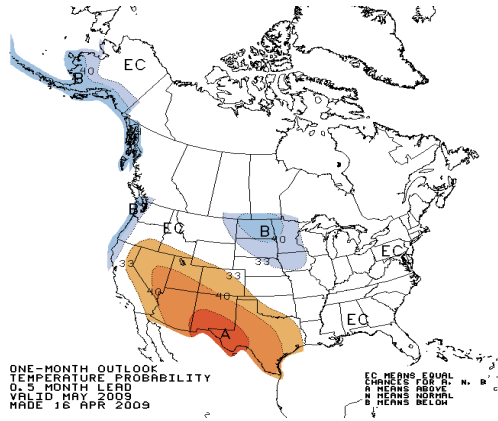


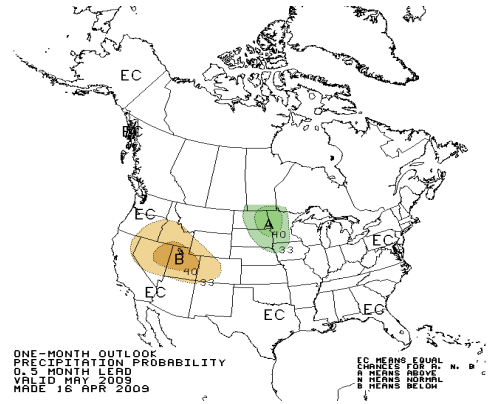
May – July 2009 Temperature and Precipitation Outlooks

Below are the latest official probabilistic outlooks from the Climate Prediction Center (CPC) for May temperatures and precipitation, and the average for the May through July three month period.

MAY 2009 OUTLOOKS

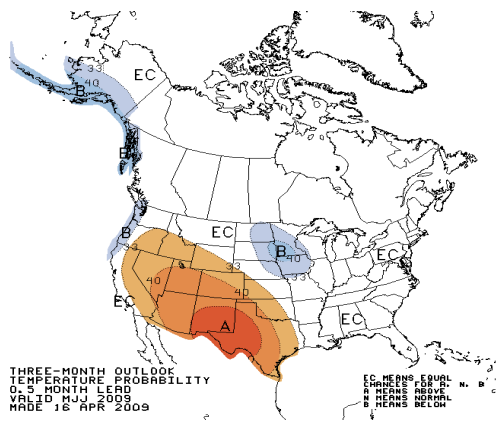


Temperature

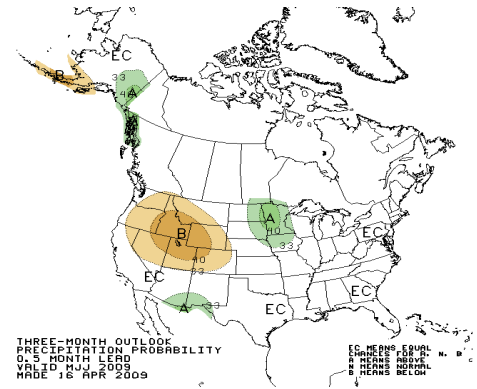


Precipitation

MAY through JULY 2009 OUTLOOKS



Temperature



Precipitation

In the above CPC outlooks for May, there is an increased likelihood of below normal temperatures for most of the Northern Plains, and above normal precipitation for the eastern Dakotas into western Minnesota and northwestern Iowa. For the May through July period, there is an increased probability of below normal temperatures and above normal precipitation in the eastern Dakotas, Minnesota, and Iowa, with equal chances (EC) for above normal, normal and below normal temperatures and precipitation for western South Dakota (33.3 percent chance of any category happening).

The shaded areas on these maps indicate where there is a higher probability of above normal or below normal values. For example, on the May precipitation outlook, there is a 40 percent chance of seeing above normal precipitation in northeastern South Dakota and eastern North Dakota. There is still a 33 percent chance of normal precipitation, and a 27 percent chance of below normal precipitation in that region.

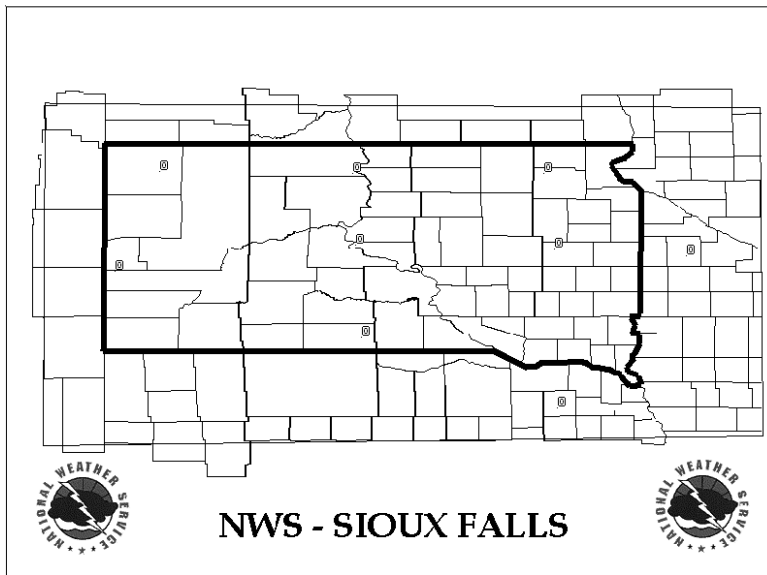
Experimental WFO FSD Outlooks

The following images show the “best-guess” outlooks developed at WFO FSD. They are based on a combination of the output from several neural networks, comparing historical data from years with similar values and trends of multiple climate indices (analogs), and looking at the correlations of several observed climate indices with future observed temperatures and precipitation based on historical data from over 55 years. Red is for above normal temperatures, blue is below normal temperatures, green is above normal precipitation, and brown is below normal precipitation.

May 2009 Temperature Outlook

based on 4/29 indices

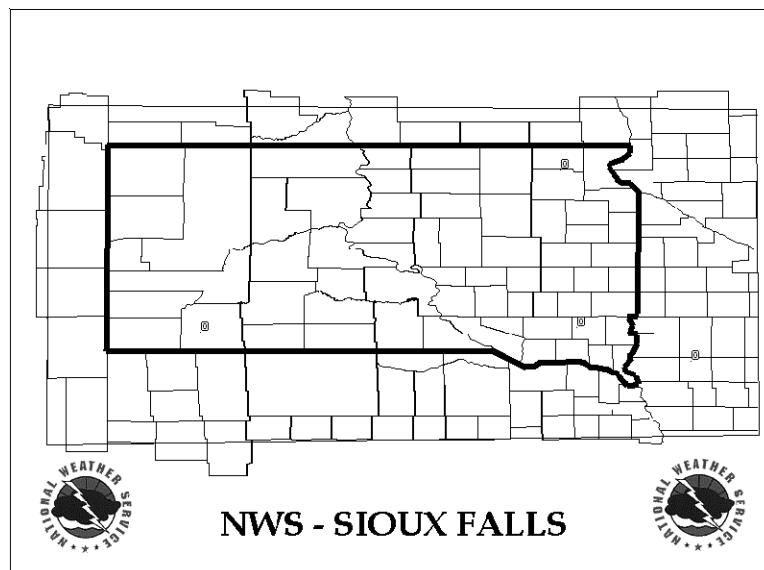
> 50% conf.



May 2009 Precipitation Outlook

based on 4/29 indices

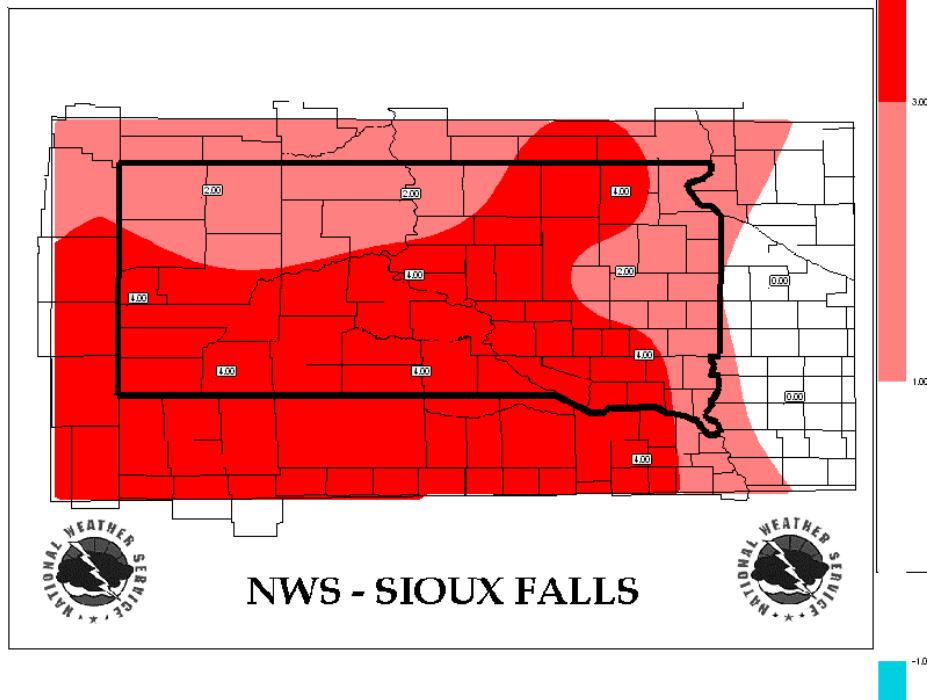
> 50% conf.



June 2009 Temperature Outlook

based on 4/29 indices

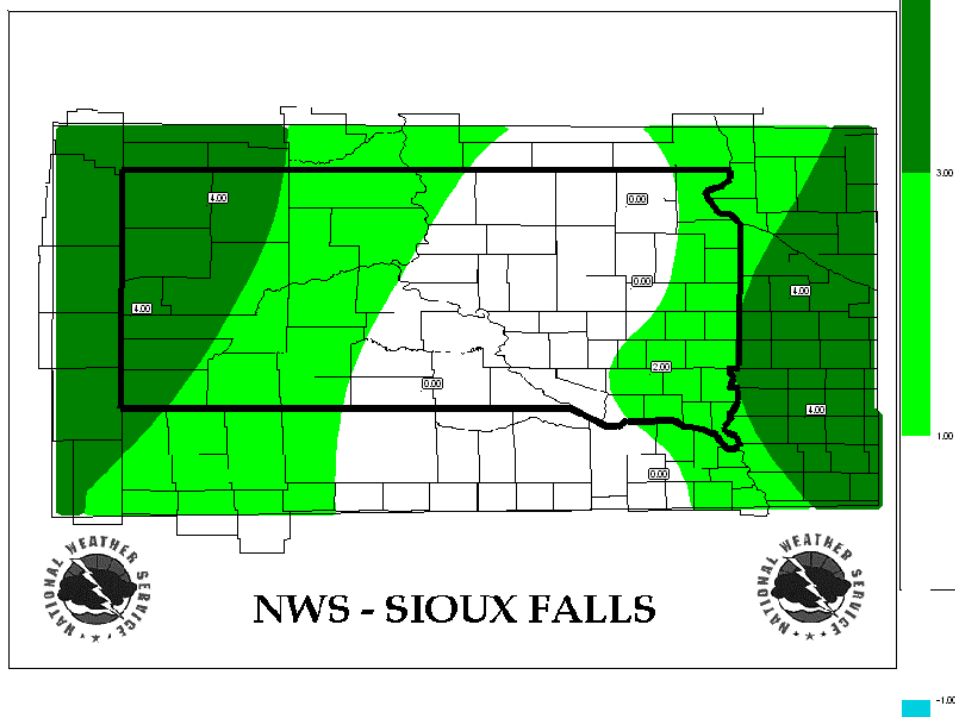
all values



June 2009 Precipitation Outlook

based on 4/29 indices

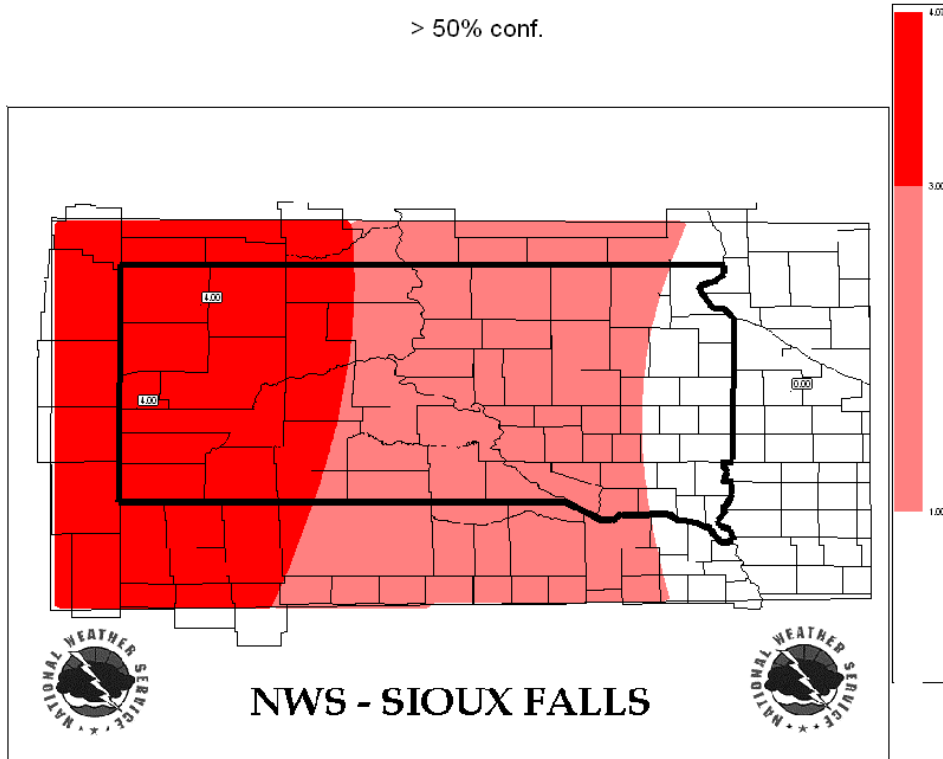
> 50% conf.



July 2009 Temperature Outlook

based on 4/29 indices

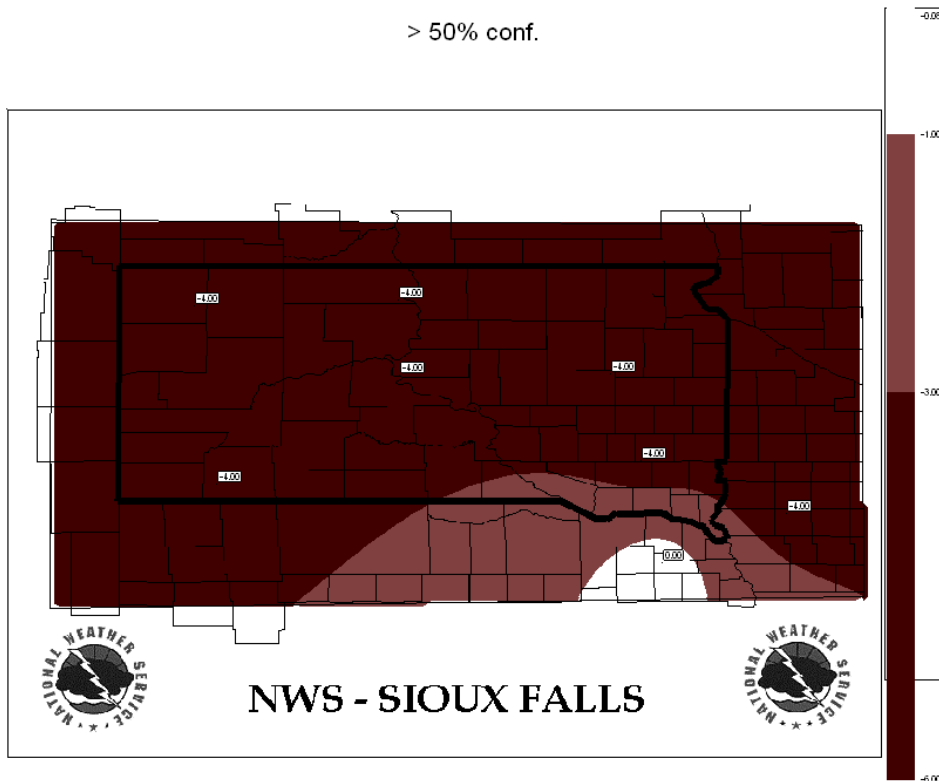
> 50% conf.



July 2009 Precipitation Outlook

based on 4/29 indices

> 50% conf.



Outlook Summary

MAY TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	43.2	NORMAL	60%
North-central SD	43.1	NORMAL	100%
Northeast SD	43.0	NORMAL	80%
Black Hills	40.3	NORMAL	100%
Southwest SD	45.3	NORMAL	40%
Central SD	45.3	NORMAL	100%
East-Central SD	44.5	NORMAL	100%
South-Central SD	46.1	NORMAL	100%
Southeast SD	47.2	NORMAL	20%
Northwest IA	46.1	NORMAL	20%
Southwest MN	44.8	NORMAL	80%
Northeast NE	48.6	NORMAL	100%

MAY PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	1.62	BELOW	40%
North-central SD	1.87	BELOW	40%
Northeast SD	2.08	NORMAL	80%
Black Hills	2.33	ABOVE	20%
Southwest SD	1.85	NORMAL	80%
Central SD	1.95	ABOVE	20%
East-Central SD	2.20	ABOVE	20%
South-Central SD	2.34	BELOW	20%
Southeast SD	2.48	NORMAL	80%
Northwest IA	2.71	NORMAL	80%
Southwest MN	2.57	BELOW	20%
Northeast NE	2.57	ABOVE	20%

JUNE TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	54.8	ABOVE	40%
North-central SD	55.8	ABOVE	20%
Northeast SD	56.1	ABOVE	40%
Black Hills	50.8	ABOVE	40%
Southwest SD	56.5	NORMAL	60%
Central SD	57.4	ABOVE	40%
East-Central SD	57.0	ABOVE	20%
South-Central SD	57.7	ABOVE	40%
Southeast SD	59.3	ABOVE	40%
Northwest IA	58.9	NORMAL	60%
Southwest MN	57.8	NORMAL	60%
Northeast NE	60.2	ABOVE	40%

JUNE PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	2.72	ABOVE	80%
North-central SD	2.74	ABOVE	40%
Northeast SD	2.82	NORMAL	60%
Black Hills	3.66	ABOVE	60%
Southwest SD	2.98	ABOVE	20%
Central SD	2.76	ABOVE	40%
East-Central SD	3.02	NORMAL	60%
South-Central SD	3.32	NORMAL	60%
Southeast SD	3.44	ABOVE	60%
Northwest IA	3.67	ABOVE	60%
Southwest MN	3.35	ABOVE	60%
Northeast NE	3.96	NORMAL	60%

JULY TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	64.5	ABOVE	60%
North-central SD	65.4	ABOVE	40%
Northeast SD	65.6	ABOVE	40%
Black Hills	60.3	ABOVE	80%
Southwest SD	66.3	ABOVE	40%
Central SD	67.3	ABOVE	40%
East-Central SD	66.8	ABOVE	40%
South-Central SD	67.6	ABOVE	40%
Southeast SD	69.2	ABOVE	40%
Northwest IA	68.5	ABOVE	40%
Southwest MN	67.5	NORMAL	60%
Northeast NE	70.2	ABOVE	20%

JULY PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	3.08	BELOW	60%
North-central SD	3.28	BELOW	60%
Northeast SD	3.50	BELOW	40%
Black Hills	3.63	NORMAL	40%
Southwest SD	3.12	BELOW	60%
Central SD	3.17	BELOW	60%
East-Central SD	3.84	BELOW	60%
South-Central SD	3.52	BELOW	40%
Southeast SD	3.74	BELOW	60%
Northwest IA	4.48	BELOW	80%
Southwest MN	4.12	BELOW	40%
Northeast NE	4.16	NORMAL	60%

DISCLAIMER: WFO FSD is developing local 1 to 3 month outlooks of temperature and precipitation. These outlooks are experimental and still being tested and developed. They are being provided to give more details and a more deterministic outlook for South Dakota and the portions of Minnesota, Iowa, and Nebraska in the FSD forecast area. They are not intended to compete with or replace the official NOAA outlooks issued by the Climate Prediction Center (CPC), which are probabilistic. For more details on how these outlooks are prepared, or if you have any questions concerning these outlooks, please feel free to contact the WFO FSD Climate Services Focal Point [Mike Gillispie](#).