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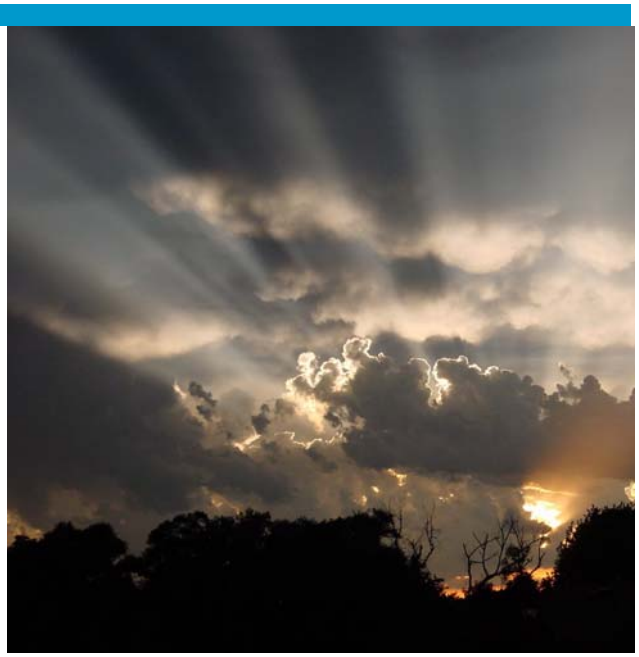


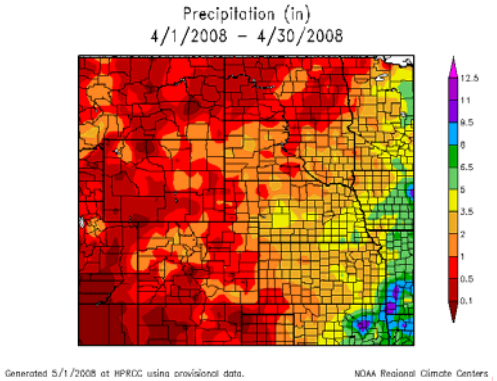
Convection returns to the region-Photo by Ken Hubbard

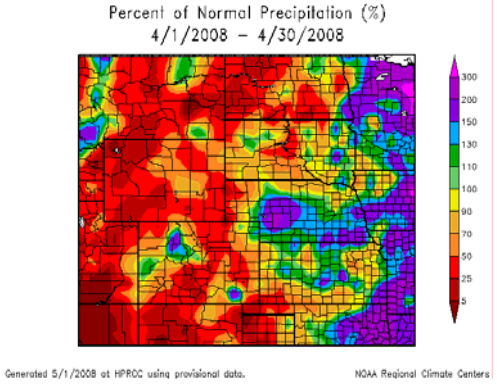
April 2008 Climate Summary

Region Breakdown

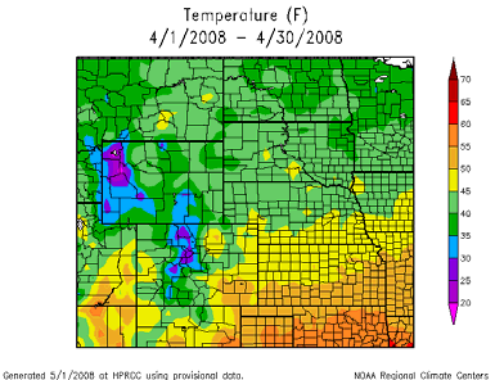
Dryness was present over the western two thirds of the High Plains region for the month of April 2008. Areas in the eastern third of the region improved significantly with respect to March. Snow fell in the western Dakotas and in Western Nebraska and in the mountainous states of Wyoming and Colorado while much of the east and southeast portion of the region received mostly rainfall. Several stations in the western part of the region received a tenth of one inch of precipitation or less while stations in southeast Kansas received 5 to 8 inches of precipitation. The percent of normal map shows that a few parts of the region were above 100 percent and some areas approached 200% of the normal precipitation for the 30 year period 1971-2000.

Weather patterns consisted of a series of high and low pressure systems, each moving through the region in a manner of a few days. The intermittent cold fronts moving generally down from the north and the warm fronts moving mostly up from the south caused temperatures to fluctuate considerably during the month. The cold warm air fluctuation is not uncommon for the spring transition months but, the frequency of changes was fairly high.

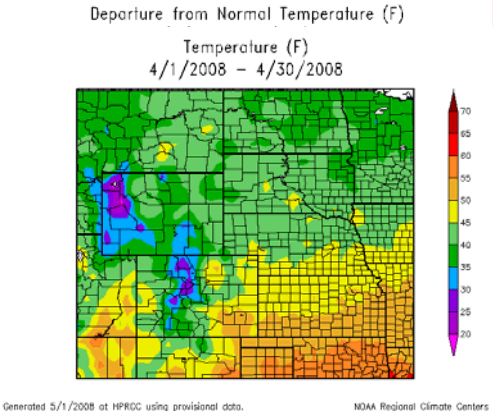




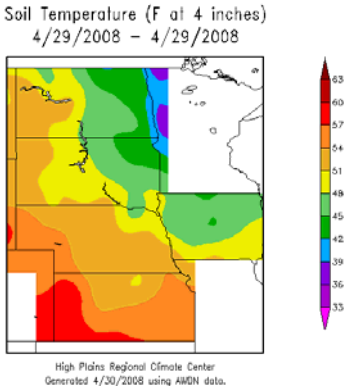
Regional Breakdown (Cont.) The average temperature patterns warmed over the region and the pattern is typical for this time of year with the coldest temperatures to the north and the warmest temperatures to the south. The exception is in the mountains where the average temperatures were the lowest owing to the decrease in temperature with elevation.



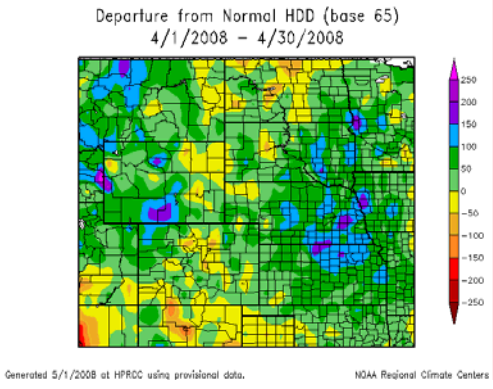
The temperature average for April was below the April mean temperature for the normal period 1971-200 over much of the region with a range from 0 to nearly 8 degrees below average for the month. A few stations in Colorado and Kansas experienced temperatures from 0 to 2 degrees above the monthly normal.



A weekly average soil temperature of 50 or higher is recommended before planting of corn.Soil temperatures have been slow to warm this spring. Average weekly soil temperatures at the 4 inch depth have reached 50 to 60 degrees over most of Nebraska, Kansas, Eastern Colorado and Eastern Wyoming.

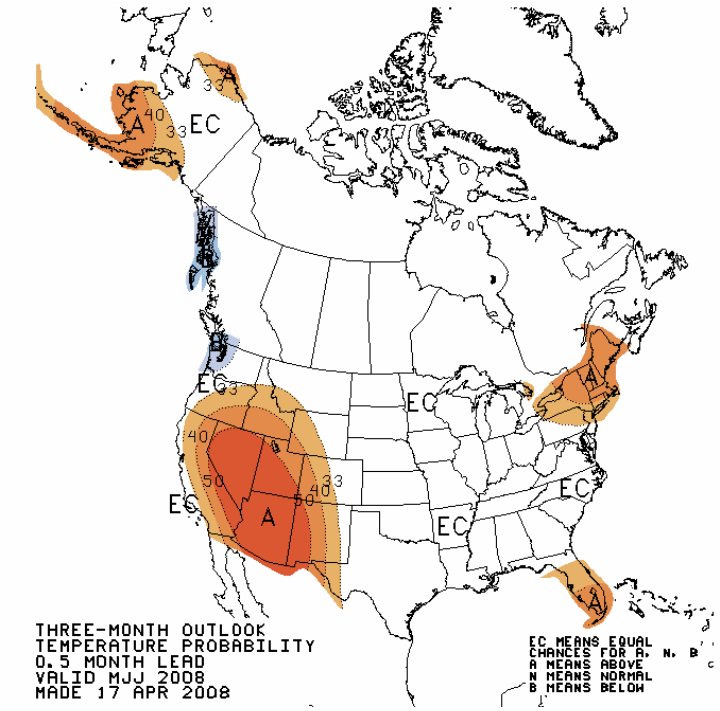


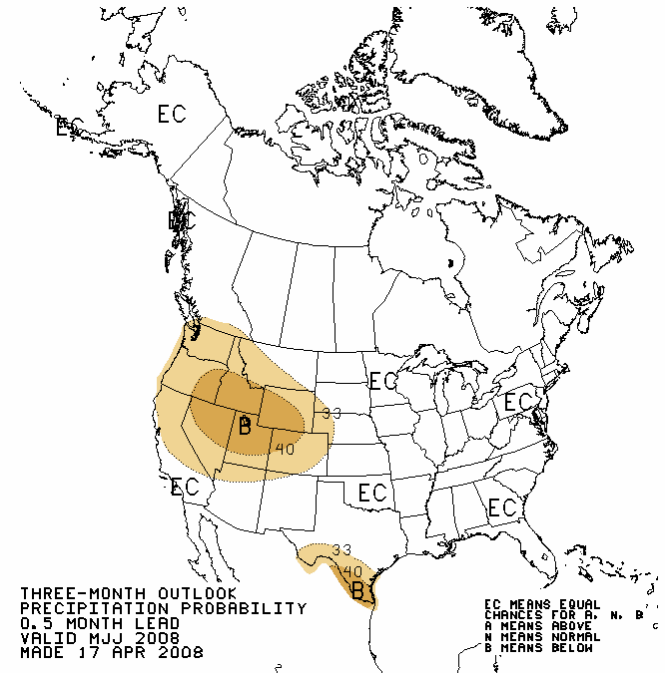
The heating degree days (HDD) were below normal in some areas in the western part of the region but were up to 200 HDD above the normal accumulated values for most of the rest of the region. Thus energy required to heat homes and businesses was higher than usual for most of the region in the month of April



Climate Outlook

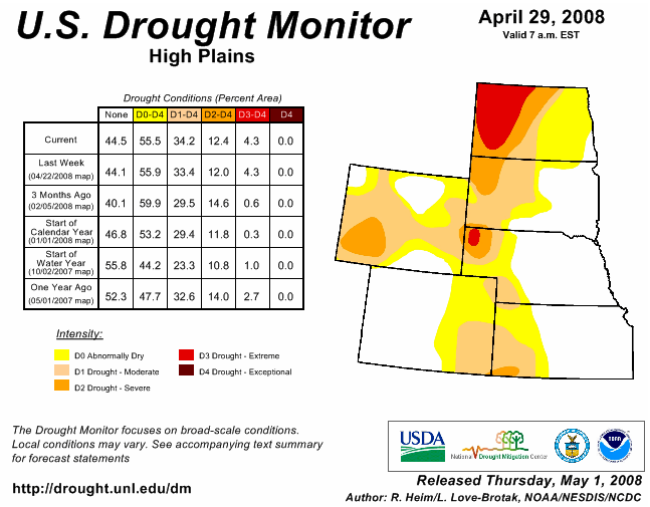
Forecasts generally indicate a weather La Nina conditions for May-April-June 2008, followed by significant uncertainty thereafter. The temperature outlook for May-June-July is for above normal temperatures in western Wyoming and Colorado with chances of above reaching up to 50% skill level relative to a 33% by chance alone.

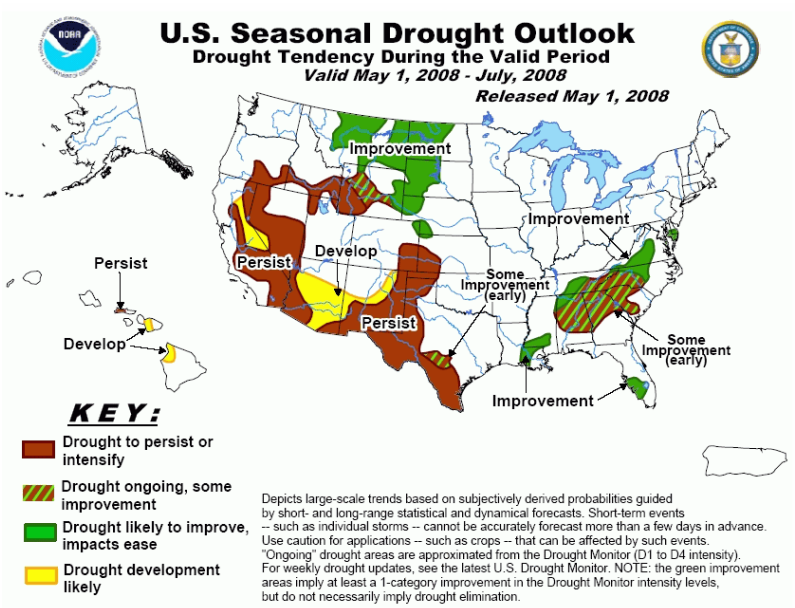




Drought Watch

Drought conditions vary from D0 to D3 in the region where the extreme drought (D3) is in the western part of North Dakota and Nebraska. The seasonal outlook through July is calling for some improvement in these areas.





State Summaries[1]

Colorado

Station	Temperature (F) Max	Min	Mean	Dep	Extremes High	Date		Low	Date	% Avail	Precipitation Totals (inches) Obs	Depart	% Norm
AKRON WASHINGTON CO AP	61.2	31.4	46.3	-0.8	85	30-Apr	+	11	4/1	100	0.54	-1.04	34
ALAMOSA SAN LUIS AP	59.8	22	40.9	0.1	72	29-Apr		7	4/12	100	0.18	-0.36	33
COLORADO SPRINGS MUNI AP	60.3	29.9	45.1	-0.2	79	15-Apr		21	4/2	100	0.39	-1.23	24
GRAND JUNCTION WALKER FLD	63	33.9	48.5	-2.4	81	29-Apr		22	4/1	100	0.86	0	100
PUEBLO MEM AP	67.3	28.9	48.1	-1.8	87	15-Apr		20	4/2	100	0.96	-0.29	77

Kansas

Station	Temperature (F) Max	Min	Mean	Dep	Extremes High	Date		Low	Date	% Avail	Precipitation Totals (inches) Obs	Depart	Pct Norm
CONCORDIA MUNI AP	60.4	37.4	48.9	-3.9	82	20-Apr		26	4/14	100	3.01	0.56	123
DODGE CITY RGNL AP	65.1	37.9	51.5	-2.4	93	30-Apr		24	4/1	100	1.79	-0.46	80
GOODLAND RENNER FLD	63	32.7	47.9	-0.9	88	30-Apr	+	23	4/1	100	1.11	-0.4	74
TOPEKA MUNI AP	62.7	41.1	51.9	-2.6	80	30-Apr	+	27	4/14	100	2.95	-0.19	94
WICHITA MID-CONTINENT AP	65.5	42.2	53.9	-1.4	81	30-Apr	+	27	4/14	100	1.82	-0.75	71

North Dakota

Station	Temperature (F) Max	Min	Mean	Dep	Extremes High	Date		Low	Date	% Avail	Precipitation Totals (inches) Obs	Depart	Pct Norm
BISMARCK MUNI AP	57	26.6	41.8	-1.5	85	15-Apr		9	4/7	100	0.73	-0.73	50
DICKINSON MUNI AP	55.6	26.1	40.9	-1.9	80	14-Apr		13	4/7+	100	0.19	-1.57	11
FARGO HECTOR INTL AP	52.1	29.8	41	-2.5	68	15-Apr		20	4/27	100	2.2	0.83	161
GRAND FORKS INTL AP	52.3	27.6	40	-2.3	70	15-Apr		19	4/28	100	0.53	-0.7	43
WILLISTON SLOULIN INTL AP	56.4	26.5	41.5	-1	82	14-Apr		12	4/6	100	0.27	-0.78	26

Nebraska

Station	Temperature (F) Max	Min	Mean	Dep	Extremes High	Date		Low	Date	% Avail	Precipitation Totals (inches) Obs	Depart	Pct Norm
CHADRON MUNI AP	59.5	28.9	44.2	-1.7	88	15-Apr		7	4/1	100	0.98	-0.91	52
GRAND ISLAND AP	58.6	35.4	47	-2.9	79	20-Apr	+	25	4/14+	100	3.42	0.81	131
LINCOLN MUNI AP	59	35.6	47.3	-3.9	80	20-Apr		21	4/14	100	3.8	0.9	131

OMAHA EPPLEY AIRFIELD	58.4	36.5	47.5	-3.9	79	23-Apr		23	4/14	100	4.01	1.07	136
NORFOLK KARL STEFAN AP	57.4	33.6	45.5	-3.6	78	23-Apr		22	4/14	100	1.98	-0.61	76
NORTH PLATTE RGNL AP	59.3	30.6	45	-3.1	84	15-Apr		18	4/1	100	3.67	1.7	186
VALENTINE MILLER FLD	58.6	29.6	44.1	-2	84	15-Apr		14	4/7	100	1.39	-0.58	71

South Dakota

	Temperature (F)				Extremes					%	Precipitation Totals (inches)		
Station	Max	Min	Mean	Dep	High	Date		Low	Date	Avail	Obs	Depart	Pct Norm
ABERDEEN RGNL AP	55.7	28	41.9	-3.5	76	15-Apr		14	4/7	100	0.81	-1.02	44
HURON RGNL AP	56.7	29.8	43.2	-2.9	78	23-Apr		18	4/13+	100	2.05	-0.24	90
RAPID CITY RGNL AP	55.9	27.7	41.8	-2.9	85	15-Apr		10	4/1	100	1.38	-0.48	74
SIOUX FALLS FOSS FLD	55.4	31.2	43.3	-2.4	78	23-Apr		19	4/14	100	2.68	0.03	101

Wyoming

	Averages				Extremes					%	Precipitation Totals (inches)		
Station	Max	Min	Mean	Dep	High	Date		Low	Date	Avail	Obs	Depart	Pct Norm
CASPER NATRONA CO AP	55.7	23.6	39.6	-3.1	77	29-Apr		10	4/1	100	1.27	-0.25	84
CHEYENNE MUNI AP	54.2	26.9	40.5	-1.1	76	15-Apr		12	4/1	100	0.51	-1.04	33
LANDER HUNT FLD AP	55.8	26.1	40.9	-3	75	29-Apr		11	4/1	100	0.9	-1.17	43
LARAMIE RGNL AP	48.8	21.1	35	-2.2	68	30-Apr	+	3	4/1	100	0.38	-0.68	36
RAWLINS MUNI AP	49.4	23.2	36.3	-5.3	71	29-Apr		4	4/1	100	0.42	-0.64	40
SHERIDAN CO AP	55.3	24.4	39.9	-4	80	29-Apr	+	1	4/1	100	1.12	-0.65	63

[1]All Data are Preliminary and Subject to Change
Source: National Weather Service Cooperative Observation Program Network
Data is retrieved through the Applied Climate Information System (ACIS)
This data is available for the entire period of record through the CLIMOD system. For more information please see http://hprcc.unl.edu/services.

About the NOAA High Plains Regional Climate Center

The NOAA High Plains Regional Climate Center (HPRCC) is headquartered at the University of Nebraska – Lincoln (UNL) in Lincoln, Nebraska. As one of 6 NOAA regional climate centers operated under the National Oceanic and Atmospheric Administration (NOAA), HPRCC works closely with other organizations such as the National Climatic Data Center (NCDC), Local and Regional National Weather Service (NWS) Offices, and other climate services organizations such as the National Drought Mitigation Center and the American Association of Station Climatologist members to provide climate data services and information for decision/policy decisions.

For more information online

High Plains Regional Climate Center: http://hprcc.unl.edu

High Plains Regional Climate Services: http://hprcc.unl.edu/services

CLIMOD: http://climod.unl.edu

NOAA Regional Climate Centers and ACIS: http://ww.rcc-acis.org

North Dakota State Climate Office: http://www.ndsu.edu/ndsco

North Dakota Agricultural Network: http://www.ndawn.ndsu.nodak.edu

National Weather Service: http://www.weather.gov

National Climate Data Center; http://ncdc.noaa.gov

School of Natural Resources – University of Nebraska – Lincoln: http://snr.unl.edu

University of Nebraska – Lincoln: http://www.unl.edu

National Drought Mitigation Center: http://drought.unl.edu

Climate Prediction Center: http://www.cpc.noaa.gov

NOAA Storm Prediction Center: http://www.spc.noaa.gov

National Agricultural Statistics Service (USDA): http://www.nass.usda.gov

Weather Photos: http://www.nebraskaweatherphotos.org

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