



North Dakota Monthly Climate Summary

March 2014

Precipitation:

March 2014 was a dry month in much of North Dakota. Many parts of the state recorded less than 50% of normal precipitation (see Figure 1). Preliminary data suggests a state wide average of 0.42 inches of liquid precipitation in comparison to the average of 0.74 inches. That would rank March 2014 as the 31st driest March on record. The U.S. Drought Monitor listed a small portion of northeastern North Dakota as abnormally dry as of April 1. Of note many locations recorded a high percentage of that limited monthly moisture on the last day of the month (see page 2).

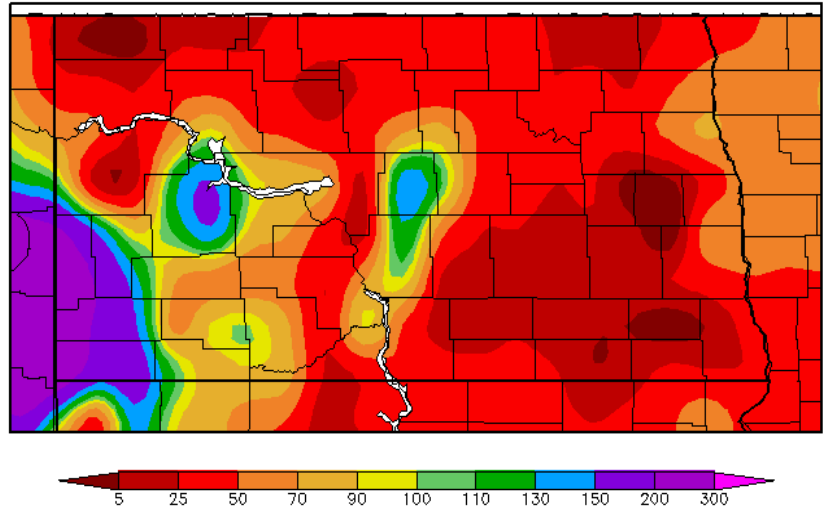


Figure 1. Precipitation Percent of Normal in March 2014 for North Dakota (High Plains Regional Climate Center)

Temperature:

March was not only a dry month for the state but also a cold one. NDAWN average temperature anomalies ranged from 5 to 10 degrees below normal for the month. The coldest readings were in the northeastern portion of North Dakota. Not surprisingly, that area also maintained the highest snow cover from the winter throughout the month. The preliminary statewide average temperature was 22.2 degrees which is 2.6 degrees below normal and would rank March 2014 as the 30th coldest on record.

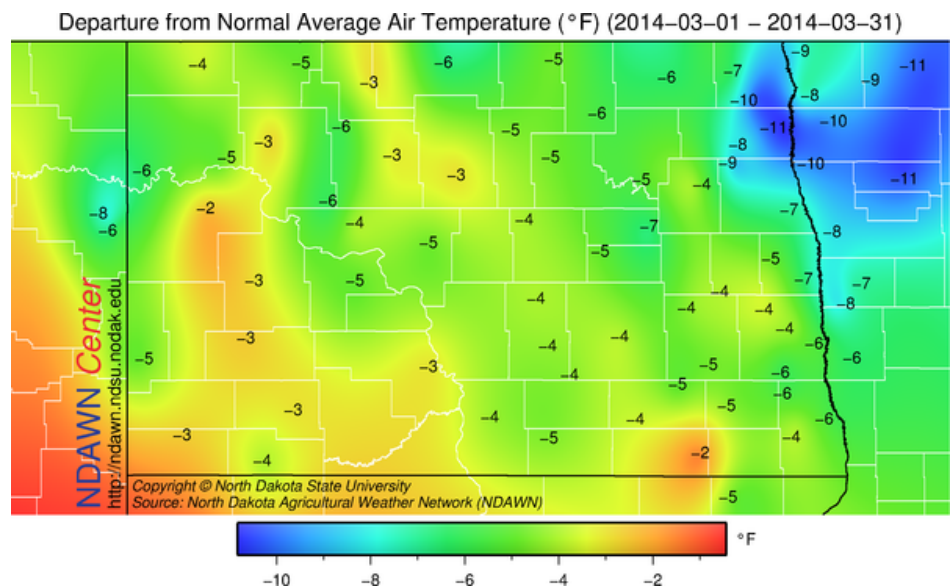


Figure 2. Temperature Departure from Normal in March 2014 for North Dakota (North Dakota Agricultural Weather Network, NDAWN)

Notable Weather:

The most notable weather event during the month was a severe blizzard that moved across the upper Midwest on March 31. Wind gusts over 50 mph were recorded in Valley City, Fargo, Emerado, Cooperstown and at the Grand Forks Air Force Base. That severe wind in combination of heavy snow in excess of 10 inches in some locations produced drifts over 6 feet. Many roads were closed, including Interstate 29 from the North Dakota/South Dakota line to Canada and Interstate 94 from Fargo to Jamestown because of near zero visibility being reported.

The highest snowfall fell in a band from the southwestern to northeastern corners of the state. The highest snow amount was an estimated 20 inches in Grafton (see Figures 3 and 4). That would be the highest daily total of record for that location. With the exception of a small portion of southwestern North Dakota that was hit with an even stronger blizzard in October 2013, the March 31 event was the strongest storm of the 2013-2014 cold season when snow totals and wind speeds are combined for the rest of the state.

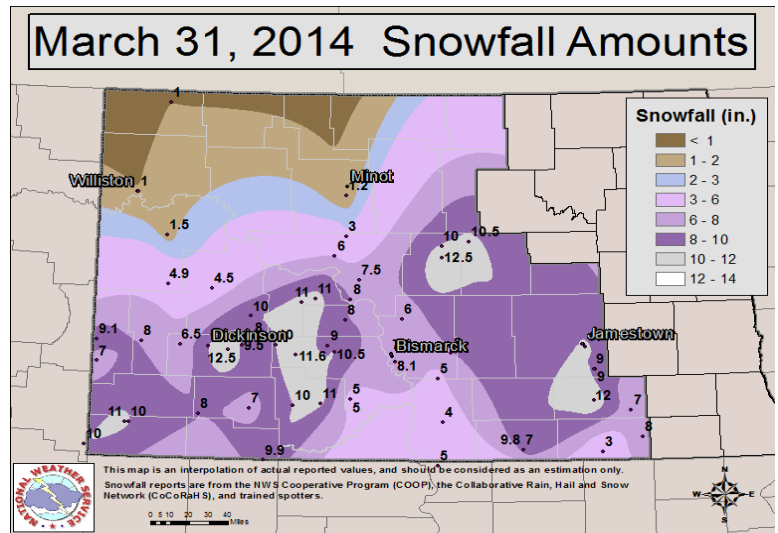


Figure 3. Snow totals from March 31, 2014 Blizzard in western and central North Dakota (National Weather Service Bismarck)

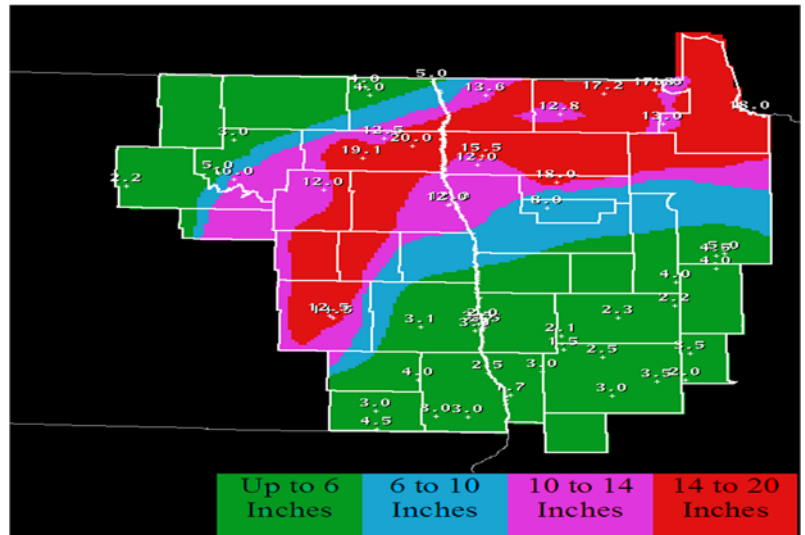


Figure 4. Snow totals from March 31, 2014 Blizzard in eastern North Dakota and western Minnesota (National Weather Service Grand Forks)