

North Dakota Monthly Climate Summary

April 2025

Volume 19, No. 4

NORTH DAKOTA STATE CLIMATE OFFICE



April 2025



Photo: Cows and their Calves enjoy the mild spring weather in Sheyenne, ND. Photo via Sandra Larson

April challenged what a typical spring looks like in North Dakota. With temperatures both on the hot *and* cold side, the monthly temperature averaged normal. The last 0°F temperature of the season was recorded early in the month of April, and that same region also measured widespread temperatures in the 80s not long after!

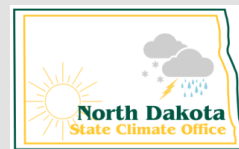
Many in the Southeast and Northwest saw relief from the dry conditions, even in excess. Severe drought conditions persist in West Central ND, where monthly precipitation totals were 50-80% of normal. In the Northern Red River Valley precipitation totals were also lower, a big change from the wet fall in late 2024 that soaked the region during harvest season.



Figure 1: View from Little Missouri State Park, the site of one of the newest NDAWN stations installed in April

Precipitation

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April 2025 certainly outpaced the previous month in terms of precipitation, bringing much needed moisture across the state of North Dakota. The average precipitation measured at NDAWN stations in North Dakota during April was 1.7 inches, which is only 0.4 inches greater than normal. This is because although several stations recorded over 200% of normal, many were on the dry side measuring only 50% of normal. This was very prominent in the drought-stricken areas in the West where the dry atmosphere facilitates virga, rain that evaporates before it reaches the ground.

Percent of Normal Precipitation (%)

04-01-2025 - 04-30-2025

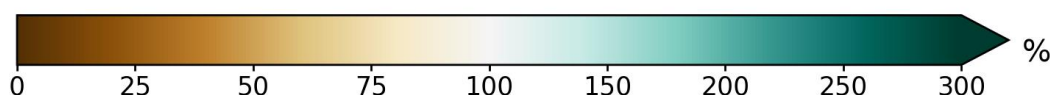
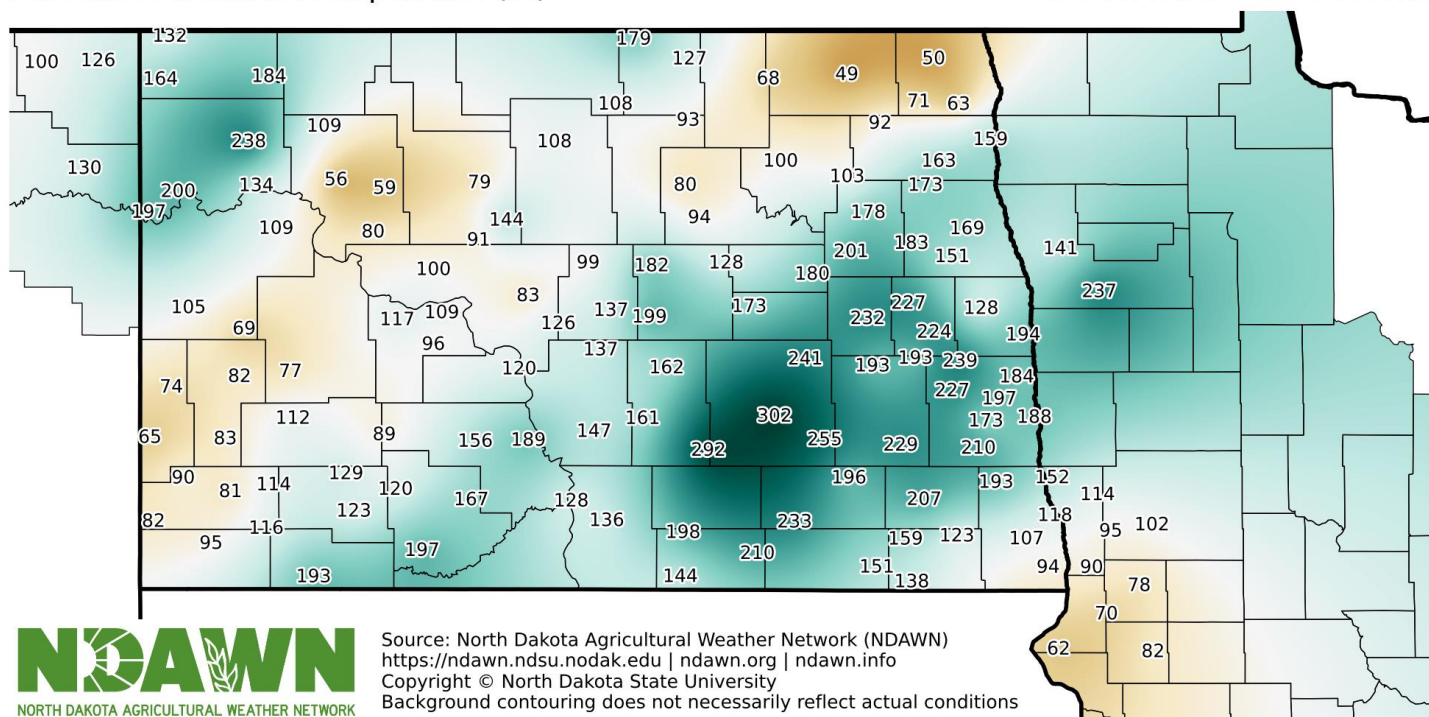
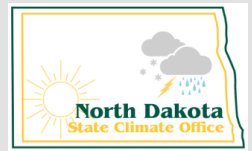


Figure 2: Percent of Normal Precipitation measured at all NDAWN stations in April 2025

Precipitation

3



The maximum monthly precipitation recorded by NDAWN during the month of April was 3.68 inches at the Jamestown 10W station in Stutsman County. This is nearly 2.5 inches above average for this station, and multiple NDAWN stations in the same county reported over 200% normal precipitation. On the dry side of things, in Northeastern North Dakota, both the Langdon and Cavalier NDAWN stations recorded just 0.56 inches of precipitation, half of normal.

Total Precipitation (in)

04-01-2025 - 04-30-2025

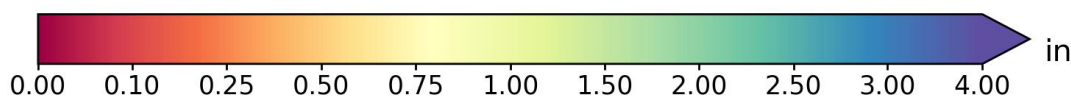
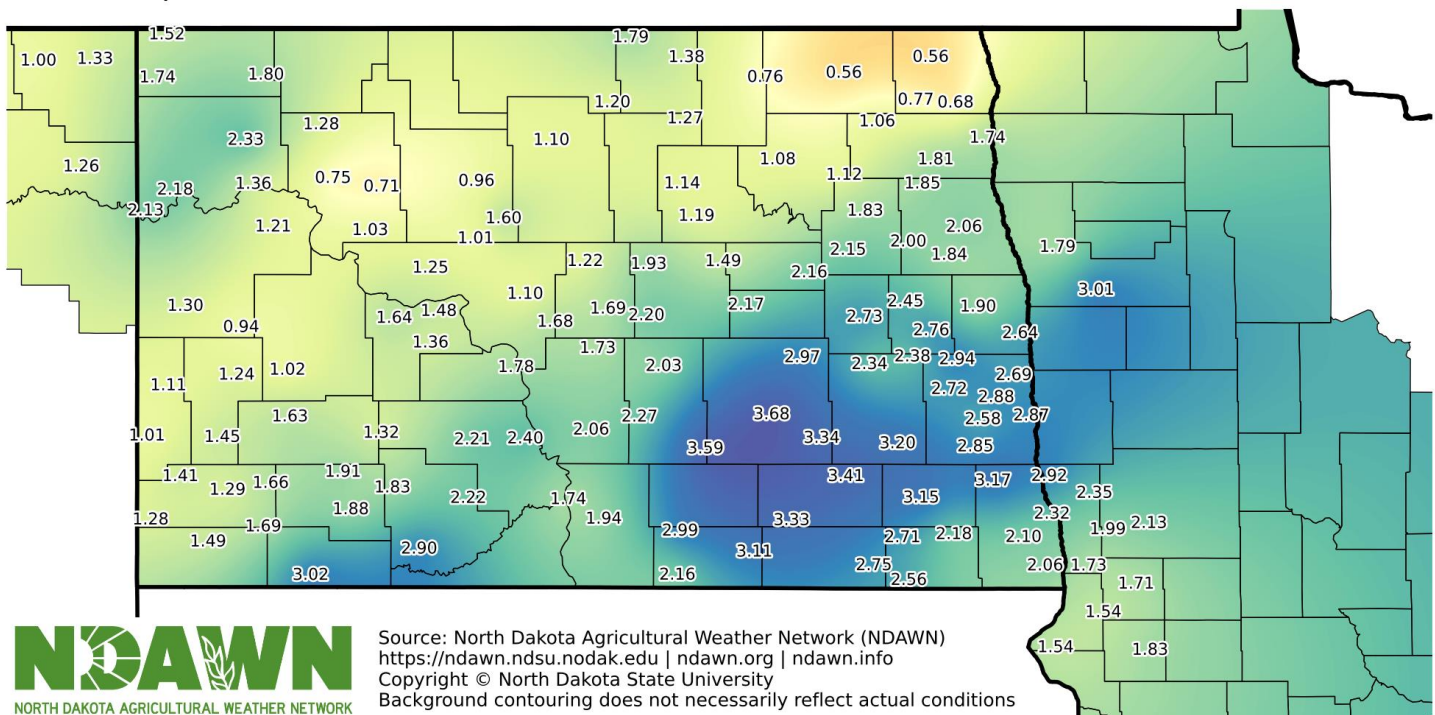
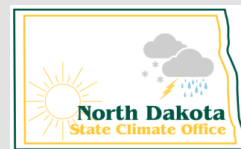


Figure 3: Total precipitation measured at each NDAWN station throughout the month of April

Precipitation

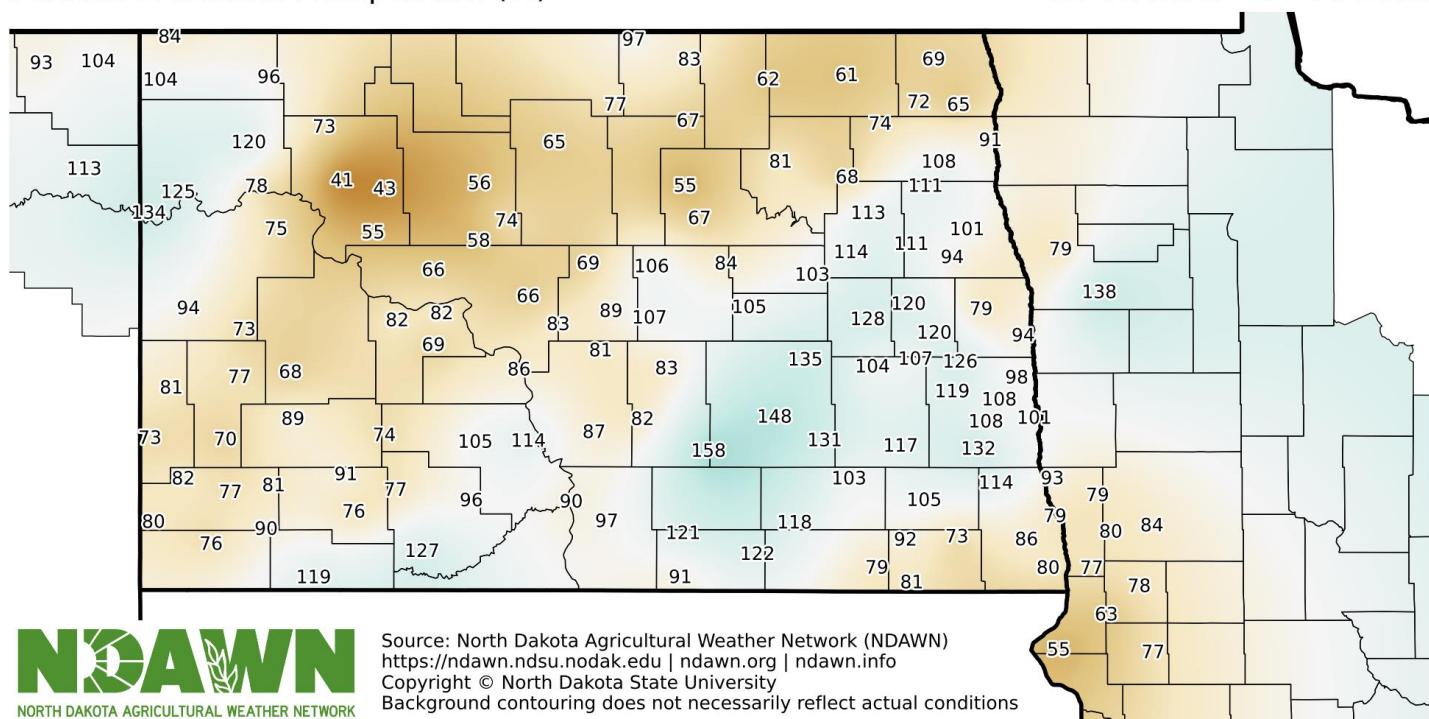
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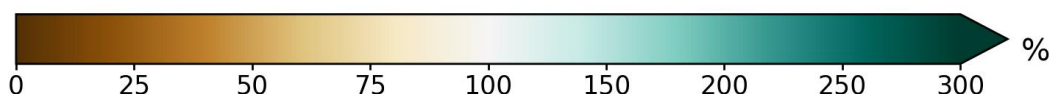
Long term precipitation is still lacking from a slightly drier than normal winter and early spring. North Dakota has not had the widespread snow cover or consistent rain showers needed to saturate the ground. Many stations are below 70% of normal precipitation since January 1 of this year. The big exception being East Central and Southeast North Dakota, with well above average precipitation – the majority of which falling in April, reflected in the U.S. Drought Monitor.

Percent of Normal Precipitation (%)

01-01-2025 - 04-30-2025



Source: North Dakota Agricultural Weather Network (NDAWN)
<https://ndawn.ndsu.nodak.edu> | ndawn.org | ndawn.info
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Background contouring does not necessarily reflect actual conditions



Drought conditions changed slightly as the spring thaw came in full force in April. Most notably a decrease in D1 Moderate Drought conditions along the South Dakota border.

D2 Severe Drought in the Northwest lessened to D1 conditions from normal to above average precipitation in the area from both snow and rain. This provided much needed relief, but conditions are still not ideal.

The lack of precipitation in the Northwest is reflected as well with the addition of D0 Abnormally Dry conditions across Pembina and Cavalier Counties.

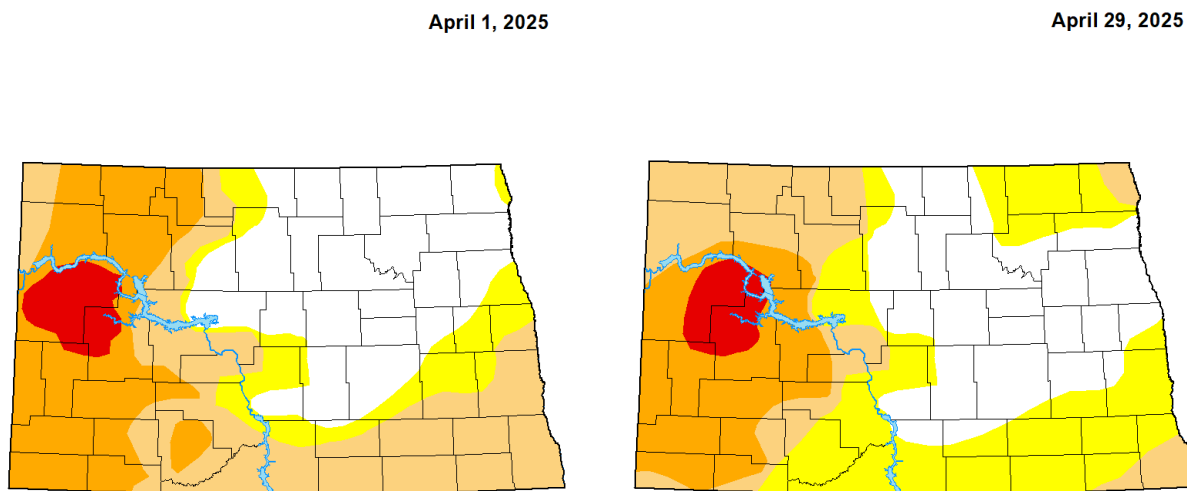
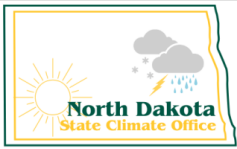


Figure 4: U.S. Drought Monitor conditions changes between April 1, 2025 (left) to April 29, 2025 (right)



Precipitation



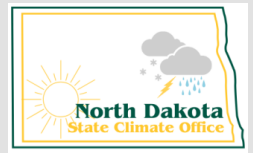
Figure 5: A fresh snowfall from the Noonan NDAWN station camera on April 22 2025

North Dakota April Precipitation Summary

	Precipitation	Normal	Anomaly	Rank	Record Year
April 2025	1.70"	1.29"	+0.41"	38 th Wettest	1986
				94 th Driest	1987

Temperature

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The average temperature of April 2025 came out to less than 1°F above average, but it wasn't that easy. Coming off a mild March, the temperatures in the first week of April were well below average, with a dusting of snow and even reaching 0°F at the Epping 2SE NDAWN station in Northwest North Dakota. Conditions quickly turned around, and within just days temperatures were in the 80s across Western North Dakota. This wavy weather pattern continued throughout the month, and both extremes contributed to the average temperature of 41.8°F. Average on paper, but a turbulent April for North Dakotans.

Average Air Temperature (° F)

04-01-2025 - 04-30-2025

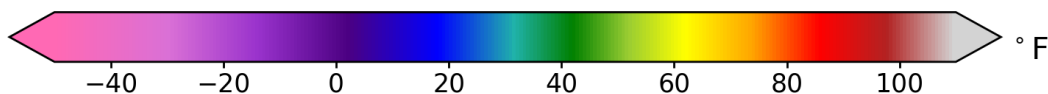
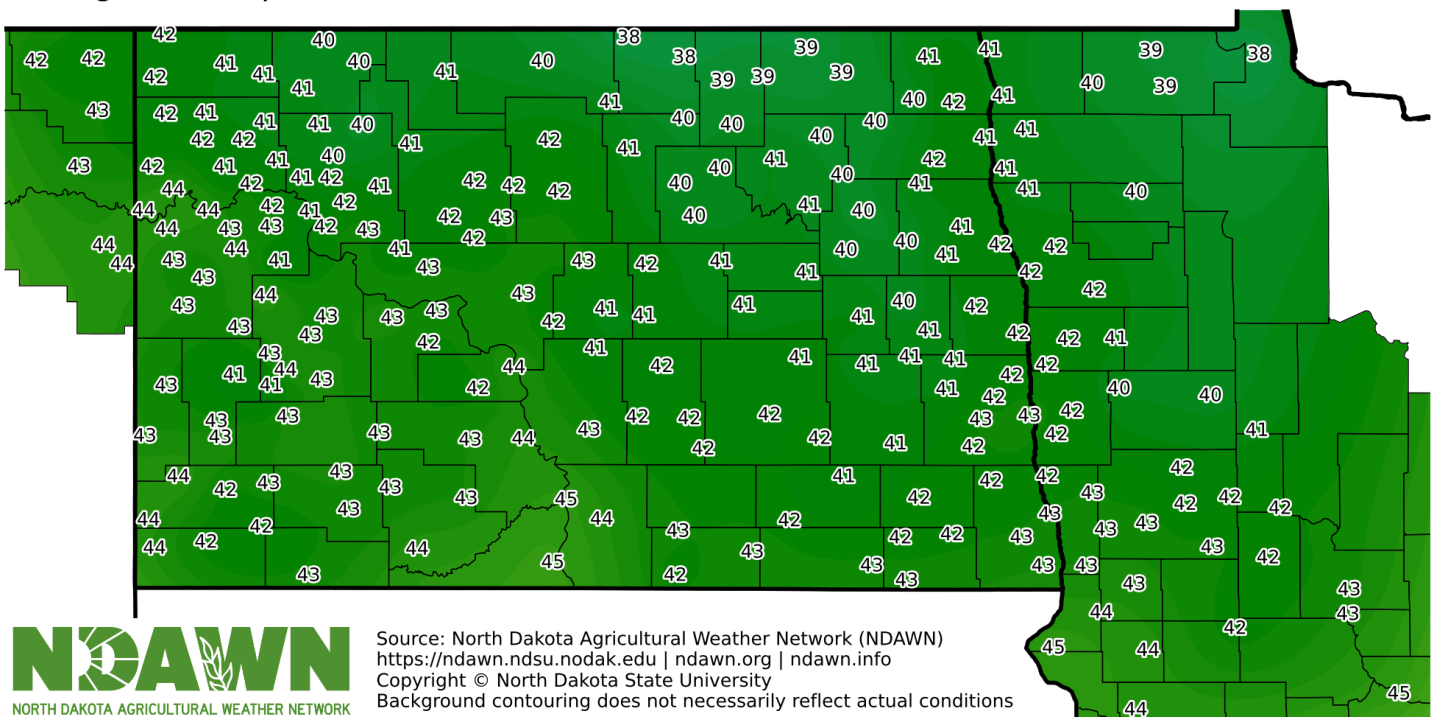


Figure 6: Average Air Temperature for the month of April at all NDAWN Stations

Average minimum temperatures were normal for the season, but average maximum temperatures were warmer than normal by 1.1°F. The average maximum temperature in North Dakota was 54.4°F, impressive considering much of the state had multiple days in the 60s and 70s and above. The average minimum temperature was 29.3°F, not much more than normal at 29.1°F.

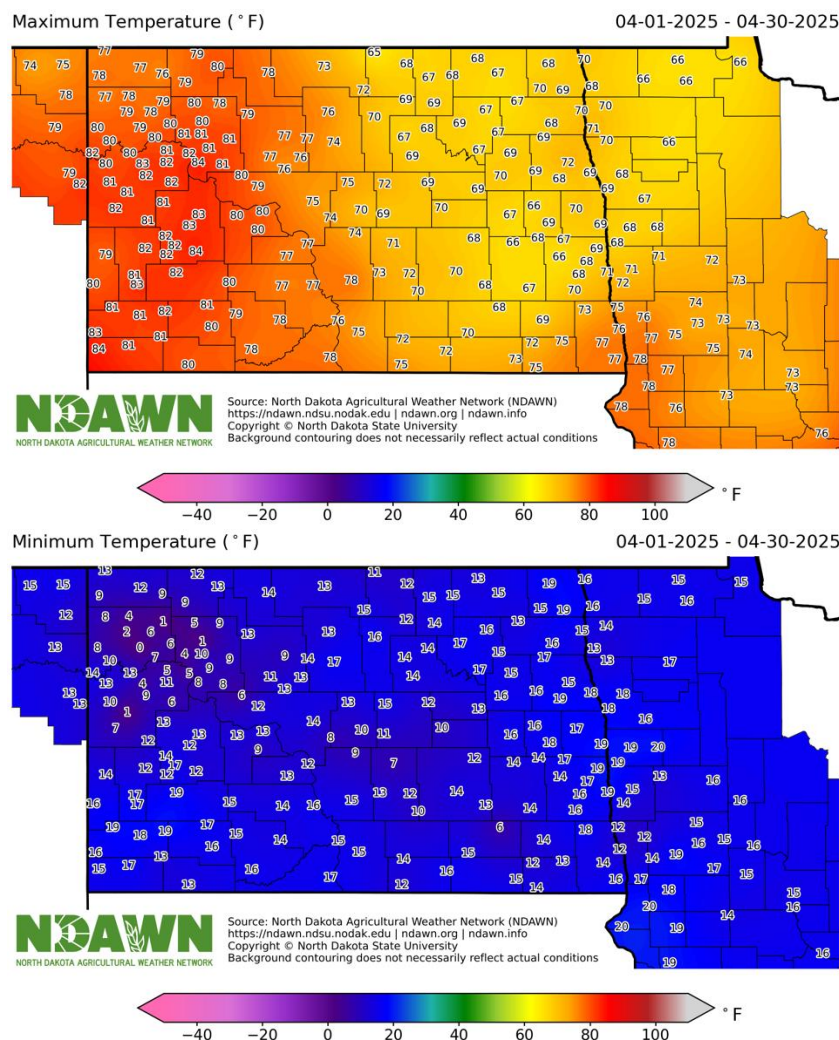
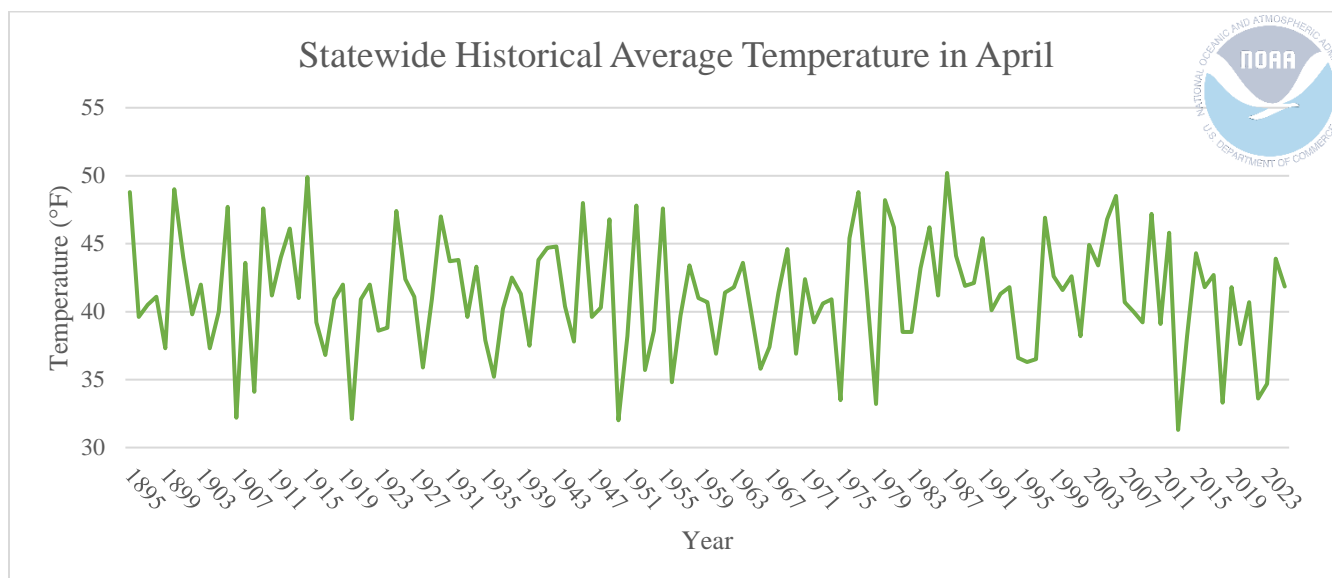


Figure 7: Maximum Temperature (top) and Minimum Temperature (bottom) recorded at all NDAWN stations during the month of April

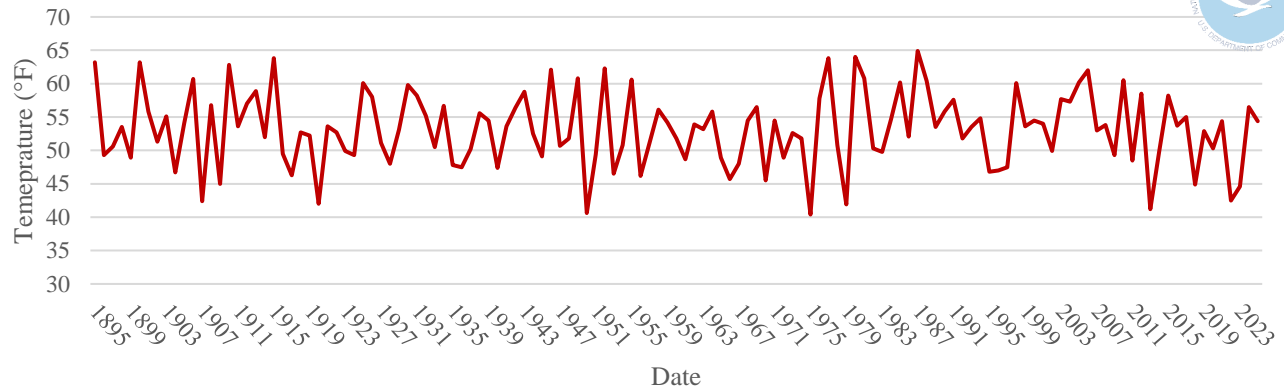
North Dakota April Temperature Summary

<i>April 2025 Temperature Summary</i>	Average T	Avg max T	Avg min T	Maximum	Minimum
	41.8°F	54.4°F	29.3°F	84°F	0°F
Anomaly	+0.7°F	+1.1°F	+0.3°F		
Rank					
Warmest	54 th warmest	60 th Warmest	63 rd warmest		
Coolest	78 th Coldest	72 nd Coldest	69 th Coldest		
Record					
Warmest	50.2°F (1987)	64.9°F (1987)	35.9°F (1915)	101°F (Oakes, 1980)	
Coolest	31.3°F (2013)	40.4°F (1975)	21.3°F (2013)		-24°F (Powers Lake, 1975)

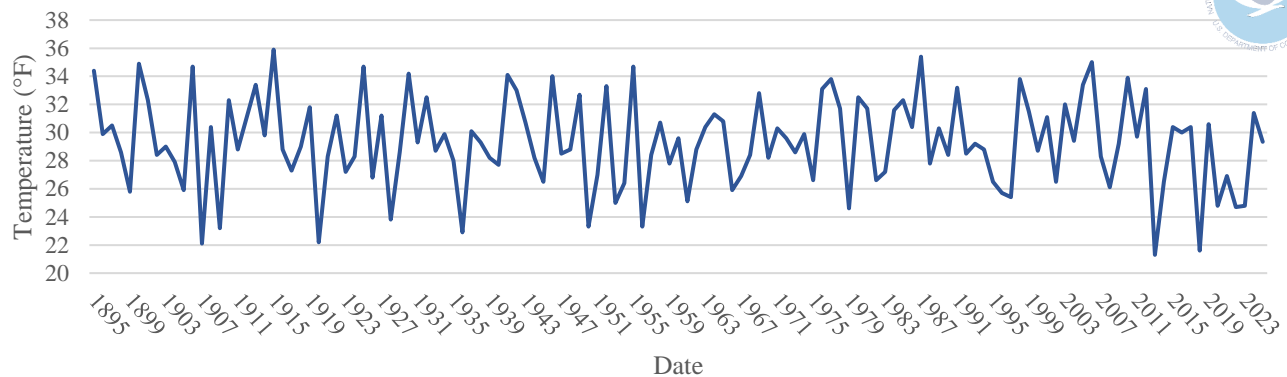
Table 2: April temperature summary for North Dakota. 2025 statistics from NDAWN station data. Ranking and records based on NCEI climate data (1895-2025) (NOAA).



Statewide Historical Average Maximum Temperature in April



Statewide Historical Average Minimum Temperature in April



Statewide Historical Precipitation in April

