

North Dakota Climate Bulletin

Summer 2025

Volume 19, No. 3

In this Issue

- ❖ From the Office of the State Climatologist
- ❖ Seasonal Summary

Daryl Ritchison
North Dakota State
Climatologist
daryl.ritchison@ndsu.edu

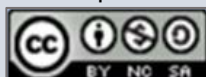
North Dakota State Climate
Office
School of Natural Resource
Sciences
North Dakota State
University

174 Van Es Hall
Fargo, ND 58108

www.ndsu.edu/ndsco



This publication can be
made available in
alternative formats upon
request.



From the Office of the State Climatologist

The North Dakota Climate Bulletin is a quarterly publication of North Dakota's weather and climate from the North Dakota State Climate Office in the School of Natural Resource Sciences, North Dakota State University in Fargo, North Dakota.

Summer (June to August) 2025 will probably be remembered the most of the severe weather outbreak on June 20 into the early hours of June 21 (See the June 2025 summary for a detailed description). Large tornadoes and wide-spread wind damage. The summer was nowhere near the coldest on record, but it was on the cool side with many parts of the state recording temperatures of 1° to 2° below average. That may save on cooling costs, but in a cool climate, the lack of growing degree days delayed maturity of many crops and probably lowered yields.

It may have felt wet, and it was in some locations, but overall, it ended up closer to average than many thought, mainly because the past few summers were generally drier than average.



Figure 1: A Great Horned Owl sits in a tree at sunrise at the NDAWN Cedar Lake station.

Seasonal Summary

Precipitation

Total summer rainfall varied greatly across the state. Northeastern North Dakota was generally dry, whereas southwestern North Dakota had a wetter than average summer. The highest precipitation total occurred at the North Dakota Agricultural Weather Network (NDAWN) station near Wirsch in eastern McIntosh County. The high total was mostly associated with over 7 inches of rain that fell in a single day and for the summer, over twice the average rain fell at that location.

The lowest seasonal rainfall occurred in Pembina County at the St. Thomas NDAWN station, which recorded 5.59 inches from June 1 through August 31, which was 57% of normal for the season. That led to increased drought conditions in the area (Figure 3), as much of northeastern North Dakota into northwestern Minnesota recorded well below average rain.

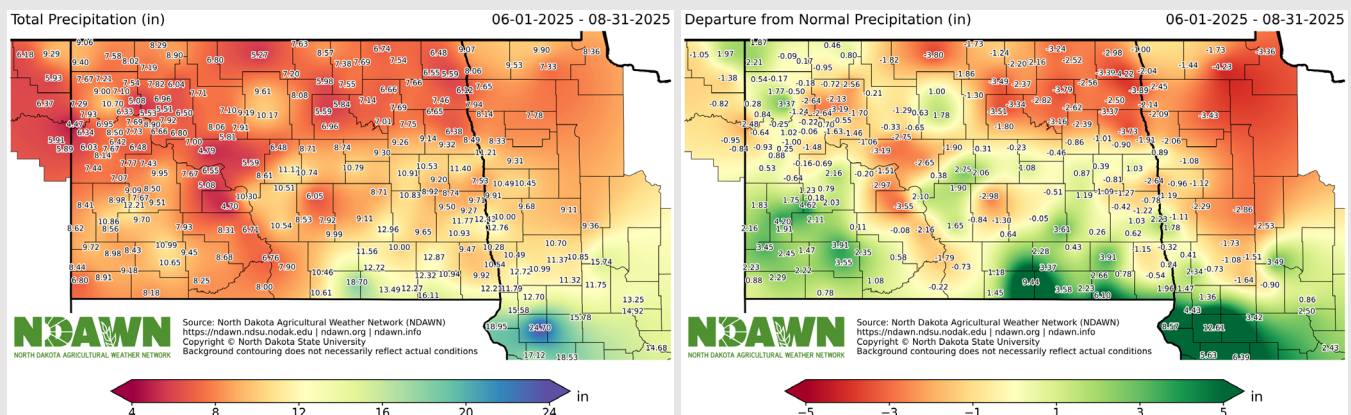


Figure 2: Total precipitation (left) and departure from normal (right) recorded by NDAWN stations between 6/1/2025-8/31/2025

Drought may have been significantly reduced from the beginning to the end of the summer season, but in northeastern North Dakota there was expansion during the summer, that was then reduced by the end of August. See monthly climate bulletins for more details.

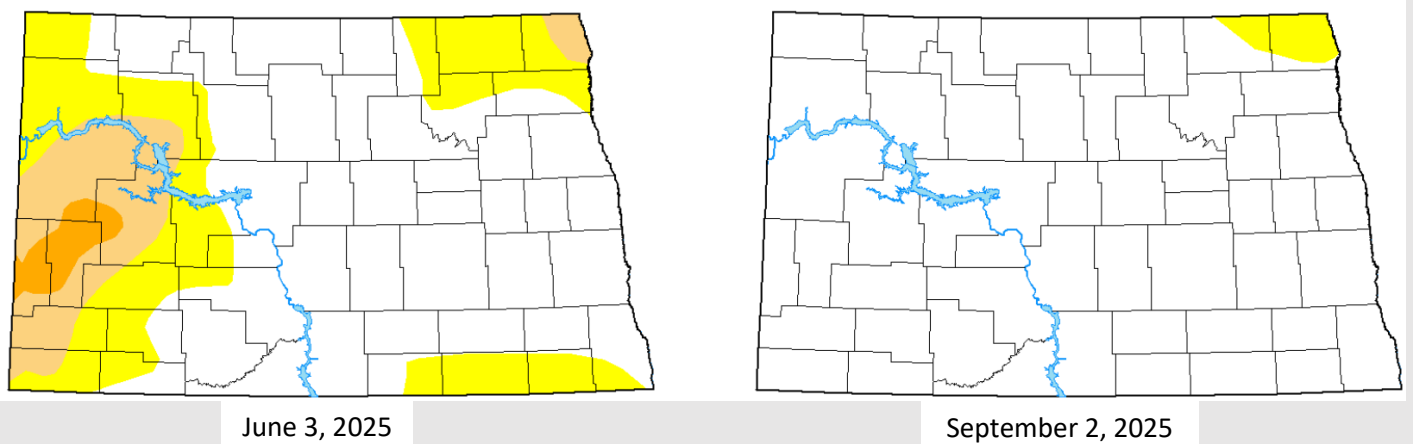
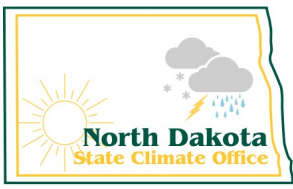


Figure 3: First version of the U.S. Drought Monitor this summer 6/3/2025 (left) vs the latest 9/2/2025 (right)

There were spots there were noticeably above average for rainfall, but dry conditions were mostly eliminated for above average or at least slightly above average rainfall during the summer months. The above average rainfall was of course, associated with more storms and cloud cover. An analysis of solar radiation at NDAWN stations this summer found that most stations recorded around 5% less solar energy (Langley's) this summer in comparison to other summer this decade. Between the additional cloud cover and wetter soil conditions, cooler than average temperatures were observed.



North Dakota Climate Bulletin

Summer 2025

Volume 19, No. 3

North Dakota Precipitation

June-August

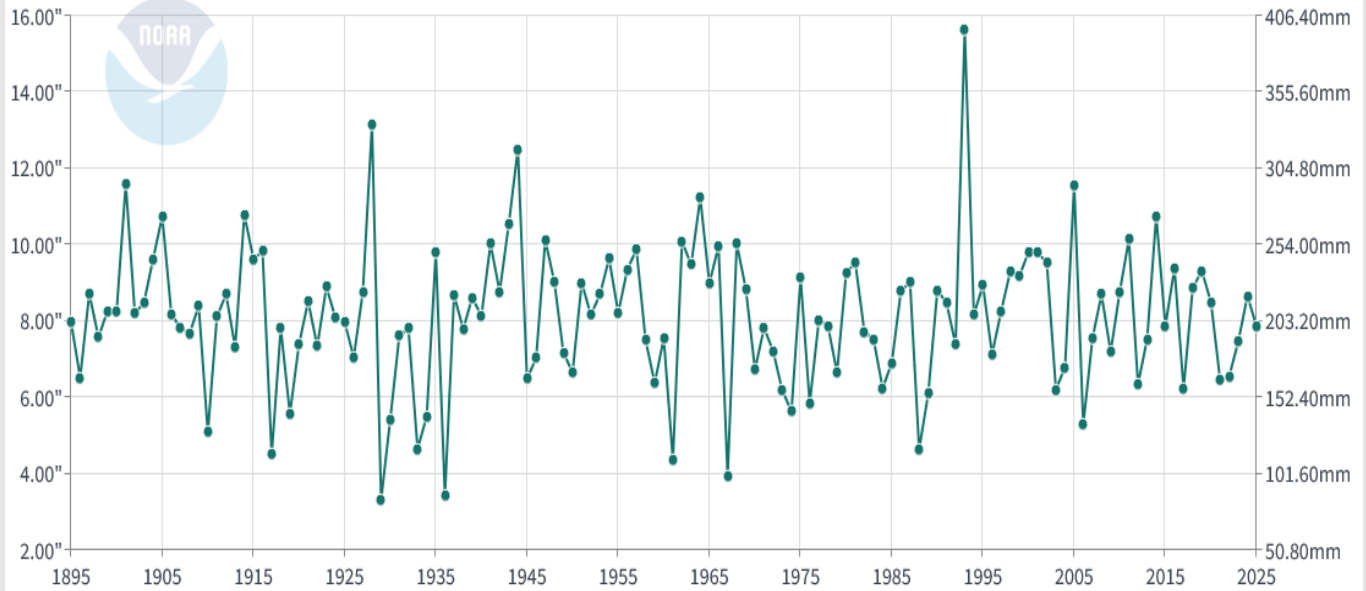


Figure 4: Historical Average precipitation totals for the summer season in North Dakota

North Dakota Summer Precipitation Summary

Summer 2025 June- August	Precipitation	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
	7.86"	8.14"	-0.28"	76 th Wettest	Wettest since 2024	1993
				56 th Driest	Driest since 2023	1929

Table 1: Ranking from NCEI NOAA based on data for the summer season 1895-2025.

Temperature

Unlike the spring months, the summer of 2025 was cooler than average overall. The first half of May in particular was quite warm and ended up being the warmest period of the year as 90-degree plus temperatures during the summer were rare. Although, NCEI did have the summer near average, NDAWN data clearly shows the summer finished below the current 30-year temperature average (Figure 5).

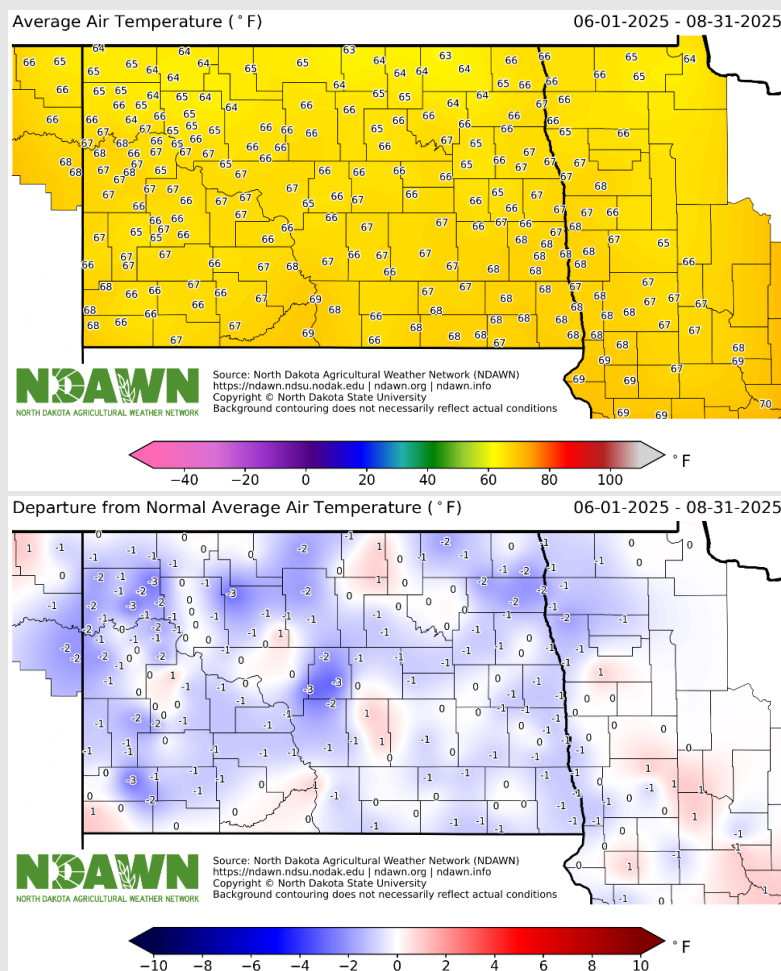
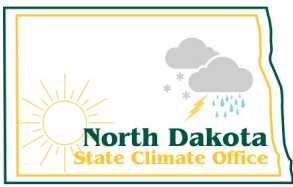


Figure 5: Average Temperature (top) and Departure from Normal Temperature (bottom) across North Dakota NDAWN stations from 6/1/2025-8/31/2025



North Dakota Climate Bulletin

Summer 2025

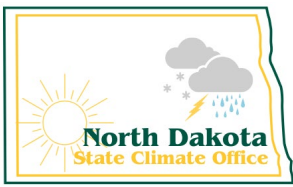
Volume 19, No. 3

The warmest temperature of the summer was recorded at the Alexander NDAWN station where a 105° was observed. Although a historically average maximum during the summer, it was a one-day event. Most NDAWN stations recorded just a handful of hot days during the summer, with hot defined as 90° or above. It was the second straight summer with very few hot days in the central and eastern part of the state. In fact, some areas that recorded over 100° in May, never hit 90° over the summer, or recorded just one such day. The coldest temperatures of the season occurred at the Willow City station with a minimum of 33°. That station recorded a 33° or 34° in each of the three months of the summer season.

North Dakota Summer Temperature Summary

<i>Summer 2025 June - August</i>	Average T	Avg max T	Avg min T	Maximum	Minimum
	66.8°F	78.8°F	54.9°F	105°F	33°F
Anomaly	+0.2°F	-0.6°F	+2.8°F		
Rank					
Warmest	54 th Warmest	85 th Warmest	57 th Warmest		
Coolest	78 th Coolest	47 th Coolest	54 th Coolest		
Record					
Warmest	72°F (1936)	87.2°F (1936)	56.8°F (1936)	121°F (Steele, 1936)	
Coolest	61.2°F (1915)	72.8°F (1993)	48.8°F (1915)		

Table 2: Ranking and records based on NCEI climate data (1895-2025) (NOAA)

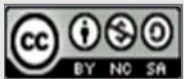


North Dakota Climate Bulletin

Summer 2025

Volume 19, No. 3

Detailed monthly summaries and the full archive can be found at www.ndsu.edu/ndsco.



Feel free to use and share this content, but please do so under the conditions of our [Creative Commons](#) license and our [Rules for Use](#).

NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to Vice Provost, Title IX/ADA Coordinator, Old Main 201, 701-231-7708, ndsuoaa@ndsuo.edu.