December 2009

Precipitation:

December monthly precipitation was below normal in the west and northwest plus a few Counties in the eastern central and southeastern part of the state with a range from 25% to 90% of normal. The remaining areas had above normal precipitation ranging from 150% to 300% plus percent of normal precipitation (Figure 1. High Plains Regional Climate Center). Monthly total precipitation ranged from 0.1 to 2.7 inches. The higher amounts fell in the south central and eastern edge of the state. The state average precipitation was 0.81 inches which was 45% of normal

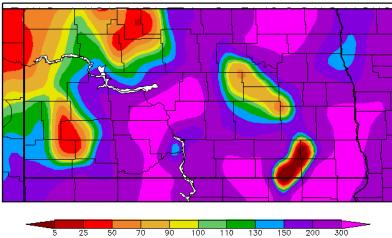


Figure 1. Precipitation Percent of Normal in December 2009 for North Dakota (High Plains Regional Climate Center)

precipitation. Traces to measurable amounts of snow fell almost daily during the first half of the month. A major winter storm system hit the eastern and central parts of the US from the 23^{rd} through the 26^{th} . All of North Dakota had snowfall during the four day event. Total snowfall in inches for the 23^{rd} through the 26^{th} was 6.0 at Williston, 13.8 at Bismarck, 17.2 at Fargo, and 23.6 at Grand Forks. The National Weather Services recorded breaking snowfall records at all four cities on the 25^{th} .

Temperature:

December monthly departure from normal air temperatures were below normal across the state with a range of -10°F in the west to -2°F in the east (Figure 2. High Plains Regional Climate Center). The monthly average temperatures ranged from 1°F in the north to 11°F in the south. Average air temperatures on December 1st were around 30°F. Daily average air temperatures quickly dropped to 20 to 30°F below normal during the first half of the month. Daily average air temperatures were near normal or just below during the second half of the month.

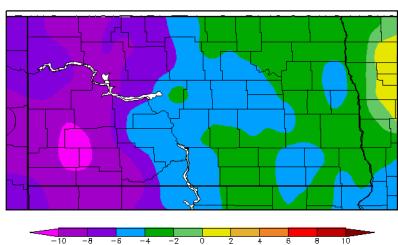


Figure 2. Temperature Departure from Normal in December 2009 for North Dakota (High Plains Regional Climate Center)