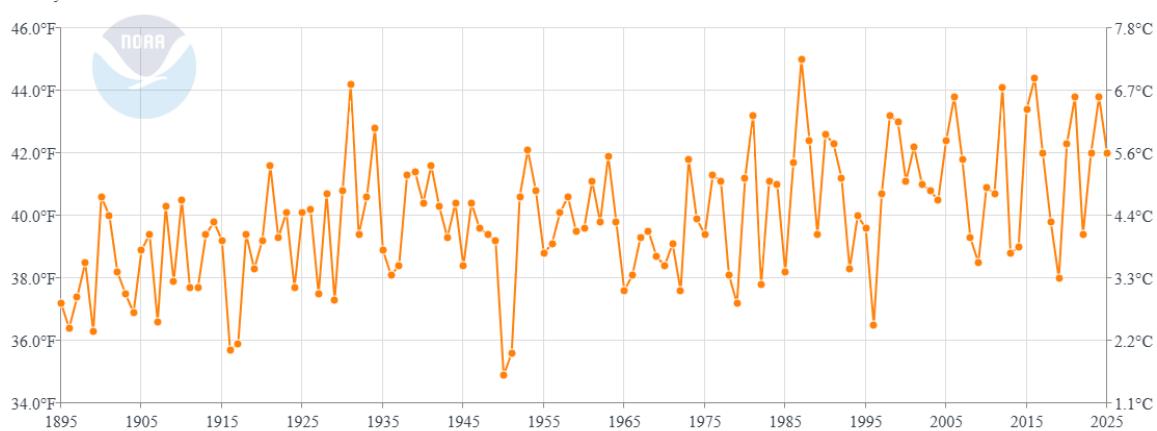


Figure 8: Annual Average Temperature in North Dakota. 2025 was the 25th warmest year (warmest: 45.0°F in 1987; coldest: 34.9°F in 1950) (via NCEI)

# Sources

North Dakota Agricultural Weather Network

National Centers for Environmental Information

U.S. Drought Monitor

NWS Grand Forks

NWS Bismarck

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Detailed monthly and seasonal summaries and the full archive can be found at [www.ndsu.edu/ndSCO](http://www.ndsu.edu/ndSCO).

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