South Dakota Climate Summary
January 2009
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Two major cold outbreaks (one mid-month, the second around the 24-25 January) hit most of the state with well below 0 F temperatures. The mid-month outbreak brought the coldest temperatures since February 1996 to the southeast part of the state and the coldest since 1972 in the northeast part of the state. The coldest temperature recorded in the state was -47 F at Pollock on the 15th. This single temperature would rank in the top 10 coldest temperatures experienced in the state. During that outbreak record lows were set at:

Sisseton	-24 on the 13th	(-18 in 1999)
Mobridge	-33 on the 15th	(-30 in 1972)
Sisseton	-31 on the 15th	(-29 in 1972)
Aberdeen	-42 on the 15th	(-35 in 1972)
Pollock	-47 on the 15th	(-40 in 1972)

At least 5 stations reported temperatures at -40 F or below. Another 20+ stations went below -30 F at the coldest. The southwest generally was warmer for the month with Porcupine recording the state high at 66 F on the 21st.

Record high temperatures were set at the Rapid City Airport on the 21st (64 F), which broke the previous record of 63 in 2005. Mitchell tied a record of 55 on the 31st (previous record in 1906).

Snow has greatly impacted the temperature situation for the month. Generally the snowpack has covered about the northeast half of the state, although nearly all areas have received some snow. The most consistently covered area has been east of the river with the deepest amounts in the northeastern corner where areas still have over 12" on the ground. This has helped temperatures stay colder east of the river and be somewhat warmer west of the river. Nearly all stations east of the Missouri River were below average in January. The far northeast corner was 6-8 F below average. Stations west of the river were warmer with areas of the Black Hills into the southern part of the state coming in 4-6 F above average for the month. The recent warming has also helped to reduce the area of snow pack.

Several snowfall events occurred during the month. Areas around the Black Hills and scattered areas east of the river accumulated the most snowfall. A swath from northwest to southeast across the state received below average precipitation for the month.

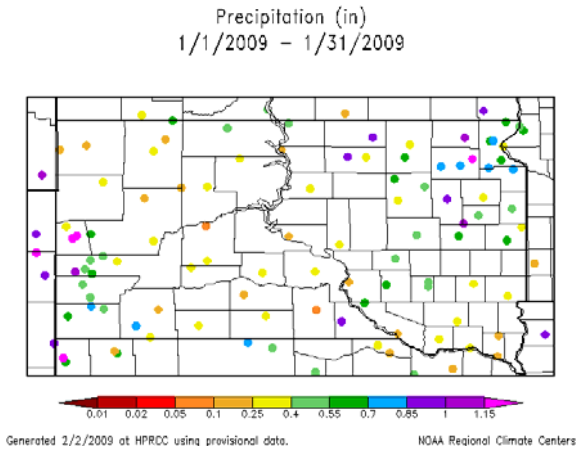
The Black Hills snow pack continues to run well above average, nearly double average in some locations. Local reports indicated the best snow pack in 10-12 years.
http://www.rapidcityjournal.com/articles/2009/01/31/news/local/doc4985359d3dfc8630406925.txt

Drought continues to be a non-issue. An area of D0 in the far southwestern corner remains unchanged since the fall. This area finally did receive snow in a late month event. But the snow has not been

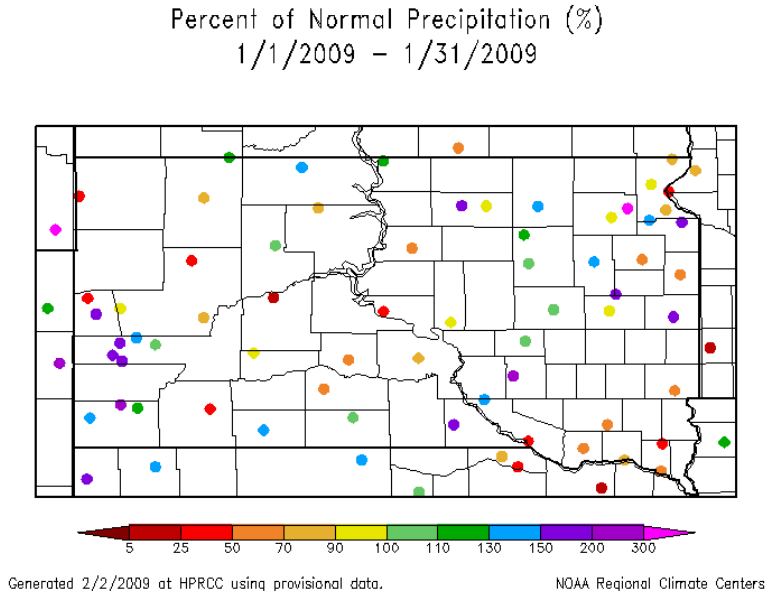
sufficient to overcome accumulated deficits since the fall. Thus, the D0 area has held steady for the month.

No major snowstorms affected the state during the month. Most events produced totals up to a few inches. But travel problems occurred several times earlier in the month as very strong winds shifted recent snows reducing visibility and causing drifting across rural roads.

Total Precipitation

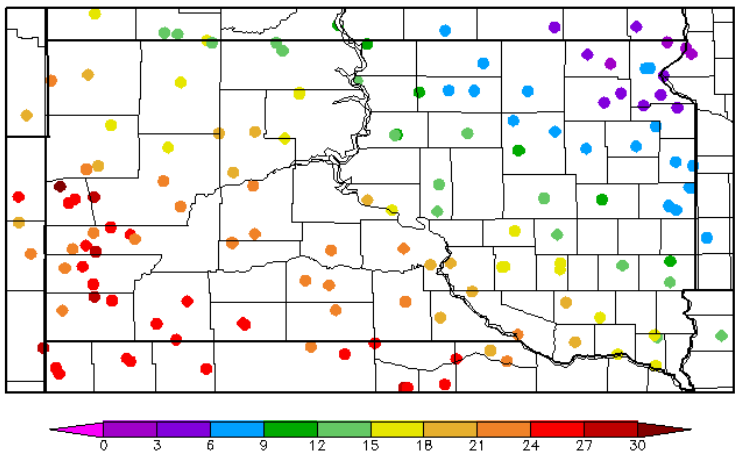


Percent of average precipitation



Average temperature

Temperature (F)
1/1/2009 – 1/31/2009



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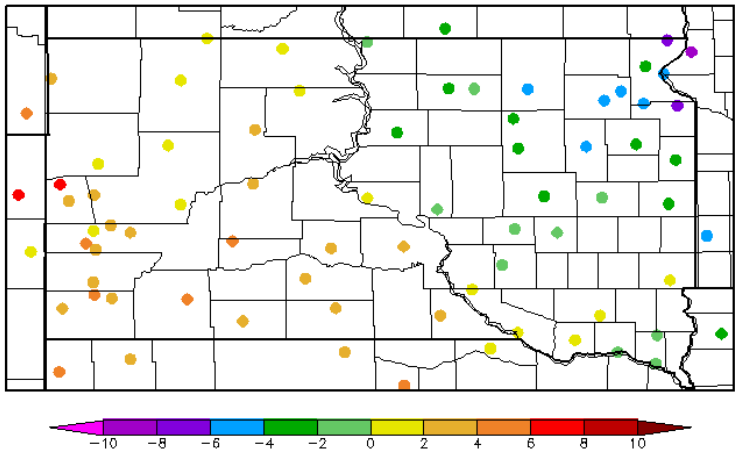
Deviation from average temperature

Departure from Normal Temperature (F)
1/1/2009 – 1/31/2009



Generated 2/2/2009 at HPRCC using provisional data. NOAA Regional Climate Centers

US Drought Monitor

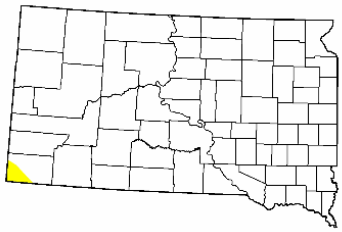
U.S. Drought Monitor

South Dakota

January 27, 2009
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	99.4	0.6	0.0	0.0	0.0	0.0
Last Week (01/20/2009 map)	99.5	0.5	0.0	0.0	0.0	0.0
3 Months Ago (11/04/2008 map)	98.4	1.6	0.0	0.0	0.0	0.0
Start of Calendar Year (01/06/2009 map)	99.5	0.5	0.0	0.0	0.0	0.0
Start of Water Year (10/07/2008 map)	73.9	26.1	0.8	0.0	0.0	0.0
One Year Ago (01/29/2008 map)	46.9	53.1	34.3	9.7	0.0	0.0



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements

http://drought.unl.edu/dm

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Reports include information from:
National Weather Service
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