



North Dakota Monthly Climate Summary

November 2021

Volume 15, No. 11

Precipitation

North Dakota State Climate Office: Your Resource for Climate Information.



North Dakota State University

College of Agriculture, Food Systems, and Natural Resources

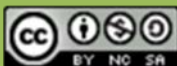
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Based on the National Centers for Environmental Information (NCEI), the statewide average November precipitation was 0.45 inches, which was 2.67 inches less than last month but 0.34 inches more than November 2020. It was 0.19 inches less than the 1991-2020 average, making it the 56th driest November in the 127-year period of record (Table 1).

The counties shaded in green in Figure 1 indicate wetter-than-average conditions in November 2021. In contrast, the counties shaded in brown indicate drier-than-average conditions. White shading indicates near-average conditions. The numbers inside the counties are the precipitation rankings with one being the lowest (driest) and 127 being the highest ranking (the wettest).

The greatest monthly precipitation accumulation was 2.08 inches, recorded in Fargo, Cass County. The greatest monthly snowfall accumulation was 9.7 inches, recorded in Pembina, Pembina County. Based on historical records, statewide November precipitation showed a slight positive long-term trend of 0.05 inches during the last century. The lowest and highest November precipitation for the state during this period ranged from 0.03 inches in 1939 to 2.33 inches in 2000 (Figure 2 and Table 1).

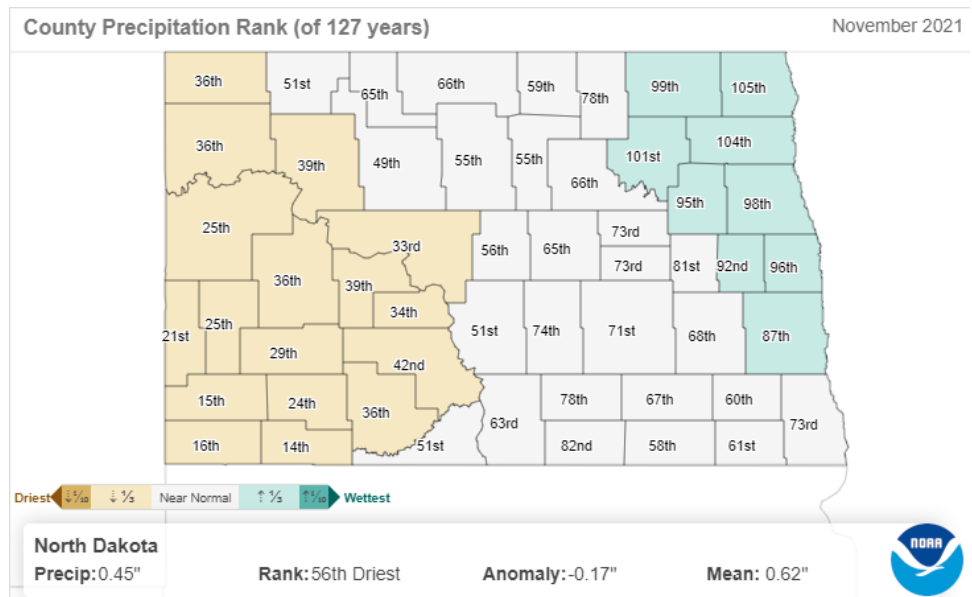


Figure 1. November 2021 county precipitation ranking map of North Dakota. (NCEI, NOAA)



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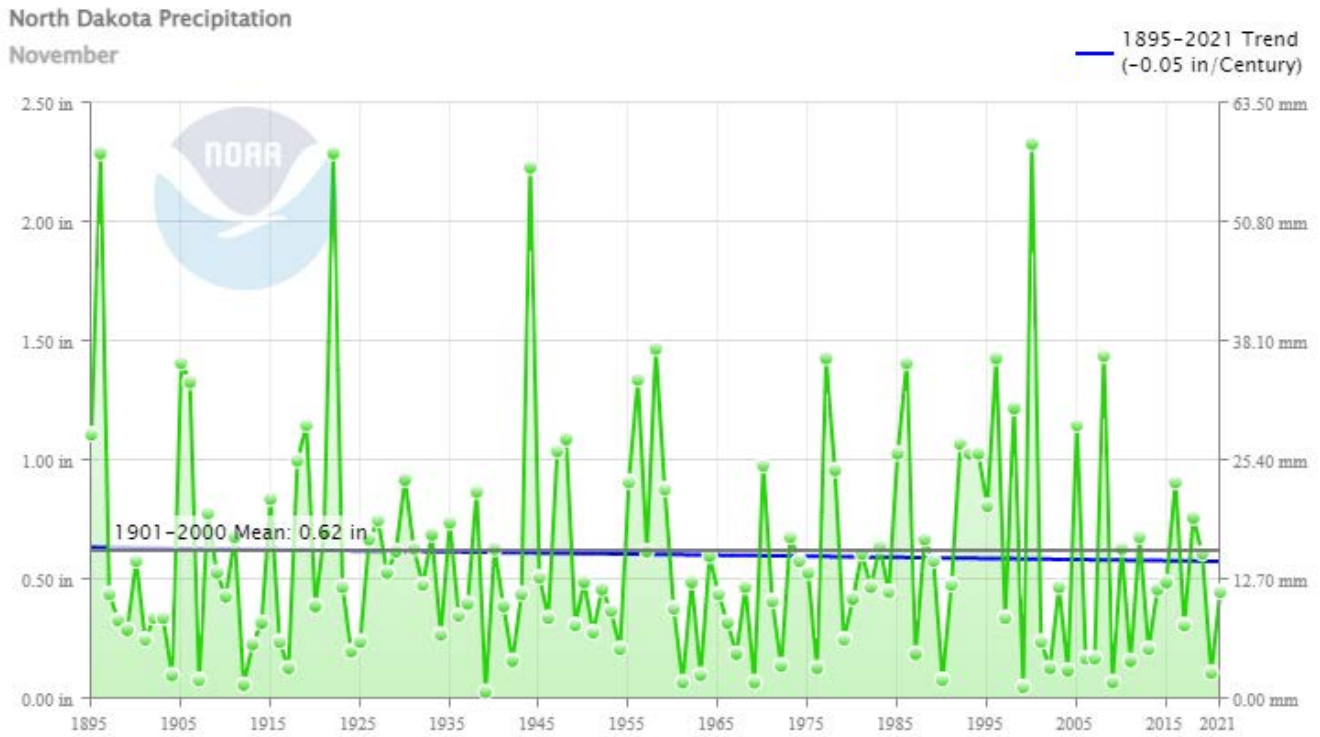


Figure 2. Historical November precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota November Precipitation Ranking Table.

Period	Value	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
November 2021	0.45"	0.64"	-0.19"	56th driest 72nd wettest	Driest since 2020 Wettest since 2019	0.03" (1939) 2.33" (2000)



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Temperature

The official state average November temperature was 32.8 F, which is 16 degrees cooler than last month, but one degree warmer than in November 2020. Furthermore, the average November temperature was 4.9 degrees warmer than the 1991-2020 average, making it the 18th warmest November in the 127 years of record (Table 2).

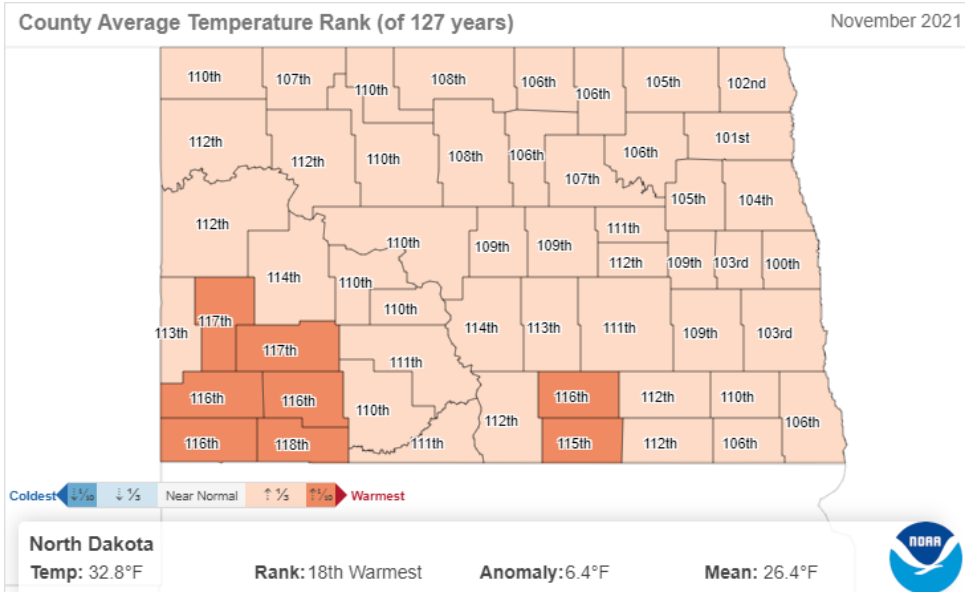


Figure 3. November 2021 county temperature ranking map of North Dakota. (NCEI, NOAA)

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

The state's highest and lowest daily temperatures ranged from 71 F on Nov. 6 in Hettinger, Adams County, to -20 F on Nov. 26 in Belcourt, Rolette County. Based on the historical records, the state average November temperature showed a positive long-term trend of 2.8 degrees during the last century. The lowest and highest monthly state November average temperatures during this period ranged from 6.1 F in 1896 to 39.3 F in 2016 (Figure 4 and Table 2).



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North Dakota Average Temperature
November

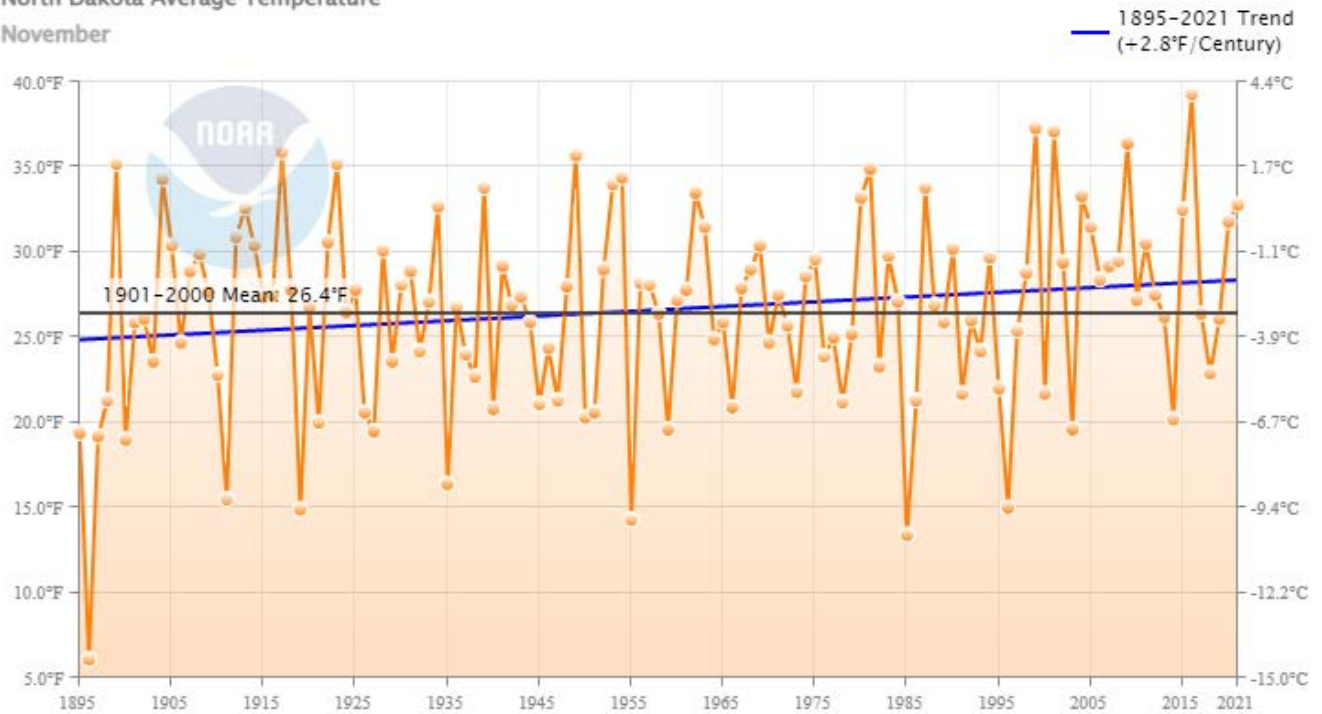


Figure 4. Historical November temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota November Temperature Ranking Table.

Period	Value	Normal	Anomaly	Rank	Warmest/Coollest Since	Record Year
November 2021	32.8°	27.9°	4.9°	110th coolest 18th warmest	Coollest since 2020 Warmest since 2016	6.1 F (1896) 39.3 F (2016)



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

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

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

Category	Number of Reports
<i>Tornado reports</i>	0
<i>Hail reports</i>	0
<i>Wind reports</i>	0
Total	0

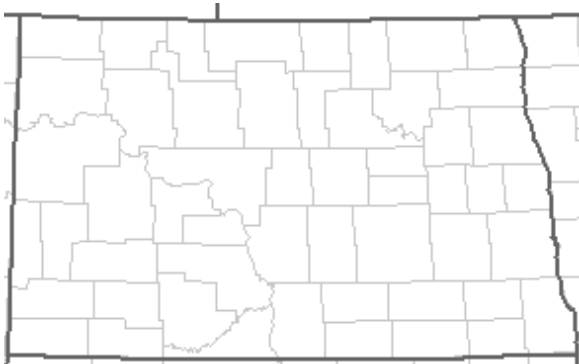


Figure 5. Map of November 2021 North Dakota storm events (red: tornado; blue: wind; green: hail). (Storm Prediction Center, NOAA)



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Daily Record Events in November: Across the observation network of weather stations with at least 30 years of history, 19 daily high- and no daily low-temperature records were set or tied. In addition, a total of 20 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 November. (NCEI Daily Weather Records)

<i>Category</i>	Number of Records
<i>Highest daily max. temp.</i>	3
<i>Highest daily min. temp.</i>	16
<i>Lowest daily max. temp.</i>	0
<i>Lowest daily min. temp.</i>	0
<i>Highest daily precipitation</i>	12
<i>Highest daily snowfall</i>	8
Total	39

The Highlight of the Month*

A highest daily snowfall record of **5 inches** was broken in **Pembina on Nov. 14**, exceeding the previous record that was set in 1978 by **2.99** inches (years on record: 120).

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

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