



# North Dakota Monthly Climate Summary

February 2021

Volume 15, No. 2

## 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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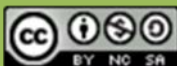
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Based on the National Centers for Environmental Information (NCEI), the statewide average February precipitation was 0.18 inch, which was 0.06 inch less than last month but 0.01 inch more than in February 2020. It was 0.26 inch less than the 1981-2010 average, making it the 12th driest February in the 127-year period of record (Table 1).

The counties shaded in brown in Figure 1 indicate drier-than-average conditions in February 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 0.75 inch, recorded in Carpio, Ward County. The greatest monthly snowfall accumulation, on the other hand, was 8 inches, recorded in Kenmare, Ward County. Based on historical records, statewide February precipitation showed a slight negative long-term trend of 0.07 inch during the last century. The lowest and highest February precipitation for the state during this period ranged from 0.07 inch in 1934 to 1.59 inches in 1998 (Figure 2).

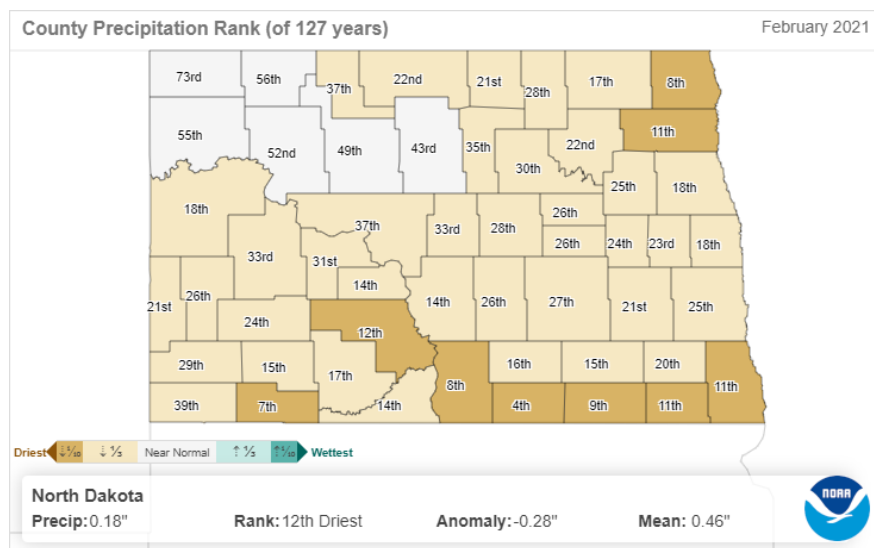


Figure 1. February 2021 county precipitation ranking map of North Dakota. (National Centers for Environmental Information, NOAA)



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## North Dakota Precipitation

February

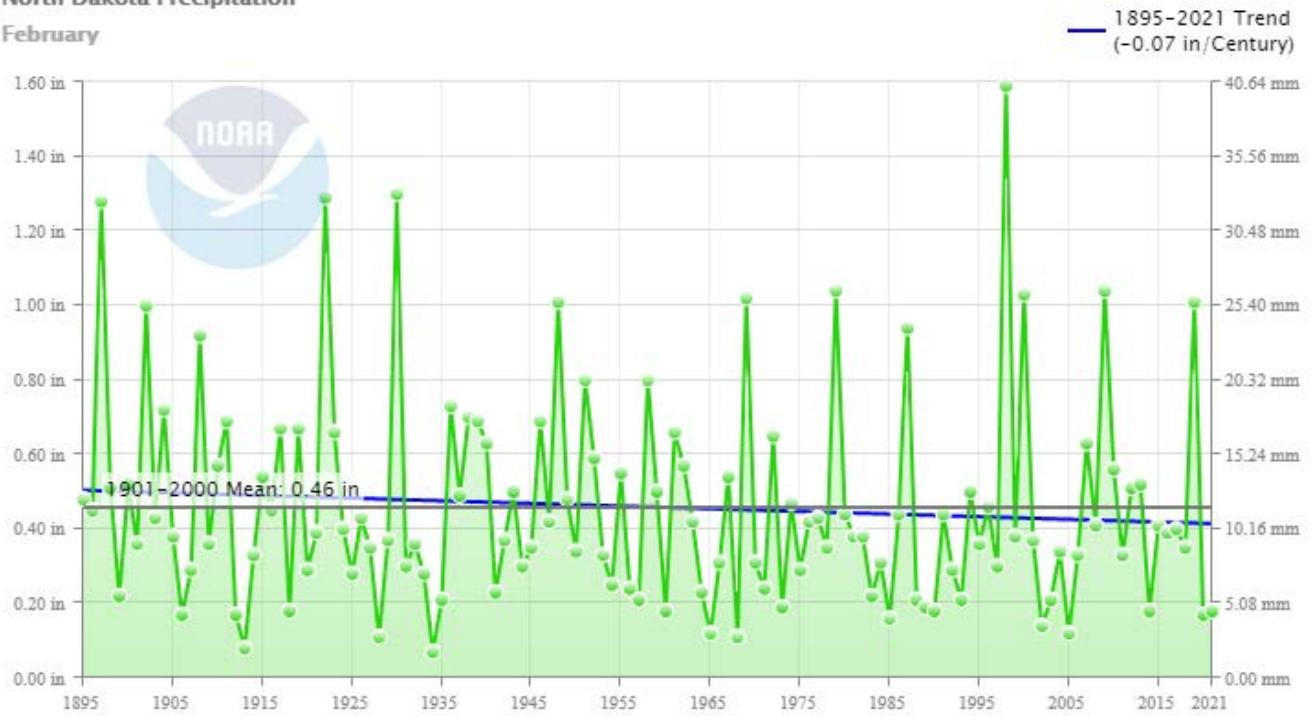


Figure 2. Historical February precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota February Precipitation Ranking Table.

Period	Value	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
February 2021	0.18"	0.44"	-0.26"	12th driest 116th wettest	Driest since 2020 Wettest since 2019	0.07" (1934) 1.59" (1998)



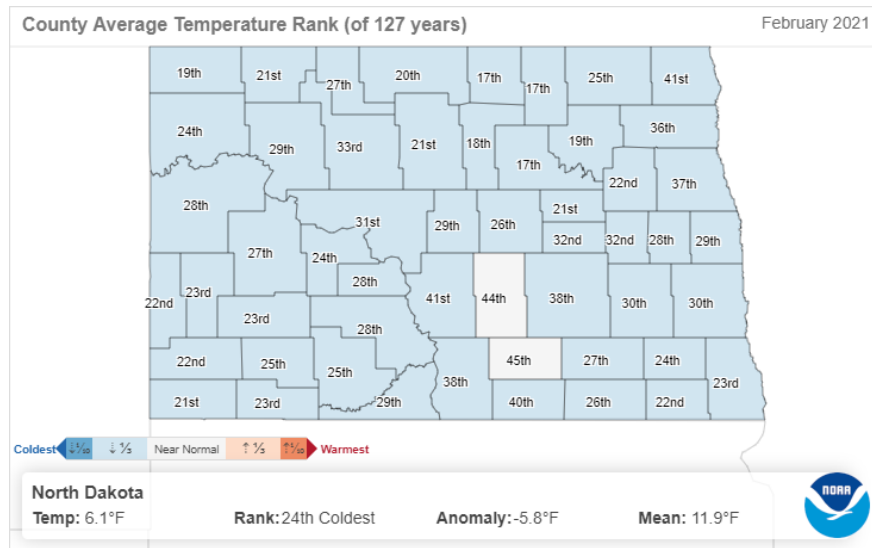
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## Temperature

The official state average February temperature was 6.1 F, which is 14.8 degrees cooler than last month, and 11.7 degrees cooler than in February 2020. The average February temperature also was 9.6 degrees cooler than the 1981-2010 average, making it the 24th coldest February in the 127 years of record (Table 2).



The counties shaded in blue in Figure 3 indicate cooler-than-average conditions. A white shading indicates near-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).

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

The state's lowest and highest daily temperatures ranged from minus 51 F on Feb. 13 in Bottineau, Bottineau County, to 61 F on Feb. 5 in Watford City, McKenzie County. Based on the historical records, the state average February temperature showed a positive long-term trend of 5.9 degrees during the last century, the largest trend in the nation. The lowest and highest monthly state February average temperatures during this period ranged from minus 14.1 F in 1936 to 29.6 F in 1954 (Figure 4).



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North Dakota Average Temperature  
February

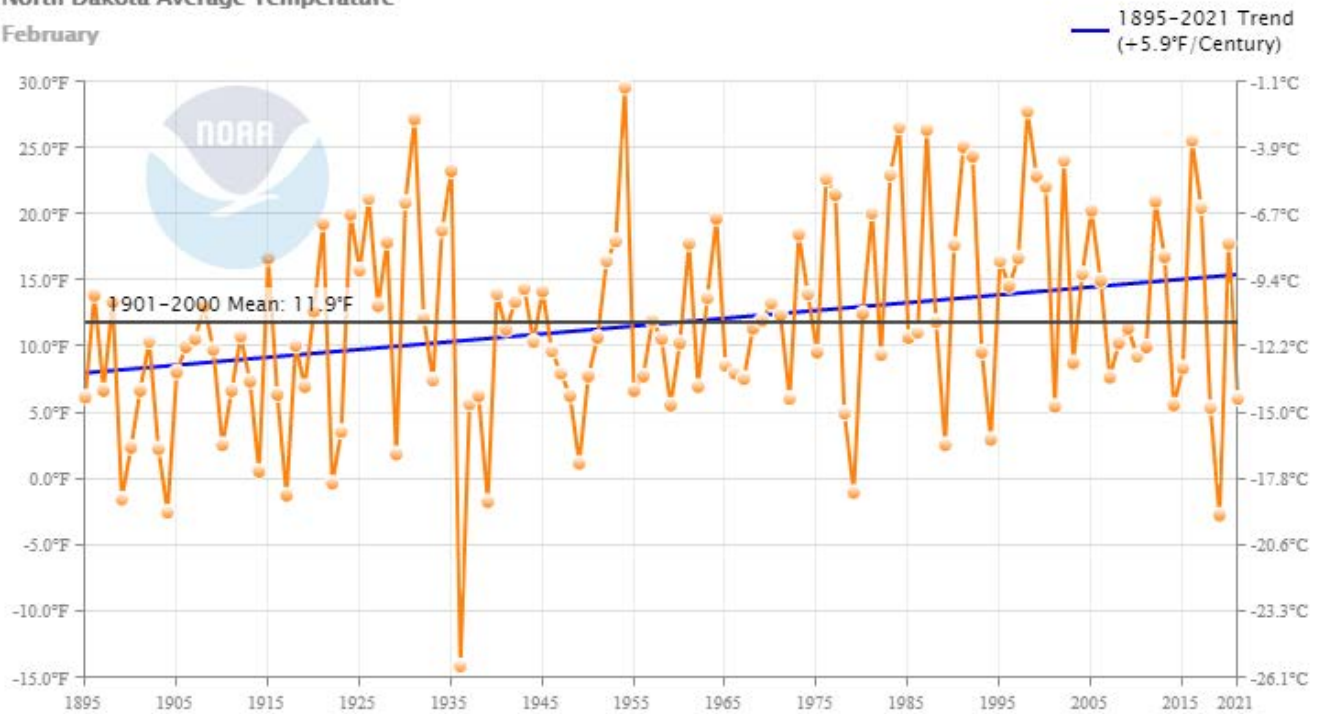


Figure 4. Historical February temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota February Temperature Ranking Table.

Period	Value	Normal	Anomaly	Rank	Warmest/Coollest Since	Record Year
February 2021	6.1°	15.7°	-9.6°	24th coolest 104th warmest	Coollest since 2019 Warmest since 2020	-14.1 F (1936) 29.6 F (1954)



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**Daily Record Events in February:** Across the observation network of weather stations with at least 30 years of history, 12 daily high- and 90 daily low-temperature records were set or tied. Only a total of 11 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 February. (NCEI Daily Weather Records)

Category	Number of Records
Highest daily max. temp.	4
Highest daily min. temp.	8
Lowest daily max. temp.	55
Lowest daily min. temp.	35
Highest daily precipitation	7
Highest daily snowfall	4
<b>Total</b>	<b>113</b>

### The Highlight of the Month\*

A lowest daily minimum temperature record of minus 51 degrees was broken in **Bottineau on Feb. 13**, exceeding the previous record that was set in 1936 by **14** degrees. (years on record: 128).

\*The records in this box may be different 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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This work is supported by the USDA National Institute of Food and Agriculture, Hatch/Multi State project ND1005365.