

May 2020

Volume 14, No. 5

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 May precipitation was 1.43 inches, which was 0.68 inch more than last month but 0.87 inch less than in May 2019. It also was 1.1 inches less than the 1981-2010 average, making it the 26th driest May in the 126-year period of record (Table 1). It was the driest May since 2018. 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 May. The greatest monthly precipitation accumulation was 2.95 inches, recorded in Northville, LaMoure County. The greatest monthly snowfall accumulation was 5 inches, recorded in Maxbass, Bottineau County. Based on historical records, statewide May precipitation showed a slight positive long-term trend of 0.3 inch per century since 1895. The lowest and highest May precipitation for the state ranged from 0.23 inch in 1901 to 5.96 inches in 1927 (Figure 2).

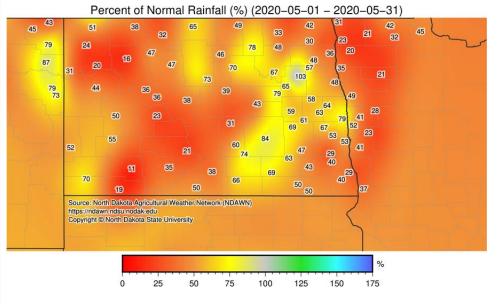


Figure 1. May 2020 precipitation percent of normal for North Dakota. (North Dakota Agricultural Weather Network, NDSU)



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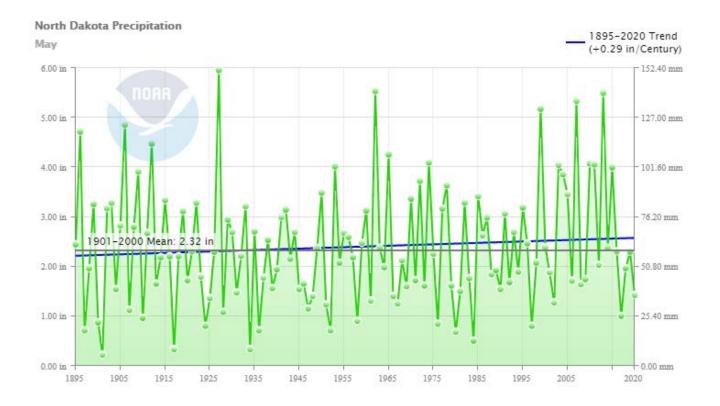


Figure 2. Historical May precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota May Precipitation Ranking Table.							
Period	Value	Normal	Anomaly	Rank	Wettest/Driest	Record	
			-		Since	Year	
May 2020	1.43"	2.53"	-1.1"	26th driest	Driest since 2017	0.23" (1901)	
-				101th wettest	Wettest since 2019	5.96" (1927)	

Table 1. North Dakota May Precipitation Ranking Table.



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Temperature

The official state average May temperature was 52.4 F, which is 14.7 degrees warmer than last month and 2.8 degrees warmer than in May 2019. The average May temperature, however, was 1.7 degrees cooler than the 1981-2010 average, which made it the 48th coolest May in the 126 years of record (Table 2). The negative numbers in Figure 3 are shaded in green and blue to depict the region

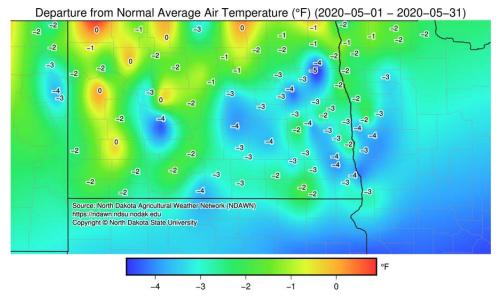


Figure 3. May 2020 temperature departure from normal for North Dakota. (North Dakota Agricultural Weather Network)

with cooler-than-average temperatures in May. In contrast, the positive numbers in the same figure are shaded in red and orange to illustrate the region with warmer-than-average temperatures in May. The state's lowest and highest daily temperatures ranged from 14 F on May 11 in Taylor, Stark County, to 92 F on May 22 in Dunn Center, Dunn County. Based on the historical records, the state average May temperature showed a slight positive long-term trend of 0.1 degree per decade since 1895. The lowest and highest monthly state May average temperatures ranged from 44.4 F in 1907 to 63.4 F in 1934 (Figure 4).



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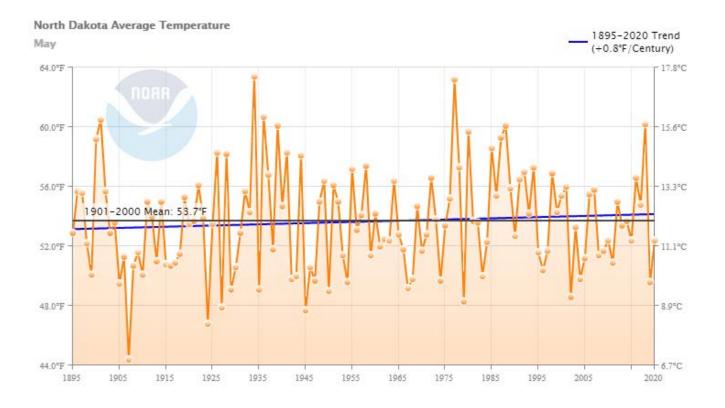


Figure 4. Historical May temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota May Temperature Ranking Table.						
Period	Value	Normal	Anomaly	Rank	Warmest/Coolest	Record
					Since	Year
May 2020	52.4°	54.1°	-1.7°	48th coolest	Coolest since 2019	44.4 F (1907)
				79th warmest	Warmest since 2018	63.4 F (1934)

Table 2. North Dakota May Temperature Ranking Table.



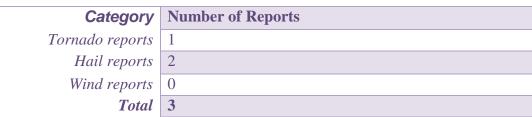
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Storm Reports: Table 3 below shows the summary of May severe storm reports in North Dakota (Storm Prediction Center, NOAA).

The NOAA Storm Report showed one tornado (land spout), two hail and no damaging wind reports, with a total of three significant storm event 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. (StormPrediction Center, NOAA)



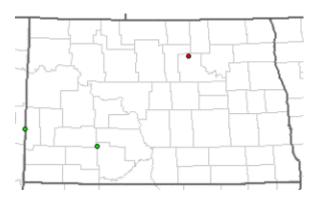


Figure 5. Map of May 2020 North Dakota storm events (red: tornado; blue: wind; green: hail). (Storm Prediction Center, NOAA)



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Daily Record Events in May: Across the observation network of weather stations with at least 30 years of history, three daily high- and 21 daily low-temperature records were set or tied. A total of seven 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.	3
Lowest daily max. temp.	1
Lowest daily min. temp.	20
Highest daily precipitation	3
Highest daily snowfall	4
Total	31

The Highlight of the Month*

A lowest daily minimum temperature record of 17 degrees was set in **Dunn Center** on **May 12**, exceeding the previous record that was set in **1953** by 5 degrees (years on record: 101).

*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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