



April 2015 Climate Summary

Spring has sprung - Photo by Holly Lussenden
<http://hprcc.unl.edu>

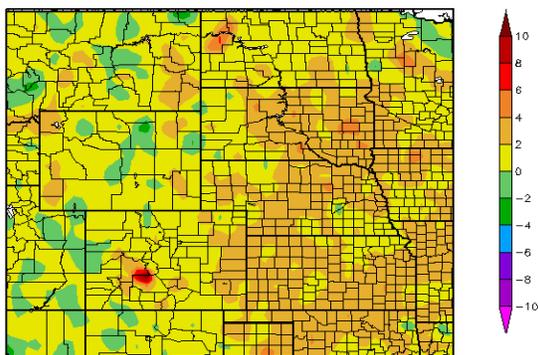
A Break in the Pattern

April 2015 was mild with a wide range in precipitation across the High Plains Region. Generally, average temperatures ranged from near normal up to 4.0 degrees F (2.2 degrees C) above normal. Only isolated areas were outside of this temperature range. Precipitation varied widely, however, with areas like southeastern Wyoming receiving over 200 percent of normal precipitation, while areas such as central South Dakota failed to reach 25 percent of normal. This translated into precipitation surpluses in excess of 1.50 inches (38 mm) across southeastern Wyoming, northeastern Colorado, and a portion of the Nebraska panhandle. On the other end of the spectrum, deficits of at least 1.50 inches (38 mm) were common across central and eastern South Dakota.

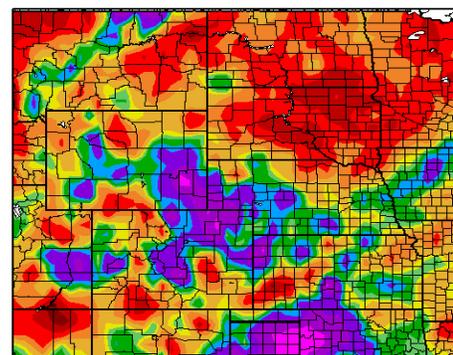
The dry weather had both positive and negative impacts this month. Early in the season, dry weather can have a positive impact on agriculture. For instance, dry areas in the Dakotas have been good for farming activities as drier soils have allowed for field work to commence with some early planting of small grains, like oats and spring wheat. The dry weather also had some negative impacts, such as an increased risk of wildfires. Wildfires are not uncommon in the spring and this month was no exception, especially across the Dakotas. Multiple reasons for the increased risk include an abundance of fuel built up from the past few years, low snowpack this winter, and overall low precipitation totals. North Dakota had many wildfire issues this month. For example, in mid-April, a grass fire came very close to the campus of University of Mary, just outside of Bismarck, North Dakota. The university closed for one evening and some students were evacuated to a neighboring college. Additionally, I-29 from Grand Forks to the Canadian border was closed due to smoke from grass fires. According to the May 1st release of the National Significant Wildland Fire Potential Outlook from the National Interagency Fire Center, the potential for significant wildfires across the Dakotas should return to normal during May.

Temperature and Precipitation Overview

Departure from Normal Temperature (F)
4/1/2015 - 4/30/2015



Percent of Normal Precipitation (%)
4/1/2015 - 4/30/2015



Above: Departure from 1981-2010 normal temperature (left) and percent of normal precipitation (right) for April 2015 in the High Plains region. Maps produced by the High Plains Regional Climate Center and are available at: <http://hprcc.unl.edu/maps/current>.

Precipitation

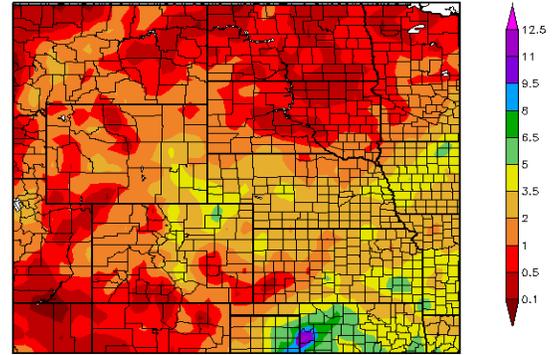
For the High Plains region, there was a wide range in precipitation this month with totals ranging from 5 to 300 percent of normal. Areas of the Dakotas largely missed out on precipitation and this was reflected in the latest release of the U.S. Drought Monitor. Two large areas in central and eastern South Dakota received at best 25 percent of normal precipitation. This area of low precipitation also extended into southeastern North Dakota. Deficits of 1.00-2.00 inches (25-51 mm) were common across these areas. On the other end of the spectrum, an area encompassing southeastern Wyoming, the panhandle of Nebraska, northeastern Colorado, and northwestern Kansas received ample precipitation with totals ranging from 150-300 percent of normal. A few pockets scattered across Nebraska, Kansas, western Wyoming, and central and western Colorado also had precipitation totals of at least 150 percent of normal. The following gives a more detailed look at some of the extremes that occurred this month.

On the wet side, wintry weather impacted transportation across southern Wyoming this month as I-80 was closed twice within just a few days. A mid-month snowstorm created treacherous driving conditions which led to multiple accidents and injuries. During the two day period of April 16-17, this stretch received heavy, wet snow with totals generally ranging from 10.0-16.0 inches (25-41 cm). I-80 was closed for about 150 miles (241 km) between Cheyenne and Rawlins for at least 20 hours as a result of the accidents. Just a few days later on the 20th, the interstate closed again as fog and wintry road conditions contributed to another pile-up involving at least 50 vehicles.

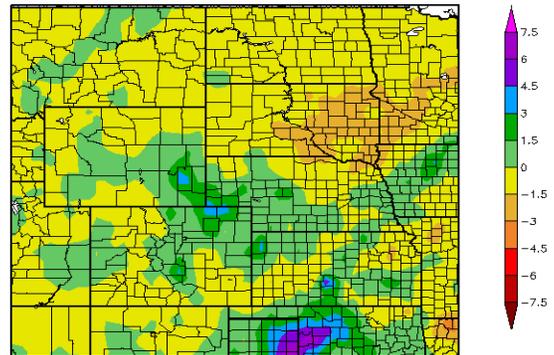
Meanwhile, on the dry side, much of South Dakota received less than 50 percent of normal precipitation. These low amounts caused most locations across the state to be ranked in the top 20 driest Aprils on record. This dryness is not a recent development, however, as precipitation has been lacking since last fall. For instance, Water Year to Date (October 1 - April 30) precipitation totals rank in the top 10 driest for locations all across the state. Examples include Rapid City in the west (4th), Pierre in the central part of the state (7th), and Aberdeen in the east (3rd). The past couple of months have been particularly dry for Rapid City which has only received 0.76 inches (19 mm) of liquid equivalent precipitation and 1.2 inches (3 cm) of snow over these two months. This marks the 2nd driest and 3rd least snowiest March and April on record for Rapid City (period of record 1942-2015).

Regional Precipitation

Precipitation (in)
4/1/2015 - 4/30/2015



Departure from Normal Precipitation (in)
4/1/2015 - 4/30/2015



Above: Total precipitation in inches (top) and departure from normal precipitation in inches (bottom) for April 2015. These maps are produced by HPRCC and can be found on the Current Climate Summary Maps page at: <http://hprcc.unl.edu/maps/current>.

Snowpack Update

The bleak snowpack situation in the western U.S. continued this month. At the beginning of May, data from the Natural Resources Conservation Service showed that only one basin in the entire west was near normal - the South Platte in Colorado and Wyoming. The vast majority of the basins were well below 50 percent of normal.

In Colorado, the basins to the east fared the best, followed by the northwest, and then the southwest. Basins in the southwest part of the state had snow water equivalent measurements less than 35 percent of normal. Meanwhile, in Wyoming, most basins were in the 50-69 percent of normal range; however a few basins were below 50 percent of normal. For current maps, please see: <http://www.wcc.nrcs.usda.gov/gis/snow.html>.

Temperatures

Unlike the last few months, temperatures were largely near normal across the High Plains region with many locations ending the month within 2.0 degrees F (1.1 degrees C) of normal. Much of Kansas, Nebraska, and South Dakota, however, were in the 2.0-4.0 degrees F (1.1-2.2 degrees C) above normal range. Isolated areas on this eastern side of the region were on the high end of this range. This allowed a few locations to rank in the top 20 warmest ApriIs on record, including Aberdeen (18th), Huron (18th), and Pierre (19th) in South Dakota, Norfolk (19th) in Nebraska, and Wichita (18th) in Kansas.

Although monthly records were not broken this April, there were some daily records set throughout the month. April 22nd was a particularly chilly morning with numerous record lows set across the region. Minimum temperatures ranged from the mid 40's (7.2 degrees C) in southern Kansas to the mid-teens (-9.4 degrees C) in the Dakotas. Aberdeen, South Dakota was one of these locations and with a minimum temperature of 15 degrees F (-9.4 degrees C) a new daily record was set (period of record 1893-2015). This broke the 1956 record by 5 degrees F (2.8 degrees C). The graph above shows Aberdeen's temperatures over the past year and how they compare to the normals and extremes.

It is not unusual to have a hard freeze in late April in places like Nebraska and the Dakotas. For example, the last spring freeze (at 28.0 degrees F / -2.2 degrees C) in the Dakotas usually occurs somewhere between mid-April to mid-May. To learn more about the last spring freeze dates in your area, see: <http://www.hprcc.unl.edu/maps/atlas/>.

Drought Conditions

Although there were small improvements, drought conditions have generally expanded across the High Plains region according to the latest release of the U.S. Drought Monitor. The total area in drought (D1-D4) increased from about 35 percent to nearly 45 percent. South Dakota fared the worst this month. The total area in drought (D1-D4) increased

U.S. Drought Monitor

**U.S. Drought Monitor
High Plains**

April 28, 2015
(Released Thursday, Apr. 30, 2015)
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0	D1	D2	D3	D4
Current	33.15	22.98	28.64	13.71	0.51	0.00
Last Week	32.92	26.13	28.28	12.00	0.66	0.00
3 Months Ago	51.17	36.37	6.96	5.20	0.30	0.00
Start of Calendar Year	59.44	29.27	5.02	5.10	0.36	0.00
Start of Water Year	78.99	8.86	6.17	5.12	0.86	0.00
One Year Ago	51.87	15.42	12.82	13.73	5.86	0.39

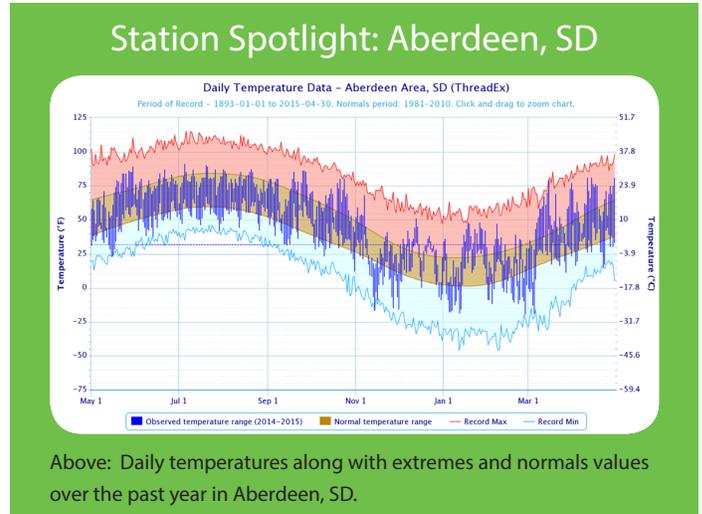
Intensity:

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

The drought monitor focuses on broad scale conditions. Local conditions may vary. See accompanying text summary for forecasts and statements.

Author:
Anthony Alfusa
NOAA/NWS/NCEP/CPC

The U.S. Drought Monitor is produced as a joint effort of the U.S. Department of Agriculture (USDA), National Drought Mitigation Center, U.S. Department of Commerce, and the National Oceanic and Atmospheric Administration (NOAA). For current Drought Monitor information, please see: <http://droughtmonitor.unl.edu/>.



from about 43 percent to 77 percent and a rather large new area of severe drought (D2) has emerged in the central and eastern parts of the state. In these areas, winter wheat winterkill has been an issue. Winterkill can be the result of many factors, including a lack of snow cover in the winter and early spring, and a recent lack of rainfall. Additionally, the National Agricultural Statistics Service (NASS) indicated that topsoil moisture across South Dakota was rated at 69 percent Short or Very Short at the end of the month. Other degradations around the region included an expansion of moderate drought (D1) in eastern North Dakota, northeastern Nebraska, and southwestern Wyoming. Meanwhile, in south-central Kansas, D2 expanded slightly and a new area of extreme drought (D3) emerged as well.

Improvements were made in only a few areas, such as western Colorado where a small area of D2 was improved to D1. Additionally, abnormally dry conditions (D0) were removed from northeastern Colorado, portions of central Nebraska, an area of west-central North Dakota, and a very small area of eastern Kansas. Several chances for thunderstorms in the first week of May could lead to more improvements across the region.

Climate Outlooks

El Niño conditions continued this month. According to the Climate Prediction Center, there is a 70% chance that these conditions will continue through the summer and at least a 60% chance that El Niño conditions will still be present in the autumn. Current El Niño conditions are weak, however, so the High Plains Region is expected to experience little to no impacts.

The seasonal temperature and precipitation outlooks below combine the effects of long-term trends, soil moisture, and when applicable, the El Niño Southern Oscillation cycle (ENSO). To learn more about these outlooks, please see: <http://www.cpc.ncep.noaa.gov>.

Temperature

The temperature outlook through July indicates a higher probability for above normal temperatures across the drought-stricken western U.S. There is also a chance for above normal temperatures along the Gulf and Atlantic coasts from eastern Louisiana through central North Carolina. For the High Plains region, this includes the western half of Wyoming and a small sliver of northwestern Colorado. Meanwhile, a higher probability for below normal temperatures exists for south-central parts of the country, and includes a small portion of southeastern Colorado and southwestern Kansas. The rest of the region has equal chances for above, below, or near normal temperatures.

Precipitation

Like last month, the precipitation outlook for the next three months shows a higher probability for above normal precipitation for two large areas - generally in the Four Corners region, extending south through Texas and across much of the southeastern U.S. For the High Plains region, this includes Colorado, Wyoming, a small portion of southwestern North Dakota, and western portions of Kansas, Nebraska, and South Dakota. Meanwhile, some areas of the Great Lakes region have an increased chance for below normal precipitation. The remainder of the contiguous U.S. has equal chances for above, below, or near normal precipitation.

Drought

According to the U.S Seasonal Drought Outlook released April 16th, drought conditions are forecast to persist over much of the western U.S., with some drought development likely in the Great Lakes region. In contrast, some portions of the south-central U.S. and Four Corners region could see improvements or even drought removal over the next three months. For the High Plains region, the Seasonal Drought Outlook indicates that current drought conditions across the Dakotas extending into Minnesota and Wisconsin will persist. Further drought development to the east of that area is likely over the next three months. Drought conditions are also expected to persist in central Nebraska and southeastern Kansas. On the other end of the spectrum, drought conditions across Colorado, southwestern Wyoming, and the western half of Kansas are generally expected to improve or be removed over the next few months.

Temperature Outlook

THREE-MONTH OUTLOOK
TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID MJJ 2015
MADE 16 APR 2015

Precipitation Outlook

THREE-MONTH OUTLOOK
PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID MJJ 2015
MADE 16 APR 2015

Drought Outlook

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for April 16 - July 31, 2015
Released April 16, 2015

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short-lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor area/ intensity of D1 to D4.

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

Author: Rich Trinker
NOAA/NWS/NCEP/Climate Prediction Center

<http://go.usa.gov/hHTE>

Above: The three-month temperature probability outlook (top), the three-month precipitation probability outlook (middle), and the U.S. Seasonal Drought Outlook. For more information on these outlooks, produced by the Climate Prediction Center, see: <http://www.cpc.ncep.noaa.gov>.

Station Summaries: By the Numbers

Colorado	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Akron Washington County Airport	62.6	36.0	49.3	2.3	78	04/30	25	04/03	1.49	-0.16	90
Alamosa San Luis Airport	61.0	25.9	43.4	1.6	75	04/30	19	04/21+	0.43	-0.16	73
Colorado Springs Municipal Airport	62.0	34.9	48.5	2.0	79	04/30	22	04/04	0.97	-0.45	68
Denver International Airport	62.1	35.3	48.7	1.3	79	04/30	27	04/03	2.65	0.94	155
Grand Junction Walker Field Airport	64.0	36.6	50.3	-1.4	80	04/30	22	04/03	2.12	1.21	233
Pueblo Memorial Airport	67.8	36.4	52.1	1.5	83	04/30	27	04/04	1.42	0.02	101

Kansas	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Concordia Municipal Airport	66.8	43.7	55.3	2.2	84	04/01	34	04/10+	2.23	-0.22	91
Dodge City Regional Airport	70.9	42.6	56.8	2.9	89	04/06	27	04/10	1.80	-0.02	99
Goodland Renner Field	66.1	37.1	51.6	2.4	84	04/01	27	04/03	4.84	3.25	304
Topeka Municipal Airport	69.1	45.3	57.2	2.1	86	04/07	28	04/04	2.40	-1.13	68
Wichita Mid-Continent Airport	72.4	48.2	60.3	4.2	87	04/01	25	04/04	2.62	0.03	101

Nebraska	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Chadron Municipal Airport	62.3	31.4	46.8	2.0	78	04/14+	14	04/03	1.43	-0.55	72
Grand Island Airport	64.8	39.8	52.3	1.7	87	04/01	27	04/22	2.14	-0.39	85
Lincoln Municipal Airport	66.0	42.0	54.0	2.4	85	04/01	26	04/22	1.99	-0.72	73
Norfolk Karl Stefan Airfield	65.0	40.1	52.6	3.0	85	04/01	26	04/22	1.94	-0.71	73
North Platte Regional Airport	64.9	35.8	50.4	2.8	81	04/01	22	04/10+	3.01	0.74	133
Omaha Eppley Airport	65.6	42.8	54.2	2.5	85	04/01	30	04/22	3.67	0.71	124
Valentine Miller Field	64.0	35.3	49.6	2.9	83	04/30	18	04/04+	1.62	-0.60	73

North Dakota	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Bismark Municipal Airport	59.8	30.9	45.4	1.6	82	04/14	15	04/03	0.37	-0.89	29
Fargo International Airport	61.3	32.9	47.1	2.9	82	04/30	15	04/23	0.98	-0.38	72
Grand Forks International Airport	59.0	29.8	44.4	2.4	80	04/30	13	04/03	0.73	-0.28	72
Theodore Roosevelt Airport	57.9	29.0	43.5	1.2	79	04/14	17	04/03	1.03	-0.44	70
Williston International Airport	59.6	29.7	44.6	1.2	79	04/29+	15	04/22	0.27	-0.73	27

All data are preliminary and subject to change. + indicates multiple dates, latest date listed.
 Data are retrieved through the Applied Climate Information System (ACIS) and are available online through the CLIMOD system.
 For more information please contact us: <http://www.hprcc.unl.edu/contact.php>.

April 2015 Climate Summary

South Dakota	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Aberdeen Regional Airport	64.4	32.5	48.5	4.1	81	04/30+	15	04/22	0.55	-1.30	30
Huron Regional Airport	65.0	35.1	50.1	3.6	80	04/11	19	04/22+	0.60	-1.71	26
Pierre Regional Airport	63.8	35.2	49.5	2.5	85	04/30	18	04/03	0.49	-1.32	27
Rapid City Regional Airport	59.4	31.4	45.4	0.4	81	04/14	13	04/03	0.66	-1.14	37
Sioux Falls Joe Foss Field Airport	63.9	37.1	50.5	4.1	84	04/01	25	04/04	1.00	-2.01	33

Wyoming	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Casper Natrona County International AP	58.2	29.3	43.7	1.0	78	04/14	18	04/10	1.66	0.37	129
Cheyenne Municipal Airport	55.8	31.9	43.9	1.1	74	04/29	21	04/04	2.72	0.94	153
Lander Hunt Field Airport	57.8	32.2	45.0	1.1	76	04/29	15	04/03	2.31	0.44	124
Laramie Regional Airport	51.3	25.5	38.4	0.5	69	04/30+	10	04/03	1.73	0.66	161
Rawlins Municipal Airport	54.9	28.7	41.8	1.7	72	04/30+	7	04/03	0.89	-0.16	85
Sheridan County Airport	59.0	29.4	44.2	0.6	80	04/14	15	04/03	1.43	-0.17	89

April 2015 Highlights

Monthly Rankings

Precipitation in inches

Wettest / Driest	Precipitation / Ranking	Record / Year	Period of Record
Evergreen, CO	4.40 / 6th wettest	6.32 / 1980	1961-2015
Grand Junction, CO	2.12 / 3rd wettest	2.30 / 2004	1893-2015
Goodland, KS	4.84 / 4th wettest	5.69 / 1944	1895-2015
Sidney Muni AP, NE	5.51 / WETTEST	4.43 / 1977	1948-2015
Brookings 2 NE, SD	0.30 / 4th driest	0.14 / 1934	1893-2015
Ipswich, SD	0.28 / 9th driest	Trace / 1987	1894-2015
Watertown Regional AP, SD	0.39 / 5th driest	0.17 / 1934	1893-2015
Chugwater, WY	4.12 / 7th wettest	7.07 / 1920	1900-2015
Laramie AP, WY	1.73 / 6th wettest	3.71 / 1983	1948-2015
Wheatland 4 N, WY	5.32 / 2nd wettest	6.08 / 1920	1893-2015
Snowiest / Least Snowiest	Snowfall / Ranking	Record / Year	Period of Record
Rapid City, SD	Trace / tied least snowiest	0.1 / 1962	1942-2015
Sybillie Rsch Unit, WY	18.4 / 8th snowiest	52.0 / 1968	1964-2015

All data are preliminary and subject to change. + indicates multiple dates, latest date listed.

Data are retrieved through the Applied Climate Information System (ACIS) and are available online through the CLIMOD system.

For more information please contact us: <http://www.hprcc.unl.edu/contact.php>.

North Dakota Monthly Climate Summary

Daryl Ritchison - Assistant State Climatologist
 North Dakota State Climate Office, North Dakota State University
 For more information: www.ndsu.edu/ndsco or www.ndawn.ndsu.nodak.edu



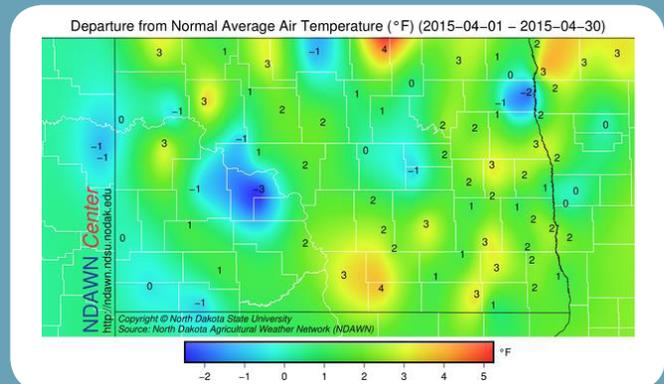
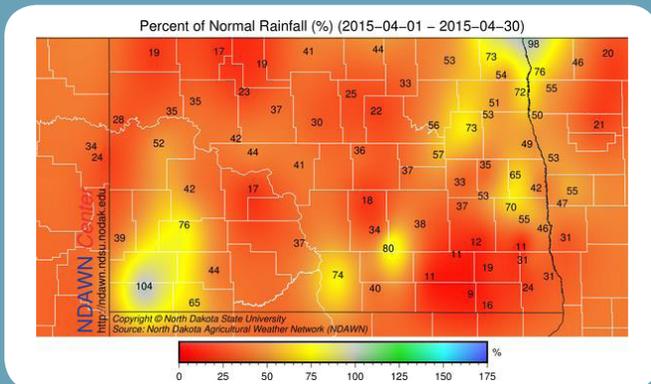
Precipitation:

Much of North Dakota recorded less than 50 percent of normal rainfall in April (Figure 1). For some parts of the state, it was the 8th consecutive month with below average precipitation. The North Dakota Agricultural Weather Network (NDAWN) average rainfall was 0.51 inches which is well below the average of 1.22 inches. That would rank the month as the 15th driest April on record. The persistently dry weather over the past several months has created Abnormally Dry or Moderate Drought conditions in 81% of North Dakota according to the April 28, 2015 U.S. Drought Monitor.

Temperature:

In typical April fashion, temperature fluctuations in North Dakota were quite extreme during the month with a minimum of 7° on April 3 in Cavalier to a maximum of 83° on April 30 in Crary. Several stations recorded minimums in the lower teens as late as April 23. The monthly anomalies from normal finished just slightly above average for much of the state (Figure 2). The NDAWN statewide average temperature was 44.0 degrees which is 1.6 degrees above normal. That would rank the month as tied for the 30th warmest on record. That was a notable departure from the previous two years as April 2013 ranked as the coldest on record and April 2014 ranked as the 25th coldest on record.

Temperature and Precipitation Overview



Above: Percent of normal precipitation (left, figure 1, produced by NDAWN) and departure from normal average temperature (right, figure 2, produced by NDAWN) for April 2015 in North Dakota.

Kansas Climate Summary

Mary Knapp - Service Climatologist
Kansas Weather Data Library, Kansas State University
For more information: www.ksre.ksu.edu/wdl



April 4th Freeze

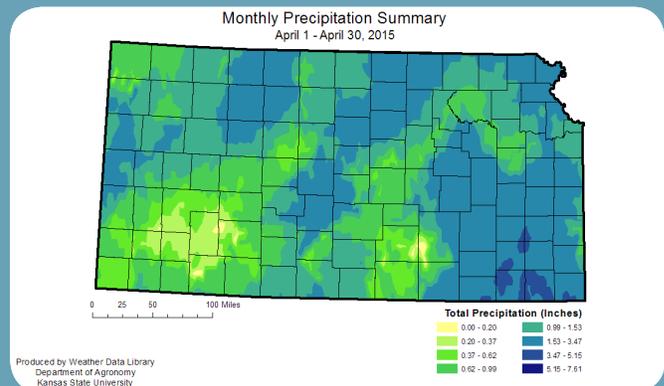
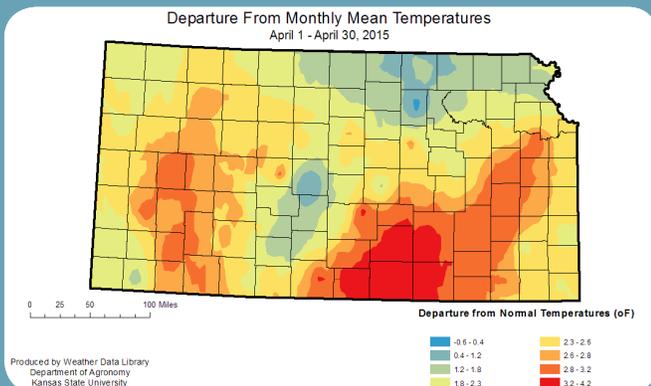
April temperatures ranged from 20F on April 5th at Wilmore 16SE (Comanche County) to 96F at Great Bend (Barton County) on the 7th. The widespread low temperatures on the 4th and 5th of April had a negative impact on winter wheat. The largest area of the coldest temperatures coincided with wheat that was at the most vulnerable stages. Overall, the temperatures averaged 55.7F, which was 2.4 degrees warmer than normal. It ranks as 34th warmest since 1895 or in the warmest third of the period of record. The warmest departures from average were in the South Central Division, while the coolest conditions prevailed in the Northeastern Division. With the warmer than average temperatures for the month, it is not surprising that 25 new record daily highs were set. None of those records were new record highs for the month. There were no records set for low daily maximums. On the low temperature side, few records were set. There were 5 record low minimums set and 10 record high minimums recorded.

State-wide average precipitation was 2.55 inches which was 95 percent of normal. That means the deficit averages just -0.08 inches. Still, the distribution was highly variable. The Southwest Division had the lowest percent of normal at 60 percent or 1.06 inches. This left a deficit of -0.62 inches. Even within the division, amounts were highly variable. Ashland (Clark County) reported 3.34 inches while the Garden City Experiment Station (Finney County) reported just 0.25 inches. State-wide, the wettest day of the month was on the 17th, when the average reported precipitation was 0.56 inches, with the highest amount reported that day 4.62 inches. However, the highest daily total reported for the CoCoRaHS network was at Caldwell 8.4 N in Sumner County, on the 19th. The highest 24hr total reported for the month at a National Weather Service Coop site was 3.95 inches at Sharon Springs, Wallace County, on the 17th. Highest monthly total for the National Weather Service was 7.61 inches at Hudson, Stafford County. The greatest monthly total for the CoCoRaHS network 7.36 inches at Buffalo 0.1 NW, Wilson County. Snowfall was concentrated at the beginning of the month, with the highest totals reported in the Northwestern Division. Greatest monthly totals were 2.7 inches at Goodland 0.5 ENE, Sherman County (CoCoRaHS) and 3.6 inches at Colby 1SW, Thomas County (NWS).

The severe weather season was more active in April than in March. There were 29 tornadoes reported in April. Damaging wind reports totaled 71, while hail reports numbered 128. One of the most active days of the month occurred on the 24th, when multiple tornadoes, with high winds and hail occurred. As part of that outbreak hail of 1.5 inches was reported in Lucas, KS. Most cars and roofs in the town sustained significant damage.

Drought conditions persist across the state, particularly in the west. There was widespread degradation in the western portions of the state, but the drought-free portion of the state expanded in the Northeast and slightly in the Southeast. While an El Niño continues, it is weak and the impacts are uncertain. The May temperature outlook calls for greater chances of normal temperatures for most of the state. The precipitation outlook is for wetter than normal conditions state-wide. This does not indicate how that moisture might be distributed. If the outlook materializes, drought conditions are likely to improve over parts of the state during the next month.

Temperature and Precipitation Overview



Above: April 2015 departure from normal monthly mean temperatures (left) and total precipitation (right) in Kansas. Maps produced by Weather Data Library, Department of Agronomy, Kansas State University.

About the High Plains Regional Climate Center

The High Plains Regional Climate Center (HPRCC) is one of six NOAA Regional Climate Centers (RCCs) that has been providing timely climate data and information to the public for cost effective decision-making since 1987. The HPRCC primarily serves the six-state region of Colorado, Kansas, Nebraska, North Dakota, South Dakota, and Wyoming, but has also served people from all across the country and even throughout the world. HPRCC operates under a three-tiered structure of climate services and works closely with other organizations on the local, regional, and national levels. HPRCC staff engage with a wide range of stakeholders including K-20 education, the public, media, private industry, research, and state/tribal/federal entities, among others.

Much of the data and products found throughout this publication were built on the Applied Climate Information System (ACIS) framework. ACIS was designed to manage the complex flow of information from climate data collectors to the end users of climate data information. The main purpose of ACIS is to alleviate the burden of climate information management for people who use climate information to make management decisions.

HPRCC is involved in the ongoing development and management of ACIS. In the spring of 2014, the RCCs released a new website for ACIS. This new and improved website not only contains descriptions of ACIS and the sources of data found within, but also features real-world examples of how RCCs and external groups are using ACIS for their particular climate data needs. In addition to these examples, there is extensive documentation and tutorials on how ACIS can be used and accessed by external clients using Web Services. For more information see: <http://rcc-acis.org>.



Additional Summary Information for the High Plains

Missouri River Basin Quarterly Climate Impacts and Outlook

For more information:
www.drought.gov/drought/content/resources/reports

Midwest and Great Plains Monthly Climate and Drought Webinar

To sign up for future webinars:
<http://www.drought.gov/drought/content/regional-programs/regional-drought-webinars>

For an archive:
www.hprcc.unl.edu/webinars.php

Author Information

For questions, comments, or suggestions, please contact:
Natalie Umphlett, Regional Climatologist
(402) 472-6764 - numphlett2@unl.edu
712 Hardin Hall, 3310 Holdrege Street
Lincoln, NE 68583-0997
<http://hprcc.unl.edu>

