

November 2020

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North Dakota
State Climate
Office: Your
Resource for
Climate
Information

NDSU NORTH DAKOTA STATE UNIVERSITY

North Dakota State University

Food Systems,

Fargo, ND 58108-6050

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Precipitation

Based on the National Centers for Environmental Information (NCEI). the statewide average November precipitation was 0.11 inch, which was 0.51 inch less than last month and 0.5 inch less than in November 2019. It was also 0.56 inch less than the 1981-2010 average, making it the 11th driest November in the 126-year period of record (Table 1). It was the driest November since 2009. The values less than 100 in Figure 1 below are shaded in yellow, orange and red to depict the region with below-average rainfall. In contrast, the values that are greater than 100 in the same figure are shaded in green, blue and purple to depict the region with above-average rainfall in November. The greatest monthly precipitation accumulation was 0.49 inch, recorded in Fargo, Cass County. The greatest monthly snowfall accumulation, on the other hand, was 4.9 inches, recorded in Bottineau, Bottineau County. Based on historical records, statewide November precipitation showed a slight negative long-term trend of 0.04 inch during the last century. The lowest and highest November precipitation for the state during this period ranged from 0.03 inch in 1939 to 2.33 inches in 2000 (Figure 2).

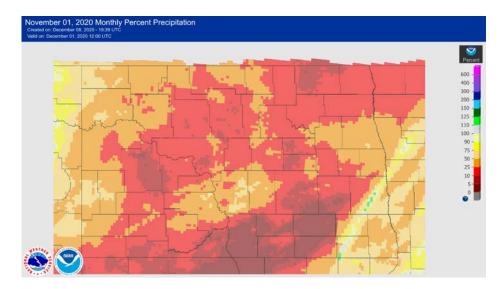


Figure 1. November 2020 precipitation percent of normal for North Dakota. (Advanced Hydrologic Prediction Center, NOAA)



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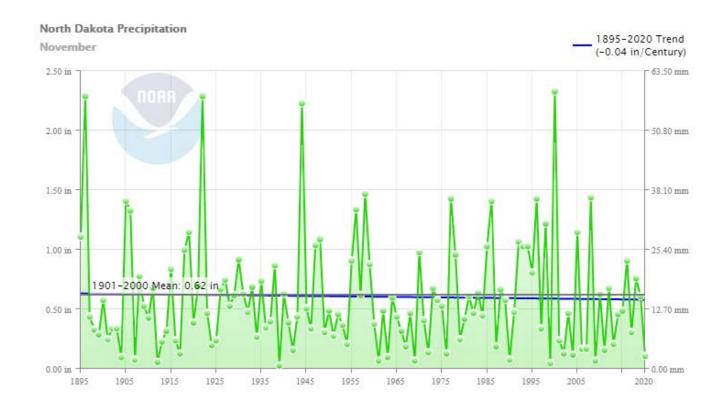


Figure 2. Historical November precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota November Precipitation Ranking Table.

Period	Value	Normal	Anomaly	Rank	Wettest/Driest Since	Record Year
November 2020		0.68"	-0.56"	11th driest 116th wettest	Driest since 2009 Wettest since 2019	0.03" (1939) 2.33" (2000)



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Temperature

The official state average November temperature was 32.1 F, which is 5.5 degrees cooler than last month, but 6 degrees warmer than in November 2019. The average November temperature also was 4.8 degrees warmer than the 1981-2010 average, which made it the 21st warmest November in the 126 years of record (Table 2). The positive numbers in Figure 3 are shaded in green, yellow and red to depict the

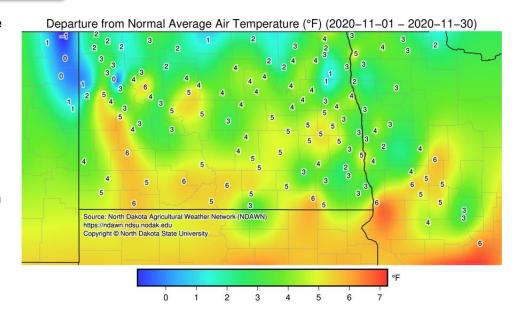


Figure 3. November 2020 temperature departure from average for North Dakota. (North Dakota Agricultural Weather Network)

areas with warmer-than-average temperatures. In contrast, the negative numbers in in the same figure are shaded in blue to depict the area with cooler-than-average temperatures in November. The state's lowest and highest daily temperatures ranged from minus 9 F on Nov. 13 in Willow City, Bottineau County, to 78 F on Nov. 5 in Dickinson, Stark County. Based on the historical records, the state average November temperature showed a positive long-term trend of 2.6 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).



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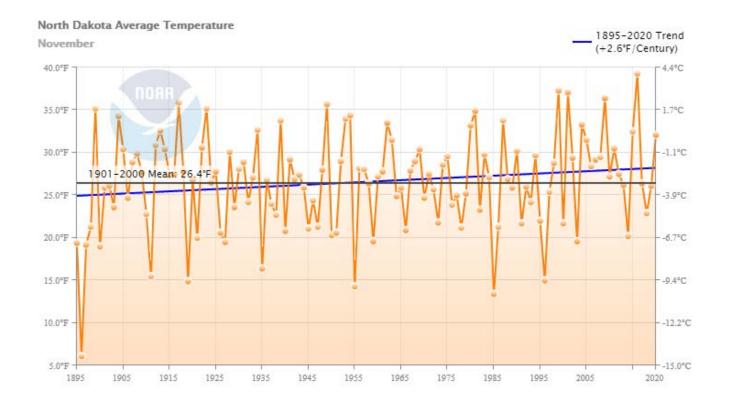


Figure 4. Historical November temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota November Temperature Ranking Table.

		Anomaly	Rank	Warmest/Coolest Since	Record Year
November 2020	27.3°	4.8°	106th coolest 21st warmest	Coolest since 2019 Warmest since 2016	6.1 F (1896) 39.3 F (2016)



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Daily Record Events in November: Across the observation network of weather stations with at least 30 years of history, 67 daily high-temperature records were set or tied. A total of two 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)

Category	Number of
	Records
Highest daily max. temp.	61
Highest daily min. temp.	6
Lowest daily max. temp.	0
Lowest daily min. temp.	0
Highest daily precipitation	2
Highest daily snowfall	0
Total	69

The Highlight of the Month*

A highest daily maximum temperature record of 78 degrees was broken in **Dickinson on Nov. 5**, exceeding the previous record that was set in 1975 by 2 degrees. (years on record: 71).

*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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