



# North Dakota Monthly Climate Summary

February 2020

Volume 14, No. 2

## Precipitation

North Dakota State Climate Office: Your Resource for Climate Information

**NDSU** NORTH DAKOTA STATE UNIVERSITY

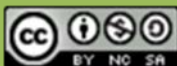
North Dakota State University

College of Agriculture,  
Food Systems,  
and Natural Resources

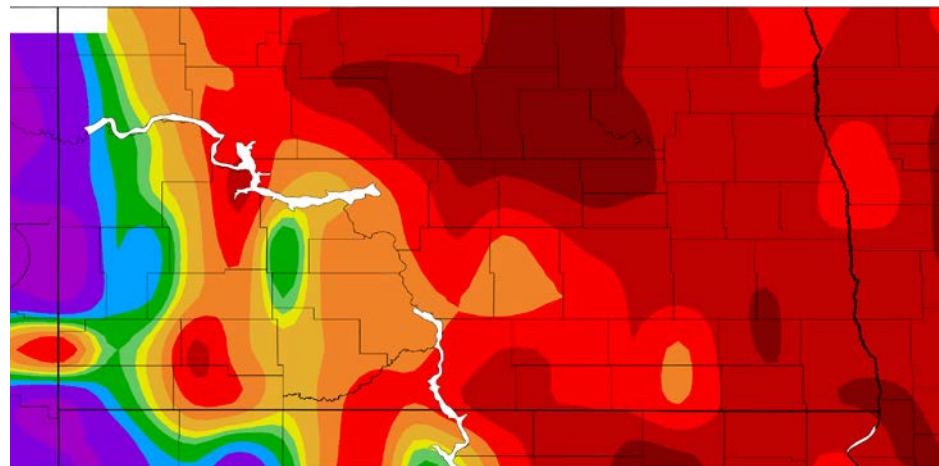
304 Morrill Hall  
Fargo, ND 58108-6050  
[www.ndsu.edu/ndSCO](http://www.ndsu.edu/ndSCO)

[Adnan.Akyuz@ndsu.edu](mailto:Adnan.Akyuz@ndsu.edu)  
701-231-6577

This publication can be made available in alternative formats upon request.



Based on the National Centers for Environmental Information (NCEI), the statewide average February precipitation was 0.18 inch, which was 0.23 inch less than last month and 0.83 inch less than in February 2019. It also was 0.26 inch less than the 1981-2010 average, making it the 11th driest February in the 126-year period of record (Table 1). It was the driest February since 2014. 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 February. The greatest monthly precipitation accumulation was 1.06 inches, recorded in Watford City, McKenzie County. The greatest monthly snowfall accumulation was 12 inches, recorded in Courtenay, Stutsman County. Based on historical records, statewide February precipitation showed a slight negative long-term trend of 0.06 inch per century since 1895. The lowest and highest February precipitation for the state ranged from 0.07 inch in 1934 to 1.59 inches in 1998 (Figure 2).



**Figure 1. February 2020 precipitation percent of normal for North Dakota. (High Plains Regional Climate Center)**



# North Dakota Monthly Climate Summary

February 2020

Volume 14, No. 2

## North Dakota Precipitation

February

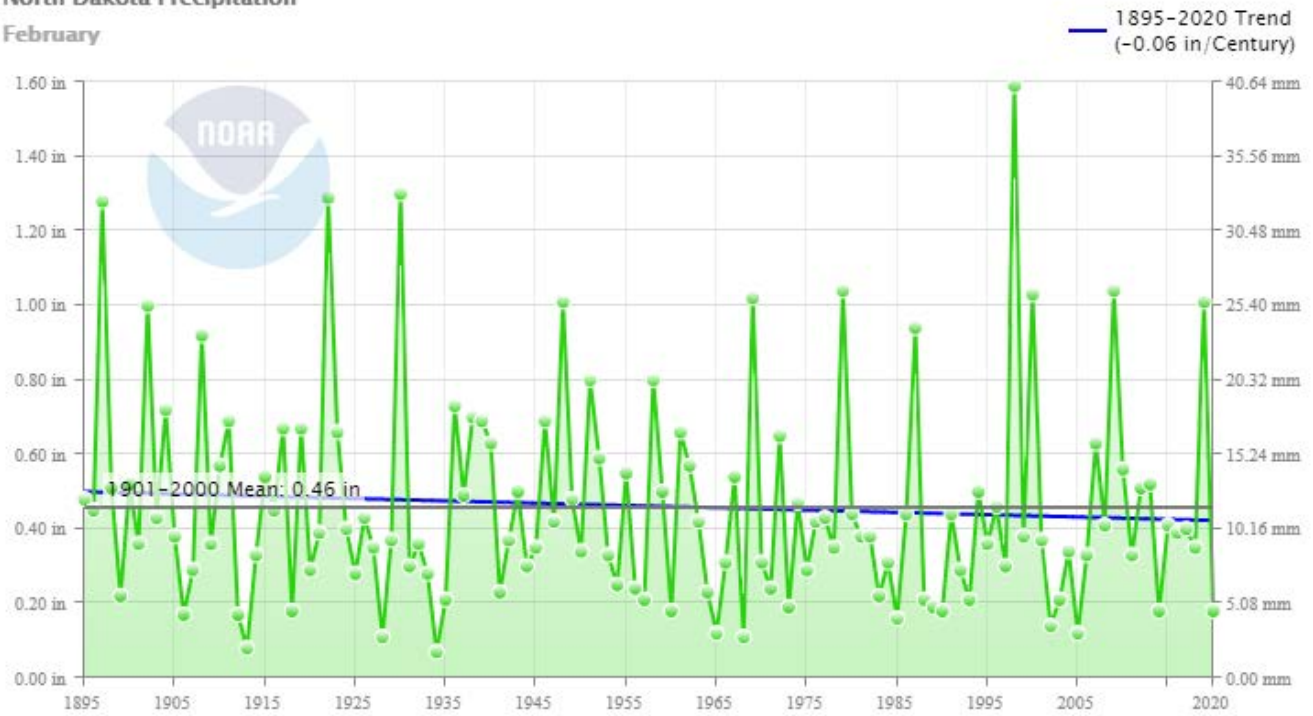


Figure 2. Historical February precipitation time series for North Dakota. (NCEI, NOAA)

Table 1. North Dakota February Precipitation Ranking Table.

| Period        | Value | Normal | Anomaly | Rank                         | Wettest/Driest Since                    | Record Year                  |
|---------------|-------|--------|---------|------------------------------|---|------------------------------|
| February 2020 | 0.18" | 0.44"  | -0.26"  | 11th driest<br>116th wettest | Driest since 2014<br>Wettest since 2019 | 0.07" (1934)<br>1.59" (1998) |



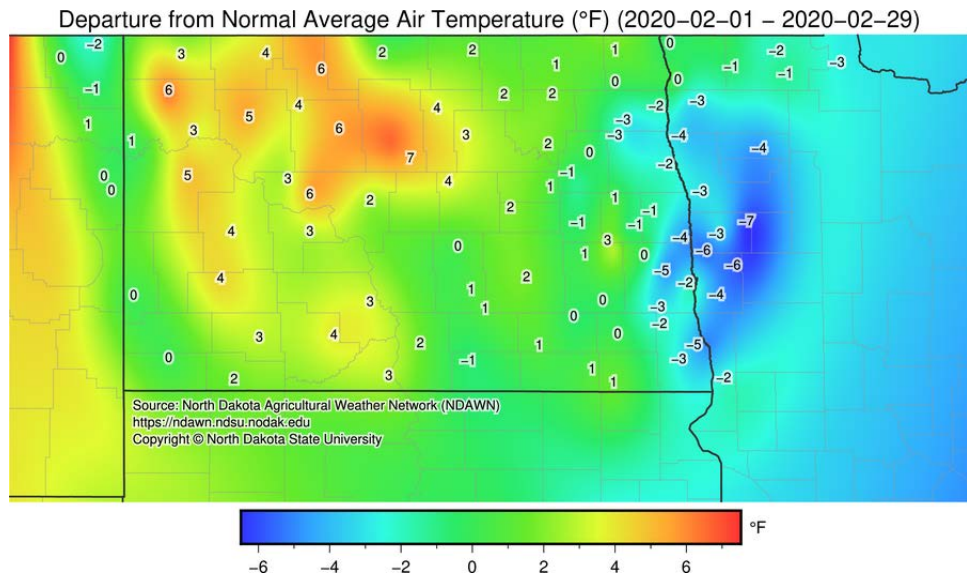
# North Dakota Monthly Climate Summary

February 2020

Volume 14, No. 2

## Temperature

The official state average February temperature was 17.6 F, which is 4.6 degrees warmer than last month and 20.3 degrees warmer than in February 2019. The average February temperature was 1.9 degrees warmer than the 1981-2010 average, which made it the 31st warmest February in the 126 years of record. It was the warmest February since 2017 (Table 2). The negative numbers in Figure 3 are



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

shaded in green and blue to depict the region with cooler-than-average temperatures in February. 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 February. The state's lowest and highest daily temperatures ranged from minus 29 F on Feb. 13 and Feb. 7 in Hettinger, Adams County, and Foxholm, Ward County, to 57 F on Feb. 29, at Pretty Rock, Grant County, and Sand Creek, Slope County. Based on the historical records, the state average February temperature showed a hard positive long-term trend of 0.6 degree per decade since 1895. The lowest and highest monthly state February average temperatures ranged from minus 14.1 F in 1936 to 29.6 F in 1954 (Figure 4).



# North Dakota Monthly Climate Summary

February 2020

Volume 14, No. 2

North Dakota Average Temperature  
February

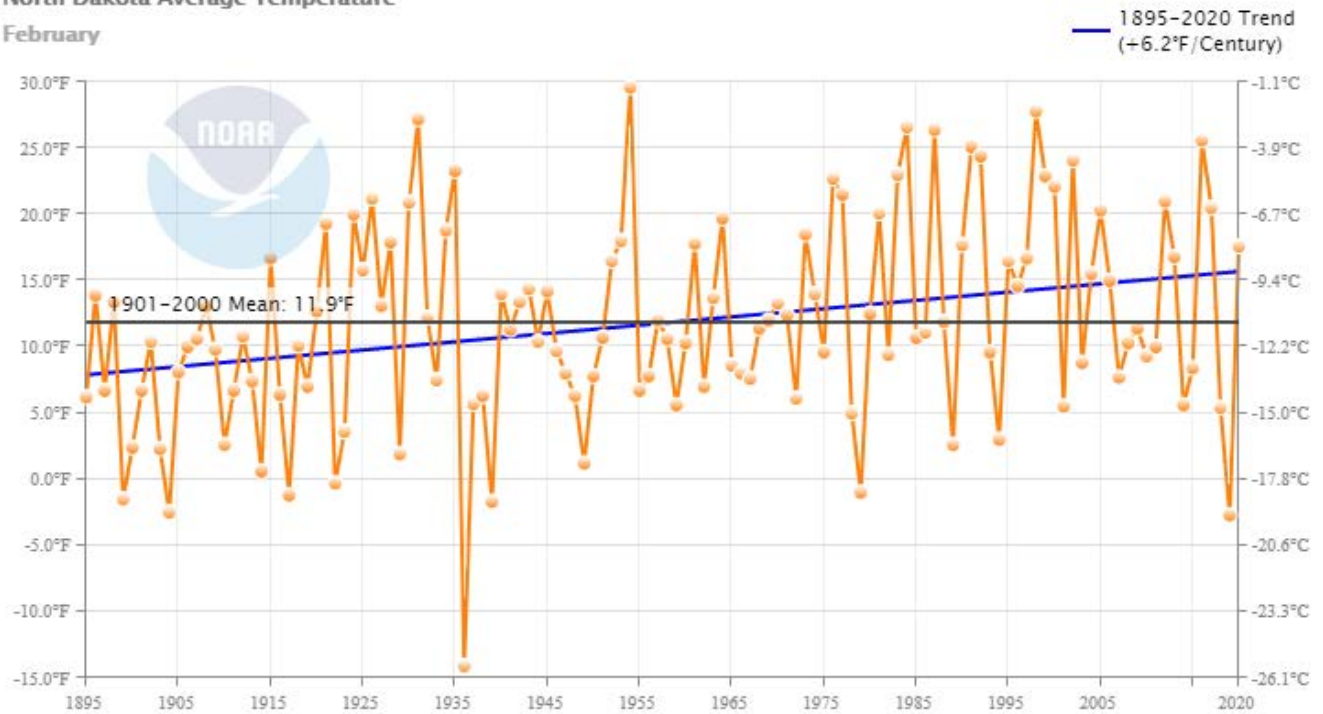


Figure 4. Historical February temperature time series for North Dakota. (NCEI, NOAA)

Table 2. North Dakota February Temperature Ranking Table.

| Period        | Value | Normal | Anomaly | Rank                         | Warmest/Coollest Since                    | Record Year                     |
|---------------|-------|--------|---------|------------------------------|---|---------------------------------|
| February 2020 | 17.6° | 15.7°  | 1.9°    | 96th coolest<br>31st warmest | Coollest since 2019<br>Warmest since 2017 | -14.1 F (1936)<br>29.6 F (1954) |



# North Dakota Monthly Climate Summary

February 2020

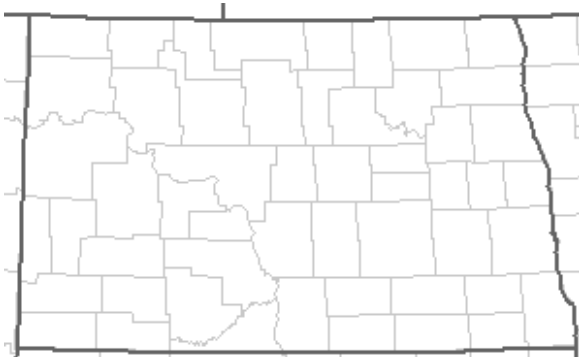
Volume 14, No. 2

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

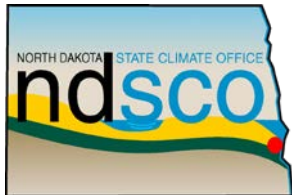
The NOAA Storm Report showed no significant storm events in February. Table 3 summarizes the number of tornado, hail and damaging wind reports in February, while Figure 5 geographically displays the locations of these storms.

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

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



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



# North Dakota Monthly Climate Summary

February 2020

Volume 14, No. 2

**Daily Record Events in February:** Across the observation network of weather stations with at least 30 years of history, seven daily high- and 13 daily low-temperature records were set or tied. 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 February. (NCEI Daily Weather Records)*

| Category                    | Number of Records |
|-----------------------------|-------------------|
| Highest daily max. temp.    | 1                 |
| Highest daily min. temp.    | 6                 |
| Lowest daily max. temp.     | 7                 |
| Lowest daily min. temp.     | 6                 |
| Highest daily precipitation | 6                 |
| Highest daily snowfall      | 4                 |
| <b>Total</b>                | <b>30</b>         |

## The Highlight of the Month\*

A highest daily temperature record of **42** degrees was set in **Fargo on Feb. 1**, exceeding the previous record that was set in **2012** by 2 degrees (years on record: 129).

*\*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.*

NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to Vice Provost, Title IX/ADA Coordinator, Old Main 201, 701-231-7708, ndsu.eoaa@ndsu.edu.

Feel free to use and share this content, but please do so under the conditions of our [Creative Commons](#) license and our [Rules for Use](#).

This work is supported by the USDA National Institute of Food and Agriculture, Hatch/Multi State project ND1005365.