



North Dakota Monthly Climate Summary

June 2021

Volume 15, No. 6

Precipitation

North Dakota State Climate Office: Your Resource for Climate Information



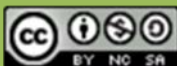
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Based on the National Centers for Environmental Information (NCEI), the statewide average June precipitation was 2.1 inches, which was only 0.17 inch greater than last month but 0.34 inch less than in June 2020. It was 1.38 inches less than the 1991-2020 average, making it the 15th driest June in the 127-year period of record (Table 1).

The counties shaded in brown in Figure 1 indicate drier-than-average conditions in June 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 8.17 inches, recorded in Montpelier, Stutsman County. The greatest monthly snowfall accumulation, on the other hand, was only a trace, recorded in Hebron, Underwood and Grassy Butte. Based on historical records, statewide June precipitation showed a slight negative long-term trend of 0.25 inch during the last century. The lowest and highest June precipitation for the state during this period ranged from 0.11 inch in 1974 to 7.01 inches in 2005 (Figure 2).

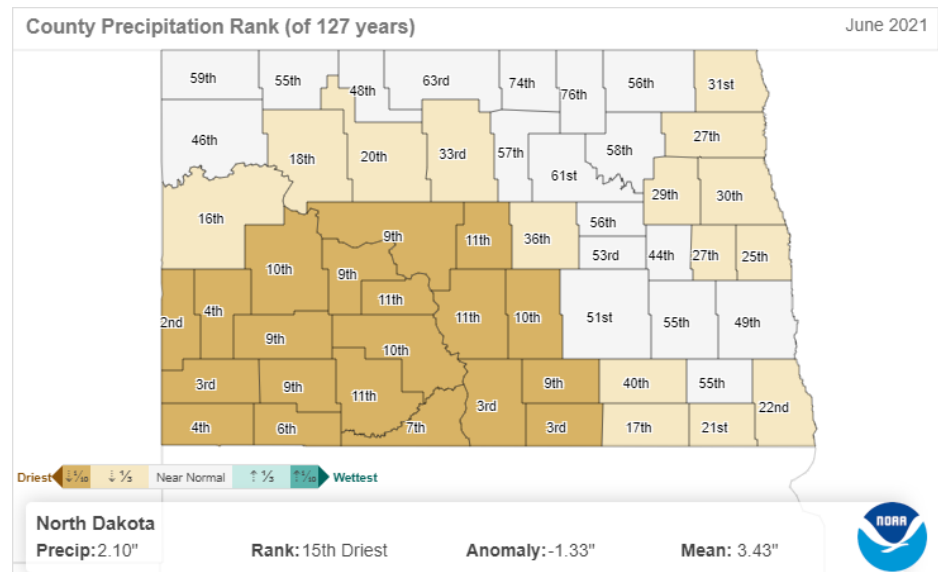


Figure 1. June 2021 county precipitation ranking map of North Dakota. (National Centers for Environmental Information, NOAA)



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North Dakota Precipitation

June

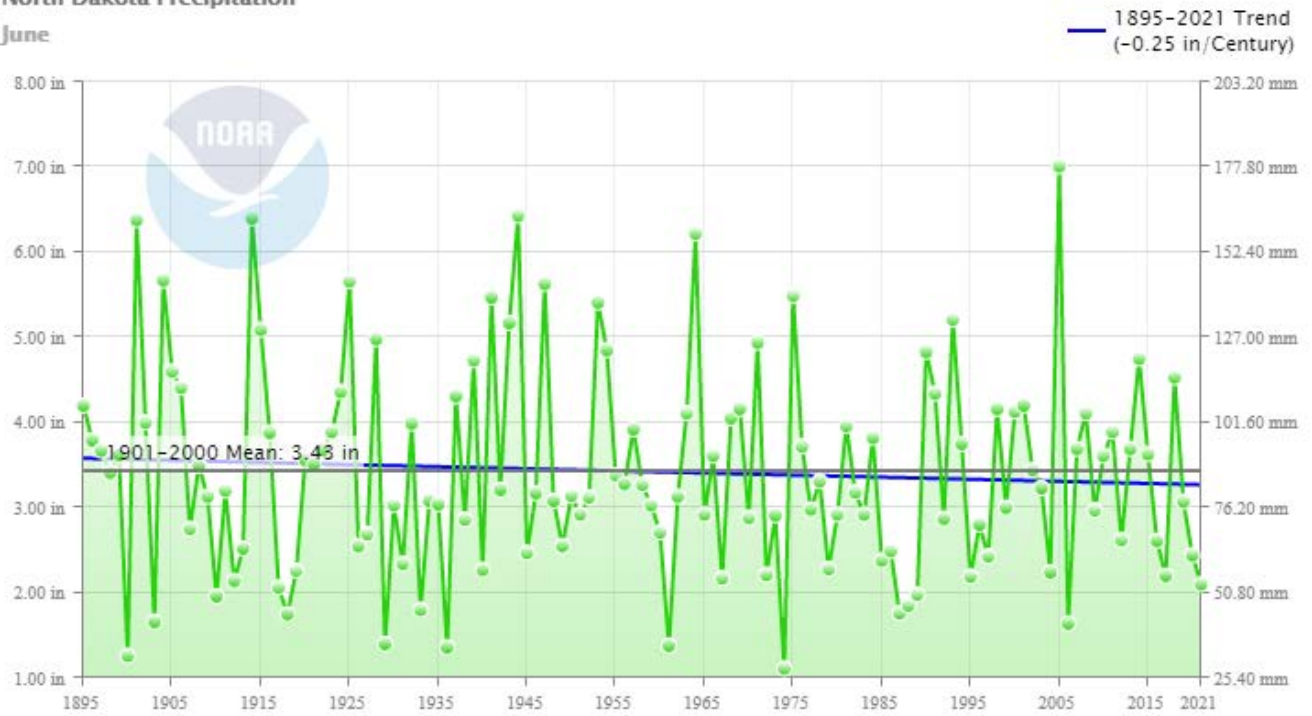


Figure 2. Historical June precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota June Precipitation Ranking Table.

Period	Value	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
June 2021	2.1"	3.48"	-1.38"	15th driest 113th wettest	Driest since 2006 Wettest since 2020	0.11" (1974) 7.01" (2005)



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Temperature

The official state average June temperature was 69.1 F, which is 16.5 degrees warmer than last month and 2.1 degrees warmer than in June 2020. Furthermore, the average June temperature was 5.5 degrees warmer than the 1991-2020 average, making it the third warmest June in the 127 years of record (Table 2).

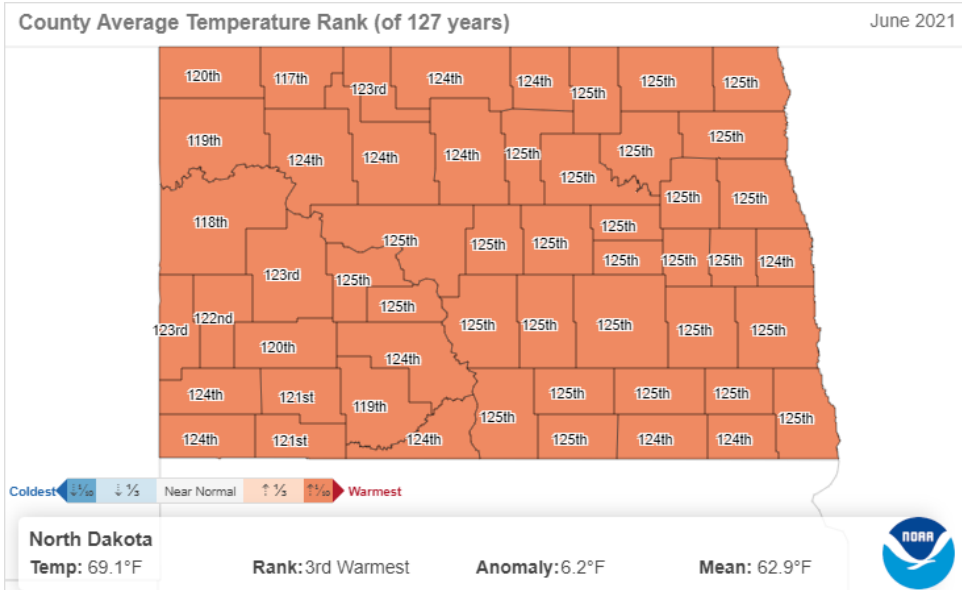


Figure 3. June 2021 county temperature ranking map of North Dakota. (National Centers for Environmental Information, NOAA)

The counties shaded in peach 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 33 F on June 1 in Watford City, McKenzie County, to 106 F on June 4 in Bismarck, Burleigh County. The state average June temperature showed a steep positive long-term trend of 1.8 degrees during the last century based on the historical records. The lowest and highest monthly state June average temperatures during this period ranged from 56.8 F in 1915 to 74.1 F in 1988 (Figure 4).



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North Dakota Average Temperature
June

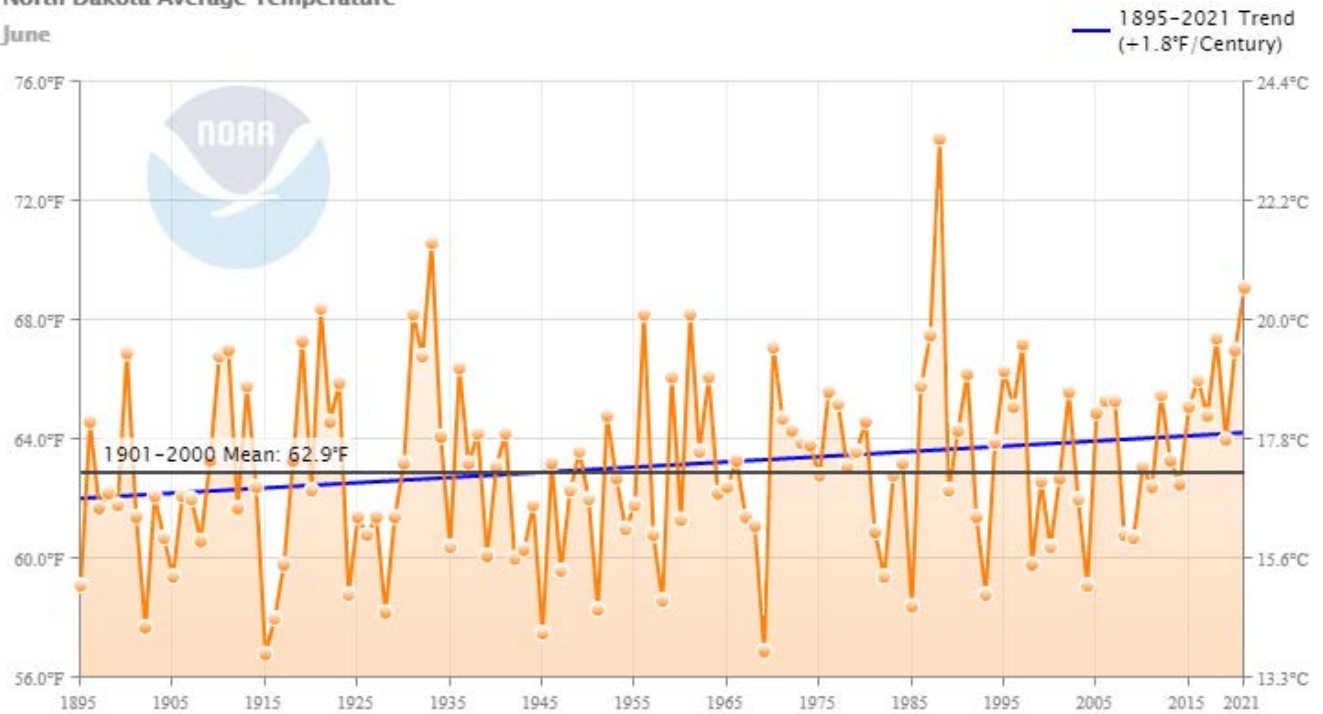


Figure 4. Historical June temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota June Temperature Ranking Table.

Period	Value	Normal	Anomaly	Rank	Warmest/Coollest Since	Record Year
June 2021	69.1°	63.6°	5.5°	125th coolest 3rd warmest	Coollest since 2020 Warmest since 1988	56.8 F (1915) 74.1 F (1988)



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

The NOAA Storm Report recorded six tornados, and 55 hail and 126 damaging wind reports, with a total of 187 significant storm events in June. Table 3 summarizes the number of tornado, hail and damaging wind reports in June, while Figure 5 geographically displays the locations of these storms.

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

Category	Number of Reports
<i>Tornado reports</i>	6
<i>Hail reports</i>	55
<i>Wind reports</i>	126
Total	187

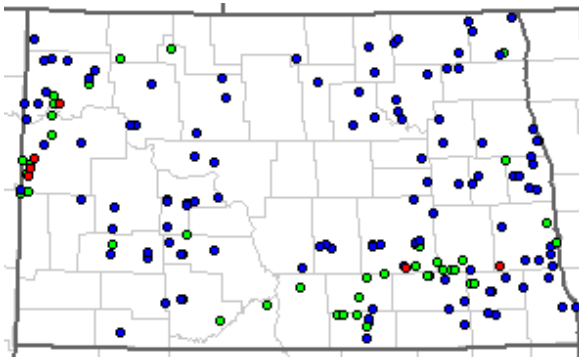


Figure 5. Map of June 2021 North Dakota storm events (red: tornado; blue: wind; green: hail). (Storm Prediction Center, NOAA)



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Daily Record Events in June: Across the observation network of weather stations with at least 30 years of history, 143 daily high- and only two daily low-temperature records were set or tied. In addition, a total of 10 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 June. (NCEI Daily Weather Records)

<i>Category</i>	Number of Records
<i>Highest daily max. temp.</i>	88
<i>Highest daily min. temp.</i>	55
<i>Lowest daily max. temp.</i>	0
<i>Lowest daily min. temp.</i>	2
<i>Highest daily precipitation</i>	10
<i>Highest daily snowfall</i>	0
Total	155

The Highlight of the Month*

A lowest daily maximum temperature record of **106 degrees** was broken in **Bismarck on June 6**, exceeding the previous record that was set in 1988 by **11** degree. (years on record: 73).

**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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