

Growing Season Climate Summary for North Dakota

2026



2026
Growing Season

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2026 Summary

The 2026 Growing Season covered the five-month period from May through September 2026. In North Dakota, it was defined by a warmer-than-average summer, especially in July, with much of the state recording below-average precipitation. This combination drove significant drought expansion, stressed crops and pastures, and reduced yields. Although late-season moisture finally arrived, it came too late to benefit most production.

The season may be remembered as a hot one, but the heat was concentrated in July, while June and August were closer to normal across most of the state. September was also above average for temperatures, although September warmth is rarely intense enough to cause meaningful yield losses. The September warmth arrived with rain, significant in many areas. Although too late to help most crops, it substantially increased soil moisture, which should provide more favorable soil water supplies heading into the 2027 growing season.

Precipitation was highly variable due to spotty thunderstorms. The central and southern Red River Valley saw extreme deficits; some North Dakota Agricultural Weather Network (NDAWN) stations were around 10 inches below average from May into early September, before the late-season rains finally arrived. Those rainfall deficits ranked among the driest summers in decades in some locations. In contrast, parts of the northern portions of the state were wetter than average. The moisture across some parts of the north came in June, which limited early drought development, but a very hot and dry July accelerated expansion. By late August, roughly 86% of the state was in Moderate to Extreme Drought (D1–D3), with Extreme Drought (D3) present in parts of southwestern North Dakota and in the central and southern Red River Valley. Only a small area of the state remained free of dryness categories by the end of the summer.

TABLE 1 summarizes the length of the growing season based on the number of consecutive days between the last and first freeze (32°F), as well as the current 30-year climate normal and record values, for the long-term climate sites in North Dakota. Bismarck, Grand Forks, and Williston recorded a top 20 longest growing season length.

Table 1: 2026 Growing Season Length for Select North Dakota Cities

	Number of Days	Dates	Normal	Record
Bismarck	158 (T-5th longest)	May 11 – October 15	May 16 – Sept. 24 (132 Days)	172 Days (2025)
				91 Days (1911)
Fargo	134 (T-65th shortest)	May 21 – October 1	May 9 – Oct. 1 (146 days)	187 Days (2007)
				77 Days (1885)
Grand Forks	161 (9th longest)	May 11 – October 18	May 12 – Sept. 29 (142 Days)	186 Days (2007)
				75 Days (1907)
Williston	146 (T-16th longest)	May 20 – October 12	May 22 – Sept. 19 (121 Days)	167 Days (1922)
				73 Days (1908)

Source: NWS Climate Data (Bismarck 1875-2026; Fargo 1881-2026; Grand Forks 1893-2026; Williston 1907-2026) (NOAA)



Precipitation Summary

Table 2: May - September 2026 Precipitation Summary for North Dakota

	Total	Normal	Anomaly	Rank	Record
Precipitation	11.14"	13.21	-2.07"	T-90th Wettest	18.80" (1993)
				T-42nd Driest	5.30" (1936)

Source: NDAWN (2024-2026), NWS Climate Data (1895-2026) (NOAA)

On the whole, precipitation across North Dakota was below average for the growing season, with a statewide average of 11.14" which is 84% or 2.07" below the current 30-year normals (TABLE 2). The growing season was a bit of a seesaw, with July 2026 being the 13th driest July on record, while September 2026 is the 13th wettest September on record (FIGURE 1). The September rains came too late in the growing season to make a significant difference in the harvest, but they will help in moisture carryover for next season.

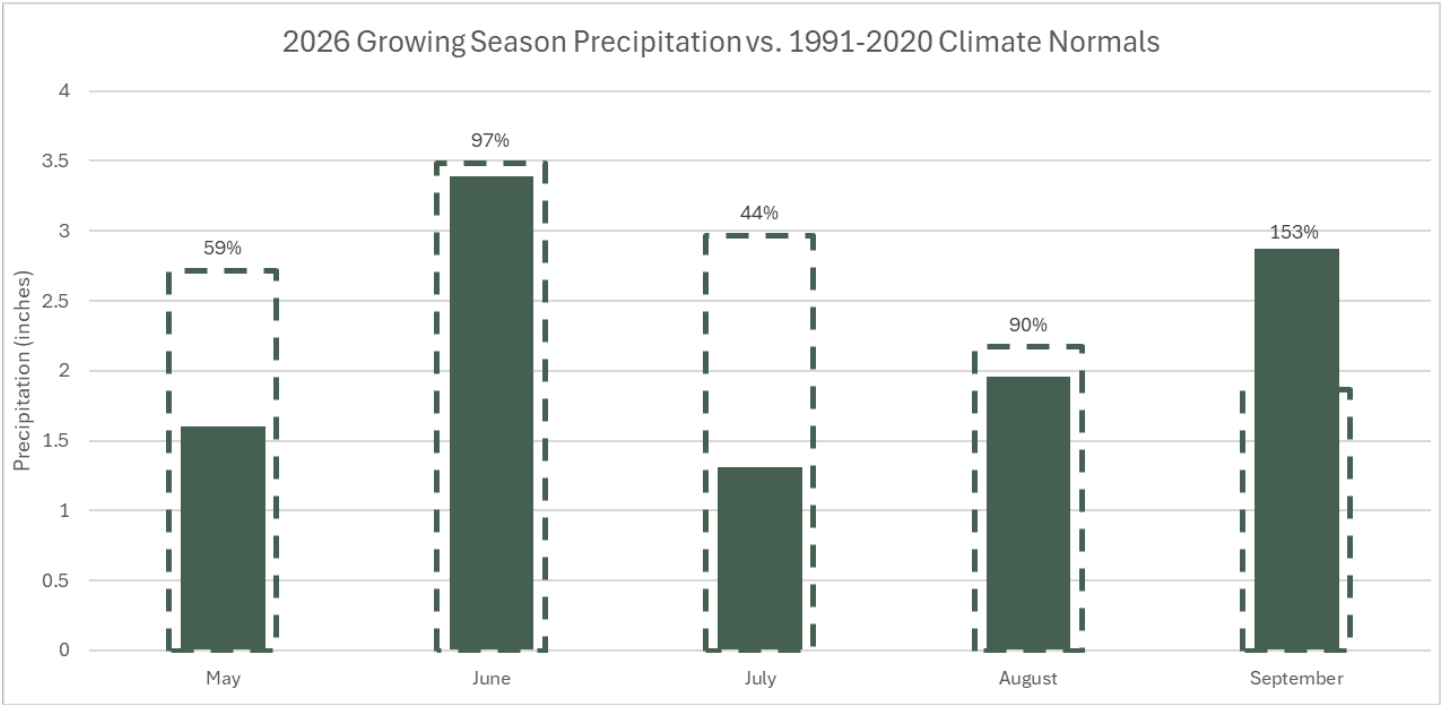
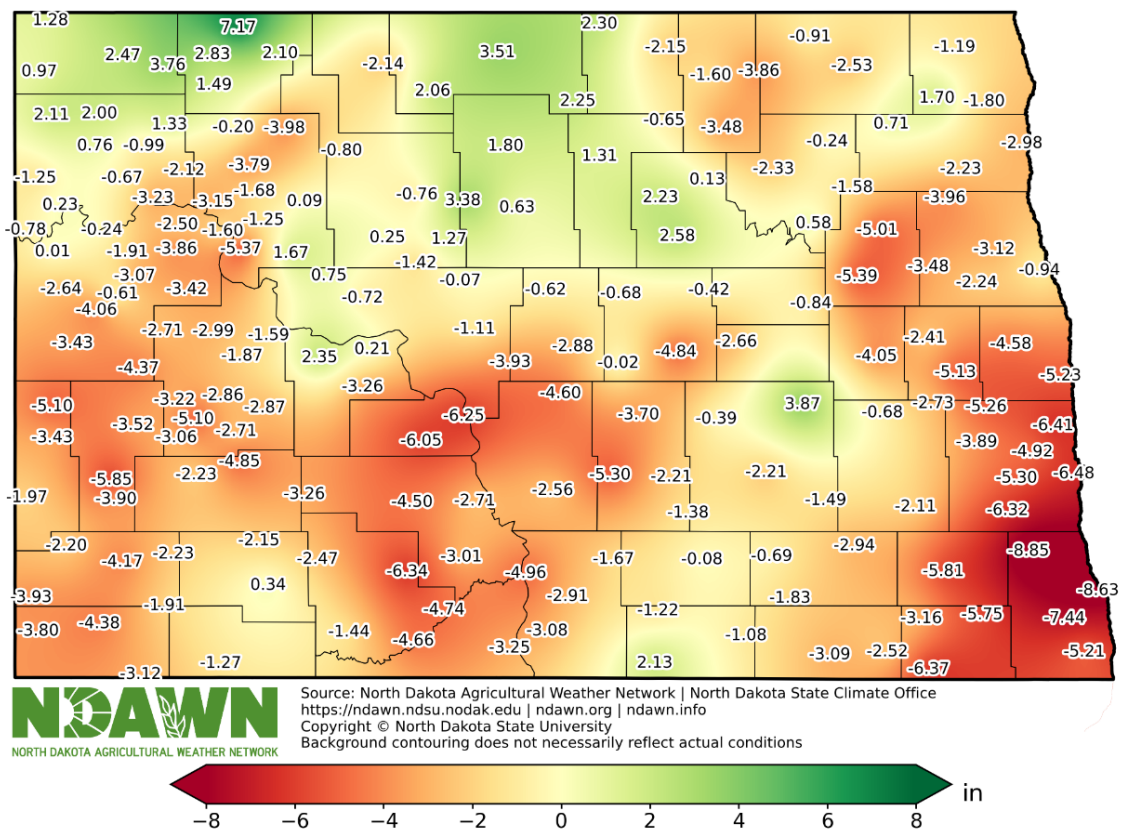


Figure 1: Statewide average precipitation (shaded bars) for the 2026 growing season compared to the current 30-year normals precipitation amounts (dashed bars) for North Dakota (NDAWN, NOAA)

As is typical, precipitation was not uniform across the state. Northwestern and North Central North Dakota averaged 107% of normal precipitation due to three wetter months (June, August, September) making up for the very dry May and July. Southern North Dakota, on the other hand, recorded below average precipitation in every month, except August for Southwest ND and September for Southeast ND (save Richland and southern Sargent Counties which missed out on the big September rains), bringing the growing season average precipitation to 75% of normal for this area (FIGURE 2).

Departure from Normal Precipitation (in)

05-01-2026 - 09-30-2026



Percent of Normal Precipitation (%)

05-01-2026 - 09-30-2026

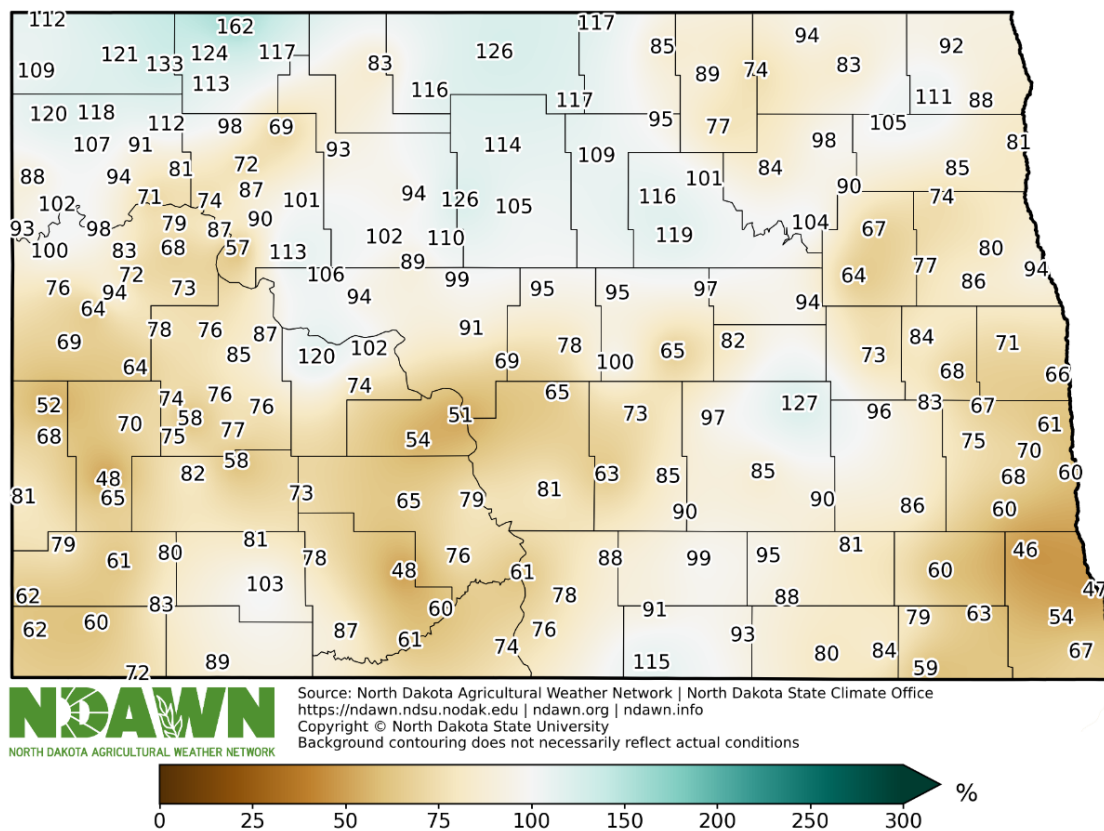


Figure 2: Departure from Normal Precipitation (top) and Percent of Normal Precipitation (bottom) measured at NDAWN stations during the 2026 Growing Season

The Portal 1SE NDAWN station in Burke County measured the highest precipitation total this growing season for North Dakota with 18.81" (FIGURE 3), which is 162% of normal (+7.17"). The lowest precipitation total was in Billings County at the Sully Springs NDAWN station with 5.31" which is 48% of normal (-5.85"). The Ekre NDAWN station in Richland County finished the growing season with a precipitation deficit from normal of 8.85", recording only 7.43" of precipitation across five months (46% of normal). Areas of Cass County received more rain in the month of September alone than in the previous four months combined (TABLE 3).

Total Precipitation (in)

05-01-2026 - 09-30-2026

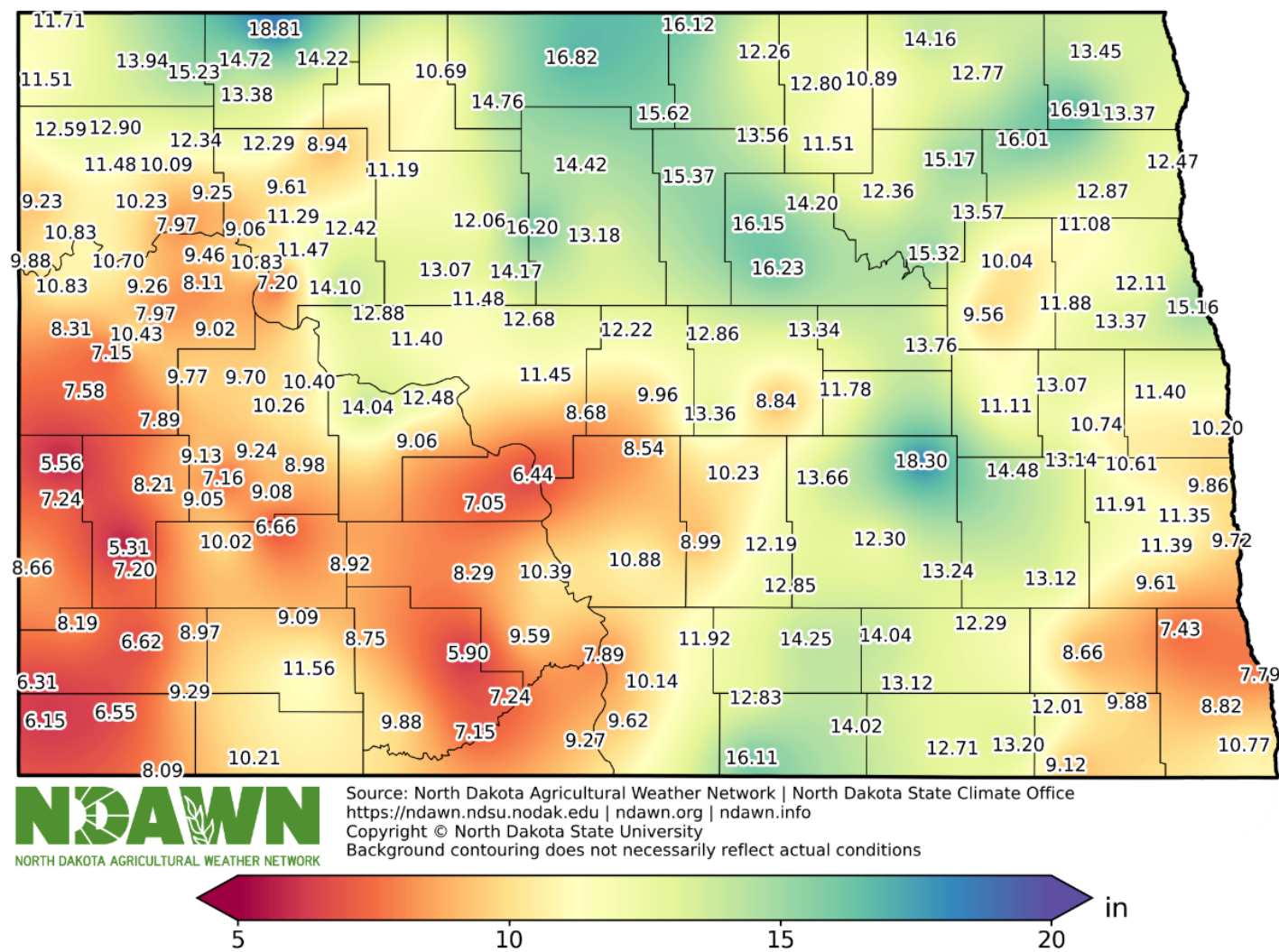


Figure 3: Total Precipitation measured at NDAWN stations during the 2026 growing season

Table 3: NDAWN Stations Receiving More Precipitation in September than May – August

NDAWN Station	May - August Total Precipitation [in.] and Percent of Normal	September Total Precipitation [in.] and Percent of Normal	Difference [in.]
Ayr 1NW	5.74 (44%)	6.17 (227%)	+0.43
Gardner 2SSW	4.19 (31%)	5.67 (209%)	+1.48
Prosper 5NW	4.98 (37%)	6.37 (235%)	+1.39

Source: NDAWN

From a historical perspective, the 2026 growing season is tied as the 42nd driest with 1920 since records began (1895-2026). However, when normalized to each year’s normals, the 2026 growing season is the 25th driest, still tied with 1907, with 84% of normal, or a deficit of 2.07” (FIGURE 4).

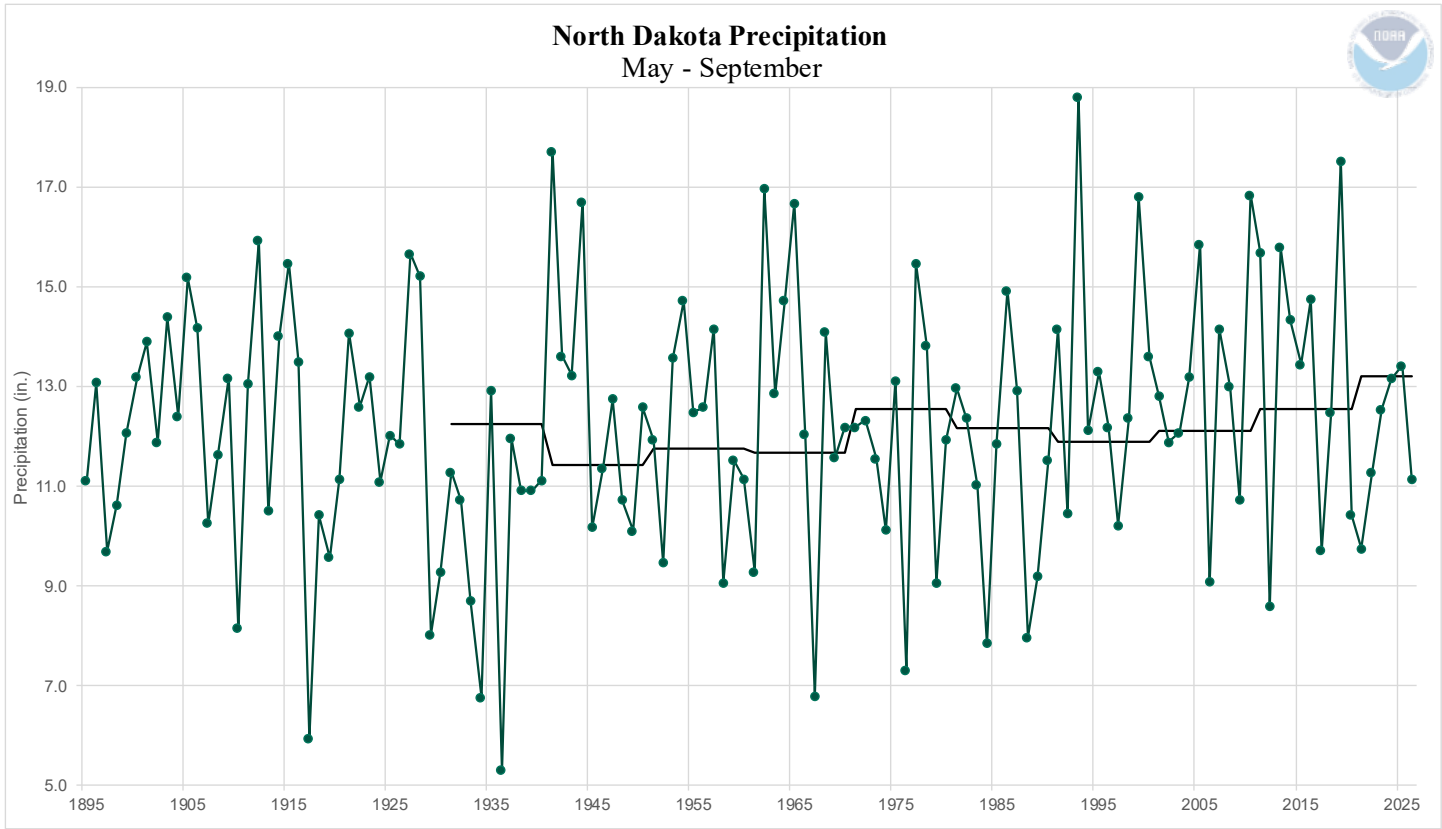


Figure 4: Statewide average precipitation for North Dakota for the growing season by year (green line, 1895-2026) and the applicable 30-year normal (black line, 1931-2020) (NOAA)

A look at the long-term climate sites shows that Fargo recorded its 17th driest growing season since records began in 1881, recording only 9.72” of precipitation, which is 60% of normal (TABLE 4).

Table 4: May - September 2026 Precipitation Summary for Select North Dakota Cities

	Total Precipitation	Anomaly	Rank	Record
Bismarck	8.79"	- 4.36"	108th Wettest	22.83" (1993)
			45th Driest	2.97" (1936)
Fargo	9.72"	- 6.00"	130th Wettest	25.60" (1905)
			17th Driest	3.34" (1936)
Grand Forks	15.12"	- 1.01"	43rd Wettest	23.62" (2002)
			83rd Driest	4.69" (1967)
Williston	10.78"	+ 0.65"	40th Wettest	17.05" (2019)
			81st Driest	3.73" (1917, 1967)

Source: NWS Climate Data (Bismarck 1875-2026; Fargo 1881-2026; Grand Forks 1893-2026; Williston 1907-2026) (NOAA)

U.S. Drought Monitor

Drought intensified rapidly throughout the summer, especially in July and August as significant precipitation was difficult to come by (FIGURE 6). Heavy rains in September did alleviate concerns in the northern half of the state, but these missed events intensified the drought conditions in the southern half (TABLE 5, FIGURE 5).

Table 5: Categorical Percent Area and Overall Change in the U.S. Drought Monitor for the 2026 Growing Season

Week	None	D0	D1	D2	D3	D4
2026-04-28	96.72	3.28	0.00	0.00	0.00	0.00
2026-06-23	50.49	37.86	11.31	0.34	0.00	0.00
2026-08-11	0.96	35.02	33.61	28.09	2.31	0.00
2026-09-29	28.79	12.76	24.95	25.97	7.54	0.00
Change	-67.93	+9.48	+24.95	+25.97	+7.54	0.00

Source: U.S. Drought Monitor

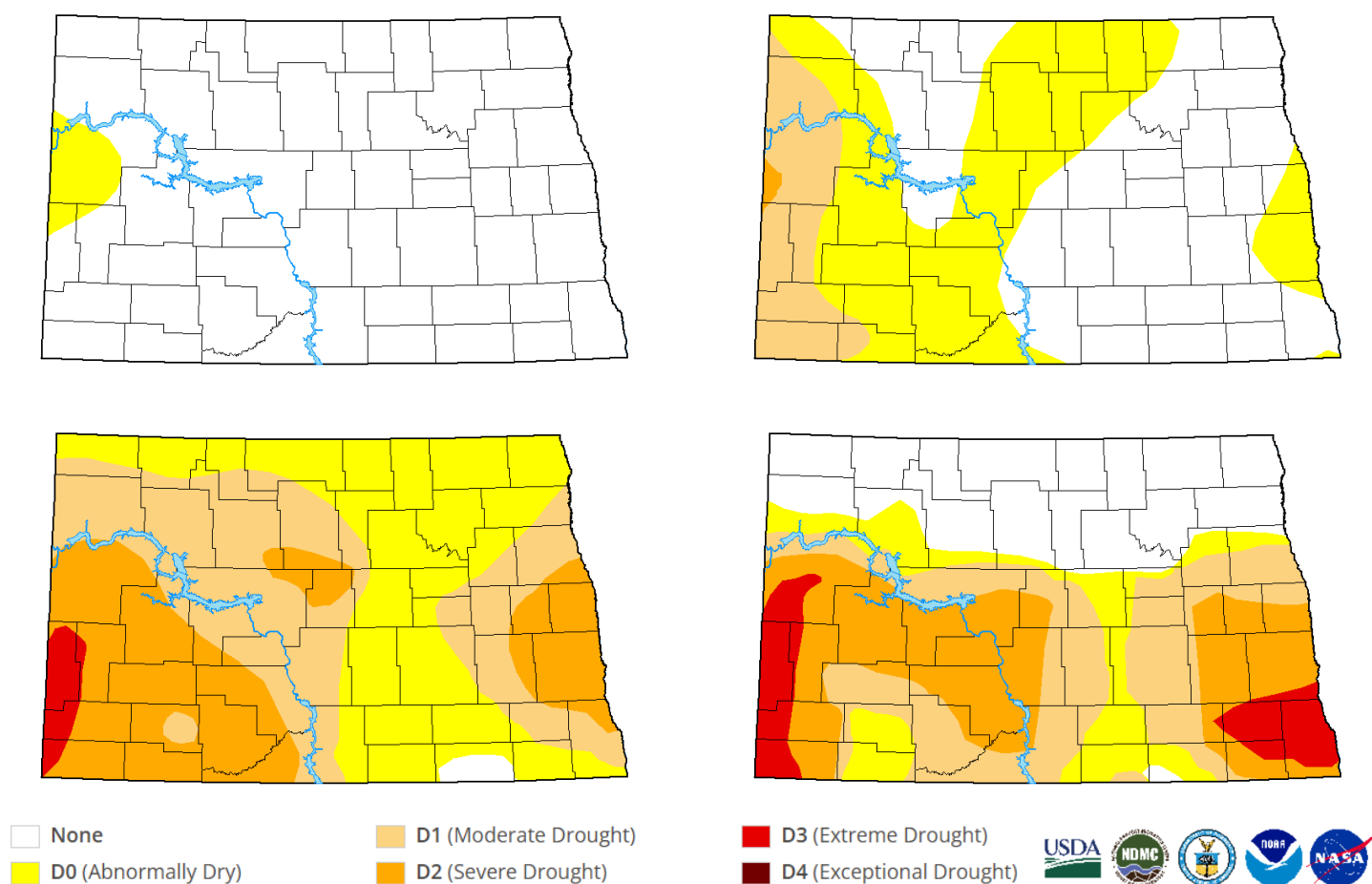
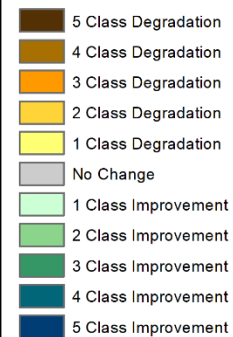
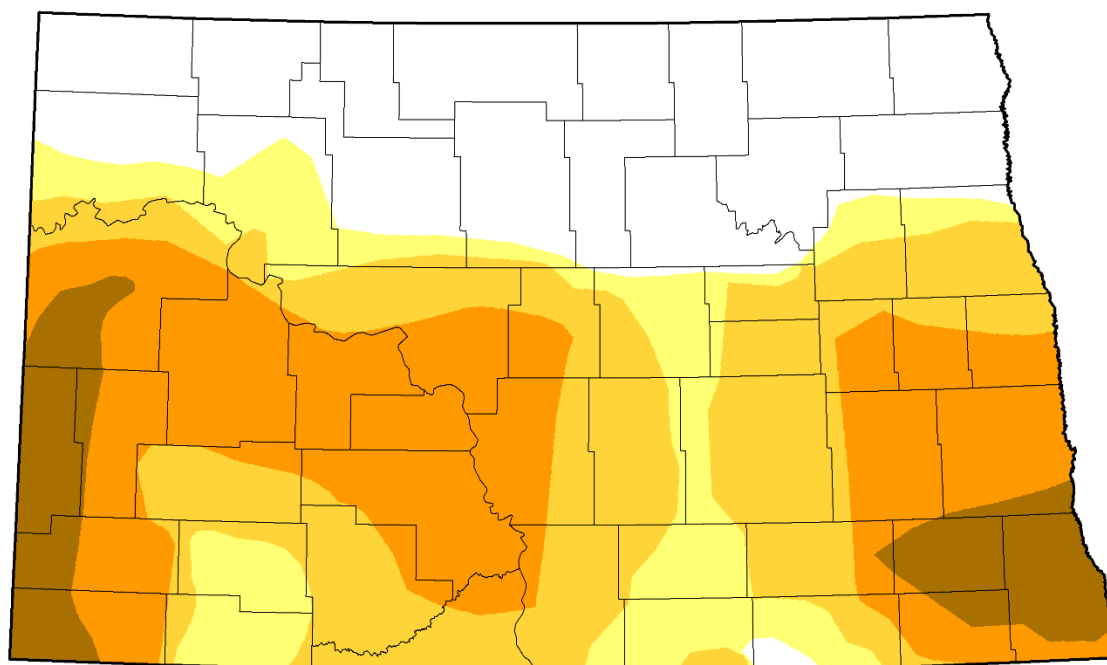


Figure 5: U.S. Drought Monitor conditions on (from left to right, top to bottom) April 28, June 23, August 11, and September 29, 2026

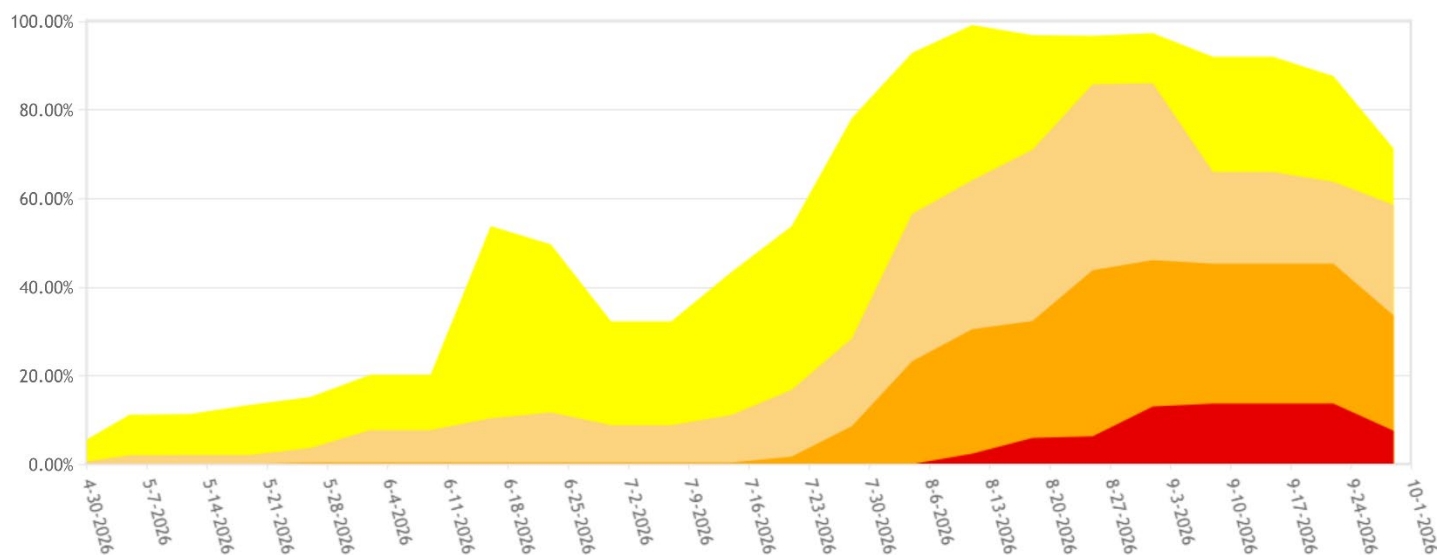
U.S. Drought Monitor Class Change - North Dakota 24 Week



September 29, 2026
compared to
April 14, 2026

droughtmonitor.unl.edu

North Dakota Percent Area in U.S. Drought Monitor Categories



From the U.S. Drought Monitor website, <https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx>, 10-2-2026



Figure 6: Class change map (top) and time series graph (bottom) of the U.S. Drought Monitor this growing season (USDM)

Temperature Summary

The 2026 growing season is tied with 1940, 1976, 2006, and 2018 as the 11th warmest growing season on record (1895-2026) at 63.9°F, which is 1.6°F above the current 30-year normal (TABLE 6, FIGURE 7, FIGURE 8). While May, June, and August hovered within a degree of average, July 2026 was the 7th warmest July on record (+4.4°F of normal) and September 2026 was the 15th warmest September (+3.2°F) on record.

Four other years from this past decade are ranked in the top 20 warmest growing seasons: 2018 tied at 11th with 63.9°F, 2021 at 3rd with 65.4°F, 2022 tied at 19th with 63.7°F, and 2023 at 4th with 65.2°F. Comparatively, seven years of the 1930s are in the top 20 warmest, and five years in the decade spanning 1899-1908 are in the top 20 coldest growing seasons.

Table 6: May - September 2026 Temperature Summary for North Dakota

Temperature	Average T	Avg Max T	Avg Min T	Maximum	Minimum
	63.9°F	76.7°F	51.1°F	109.9°F	13.2°F
Anomaly	+1.6°F	+1.6°F	+1.5°F		
Rank					
Warmest	T-11th Warmest	30th Warmest	T-5th Warmest		
Coolest	T-118th Coolest	103rd Coolest	T-126th Coolest		
Record					
Warmest	67.3°F (1936)	82.5°F (1936)	52.5°F (2023)	121°F (Steele, July 1936)	-3°F (Larimore, May 1967)
Coolest	57.7°F (1907, 1915)	69.7°F (1915)	44.8°F (1907, 1924)		

Source: NDAWN (2024-2026), NWS Climate Data (1895-2026) (NOAA)

For the long-term climate sites, all four were between 1 and 3 degrees warmer than the current 30-year normal (TABLE 7):

- Bismarck recorded its 6th warmest growing season on record (since 1875). Nine of the last 10 years rank among its 25 warmest growing seasons.
- Fargo recorded its 5th warmest (since 1881), joining 2021, 2023, and 2024 among its 10 warmest growing seasons.
- Grand Forks recorded its 8th warmest (since 1893), with now 8 of the last 10 years ranking among its 25 warmest growing seasons.
- Williston was the coolest of the bunch, recording its 35th warmest (since 1907). Six of the last 10 years rank among its 20 warmest growing seasons.

Grand Forks recorded its 3rd latest first freeze on October 19, tied with 1982. The record is October 22, 2007.

Departure from Normal Average Air Temperature (°F) 05-01-2026 - 09-30-2026

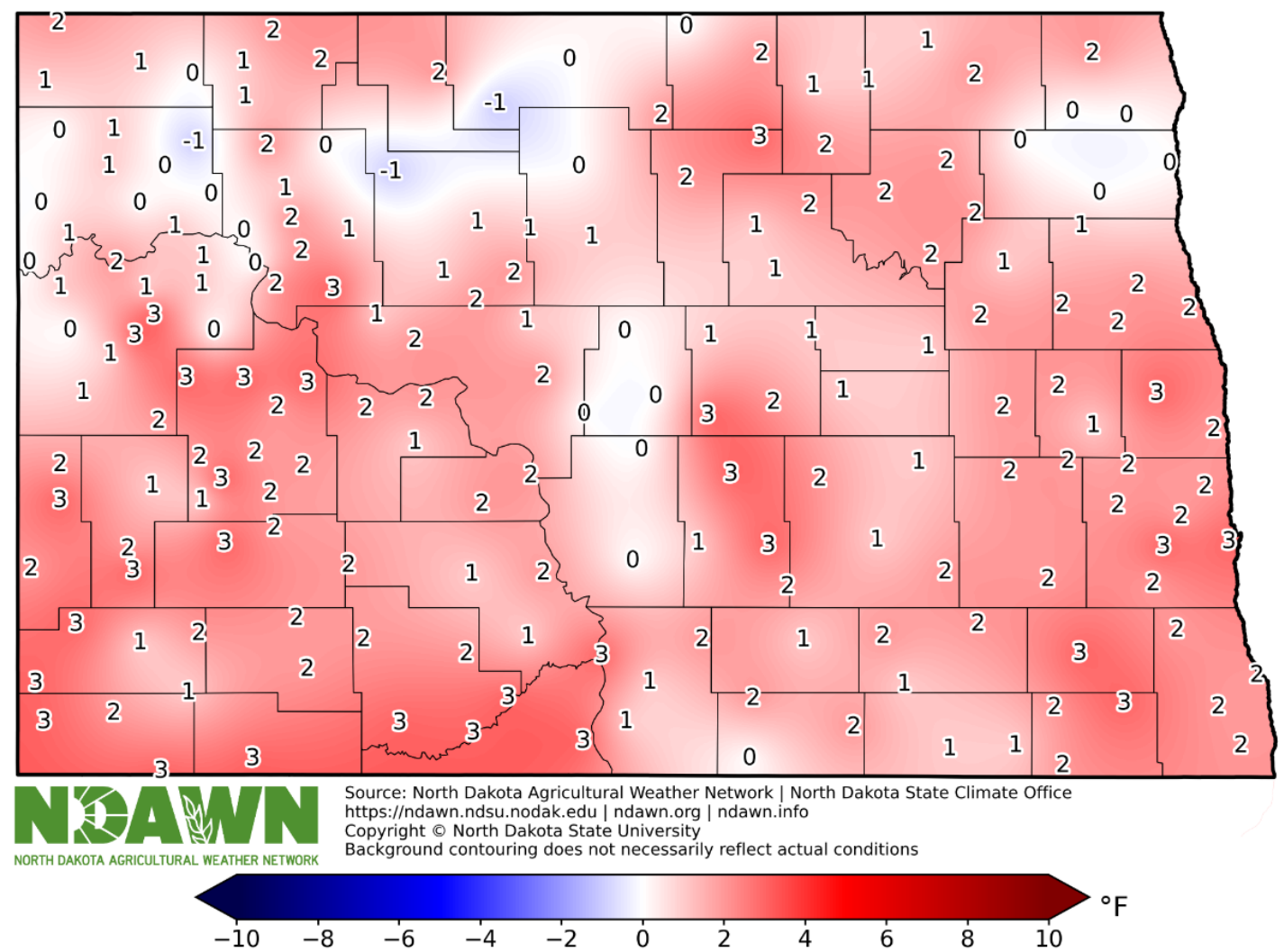
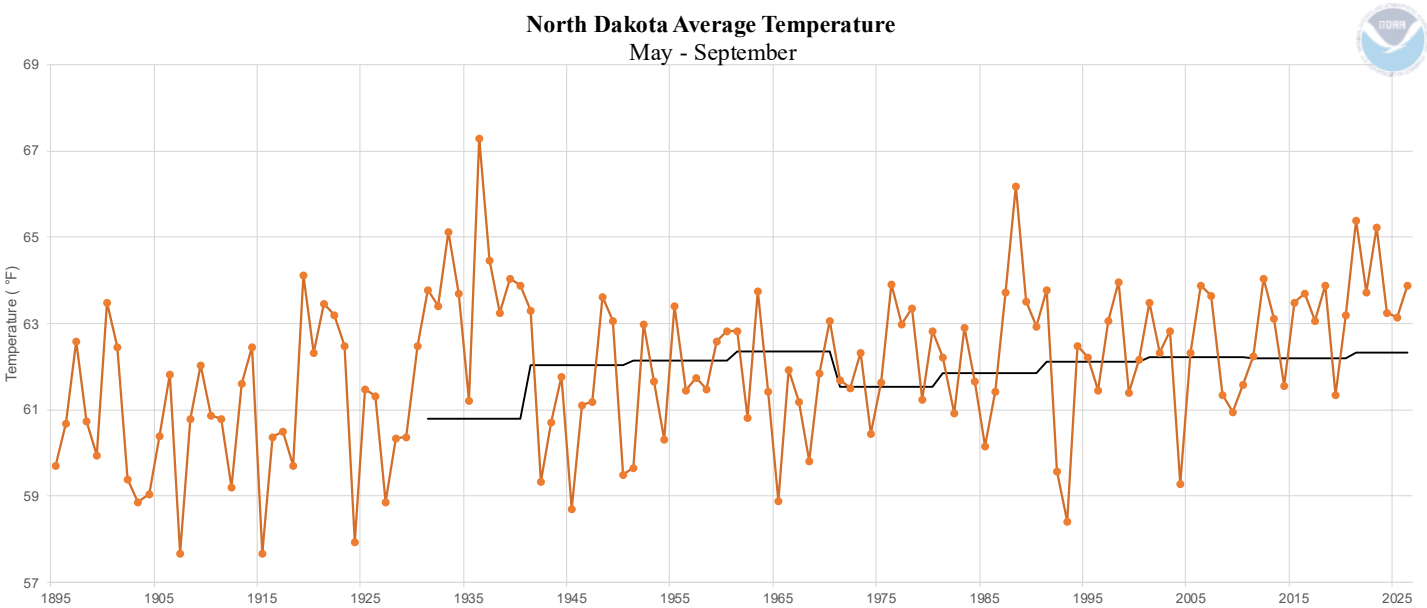
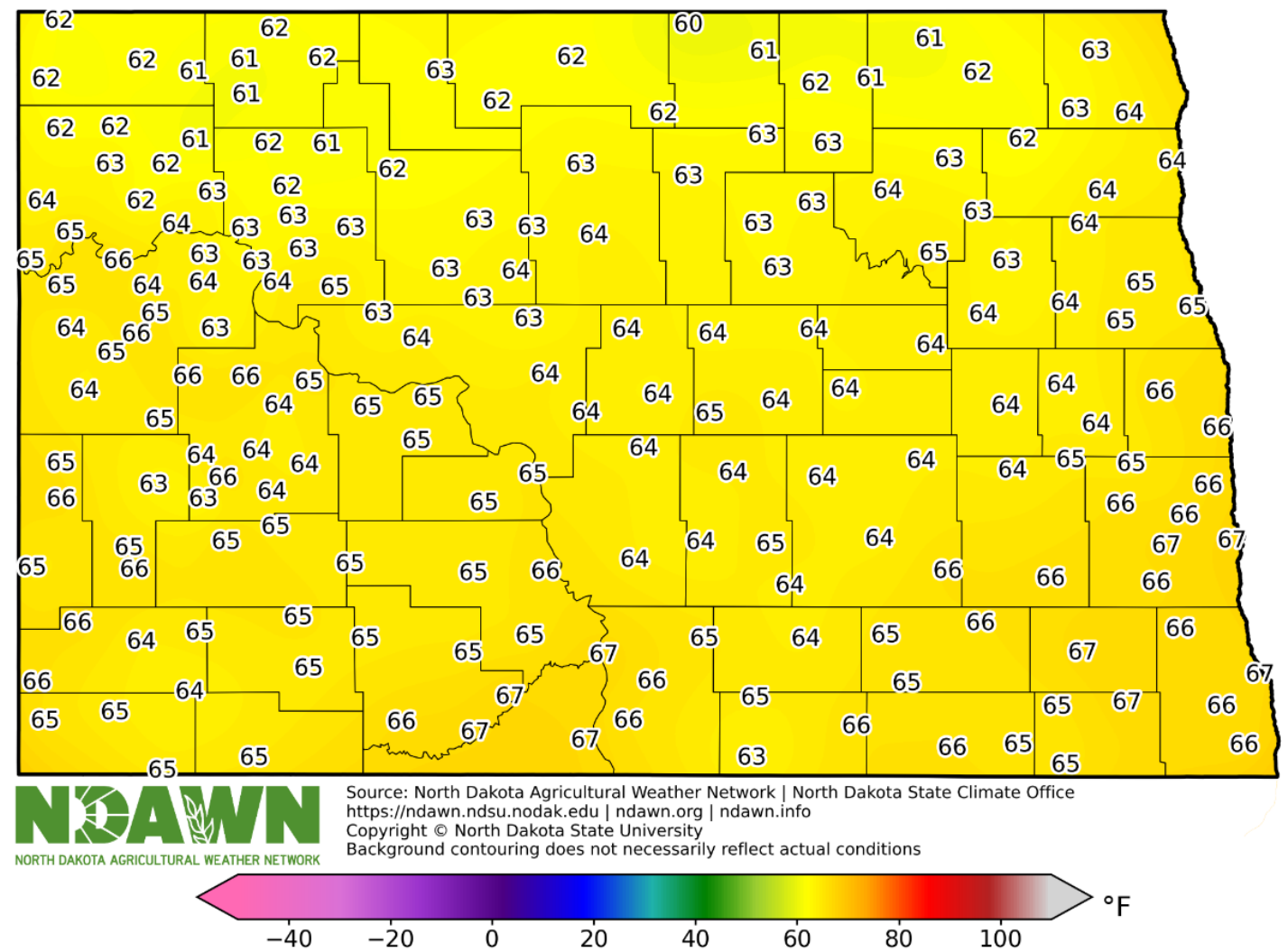


Figure 7: Departure from Normal Average Temperature measured at NDAWN stations during the 2026 growing season

Table 7: May - September 2026 Temperature Summary for Select North Dakota Cities

	Average Temperature	Anomaly	Rank	Record
Bismarck	66.9°F	+ 2.6°F	6th Warmest	69.9°F (1936)
			147th Coolest	58.6°F (1915)
Fargo	67.3°F	+ 2.5°F	5th Warmest	69.8°F (2023)
			142nd Coolest	58.6°F (1883, 1907)
Grand Forks	66.4°F	+ 2.9°F	8th Warmest	68.7°F (1988)
			118th Coolest	57.5°F (1924)
Williston	64.2°F	+ 1.3°F	35th Warmest	67.9°F (1936)
			86th Coolest	56.9°F (1907)

Source: NWS Climate Data (Bismarck 1875-2026; Fargo 1881-2026; Grand Forks 1893-2026; Williston 1907-2026) (NOAA)



The highest temperature recorded at an NDAWN station during the 2026 growing season was 109.9°F at the Haley 3W station in southern Bowman County on July 12 (FIGURE 9). Areas in southwestern North Dakota that experienced late frosts and then early frosts, were also the areas that saw the warmest temperatures, frequently seeing highs in the 100s.

Maximum Temperature (°F)

05-01-2026 - 09-30-2026

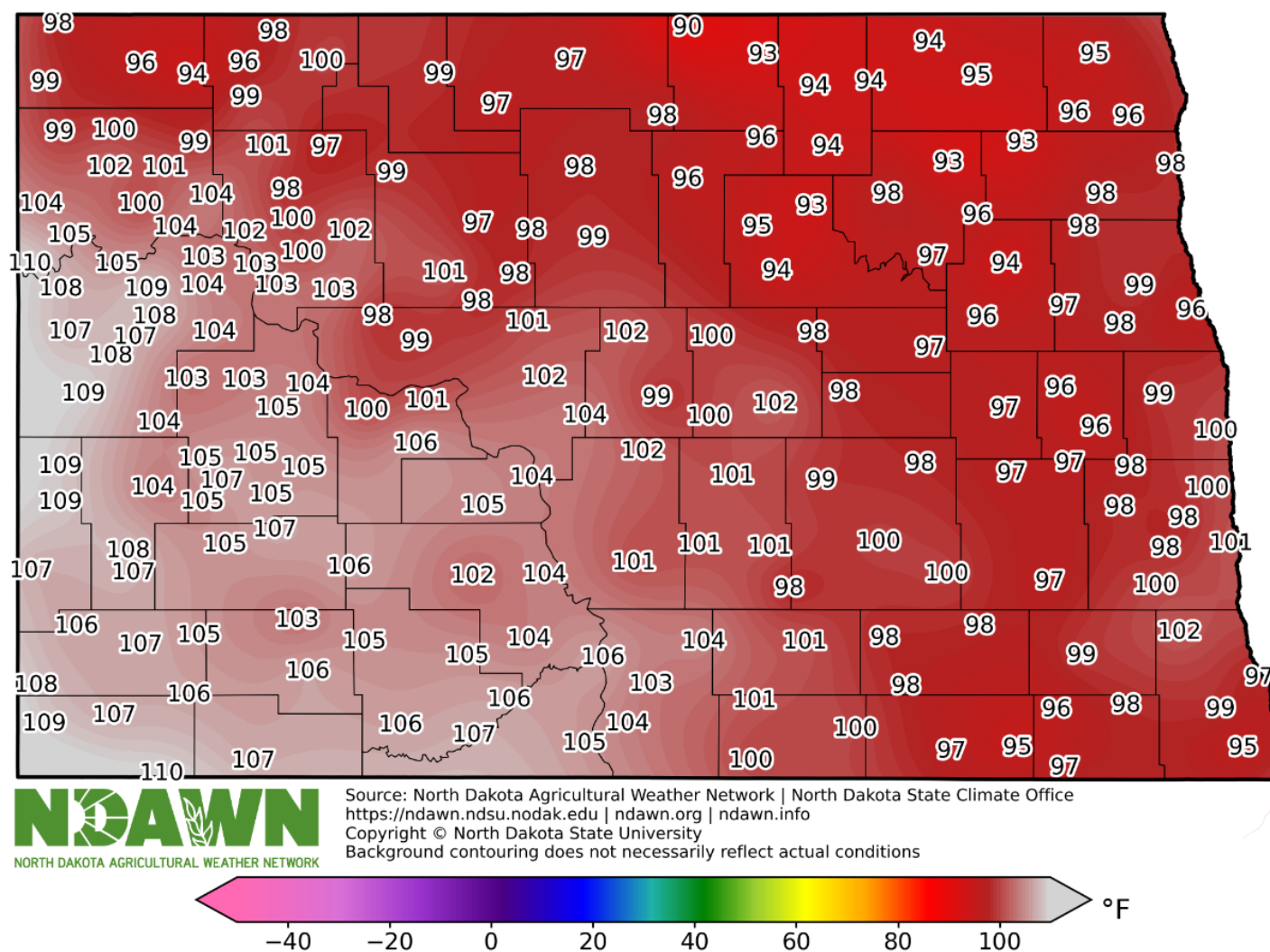
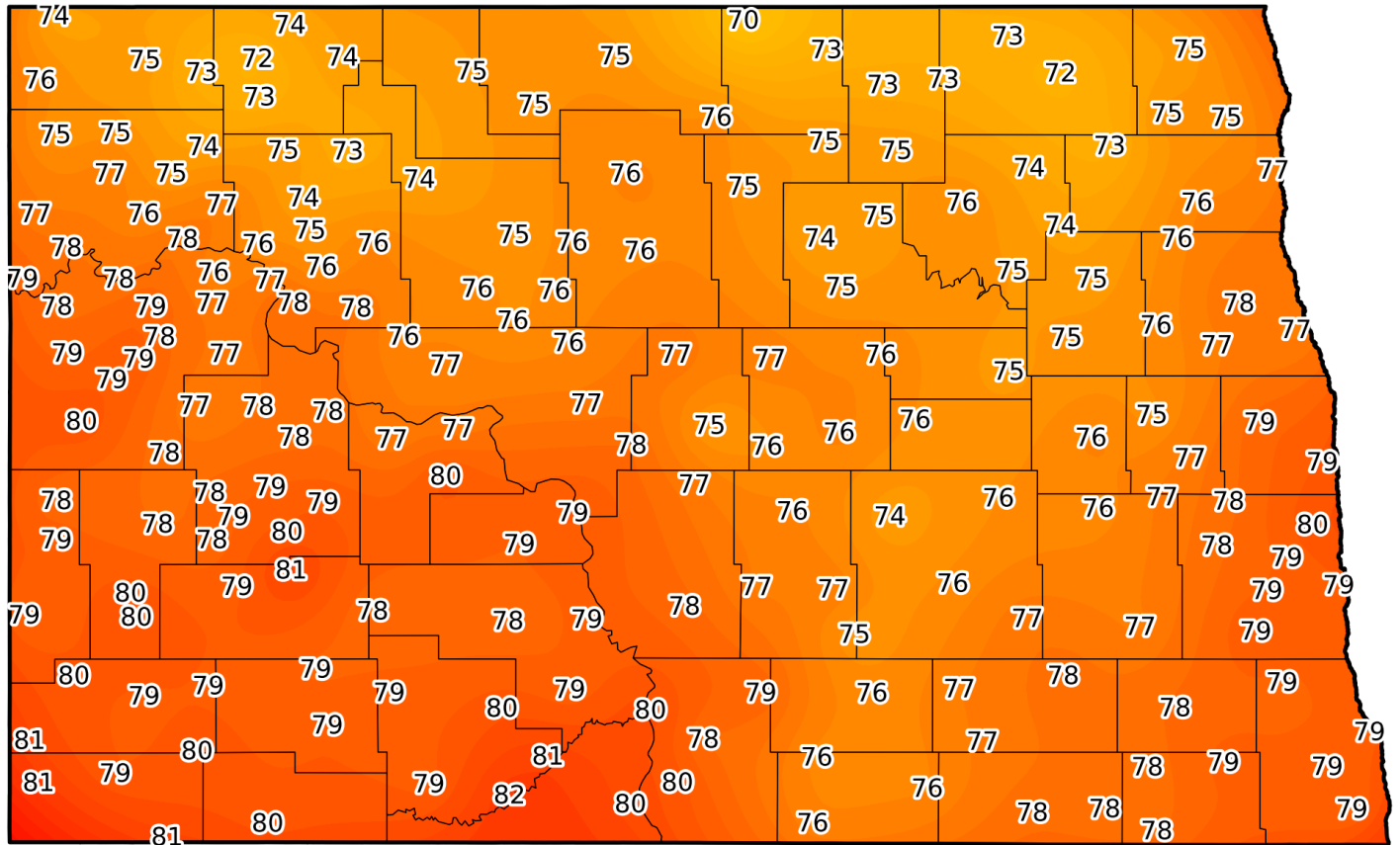


Figure 9: Maximum Temperatures measured at NDAWN stations during the 2026 growing season

The average maximum temperature statewide was 76.7°F for the growing season, which is 1.6°F above the current 30-year normal (FIGURE 10). This ranks as the 30th warmest, and is the highest average maximum temperature since 2023 (78.0°F, 10th warmest).



Source: North Dakota Agricultural Weather Network | North Dakota State Climate Office
<https://ndawn.ndsu.nodak.edu> | ndawn.org | ndawn.info
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Background contouring does not necessarily reflect actual conditions

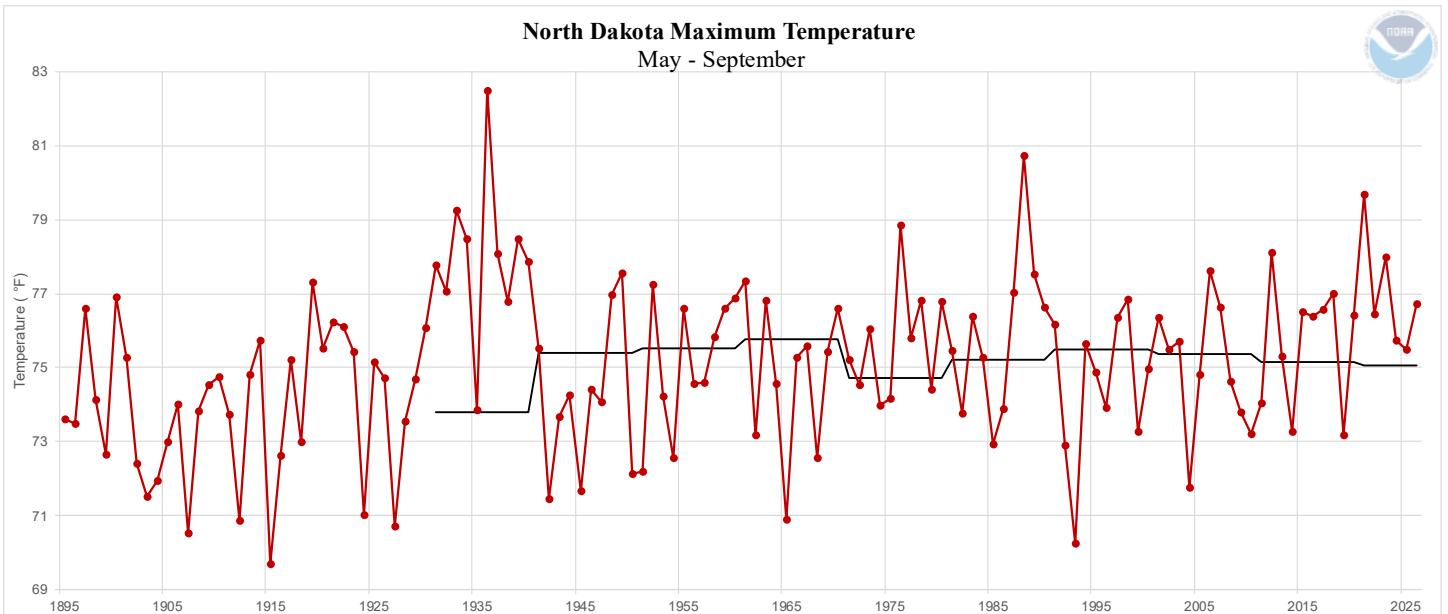
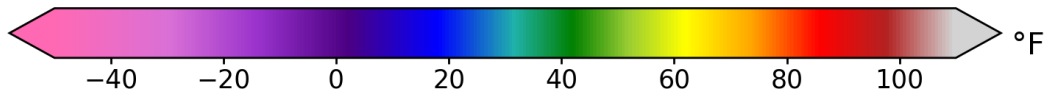


Figure 10: Average Maximum Temperature for the growing season at NDAWN stations (top) and statewide average maximum temperature for North Dakota for the growing season by year (red line, 1895-2026) and the applicable 30-year normal (black line, 1931-2020) (NOAA) (bottom)

The coldest temperature recorded at an NDAWN station during the 2026 growing season was 13.2°F at the Poker Jim station in McKenzie County on May 6 (FIGURE 11).

Minimum Temperature (°F)

05-01-2026 - 09-30-2026

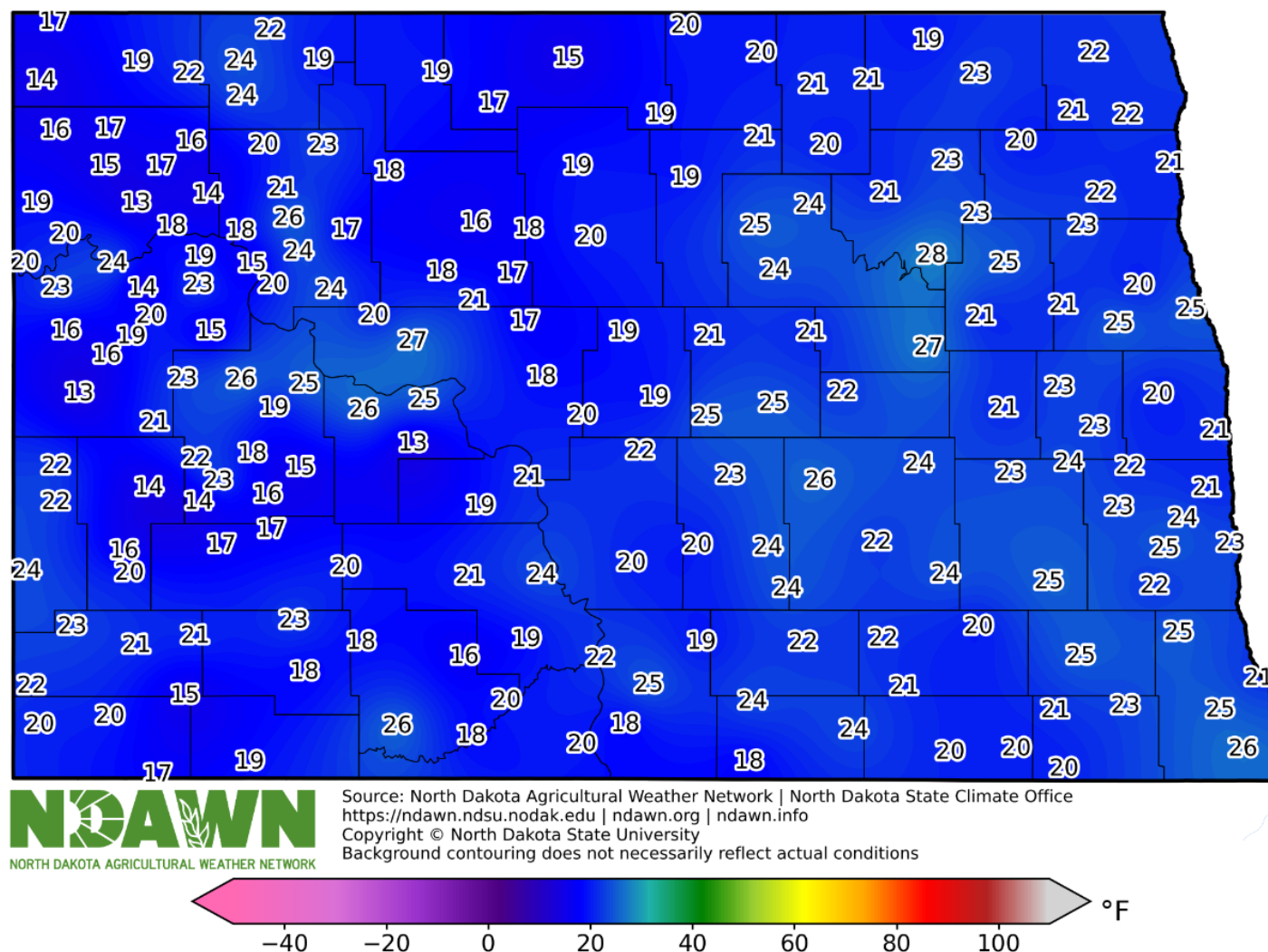


Figure 11: Minimum Temperatures measured at NDAWN stations during the 2026 growing season

The average minimum temperature statewide was 51.1°F for the growing season, which is 1.5°F above the current 30-year normal (FIGURE 12). This is tied as the 5th warmest average minimum temperature for a growing season with 1998 and 2021. It is also the highest average minimum temperature since 2023 (52.5°F, 1st warmest).

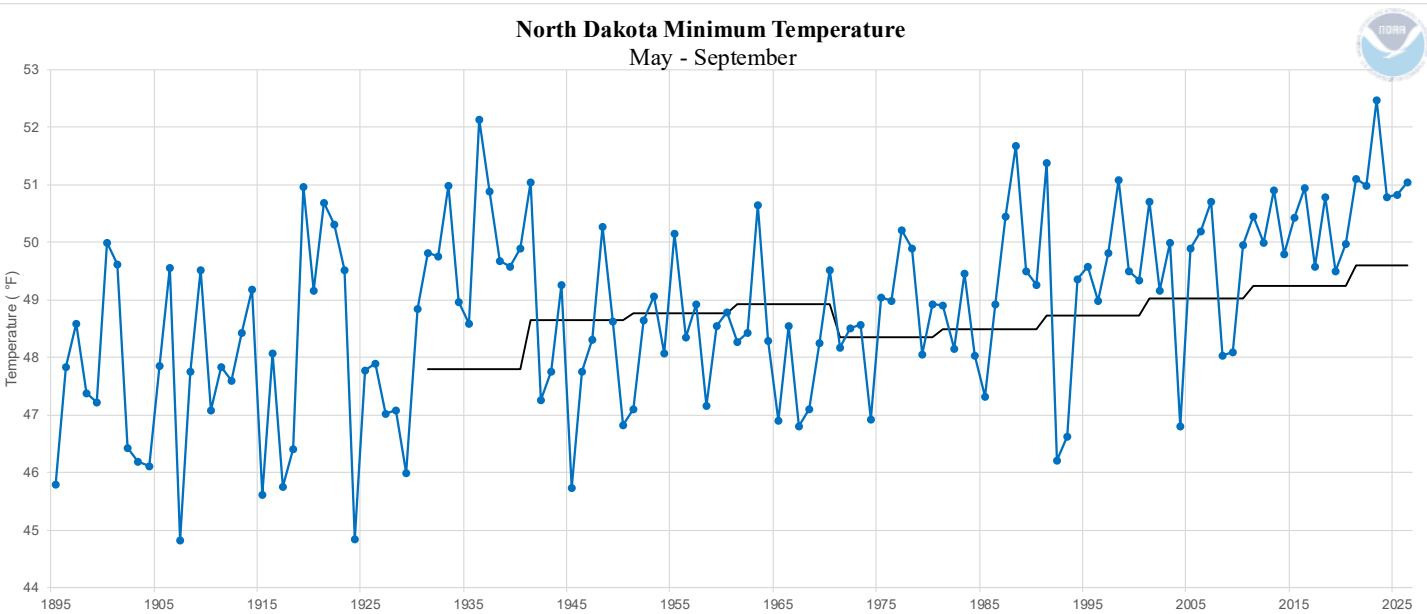
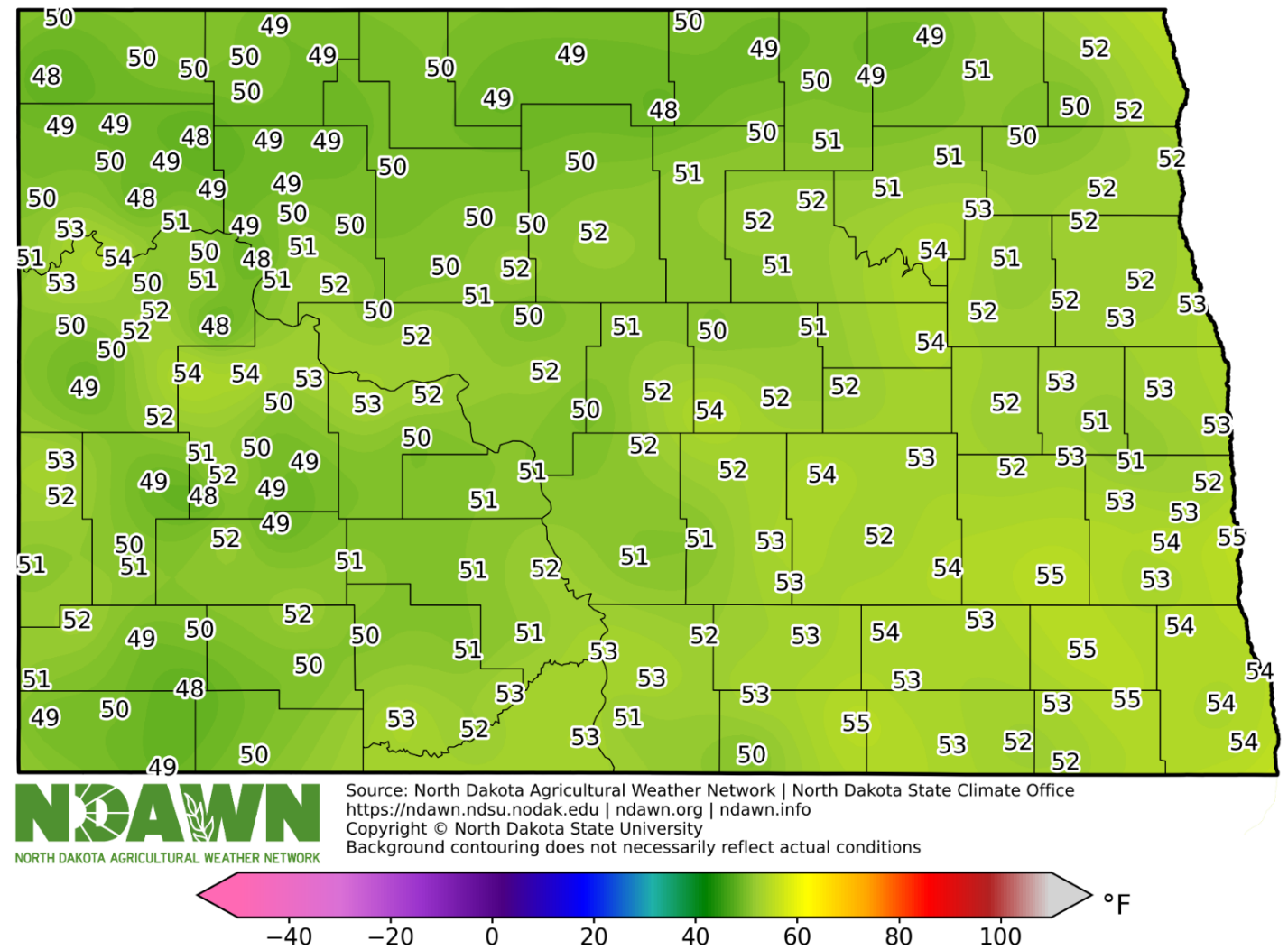


Figure 12: Average Minimum Temperature for the growing season at NDAWN stations (top) and statewide average minimum temperature for North Dakota for the growing season by year (blue line, 1895-2026) and the applicable 30-year normal (black line, 1931-2020) (NOAA) (bottom)

Sources

North Dakota Agricultural Weather Network ([NDAWN](#))

National Weather Service ([NWS](#))

U.S. Drought Monitor ([USDM](#))

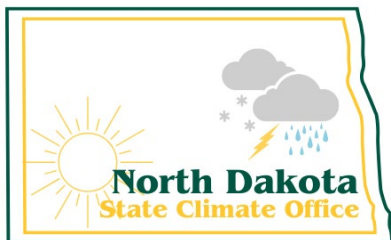
National Oceanic and Atmospheric Administration ([NOAA](#))

Detailed monthly summaries and the full archive can be found at ndsu.edu/ndsco. NDAWN monthly, seasonal, and annual climate statistic maps can be found at ndawn.info/climate_statistics.

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