



# North Dakota Monthly Climate Summary

March 2021

Volume 15, No. 3

## Precipitation

North Dakota State Climate Office: Your Resource for Climate Information



North Dakota State University

College of Agriculture, Food Systems, and Natural Resources

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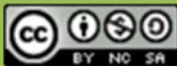
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Based on the National Centers for Environmental Information (NCEI), the statewide average March precipitation was 0.14 inch, which was 0.04 inch less than last month and 0.11 inch less than in March 2020. It was 0.69 inch less than the 1981-2010 average, making it the second driest March in the 127-year period of record (Table 1).

The counties shaded in brown in Figure 1 indicate drier-than-average conditions in March 2021. A white shading indicates near-average conditions. The numbers inside the counties are the precipitation rankings, with 1 being the lowest ranking (driest) and 127 being the highest ranking (the wettest)

The greatest monthly precipitation accumulation was 0.53 inch, recorded in Ft. Yates, Sioux County. The greatest monthly snowfall accumulation, on the other hand, was 8 inches, recorded in Forman, Sargent County. Based on historical records, statewide March precipitation showed a slight negative long-term trend of 0.04 inch during the last century. The lowest and highest March precipitation for the state during this period ranged from 0.11 inch in 1930 to 2.31 inches in 1902 (Figure 2).

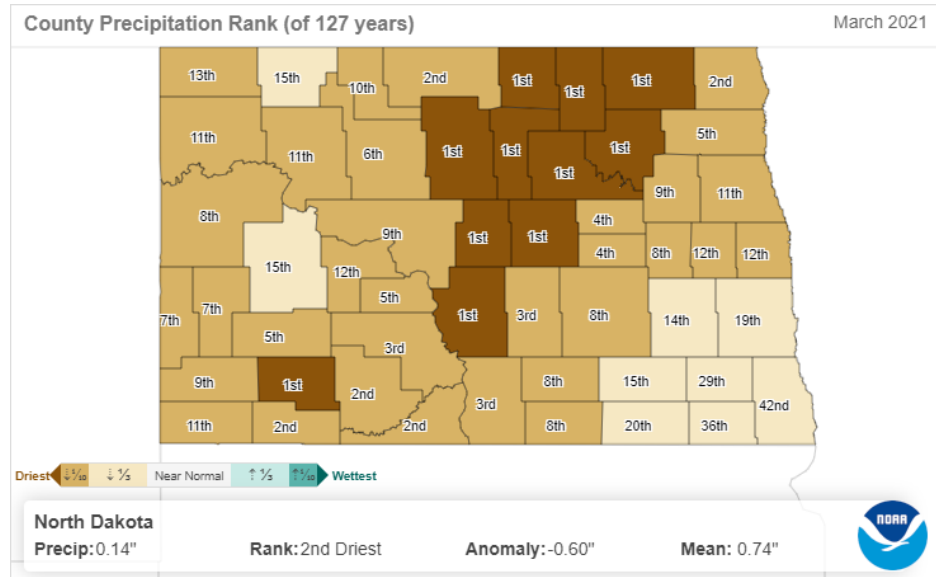


Figure 1. March 2021 county precipitation ranking map of North Dakota. (National Centers for Environmental Information, NOAA)



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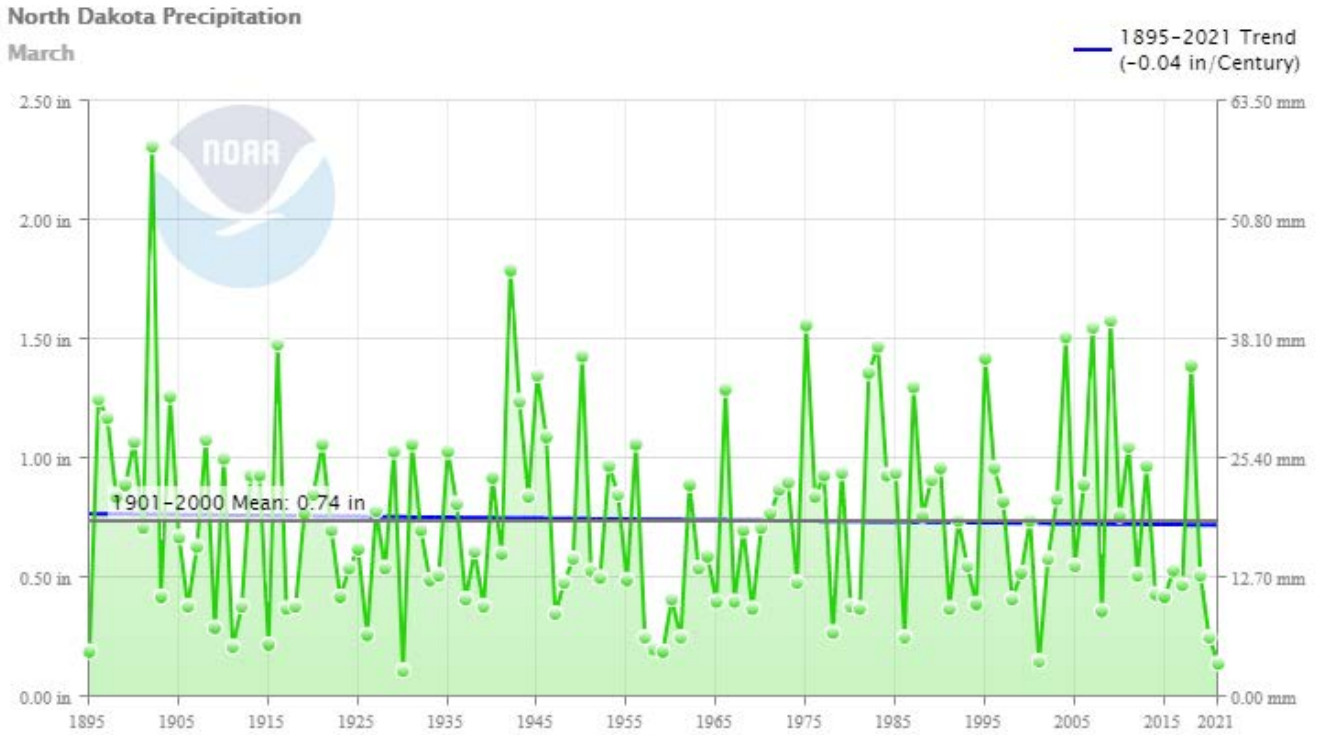


Figure 2. Historical March precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota March Precipitation Ranking Table.

Period	Value	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
March 2021	0.14"	0.83"	-0.69"	2nd driest 126th wettest	Driest since 1930 Wettest since 2020	0.11" (1930) 2.31" (1902)



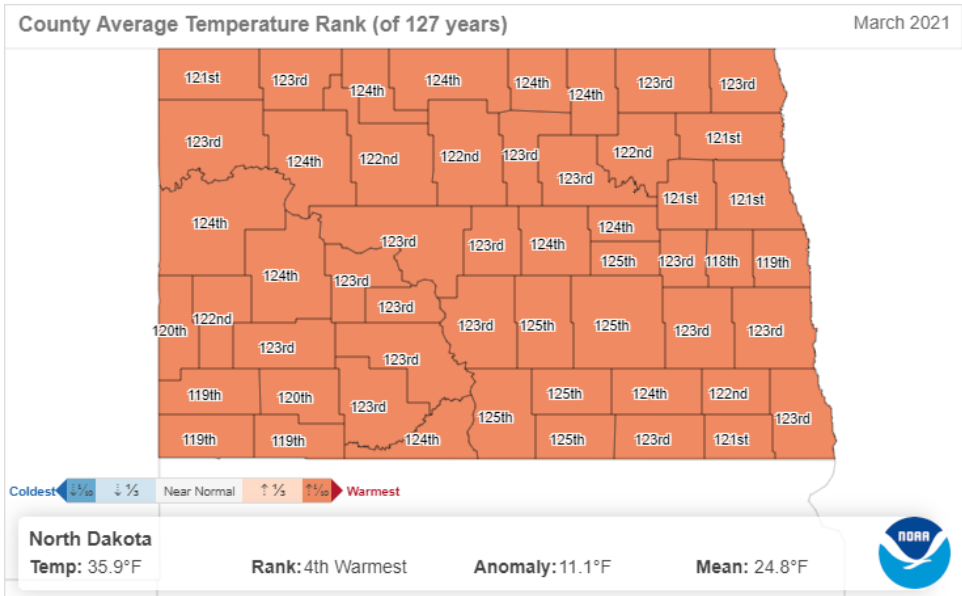
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## Temperature

The official state average March temperature was 35.9 F, which is 29.8 degrees warmer than last month and 6.1 degrees warmer than in March 2020. The average March temperature also was 8.4 degrees warmer than the 1981-2010 average, making it the fourth warmest March in the 127 years of record (Table 2).



**Figure 3. March 2021 county temperature ranking map of North Dakota. (National Centers for Environmental Information, NOAA)**

The counties shaded in pink in Figure 3 indicate warmer-than-average conditions. The numbers inside the counties are the temperature rankings, with 1 being the lowest ranking (coldest) and 127 being the highest ranking (the warmest).

The state’s lowest and highest daily temperatures ranged from minus 20 F on March 2 in Langdon, Cavalier County, to 78 F on March 30 in Lidgerwood, Richland County. Based on the historical records, the state average March temperature showed a sharp positive long-term trend of 5.2 degrees during the last century. The lowest and highest monthly state March average temperatures during this period ranged from 7 F in 1899 to 40.6 F in 2012 (Figure 4).



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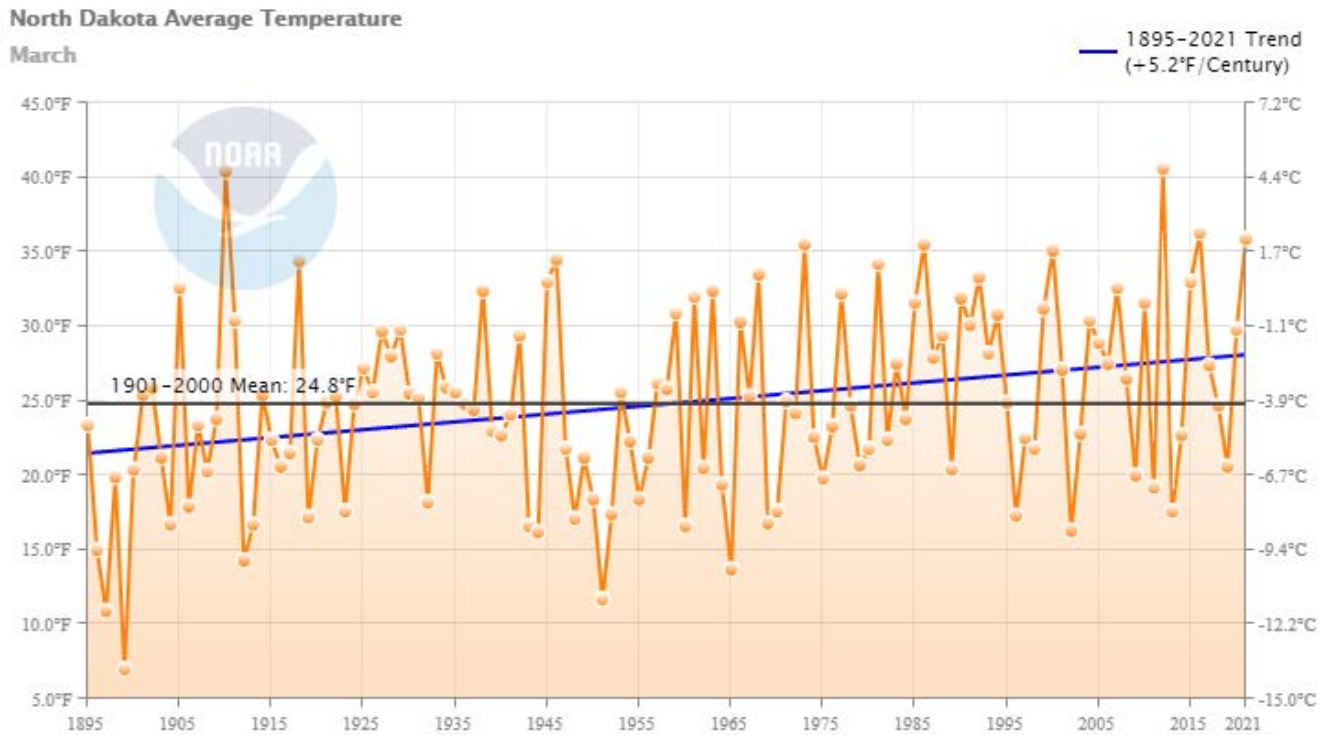


Figure 4. Historical March temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota March Temperature Ranking Table.

Period	Value	Normal	Anomaly	Rank	Warmest/Coollest Since	Record Year
March 2021	35.9°	27.5°	8.4°	124th coolest 4th warmest	Coollest since 2020 Warmest since 2016	7 F (1899) 40.6 F (2012)



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**Daily Record Events in March:** Across the observation network of weather stations with at least 30 years of history, 102 daily high- but no daily low-temperature records were set or tied. Only a total of three highest daily precipitation-related records were set or tied. Details of the records are in Table 4.

Table 4. Summary of daily records broken or set in North Dakota in March. (NCEI Daily Weather Records)

Category	Number of Records
Highest daily max. temp.	75
Highest daily min. temp.	27
Lowest daily max. temp.	0
Lowest daily min. temp.	0
Highest daily precipitation	1
Highest daily snowfall	2
<b>Total</b>	<b>105</b>

### The Highlight of the Month\*

A highest daily maximum temperature record of 77 degrees was broken in **Fargo** on **March 29**, exceeding the previous record that was set in 1986 by 1 degree. (years on record: 130).

\*The records in this box may differ from the record on Pages 1 and 3 because this page only includes records for stations with at least 30 years of history.

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