

North Dakota Monthly Climate Summary

March 2025

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March

West

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North Dakota State Climate Office:
Your Resource for Climate Information



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Precipitation

March 2025

March was on the dry side for the entire state of North Dakota. Areas in the Northeast received near normal precipitation, but the lack of typical March winter storms kept moisture low. Areas especially in Central and Southern North Dakota saw less than a tenth of an inch throughout the entire month; the Oakes NDAWN station in Dickey County, had the least precipitation with just 0.01 inches, hardly more than a trace.

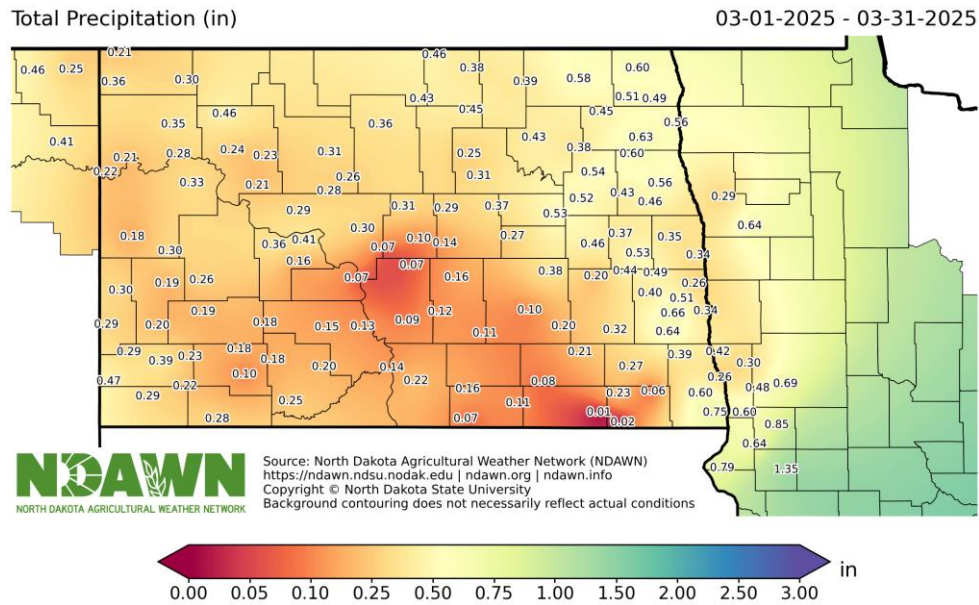


Figure 1: Total Precipitation measured by all NDAWN stations

The most precipitation was recorded at the Sonora NDAWN station in Richland County, with 0.75 inches of precipitation, aligning with showers that brought rain to parts of Minnesota, but North Dakota missed out on for the most part. The average precipitation measured by NDAWN stations in North Dakota for the month of March was 0.26 inches. This is a half inch below average precipitation of 0.78 inches.

Precipitation

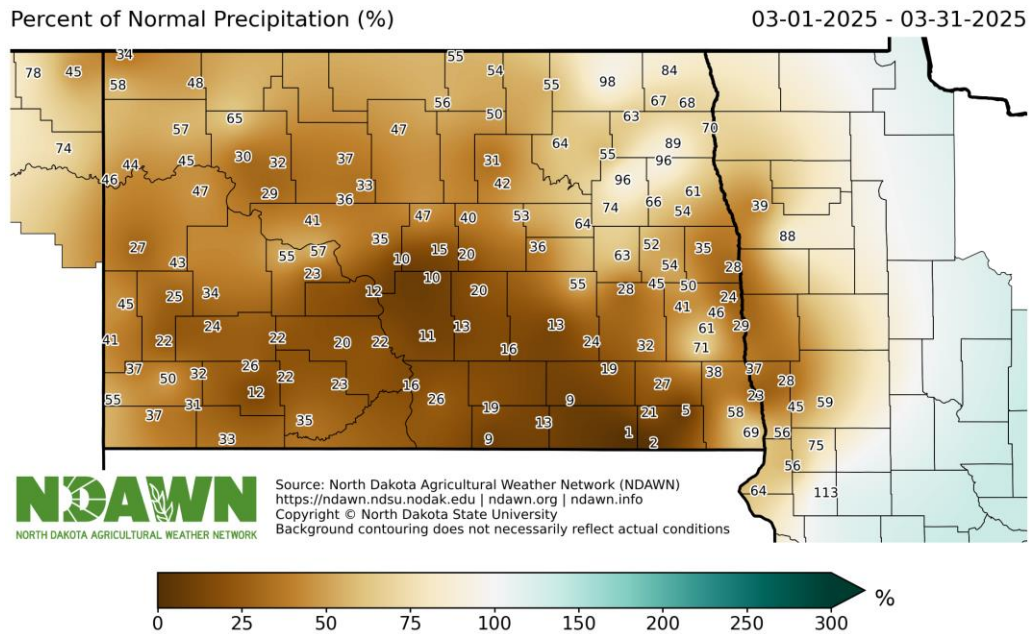
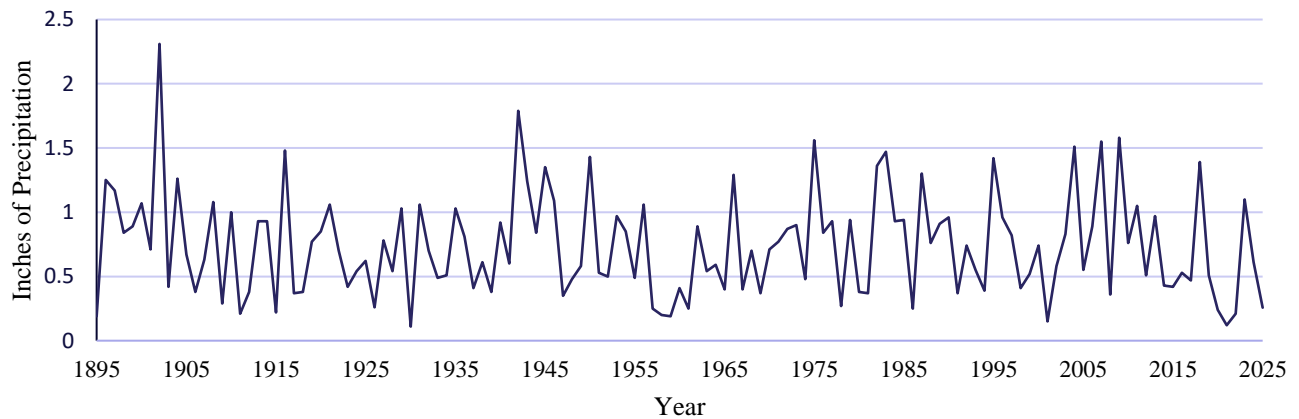


Figure 2: Percent of Normal precipitation at each NDAWN station

2025 ranked as the 14th driest March in North Dakota's record, tied also with 1926. The driest March on record occurred in 1930 with just 0.11" statewide. The wettest March recorded in North Dakota was in 1902 with 2.31 inches, nearly 10 times what was recorded this year in 2025.

Historical March Precipitation in North Dakota



Drought conditions saw little change throughout the month as the ground stayed frozen and little precipitation fell. Some areas are continuing to thaw with the lack of snow cover and increasing temperatures, but these areas are still below average precipitation on the long term.

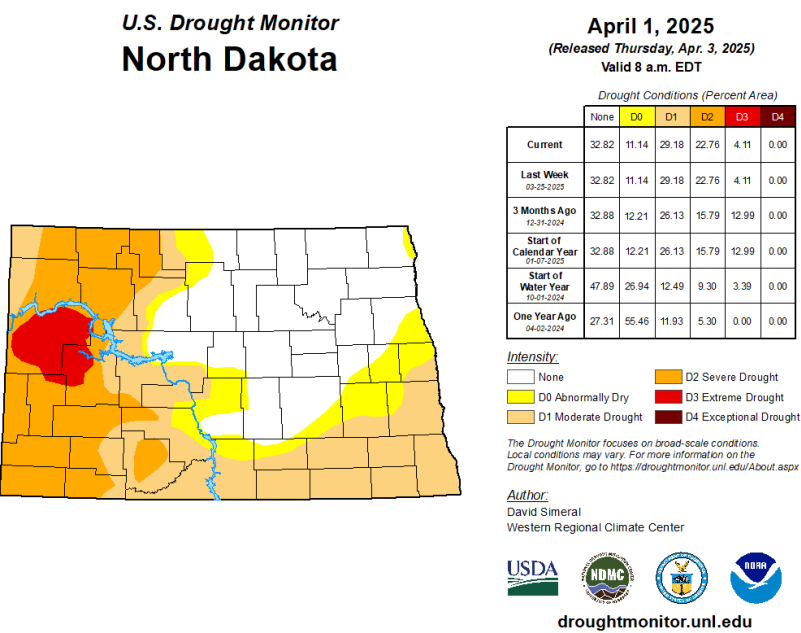


Figure 3: U.S. Drought Monitor conditions at the tail end of March 2025

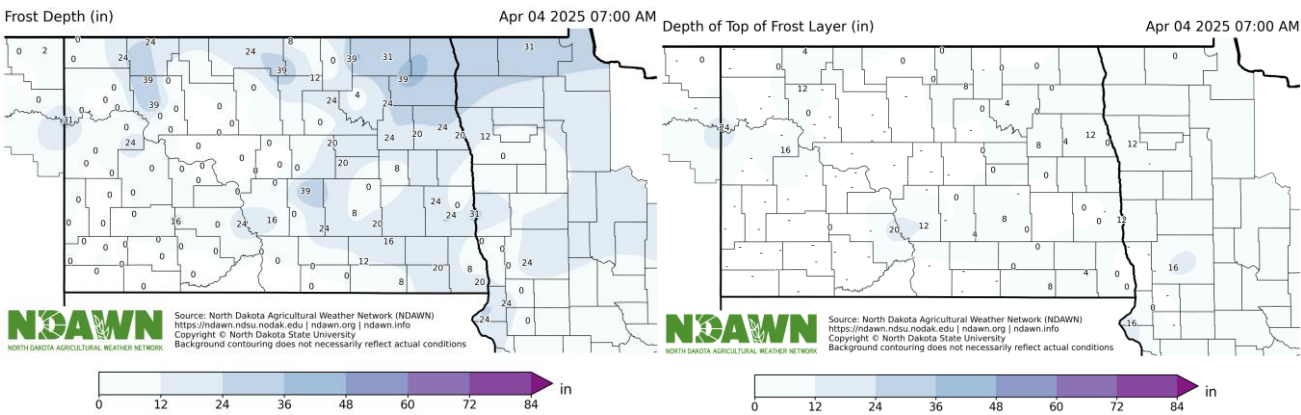


Figure 4: Frost Depth (left) and Depth of Top of Frost Layer (right) at NDAWN stations

Temperature

March was well above average in regards to temperatures this year. Mostly due to the lack of snow in the region, temperatures were almost 5°F above average across the state, getting cooler further north where snow remained on the ground. The normal average temperature in March is 26.7°F, but 2025 beat that by quite a bit with an average temperature of 31.9°F.

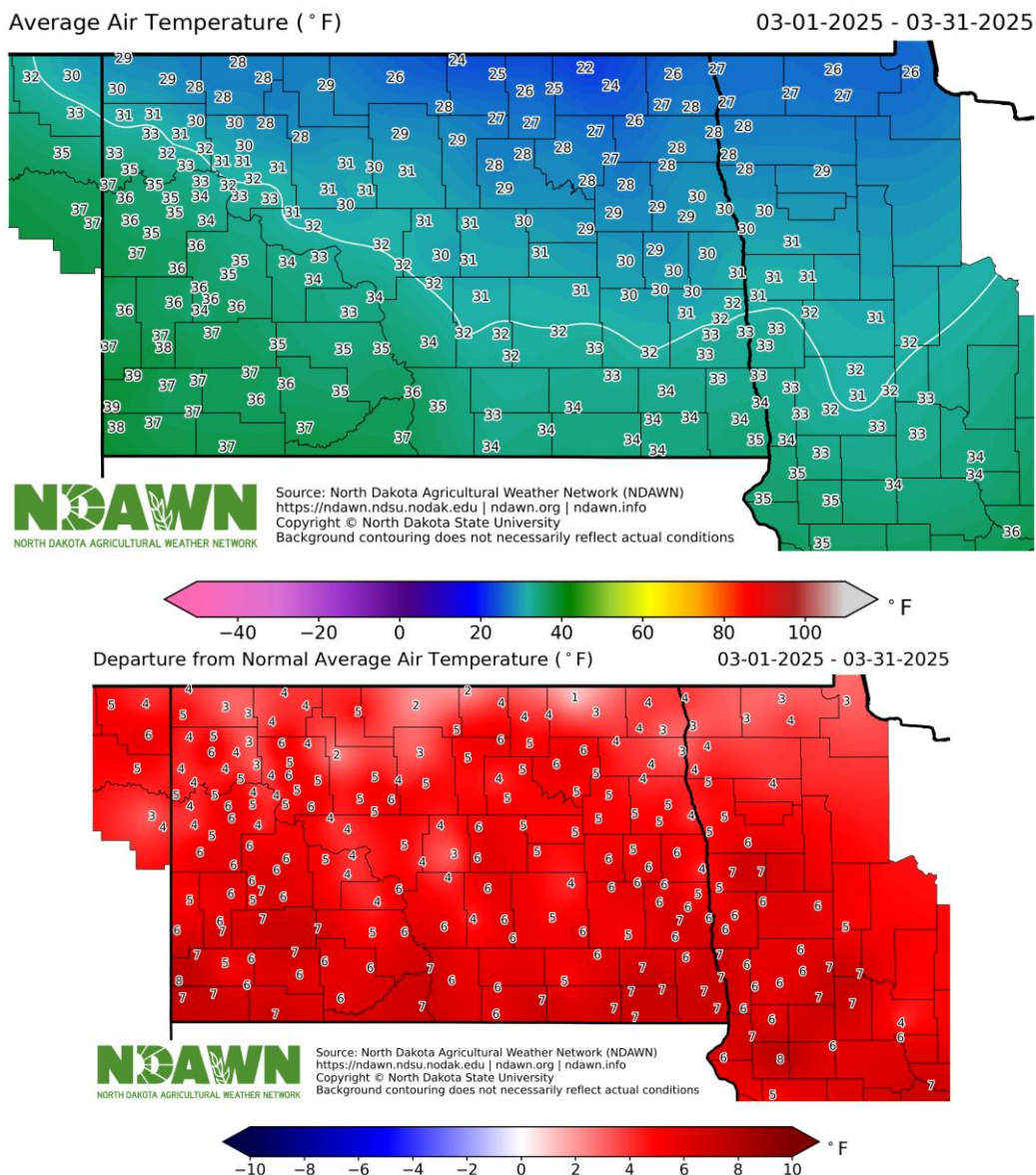


Figure 5: Average Air Temperature (Top) and Departure from Normal Average Air Temperature (Bottom) at all NDAWN stations

Temperature

Warm temperatures were seen across the state for the first month of Spring in the Northern Plains. Even widespread 70s and upper 60s were enjoyed by most of Southern and Western North Dakota. The warmest temperature measured in March by NDAWN was 74°F at the Buford station in Williams County. However, in the Northeast temperatures stayed much cooler due to some lingering snow, and the minimum temperature recorded in March was -11°F at the Wales NDAWN station in Cavalier County. On average, the first 70 of the year usually falls within the last days of March, this year is the earliest (March 10th) 70°F in the last 7 years.

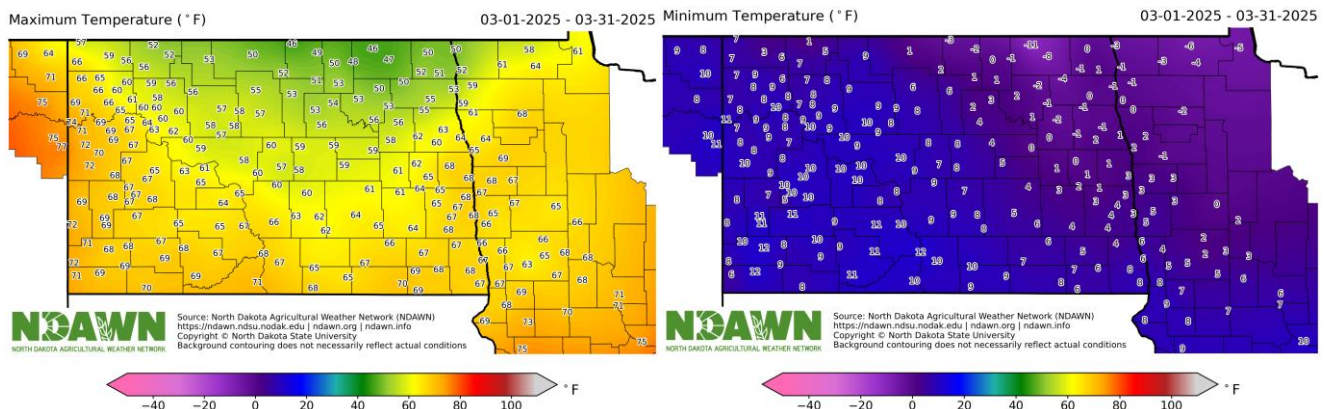
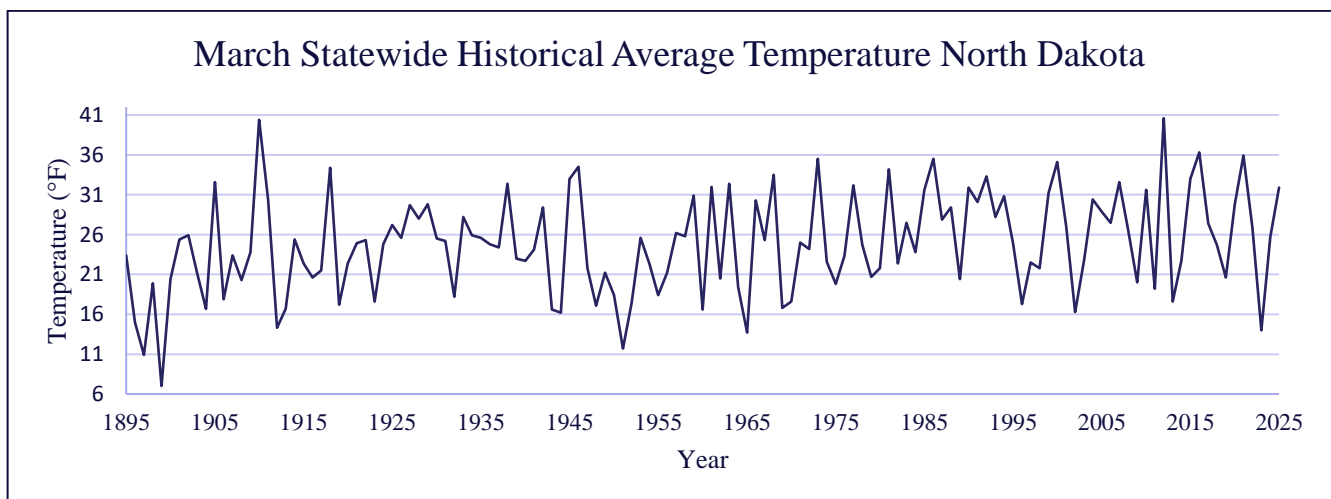


Figure 6: Maximum Temperature (Left) and Minimum Temperatures (Right) recorded at each NDAWN Station

March 2025 ranks at the 21st warmest in North Dakota's climate history, tied with 1990. The warmest March on record was 2012 with 40.6°F, and the coldest was 1899 with an average temperature of just 7°F.



North Dakota March Precipitation Summary

	Precipitation	Normal	Anomaly	Rank	Record Year
March 2025	0.26"	0.78"	-0.52"	118 th Wettest	1902
				14 th Driest	1930

Table 1: Ranking from NCEI NOAA based on data from March 1895-2025. Precipitation amounts averaged from records at NDAWN stations in North Dakota.

North Dakota March Temperature Summary

March 2025 Temperature Summary	Average T	Avg max T	Avg min T	Maximum	Minimum
	31.9°F	43.5°F	20.3°F	74°F	-11°F
Anomaly	+5.2°F	+6.4°F	+4.0°F		
Rank					
Warmest	21 st warmest	17 ^h warmest	31 st warmest		
Coollest	111 th coldest	115 th coldest	101 st coldest		
Record					
Warmest	40.6°F (2012)	53.5°F (2012)	27.8°F (2012)	90°F (Edmore, 1910)	
Coollest	7.0°F (1899)	18.4°F (1899)	--4.4°F (1899)		-48°F (Mohall, 1897)

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



Figure 7: Little precipitation fell in the month of March, however a few flurries snuck in every now and then. Snow shower on the NDAWN Turtle Lake camera on 3/16/2025



Figure 8: The Sunny Slope Ice Jam continued until it finally melted in Mid March.