North Dakota Monthly Climate Summary

May 2022 **Volume 16, No. 5**

Precipitation

Based on the National Centers for Environmental Information (NCEI), the statewide average May precipitation was 3.89 inches, which was 0.13 inches more than last month and 1.83 inches more than May 2021. It was also 1.17 inches more than the 1991-2020 average, making it the 17th wettest May in the 128-year period of record (Table 1).

The counties shaded in green indicate wetter-than-average conditions in May 2022. White shading indicates near-average conditions.The numbers inside the counties are the precipitation rankings with one being the lowest (driest) and 128 being the highest (the wettest) ranking.

The greatest monthly precipitation accumulation was 9.37 inches, recorded in Carrington, Foster County. The greatest monthly snowfall accumulation was 4 inches, recorded in McHenry, Foster County. Based on historical records, statewide May precipitation showed a positive long-term trend of 0.31 inches during the last century. The lowest and highest May precipitation for the state during this period ranged from 0.23 inches in 1901 to 5.96 inches in 1926 (Figure 2 and Table 1).

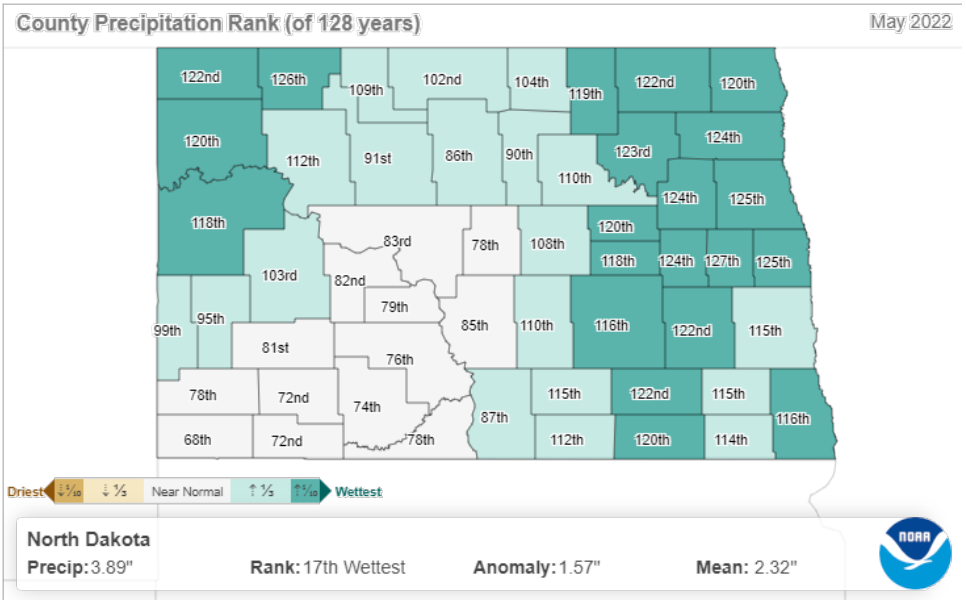

Figure 1. May 2022 county precipitation ranking map of North Dakota. (NCEI, National Oceanic and Atmospheric Administration [NOAA])

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

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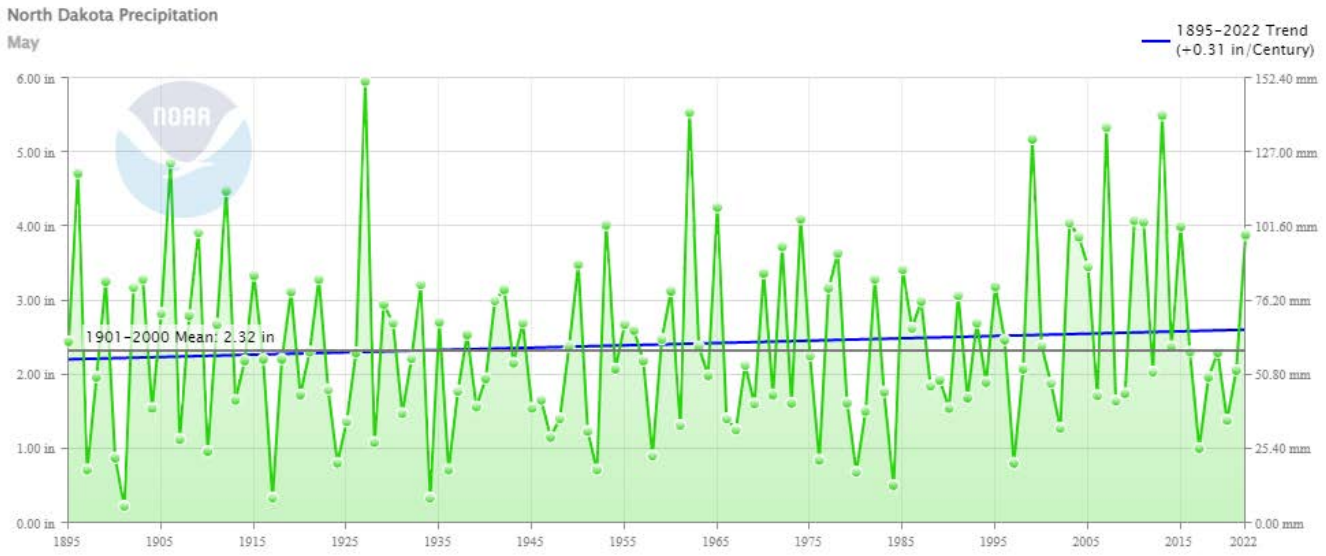

Figure 2. Historical May precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota May Precipitation Ranking Table.

Period	Value	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
May 2022	3.89”	2.72”	1.17”	112th driest 17th wettest	Driest since 2021 Wettest since 2015	0.23” (1901) 5.96” (1926)

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Temperature

The official state average May temperature was 53 F, which is 19.4 degrees warmer than last month, and 0.3 degrees warmer than in May 2021. However, the average May temperature was 0.7 degrees cooler than the 1991-2020 average, making it the 60th coldest May in the 128 years of record (Table 2).

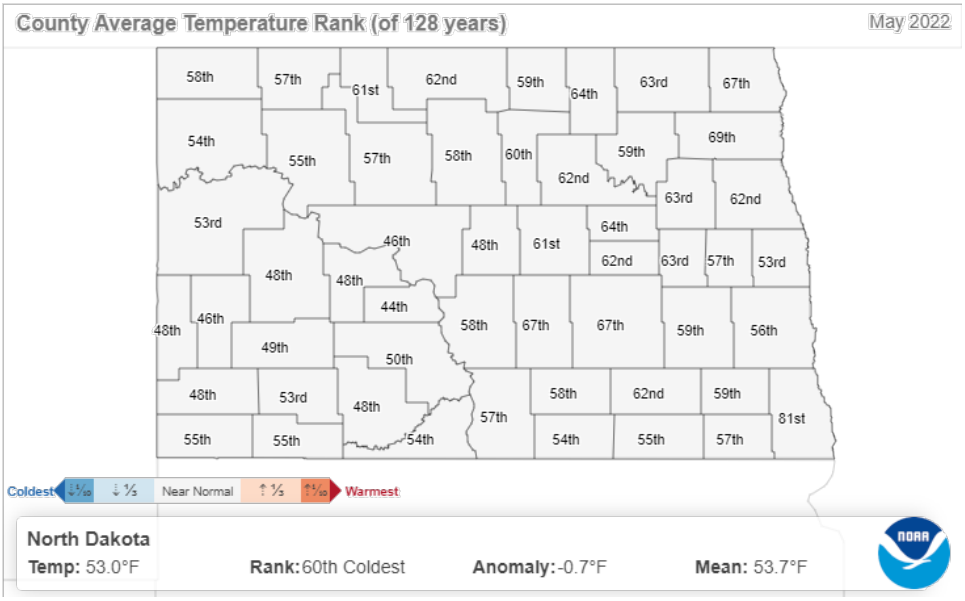

Figure 3. May 2022 county temperature ranking map of North Dakota. (NCEI, NOAA)

The counties with white shading in Figure 3 indicate near-average conditions. The numbers inside the counties are the temperature rankings, with one being the lowest (coldest) and 128 being the highest (warmest).

The state's highest and lowest daily temperatures ranged from 85 F on May 29 in Lisbon, Ransom County, to 19 F on May 10 in Foxholm, Ward County. Based on the historical records, the state average May temperature showed a slight positive long-term trend of 0.7 degrees during the last century. 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 and Table 2).

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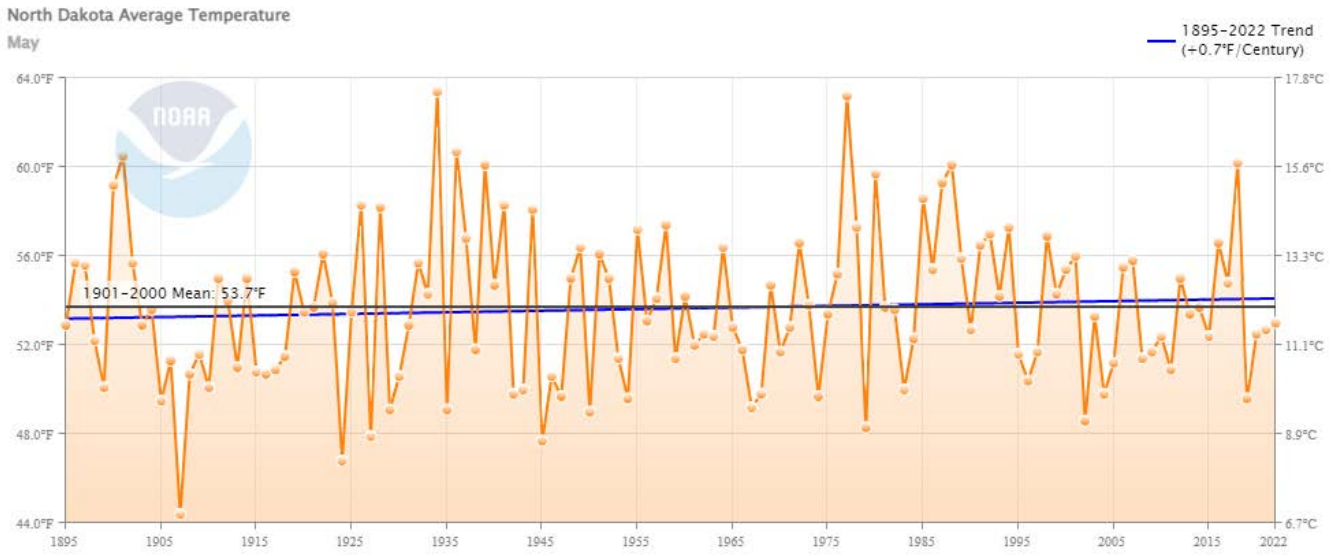

Figure 4. Historical May temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota May Temperature Ranking Table.

Period	Value	Normal	Anomaly	Rank	Warmest/Coolest Since	Record Year
May 2022	53 F	53.7 F	-0.7 F	60th coolest 69th warmest	Coolest since 2021 Warmest since 2018	44.4 F (1907) 63.4 F (1934)

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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 three tornadoes, 13 hail and 17 damaging wind reports with 33 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)

Category	Number of Reports
Tornado reports	3
Hail reports	13
Wind reports	17
Total	**33**

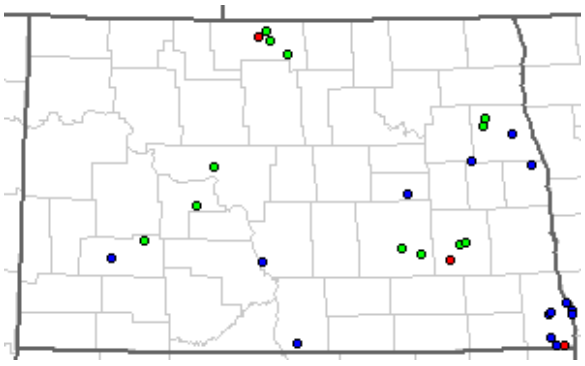

Figure 5. Map of May 2022 North Dakota storm events (red: tornado; blue: wind; green: hail). (Storm Prediction Center, NOAA)

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Daily Record Events in May: Across the observation network of weather stations with at least 30 years of history, one daily high and 19 daily low temperature records were set or tied. In addition, a total of 24 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 May. (NCEI Daily Weather Records)

Category	Number of Records
Highest daily max. temp.	0
Highest daily min. temp.	1
Lowest daily max. temp.	17
Lowest daily min. temp.	2
Highest daily precipitation	24
Highest daily snowfall	0
Total	**44**

The Highlight of the Month*

A highest daily precipitation record of **2.7 inches** was broken in **Crosby on May 13,** exceeding the previous record that was set in 1922 by **0.56 inches** (years on record: 115).

**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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