

North Dakota Monthly Climate Summary

August 2025

Volume 19, No. 8

NORTH DAKOTA STATE CLIMATE OFFICE



August 2025



Photo: A Rainbow Shining over a Field of Sunflowers Captured by the Carson NDAWN Camera.

August averages as the second warmest month of the year in North Dakota. Like the entire summer of 2025, August was mostly another cool month with few hot days.

Often cooler warm-season months are associated with excess moisture, but August recorded more dry than wet, yet there was enough moisture to lessen the dryness many areas were still experiencing.

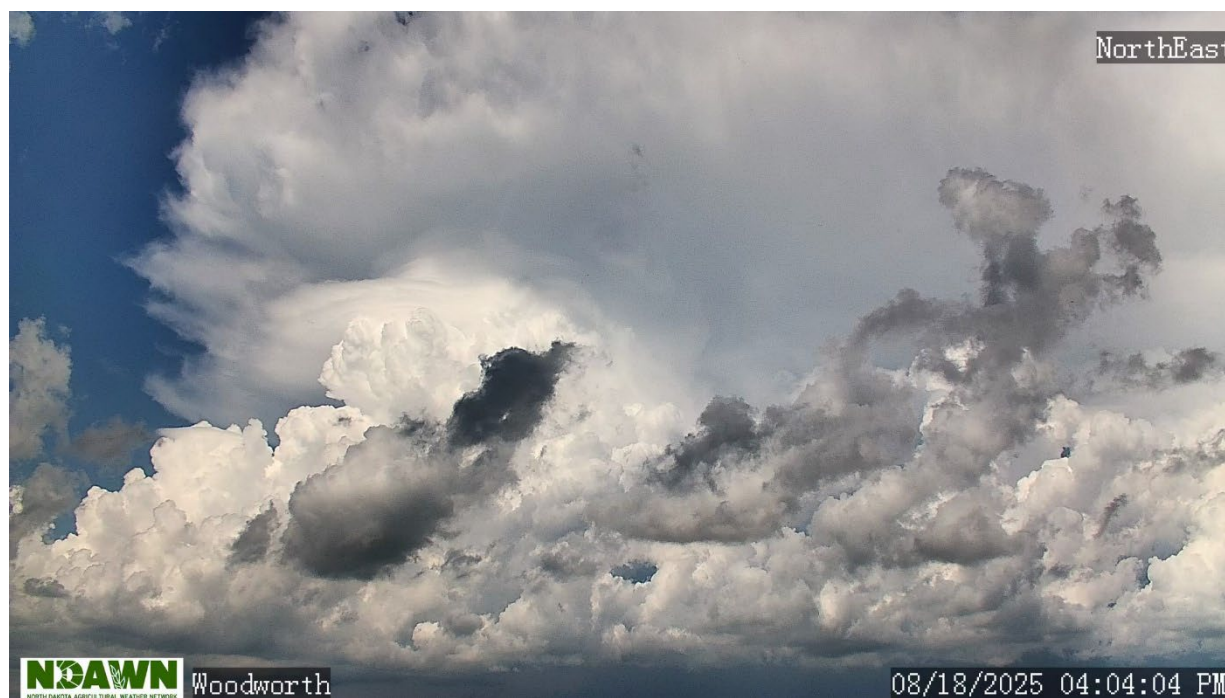
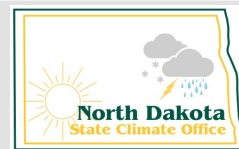


Figure 1: Mature Thunderstorms hangs over the NDAWN Woodworth station.

Daryl Ritchison, North Dakota State Climatologist

Precipitation

2



About 50% of the NDAWN (North Dakota Agricultural Weather Network) stations in North Dakota recorded above and below average rainfall during the month (Figure 2). The wettest area was in southeastern North Dakota and the far northwest corner of the state. Much of the excess rain in the southern part of North Dakota was associated with a slow-moving cluster of thunderstorms on the evening of August 5, 2025. The Wirsch station recorded 7.20" that day, the highest daily total recorded on a North Dakotan NDAWN station.

Percent of Normal Precipitation (%)

08-01-2025 - 08-31-2025

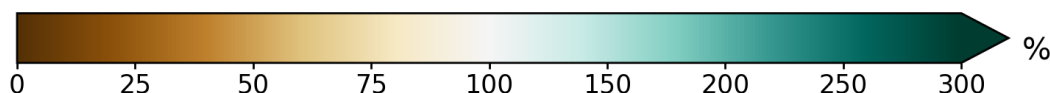
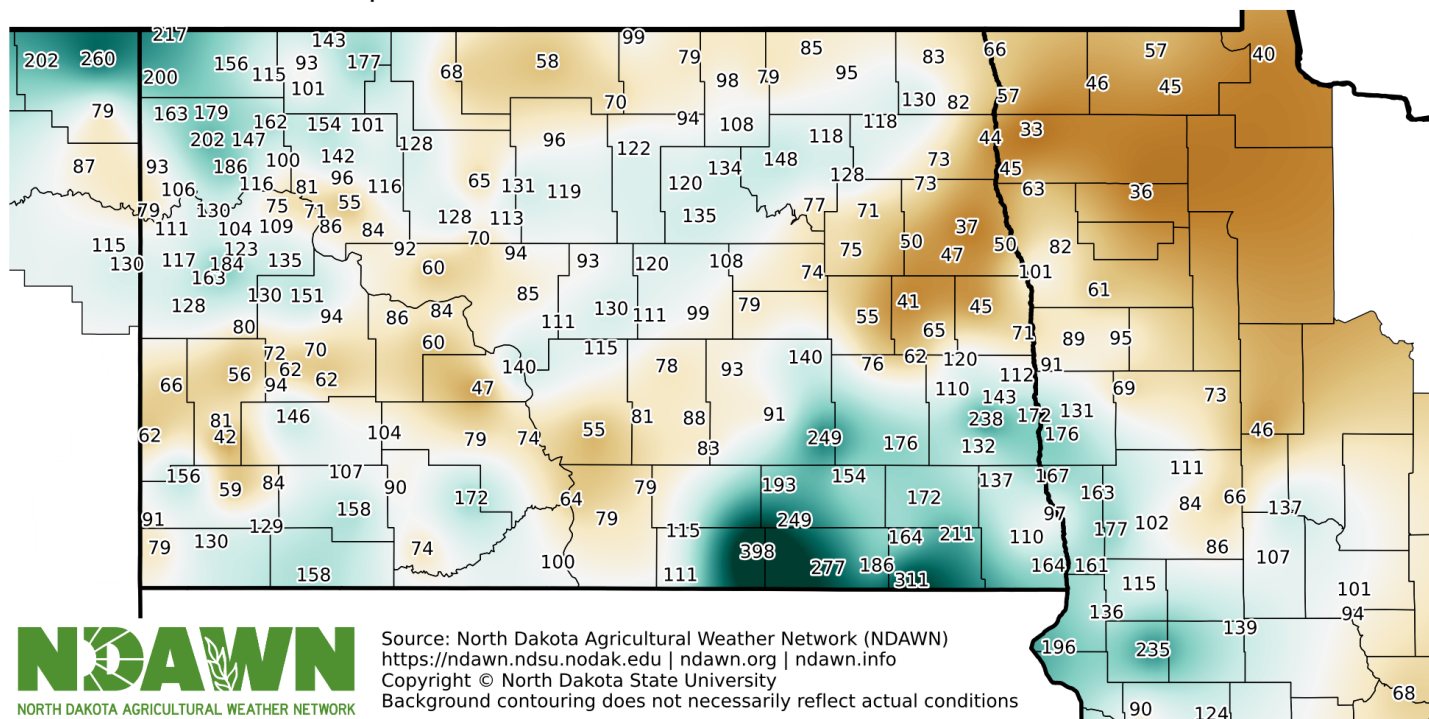
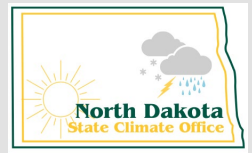


Figure 2: Percent of Average Precipitation measured at all NDAWN stations in August 2025

Precipitation

3



The maximum monthly precipitation recorded by NDAWN during the month of August was 10.00 inches at the Wirch station in eastern McIntosh County. As noted, 7.20 inches of that rain fell in one day. That was 398% of average. On the dry side of things, in southern Billings County, North Dakota, the Pyramid Park NDAWN station recorded only 0.89 inches of precipitation, 42% of normal (Figure 3).

Total Precipitation (in)

08-01-2025 - 08-31-2025

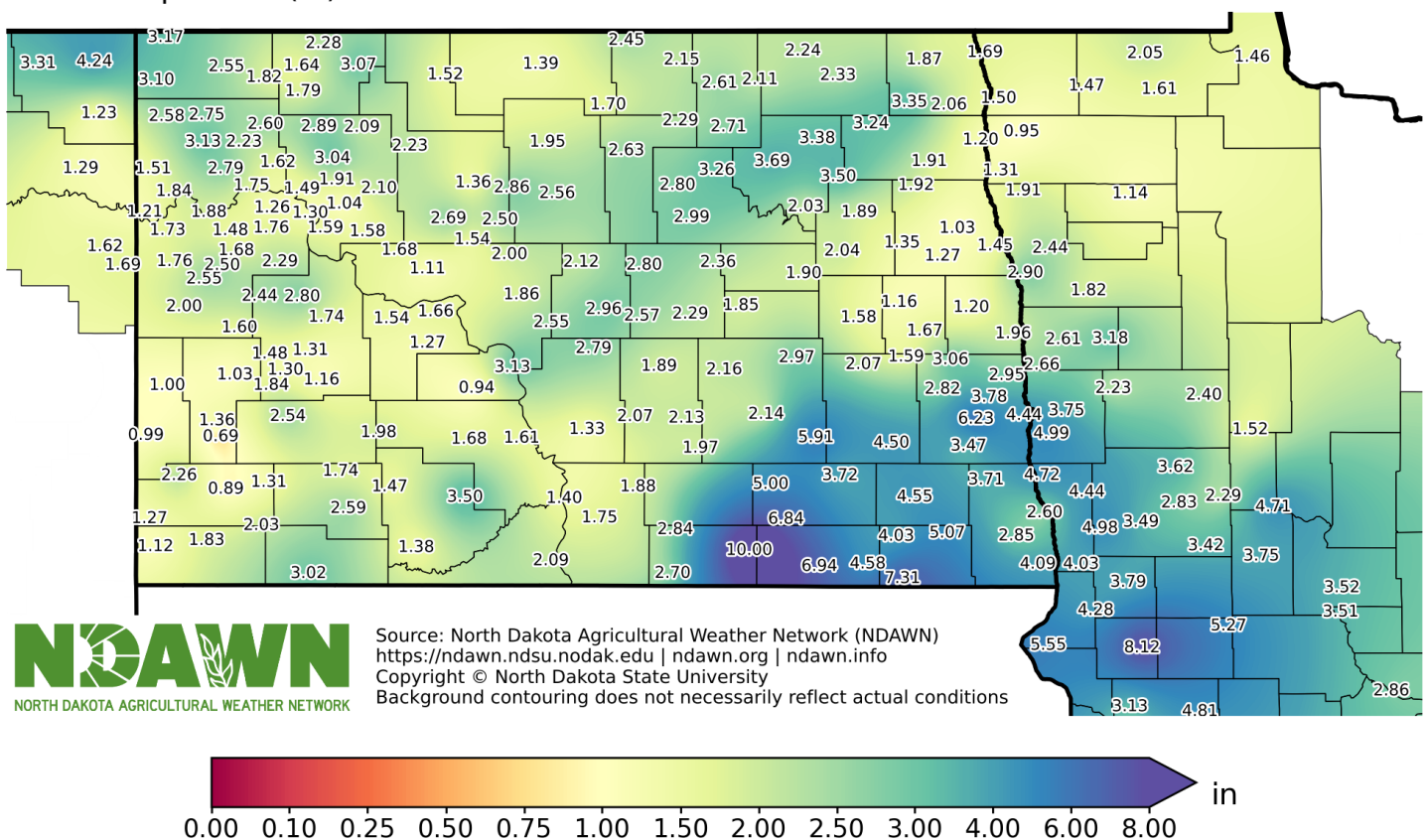
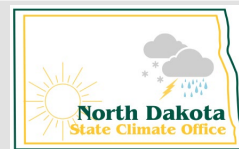


Figure 3: Rain Totals for the August, 2025 at NDAWN Weather Stations

Precipitation

4



From a long-term perspective, northeast North Dakota still overall was dry for the year (Figure 4). Yet, many other areas of the state, especially southwestern North Dakota continued to improve

Total Precipitation (in)

01-01-2025 - 08-31-2025

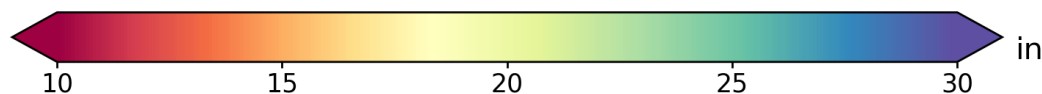
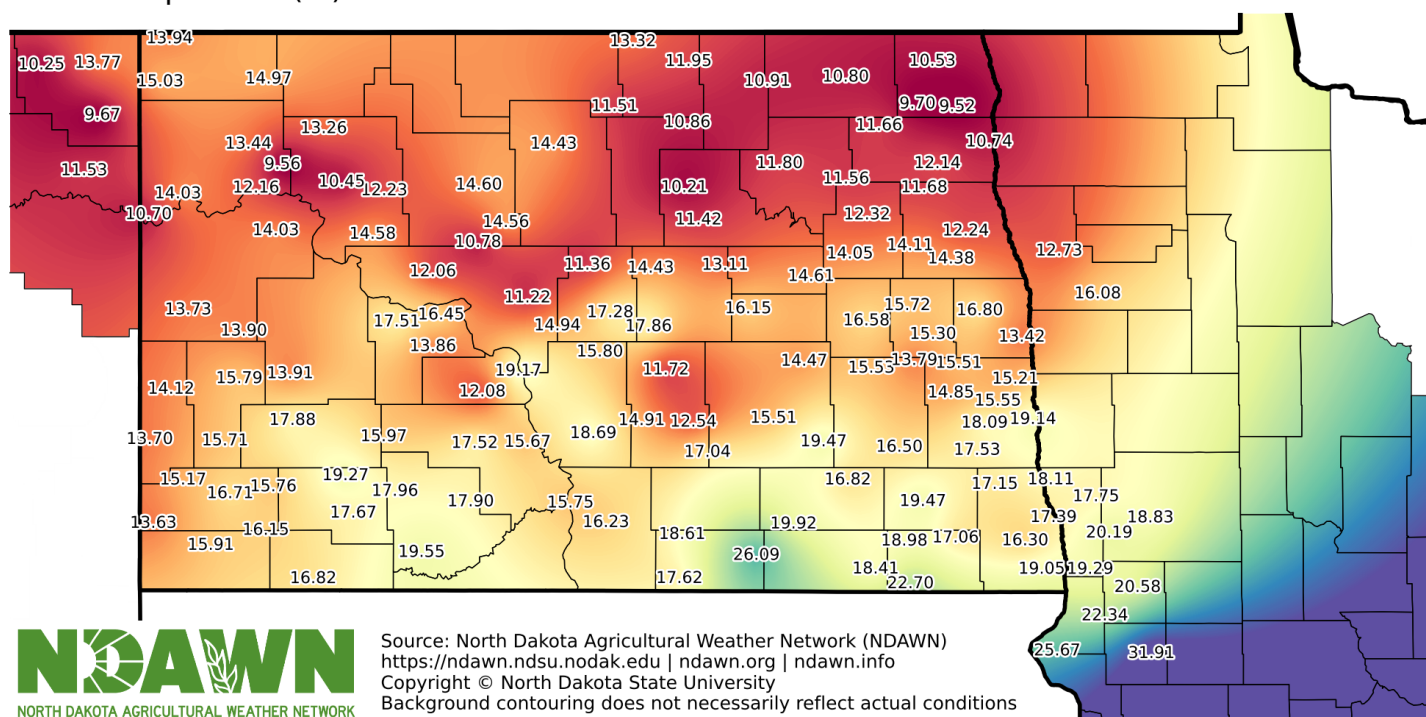


Figure 4: Total Precipitation from January through August at NDAWN with all-season gauges

Improvements to the Drought Monitor accelerated in August. Although many areas were on the dry-side, what rain did fall, fell in the areas that needed it the most. Much of western North Dakota had all dryness removed, with only a small area of D0 (Abnormally Dry) was left as September began (Figure 5).

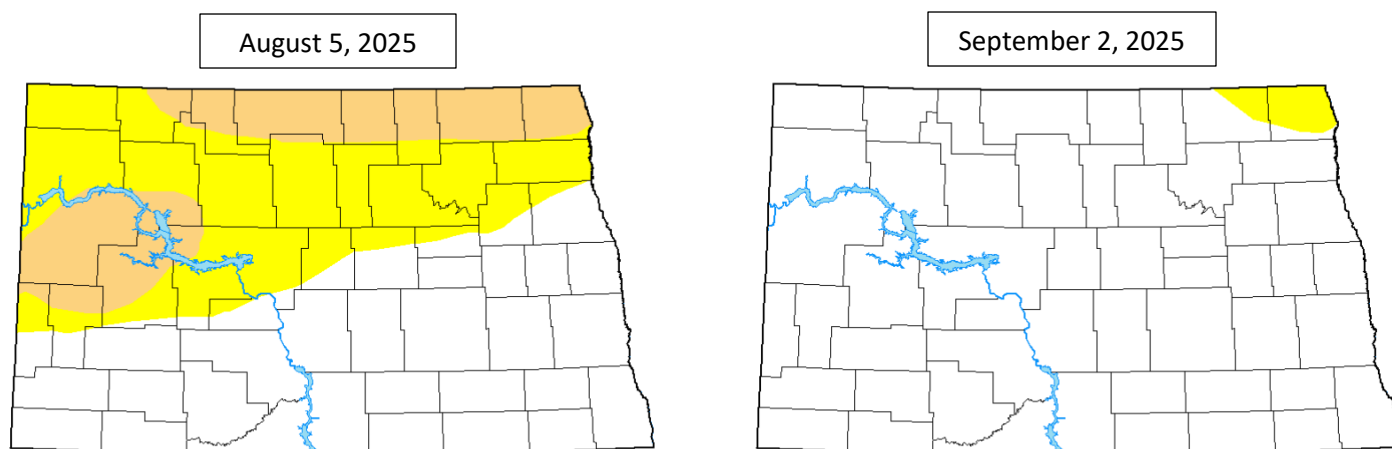


Figure 5: U.S. Drought Monitor conditions change between August 5, 2025 (left) to September 2, 2025 (right)

North Dakota Precipitation

August

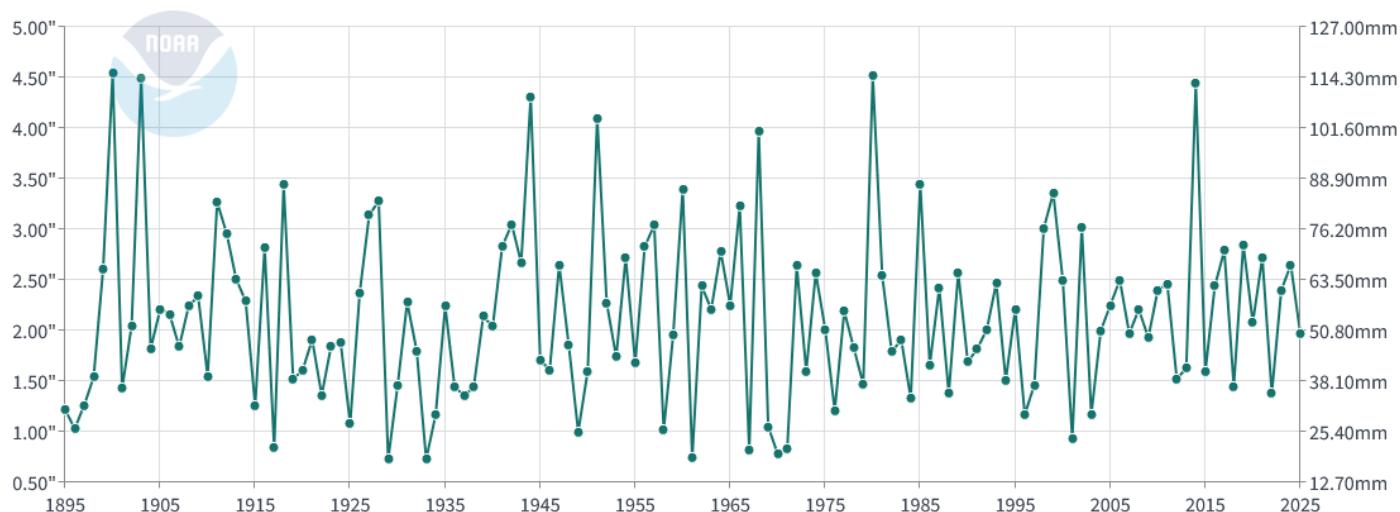


Figure 6: Average Precipitation in North Dakota for the month of August (via NCEI)

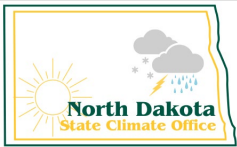


Figure 7: A rainbow as a shower approaches the NDAWN Halliday station at sunrise.

North Dakota May Precipitation Summary

	Precipitation	Normal	Anomaly	Rank	Record Year
August 2025	1.97"	2.12"	-0.15"	70th Wettest	1929, 1933
				62nd Driest	1900

Temperature

7



August overall was either near average or below average at NDAWN with few days with extreme heat. (Figure 8). As an example, the warmest temperature all month at Fargo NDAWN was just 86°. The 5th coolest August Maximum since 1881. The National Center of Environmental Information (NCEI) had the month near average, but again most NDAWN stations finished a bit below average.

Departure from Normal Average Air Temperature (° F)

08-01-2025 - 08-31-2025

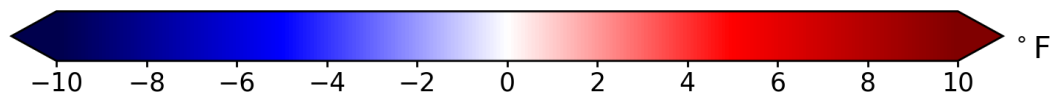
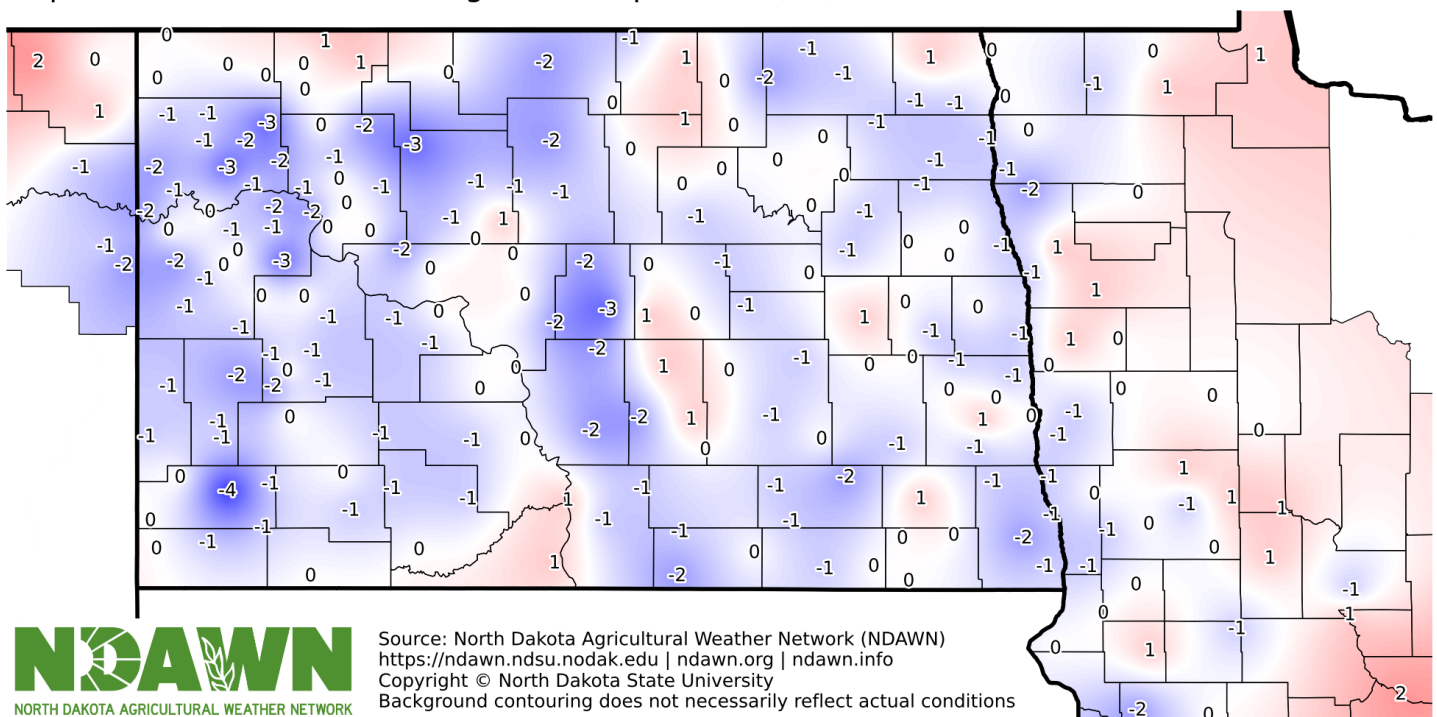
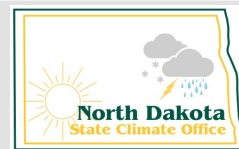


Figure 8: Average Air Temperature Departure from average for the month of August at all NDAWN Stations

Temperature

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The Sunny Slope and Marmarth NDAWN stations recorded a maximum of 103°F on August 20 (Figure 9). Most of eastern North Dakota did not record any temperatures at or above 90°. That is certainly not unprecedented, yet, you could easily consider that unusual. Even with the lack of extreme heat, the month as previously noted, did finish close to average. The month was consistently near the average much of the month.

Maximum Temperature (° F)

08-01-2025 - 08-31-2025

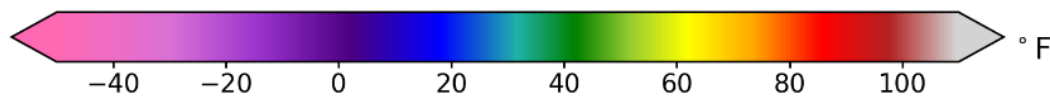
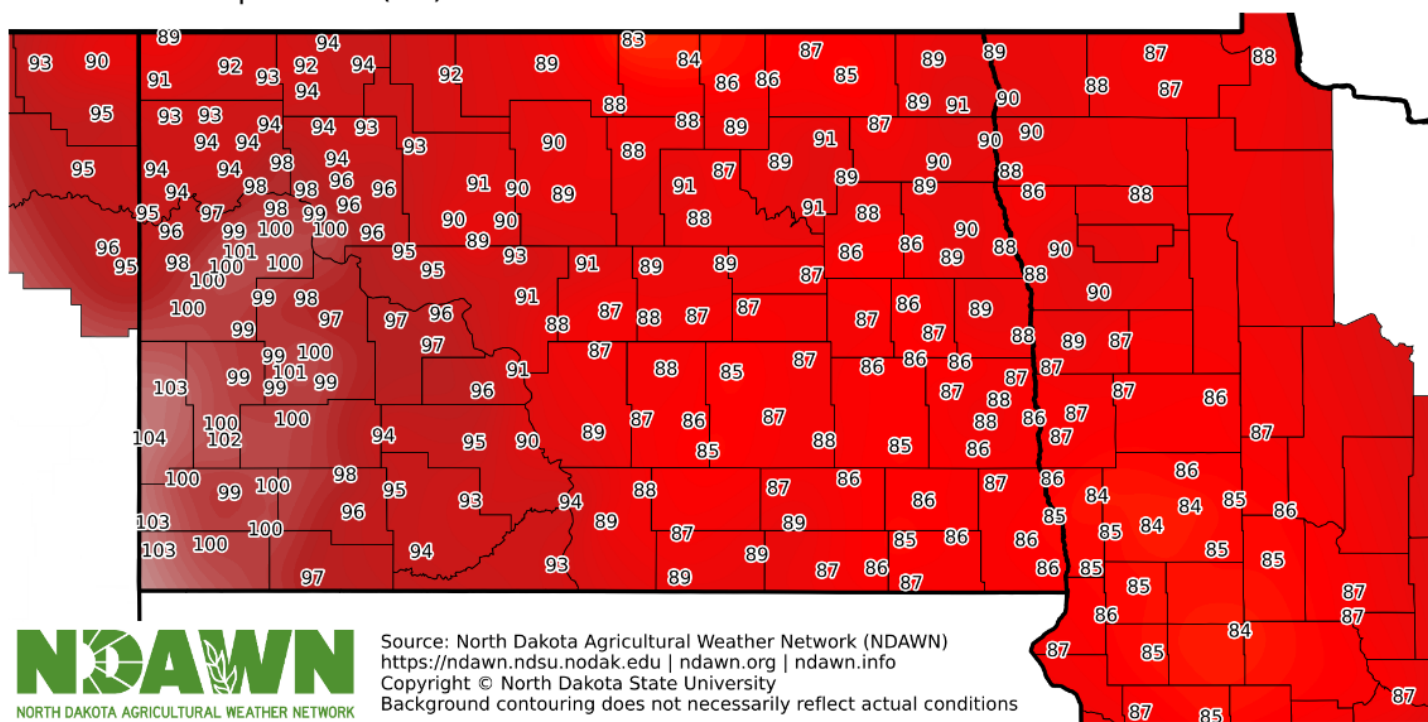


Figure 9: Maximum Temperature recorded at all NDAWN stations during the month of August.

Temperature

The lowest temperature recorded during August at NDAWN stations was at the Tioga station with a minimum of 30°F (Figure 10). The Willow City NDAWN station recorded a low of either 33° or 34° each of the three months of the summer. A testament to how cool the summer was in 2025.

Minimum Temperature (° F)

08-01-2025 - 08-31-2025

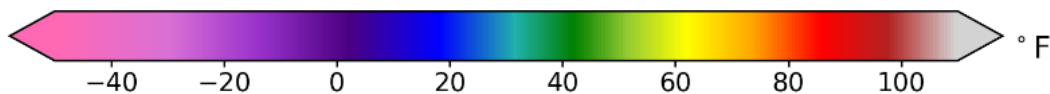
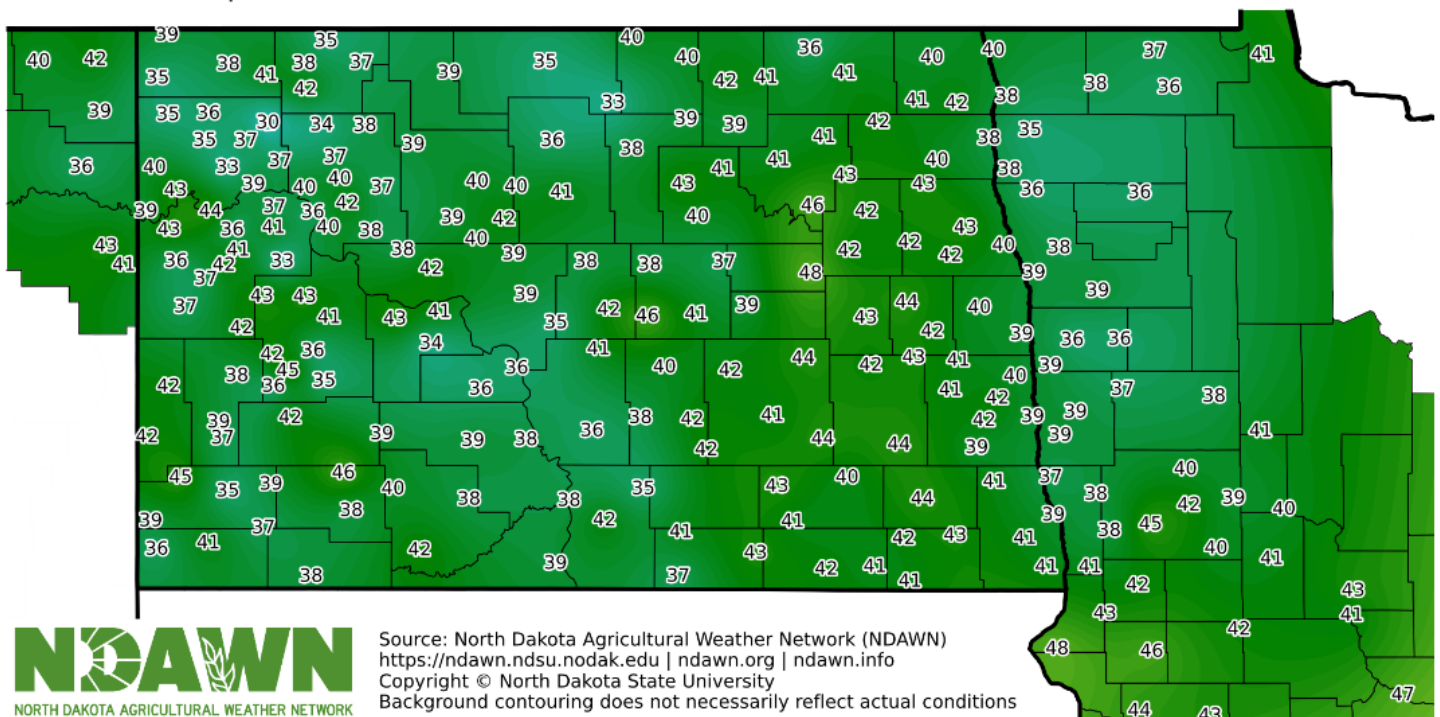


Figure 10: Minimum temperature recorded at each NDAWN Station during August 2025

North Dakota August Temperature Summary

August 2025 Temperature Summary	Average T	Avg max T	Avg min T	Maximum	Minimum
	67.4°F	79.2°F	55.7°F	103°F	30°F
Anomaly	+0.5°F	-1.7°F	+2.7°F		
Rank					
Warmest	61st warmest	83rd Warmest	19th warmest		
Coolest	71st Coldest	49 th Coldest	113th Coldest		
Record					
Warmest	73.8°F (1983)	88.8°F (1961)	58.3°F (1983)		
Coolest	61.2°F (1977)	74.2°F (2004)	47.7°F (1977)		

Table 2: August temperature summary for North Dakota. 2025 statistics from NDAWN station data. Ranking and records based on NCEI climate data (1895-2025) (NOAA).

North Dakota Average Temperature

August

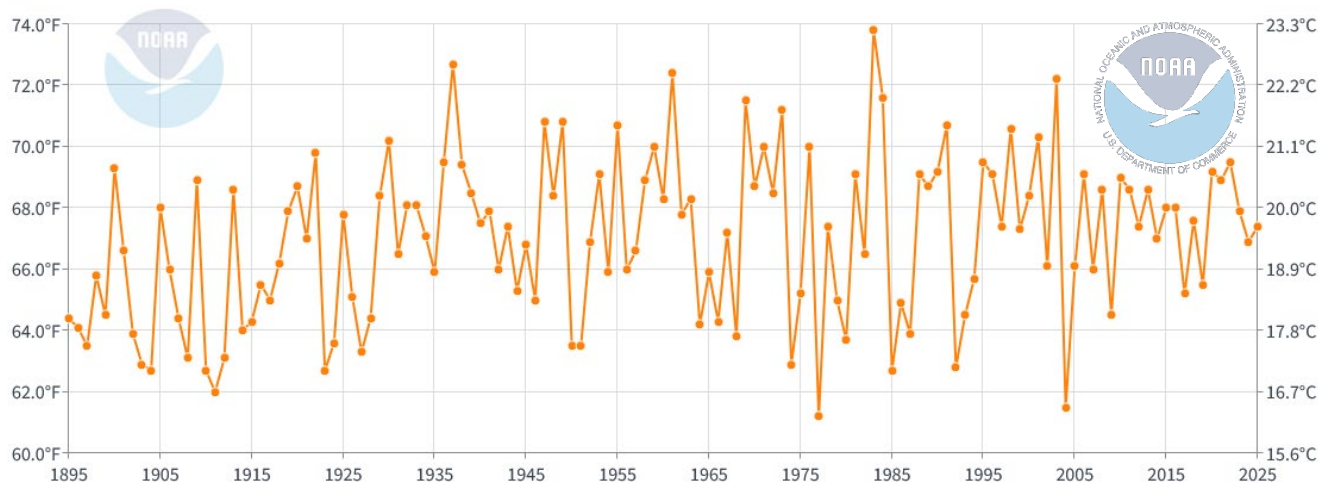


Figure 11: Average August Temperatures since 1895 based on NCEI analysis.