



# North Dakota Monthly Climate Summary

May 2021

Volume 15, No. 5

## Precipitation

North Dakota State Climate Office: Your Resource for Climate Information



North Dakota State University

College of Agriculture, Food Systems, and Natural Resources

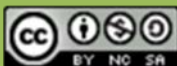
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Based on the National Centers for Environmental Information (NCEI), the statewide average May precipitation was 1.93 inches, which was 1.3 inches greater than last month and 0.55 inch greater than in May 2020. It was 0.79 inch less than the 1991-2020 average, making it the 50th driest May in the 127-year period of record (Table 1).

The counties shaded in brown in Figure 1 indicate drier-than-average conditions in May 2021. In contrast, the counties shaded in green indicate wetter-than-average conditions in May 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 5.07 inches, recorded in Dickinson, Stark County. The greatest monthly snowfall accumulation, on the other hand, was 7 inches, recorded at Pretty Rock, Grant County. Based on historical records, statewide May precipitation showed a slight positive long-term trend of 0.26 inch during the last century. The lowest and highest May precipitation for the state during this period ranged from 0.23 inch in 1901 to 5.96 inches in 1927 (Figure 2).

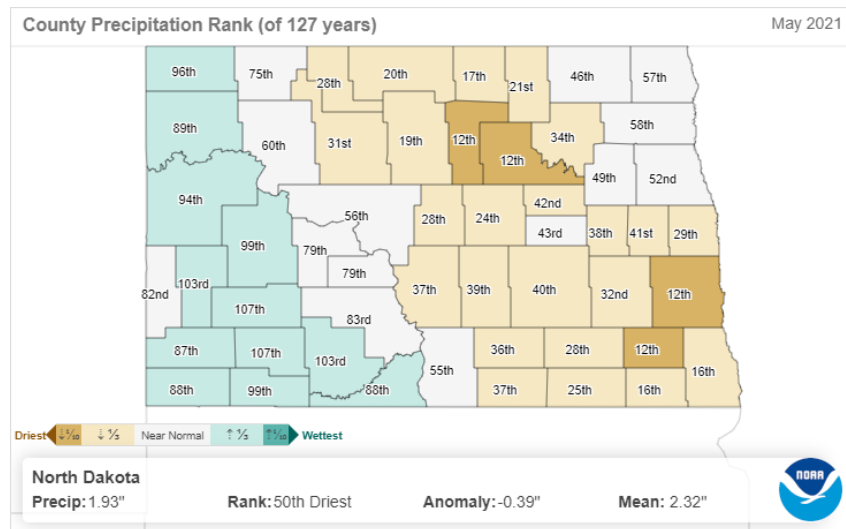


Figure 1. May 2021 county precipitation ranking map of North Dakota. (National Centers for Environmental Information, NOAA)



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## North Dakota Precipitation

May

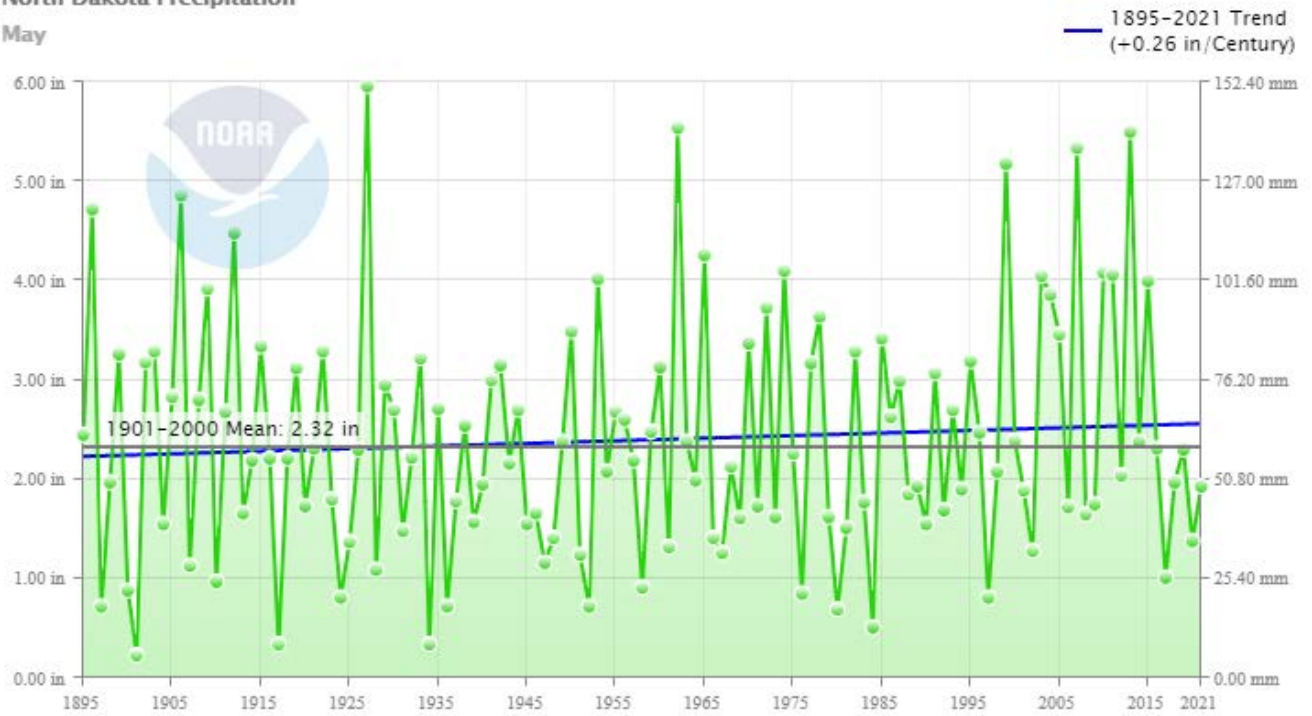


Figure 2. Historical May precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota May Precipitation Ranking Table.

Period	Value	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
May 2021	1.93"	2.72"	-0.79"	50th driest 78th wettest	Driest since 2020 Wettest since 2019	0.23" (1901) 5.96" (1927)



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## Temperature

The official state average May temperature was 52.6 F, which is 11.8 degrees warmer than last month and 0.1 degree warmer than in May 2020. However, the average May temperature was 1.1 degrees cooler than the 1991-2020 average, making it the 53rd coldest May in the 127 years of record (Table 2).

The counties shaded in blue in Figure 3 indicate cooler-than-average conditions. 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).

The state's lowest and highest daily temperatures ranged from 14 F on May 5 in Willow City, Bottineau County, to 89 F on May 20 in Carrington, Foster County. The state average May temperature showed a positive long-term trend of 0.8 degree during the last century based on the historical records. The lowest and highest monthly state May average temperatures during this period ranged from 44.4 F in 1907 to 63.4 F in 1934 (Figure 4).

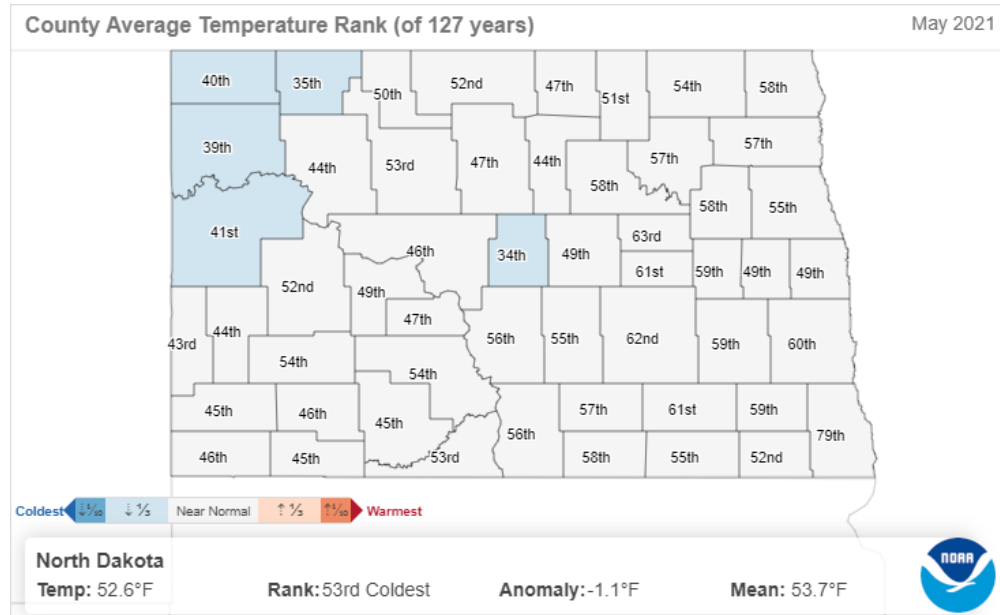


Figure 3. May 2021 county temperature ranking map of North Dakota. (National Centers for Environmental Information, NOAA)



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North Dakota Average Temperature  
May

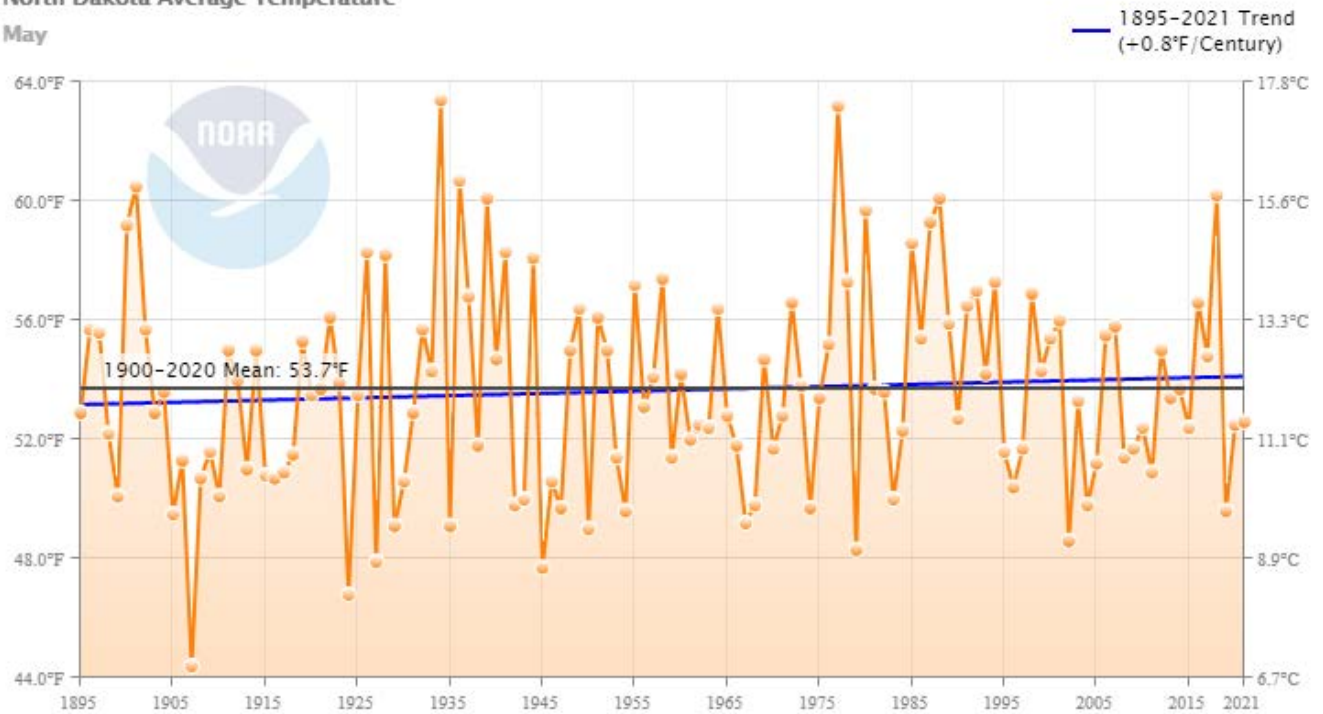


Figure 4. Historical May temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota May Temperature Ranking Table.

Period	Value	Normal	Anomaly	Rank	Warmest/Coollest Since	Record Year
May 2021	52.6°	53.7°	-1.1°	53rd coolest 75th warmest	Coollest since 2020 Warmest since 2018	44.4 F (1907) 63.4 F (1934)



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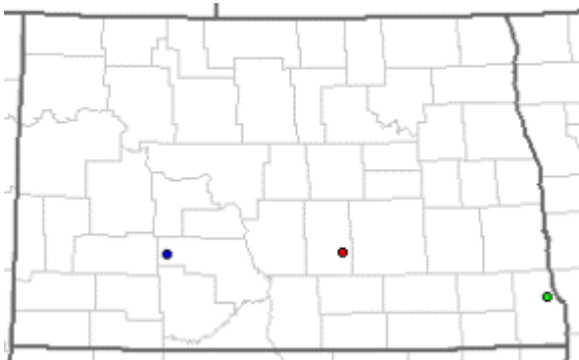
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**Storm Reports:** Table 3 below shows the summary of May severe storm reports in North Dakota (Storm Prediction Center, NOAA).

The NOAA Storm Report recorded one tornado, one hail, and one damaging wind report, with a total of three significant storm events in May. Table 3 summarizes the number of tornado, hail and damaging wind reports in May, while Figure 5 geographically displays the locations of these storms.

*Table 3. Summary of May Severe Storm Reports in North Dakota. (Storm Prediction Center, NOAA)*

<b>Category</b>	<b>Number of Reports</b>
<i>Tornado reports</i>	1
<i>Hail reports</i>	1
<i>Wind reports</i>	1
<b>Total</b>	<b>3</b>



*Figure 5. Map of May 2021 North Dakota storm events (red: tornado; blue: wind; green: hail). (Storm Prediction Center, NOAA)*



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**Daily Record Events in May:** Across the observation network of weather stations with at least 30 years of history, 12 daily high- and 28 daily low-temperature records were set or tied. Only a total of nine highest daily precipitation-related records were set or tied. Details of the records are in Table 5.

*Table 5. Summary of daily records broken or set in North Dakota in May. (NCEI Daily Weather Records)*

<i>Category</i>	<b>Number of Records</b>
<i>Highest daily max. temp.</i>	4
<i>Highest daily min. temp.</i>	8
<i>Lowest daily max. temp.</i>	16
<i>Lowest daily min. temp.</i>	12
<i>Highest daily precipitation</i>	7
<i>Highest daily snowfall</i>	2
<b>Total</b>	<b>49</b>

### The Highlight of the Month\*

A lowest daily minimum temperature record of **14 degrees** was broken in **Willow City on May 5**, exceeding the previous record that was set in 1936 by **1 degree**. (years on record: 128).

*\*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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