

National Weather Service Grand Forks



Weather & Climate Review

November-December 2020



November

	AveT	TDept	Pcpn	PDept	Snow
DVL	30.3	3.8	M	M	M
NWS GF	30.9	3.9	0.10	-0.80	1.4
GFK	30.5	4.4	0.12	-0.83	1.2
RDR	30.1	4.0	M	M	M
FAR	33.1	4.3	0.27	-0.73	0.9
BDE	29.9	4.0	M	M	M
PKD	31.9	5.6	M	M	M
BJI	31.3	5.2	M	M	M
TVF	30.4	4.1	M	M	M
Y63	33.7	3.9	M	M	M

Table 1 November 2020 Temperature and Precipitation Statistics

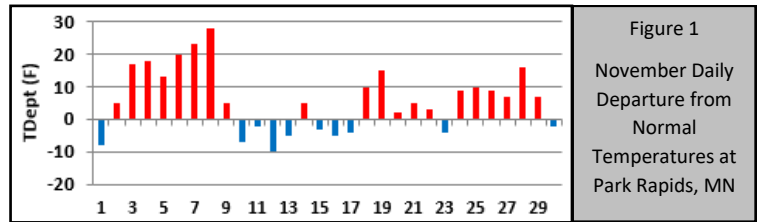


Figure 1

November Daily Departure from Normal Temperatures at Park Rapids, MN

Blue Bars = Colder than Normal Days & Red Bars = Warmer than Normal Days

In Table 1, (ND) **DVL** = Devils Lake, **NWS GF** = NWS Grand Forks, **GFK** = GF Airport, **RDR** = GF Air Force Base, **FAR** = Fargo, (MN) **BDE** = Baudette, **PKD** = Park Rapids, **BJI** = Bemidji, **TVF** = Thief River Falls, **Y63** = Elbow Lake.

Table 1 shows the November average temperature (AveT), departure from normal temperature (TDept), precipitation (Pcpn), departure from normal precipitation (PDept), and snowfall (Snow) for 10 climate stations. The November average temperature was above normal at all sites. Precipitation amounts were below normal. Figure 1 plots the daily departure from normal temperatures in November 2020 at Park Rapids, MN. The week of November 3rd to 8th was quite mild, and the rest of the month featured quite a few warmer than normal days.

Records

At Fargo-Moorhead (our longest running climate site), the high temperatures of 71 degrees on November 3rd, 74 degrees on November 4th, and 73 degrees on November 8th, established new record highs for those dates. The 74 degrees on November 4th also tied the warmest November temperature ever (with November 1, 1990).

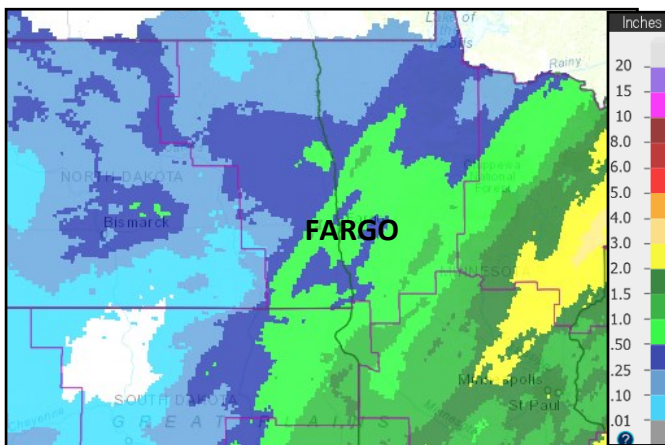


Figure 2 November Observed Precipitation

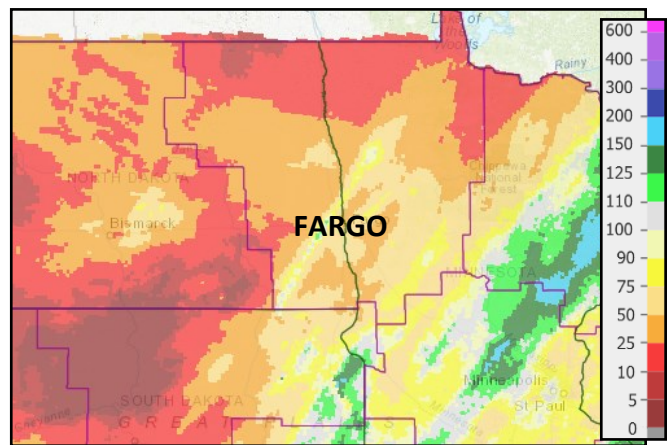
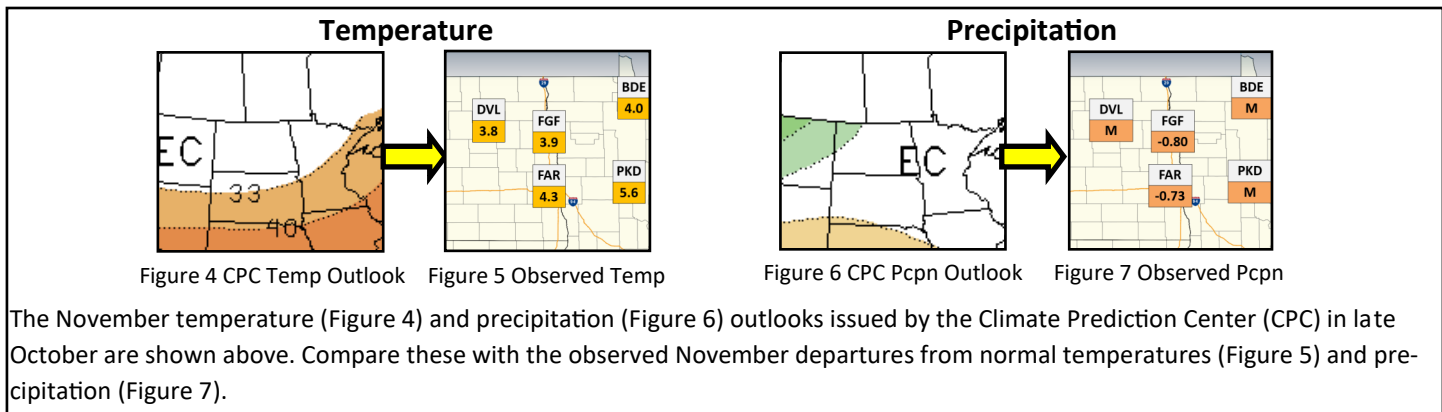


Figure 3 November Percent of Normal Precipitation

Figure 2 gives an November precipitation estimate for all of eastern North Dakota and the northwest quarter of Minnesota. The most precipitation (0.50 to 1.5 inches) fell over southeast North Dakota into adjacent areas of west central Minnesota (green colors). Figure 3 shows the November precipitation as a percent of normal. The precipitation amounts across most of the area were less than 50 percent of normal (tan and light brown colors in Figure 3).



6 Month Trend

Looking at just the Fargo climate site (FAR), Figures 8 and 9 show how November 2020 fits into the previous 5 months. Figure 8 plots the monthly departures from normal temperatures at Fargo. The blue bars represent months that were colder than normal, while the red bars represent months that were warmer than normal. Figure 9 plots the monthly departures from normal precipitation at Fargo. The green bars represent months that were wetter than normal, while the brown bars represent months that were drier than normal.

The monthly average November 2020 temperature at Fargo was above normal (Figure 8), after October 2020 had been well below normal. After a wetter than normal July and August, September, October, and November had below normal precipitation amounts (Figure 9).

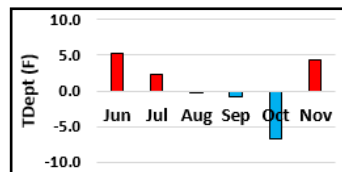


Figure 8 Monthly Departures from Normal Temps at Fargo, ND

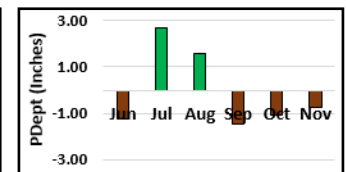
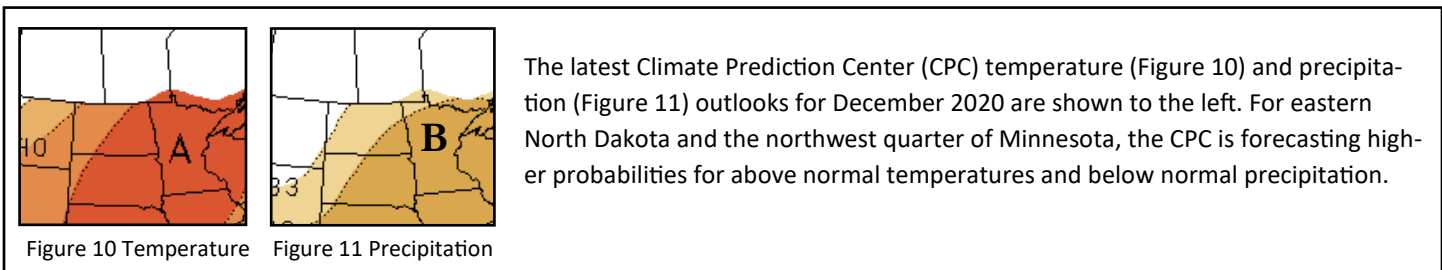


Figure 9 Monthly Departures from Normal Pcpn at Fargo, ND

Winter Warnings

No winter warnings were issued in November 2020.

December



Last Year & Normals

Per Table 2, in December 2019, Devils Lake, Baudette, and Park Rapids were a little warmer than normal, while Fargo and NWS Grand Forks were a little cooler than normal. Precipitation and snowfall amounts were high at both NWS Grand Forks and Fargo. At Fargo-Moorhead (our longest running climate site), December 2019 became the 8th wettest month on record and tied for the 6th most snow.

	AveT	TDept	Pcpn	PDept	Snow
DVL	12.9	0.8	M	M	M
NWS GF	11.7	-0.5	1.74	1.09	24.1
FAR	13.8	-0.3	1.72	0.89	20.4
BDE	13.4	3.1	M	M	M
PKD	13.1	1.5	M	M	M

Table 2 December 2019 Temperature and Precipitation Statistics

There were three Winter Storm Warnings (Figures 12, 14, and 16) and one Blizzard Warning (Figure 18) issued in December 2019. The accompanying snowfall maps are also shown (Figures 13, 15, and 17).

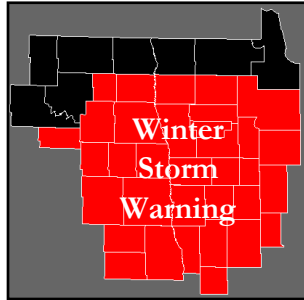


Figure 12 Nov 30-Dec 1

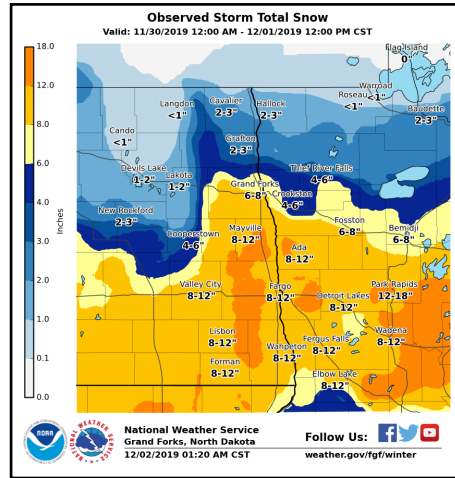


Figure 13 Snow Totals (November 30-December 1)

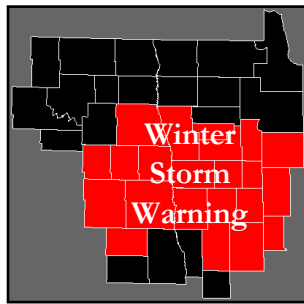


Figure 14 December 8-9

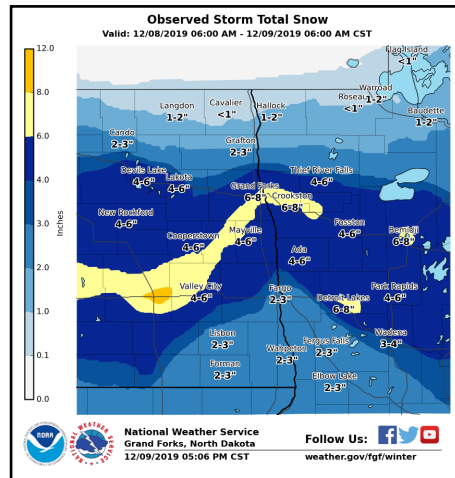


Figure 15 Snow Totals (December 8-9)

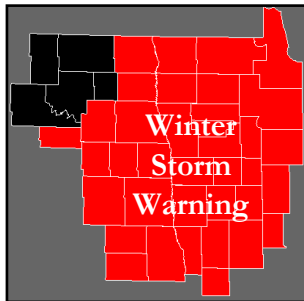


Figure 16 December 28-30

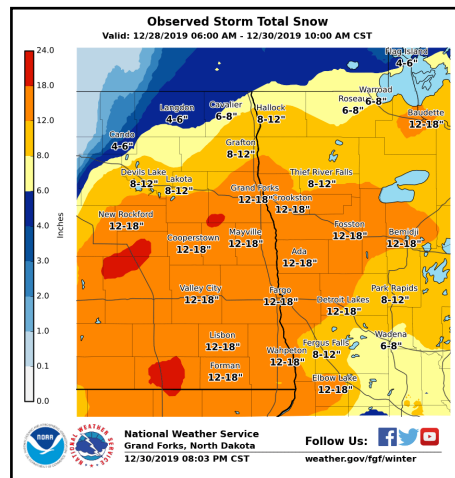


Figure 17 Snow Totals (December 28-30)

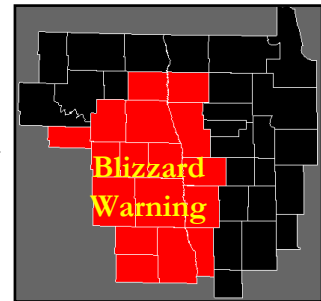


Figure 18 December 29-30

Figure 19 shows normal highs and lows on December 1st for selected cities across eastern North Dakota and northwest Minnesota. Figure 20 shows how normal highs and lows change by December 31st. As an example, at NWS Grand Forks on December 1st, the normal high is 26 and the normal low is 10. By December 31st at NWS Grand Forks, the normal high falls to 16 and the normal low falls to 0. Figure 21 shows the normal precipitation and snow amounts at the same sites as Figures 19 and 20. As an example, the normal precipitation at NWS Grand Forks in December is 0.65 inches and the normal snowfall is 10.9 inches.

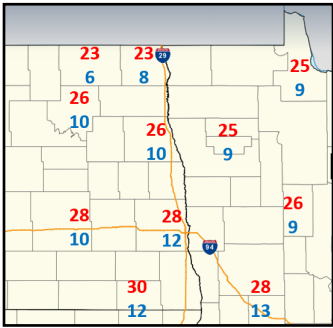


Figure 19 Normal Temps December 1

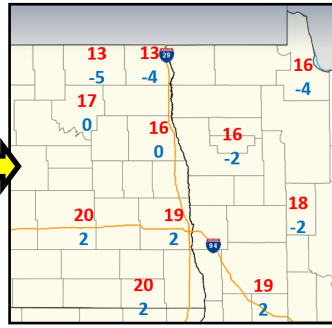


Figure 20 Normal Temps December 30

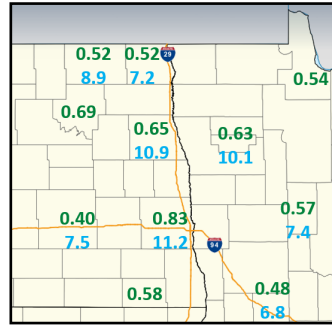


Figure 21 Normal December Pcpn/Snow

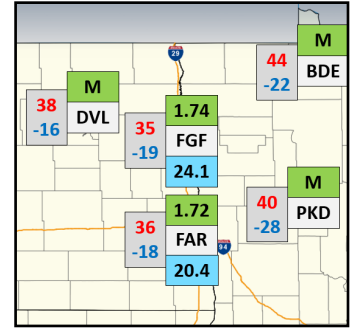


Figure 22 December 2019 Data

As a comparison to normal values, Figure 22 shows various observed data from last December (2019). As an example, in Fargo (FAR), 1.72 inches of precipitation (green box) and 20.4 inches of snow (blue box) fell. The highest temperature was 36 degrees (red number), while the lowest temperature was -18 degrees (blue number).

Miscellaneous

The winning picture in our November photo contest (fall colors) was taken by Tracy Lund (Page 1, top right). A few late November photos from west of Grand Forks are also shown below.

