



# July 2015 Climate Summary

Wildflowers in Rocky Mountain National Park, CO. Photo by Natalie Umphlett  
<http://hprcc.unl.edu>

## Mild Weather

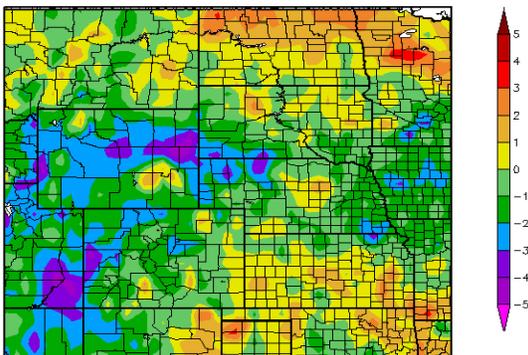
After several months of extremes, July was overall a milder and quieter month for the U.S. The majority of the country was near normal with temperature departures of 2.0 degrees F (1.1 degrees C) above or below normal. The main exceptions on the warm side were the Pacific Northwest, especially the state of Washington, and pockets of the South where temperature departures were generally 2.0-6.0 degrees (1.1-3.3 degrees C) above normal. Departures on the higher end occurred in the Pacific Northwest. Cooler weather occurred in portions of the Desert Southwest, the Four Corners region, and into Wyoming where departures of 2.0-4.0 degrees F (1.1-2.2 degrees C) below normal were common. Other areas of the High Plains region were largely near normal.

In regards to precipitation, California and Nevada were the big winners with precipitation totals in excess of 800 percent of normal at many locations. Meanwhile, areas of Washington, Oregon, and Texas received little to no precipitation. For the High Plains region, precipitation varied with wetter weather occurring in western Wyoming, western Colorado, and pockets of Kansas, Nebraska, and South Dakota. Dryness occurred in eastern Colorado, southwestern and central Nebraska, eastern Wyoming, and pockets of Kansas and the Dakotas.

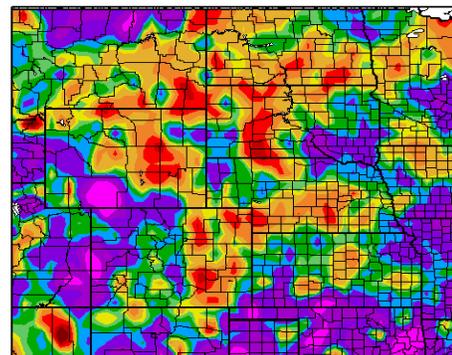
Although average temperatures were near normal this month, there were plenty of hot and humid days. These conditions tended to facilitate crop development, but stress livestock. Corn development was generally ahead in the Dakotas, but behind in Nebraska and Kansas. Meanwhile, winter wheat and other small grain harvest was completed in southern areas and underway in northern areas. Severe weather, mainly in the form of high winds and hail, did cause some damage to crops in North Dakota, however the full impact of the damage will not be realized until harvest time. For the High Plains region, a total of 859 severe storm reports came into the Storm Prediction Center this month. Of this total 28 were tornado reports, 357 were hail reports, and 474 were wind reports.

## Temperature and Precipitation Overview

Departure from Normal Temperature (F)  
7/1/2015 - 7/31/2015



Percent of Normal Precipitation (%)  
7/1/2015 - 7/31/2015



Above: Departure from 1981-2010 normal temperature (left) and percent of normal precipitation (right) for July 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

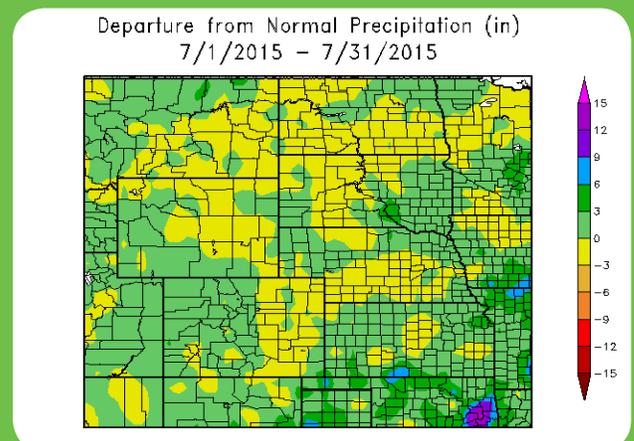
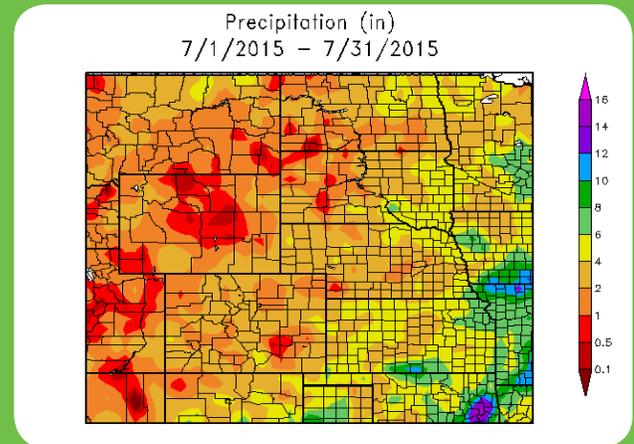
Precipitation varied widely across the High Plains region, however this is typical for the summer. Some areas, like west-central South Dakota, central Wyoming, and eastern Colorado only received at most 50 percent of normal precipitation. Other areas had precipitation totals of at least 150 percent of normal, including western parts of Colorado and Wyoming, southeastern South Dakota, and southern and northeastern Kansas.

A few locations ranked in the top 15 driest Julys on record, such as Pueblo, CO (12th) and Casper, WY (15th), but many locations receiving the heavier precipitation ranked in the top ten wettest Julys on record. A sampling of these included Laramie, WY (5th), Scottsbluff, NE (7th), Topeka, KS (7th), and Rapid City, SD (9th).

Let's take a closer look at a couple of these wet locations. Topeka's July total came to 9.33 inches (237 mm) and was enough to rank as the 7th wettest July on record (period of record 1887-2015). Although not nearly enough to break the record of 12.02 inches (305 mm) set in 1950, the precipitation over the past three months in Topeka has been impressive. Since May 1, Topeka has received 24.98 inches (634 mm), which is the 4th highest total for those three months combined. This is over 10 inches (254 mm) higher than the normal precipitation of 14.13 inches (359 mm) for those three months. Rapid City, on the other hand, has had its wettest May 1- July 31 on record with 17.99 inches (457 mm) of precipitation. This beats out the old record of 15.65 inches (398 mm) set in 1946 (period of record 1942-2015). Similar to Topeka, this amount is over 10 inches (254 mm) above the normal of 7.60 inches (193 mm).

The most interesting storm system this month brought fire danger, severe storms, and even a rare July snow. Out ahead of a potent cold front, hot and dry air caused very high fire danger, which led to grass fires in portions of Wyoming. Severe storms then occurred along the cold front, bringing damaging winds and hail to Wyoming, Montana, North Dakota, South Dakota, and Nebraska. It may have looked like it snowed in some parts, such as Custer, South Dakota, where plows had to be deployed to move the hail. But, this storm system did bring snow to areas of Wyoming, Montana, and Idaho. As the front passed, very cold air for this time of the year caused snow to fall in the mountains at elevations of at least 8,000 feet.

### Regional Precipitation



Above: Total precipitation in inches (top) and departure from normal precipitation in inches (bottom) for July 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>.

## Streamflow Update

According to data from the United States Geological Survey (USGS), both record high and record low streamflows occurred across the country this month. Widespread record high flows occurred in eastern portions of the Mississippi River Basin, especially in the Ohio and Illinois River valleys. On the other end of the spectrum, record low streamflows occurred in drought stricken areas of the western U.S. In the High Plains region, July streamflows were similar to June with high streamflows in areas of the Front Range in Colorado and the Black Hills in South Dakota, and below normal flows along the Republican River in Nebraska and also north-central Kansas. Meanwhile, streamflows in areas of western Montana have declined as drought intensifies. According to the U.S. Army Corps of Engineers, slightly above normal flows are expected along the Missouri as stored flood waters are evacuated during the fall.

# Temperatures

July average temperatures were generally mild with temperature departures within 2.0 degrees F (1.1 degrees C) above or below normal. The only exception on the warm side was northern North Dakota, which had temperature departures of 2.0-4.0 degrees F (1.1-2.2 degrees C) above normal. On the cool side, a large area of Wyoming, along with portions of western Colorado, the panhandle of Nebraska, and southwestern South Dakota had temperature departures generally in the 2.0-4.0 degrees F (1.1-2.2 degrees C) below normal range. A few pockets had larger departures and a few locations ranked in the top 15 coolest Julys on record, including Grand Junction, CO (coolest), Worland, WY (9th coolest), and Casper, WY (11th coolest). Grand Junction's new record of 73.7 degrees F (23.2 degrees C) beat the old record set in both 1911 and 1912 by a full degree (period of record 1893-2015). July is typically the warmest month of the year, but this year June was slightly warmer - coming in at 74.0 degrees F (23.3 degrees C). Only one other year, 1918, has July been cooler than June in Grand Junction.

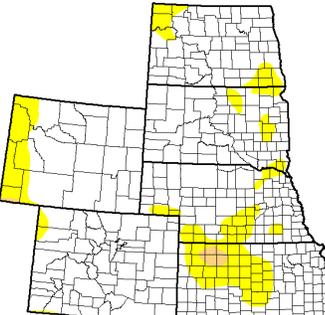
At the end of the month, a potent cold front brought freezing temperatures to portions of Montana, Wyoming, and Colorado. Much of western Wyoming, especially in the Yellowstone National Park area, had temperatures well below freezing. While the frost free season in the mountainous areas of these states is typically short, these freezing temperatures were quite late in the season, even for Wyoming's standards. Interestingly, prior to this cold front passage, there had been no temperatures that low since May. With the average last spring freeze occurring in late June or early July, some stations were on track to have their earliest last spring freeze on record.

# Drought Conditions

Although not a major issue at this time, improvements in drought conditions continued this month for the High Plains region. According to the U.S. Drought Monitor, the total area in drought (D1-D4) in the region decreased from just over 1 percent to a little over a half a percent. Moderate drought (D1) was removed in northeastern Nebraska and eastern South Dakota, and only abnormally dry conditions remain. At this time, only northwestern Kansas and southwestern Wyoming have any D1 left.

## U.S. Drought Monitor

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



**July 28, 2015**  
(Released Thursday, Jul. 30, 2015)  
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0	D1	D2	D3	D4
<b>Current</b>	84.98	14.36	0.67	0.00	0.00	0.00
<b>Last Week</b> 7/21/15	85.44	10.00	0.57	0.00	0.00	0.00
<b>3 Months Ago</b> 4/28/15	33.15	22.98	28.64	13.71	0.51	0.00
<b>Start of Calendar Year</b> 1/1/15	99.44	29.27	5.02	6.10	0.36	0.00
<b>Start of Water Year</b> 10/1/14	79.99	8.86	6.17	5.12	0.86	0.00
<b>One Year Ago</b> 7/28/14	63.28	15.06	13.06	6.51	1.90	0.19

**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 more detail statements.

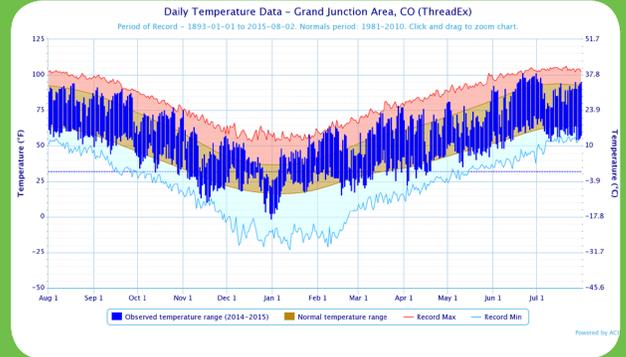
Author: Richard Heim, NCEI/NOAA





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/>.

## Station Spotlight: Grand Junction, CO



Above: Daily temperatures along with extremes and normals values over the past year in Grand Junction, CO.

While most of the region had improvements, there are a couple of areas to monitor as abnormally dry conditions (D0) expanded in southern and central Nebraska as well as central Kansas. An area of D0 in the panhandle of Nebraska also developed. These areas have experienced a mix in both short and long term impacts with a combination of precipitation deficits and low streamflows.

Although not in the High Plains region, it is important to monitor the drought conditions in Montana as the Missouri River is an important resource for the region and beyond. Areas of western Montana had degradations over the past month as extreme drought conditions (D3) developed there. At the end of July, over 35 percent of the state was in drought (D1-D4), with about 14 percent in the D3 category. With a strong El Niño likely this fall and winter, dry conditions may be in store for the headwaters of the Missouri River. These conditions should be monitored as the snow season progresses this upcoming winter and spring.

# Climate Outlooks

The status of El Niño remains about the same, with a 90 percent chance that these conditions will continue through the winter and about an 80 percent chance that conditions will continue through the early spring, according to the Climate Prediction Center. As mentioned in previous summaries, El Niño impacts are most pronounced in the winter, so stay tuned for more details as the year progresses. 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>.

If you are looking for more information about El Niño and its impacts there are many resources available. One way to get up-to-date information is to check out the ENSO blog here: <https://www.climate.gov/news-features/department/8443/all>. Or, in the coming weeks, a special report on El Niño in the Missouri River Basin states will be written and posted on the HPRCC website: <http://www.hprcc.unl.edu>.

## Temperature

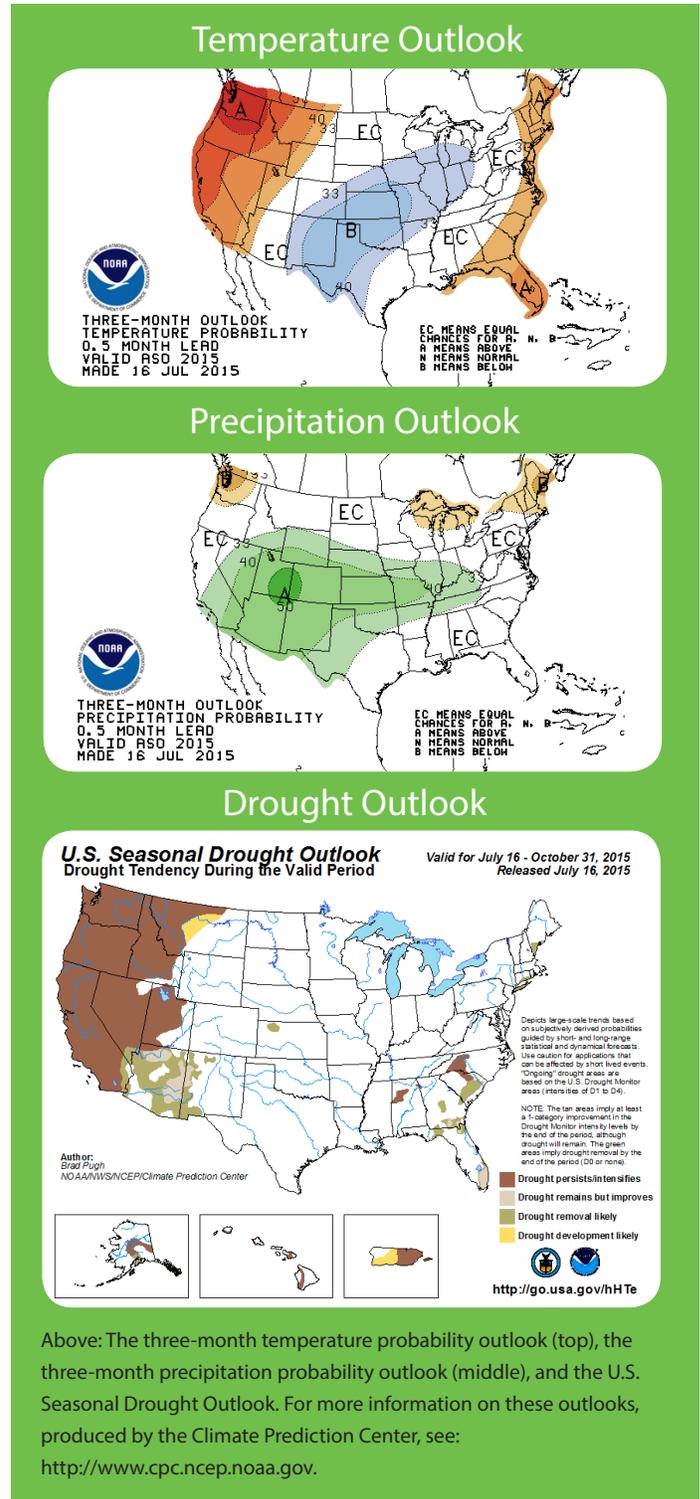
The temperature outlook through October is quite similar to last month's outlook with a higher probability of above normal temperatures for the western third of the U.S. and areas along the east coast. Meanwhile, much of the central U.S., extending from New Mexico and Texas to the northeast through Michigan and Ohio, could experience below normal temperatures. For the High Plains, increased chances for below normal temperatures include Kansas, much of southern and eastern Colorado, and portions of southern and eastern Nebraska. The only area that falls under an increased chance for above normal temperatures is roughly the western half of Wyoming. Other areas of the region have equal chances for above, below, or near normal temperatures.

## Precipitation

The precipitation outlook for the next three months shows a higher probability for above normal precipitation across much of the Desert Southwest and portions of the central U.S. For the High Plains region, this includes Colorado, Kansas, most of Nebraska and Wyoming, and southwestern South Dakota. Meanwhile, below normal precipitation could occur for parts of the Pacific Northwest, Great Lakes, and Northeast. The remainder of the contiguous U.S. has equal chances for above, below, or near normal precipitation.

## Drought

The July 16th release of the U.S. Seasonal Drought Outlook shows that in the High Plains Region, the one remaining area of drought in Kansas could be removed by the end of October, however the little sliver in southwestern Wyoming should remain. With the exception of portions of the Four Corners region, much of the drought in the western U.S. is expected to persist or intensify. Drought is expected to develop in central Montana.



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	86.6	58.6	72.6	-1.4	96	07/17	52	07/09	1.82	-0.73	71
Alamosa San Luis Airport	80.1	48.1	64.1	-0.5	87	07/01	42	07/17	1.34	0.37	138
Colorado Springs Municipal Airport	82.8	57.7	70.3	-0.6	90	07/27+	54	07/16+	3.14	0.30	111
Denver International Airport	87.6	57.9	72.8	-1.4	97	07/27	52	07/28	1.06	-1.1	49
Grand Junction Walker Field Airport	87.8	59.5	73.7	-4.5	98	07/03	53	07/10	1.25	0.64	205
Pueblo Memorial Airport	93.0	62.3	77.7	1.9	101	07/26+	56	07/08	0.64	-1.42	31

Kansas	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Concordia Municipal Airport	88.3	66.8	77.5	-1.6	101	07/24	53	07/08	3.57	-0.35	91
Dodge City Regional Airport	91.8	66.4	79.1	-0.5	106	07/13	49	07/08	2.14	-0.94	69
Goodland Renner Field	90.0	61.5	75.8	0.1	101	07/24	52	07/07	2.28	-1.19	66
Topeka Municipal Airport	88.5	69.7	79.1	0.1	100	07/24	60	07/04	9.33	5.51	244
Wichita Mid-Continent Airport	91.6	72.7	82.2	1.1	100	07/28+	63	07/08+	7.40	4.08	223

Nebraska	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Chadron Municipal Airport	87.5	56.2	71.9	-1.7	100	07/26	43	07/29	2.34	0.23	111
Grand Island Airport	87.3	63.9	75.6	-0.6	98	07/12	50	07/08	2.58	-0.82	76
Lincoln Municipal Airport	88.5	65.7	77.1	-0.5	100	07/24	52	07/08	2.39	-1.01	70
Norfolk Karl Stefan Airfield	85.3	63.5	74.4	-0.6	96	07/17	49	07/08	5.14	1.82	155
North Platte Regional Airport	87.9	60.4	74.2	-0.1	98	07/17+	49	07/07	2.55	-0.52	83
Omaha Eppley Airport	86.9	67.0	77.0	0.3	99	07/24	52	07/08	2.40	-1.43	63
Valentine Miller Field	87.6	59.2	73.4	-1.1	102	07/23	46	07/29	3.25	0.04	101

North Dakota	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Bismark Municipal Airport	84.9	58.6	71.8	0.7	95	07/23	45	07/07	1.51	-1.38	52
Fargo International Airport	83.5	61.6	72.5	1.5	91	07/27	42	07/07	2.78	-0.01	99
Grand Forks International Airport	81.9	59.3	70.6	2.0	90	07/12	43	07/07	5.10	1.95	162
Theodore Roosevelt Airport	84.2	55.5	69.9	0.7	95	07/26	49	07/07	2.37	-0.07	97
Williston International Airport	86.6	58.2	72.4	2.3	99	07/25	50	07/24	1.55	-0.99	61

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>.

## July 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	85.8	59.5	72.6	1.3	97	07/12	48	07/09+	4.06	1.04	134
Huron Regional Airport	85.5	61.9	73.7	0.0	98	07/12	50	07/07	3.61	0.69	124
Pierre Regional Airport	87.6	60.6	74.1	-1.3	98	07/23	51	07/07	2.15	-0.46	82
Rapid City Regional Airport	84.4	57.5	71.0	-1.6	95	07/23+	48	07/29	4.01	2.16	217
Sioux Falls Joe Foss Field Airport	83.0	61.4	72.2	-0.8	92	07/17+	50	07/21+	4.19	1.10	136

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	86.1	50.7	68.4	-2.1	97	07/04	36	07/29	0.57	-0.84	40
Cheyenne Municipal Airport	81.7	54.5	68.1	-1.3	92	07/27	47	07/29	1.85	-0.34	84
Lander Hunt Field Airport	83.9	53.2	68.5	-2.7	95	07/04	39	07/28	0.50	-0.28	64
Laramie Regional Airport	78.1	47.6	62.9	-1.1	87	07/04	39	07/30+	2.39	0.96	167
Rawlins Municipal Airport	80.9	50.1	65.5	-1.5	90	07/04	37	07/29	0.95	0.11	113
Sheridan County Airport	85.3	52.3	68.8	-1.2	96	07/26	45	07/28	0.84	-0.34	71

## July 2015 Highlights

### Monthly Rankings

Precipitation in inches / Temperature in degrees F

Wettest	Precipitation / Ranking	Record / Year	Period of Record
Gateway, CO	4.01 / 2nd wettest	5.29 / 2013	1947-2015
Paonia 1 SW, CO	2.43 / 3rd wettest	2.74 / 2006	1893-2015
Topeka, KS	9.33 / 7th wettest	12.02 / 1950	1887-2015
Wichita, KS	7.40 / 6th wettest	13.37 / 1950	1888-2015
Agate 3 E, NE	3.89 / 3rd wettest	4.78 / 1949	1900-2015
Scottsbluff, NE	3.83 / 7th wettest	5.33 / 1912	1893-2015
Rapid City, SD	4.01 / 9th wettest	6.13 / 1969	1942-2015
Yankton, SD	5.71 / 9th wettest	10.21 / 2010	1932-2015
Laramie 2 NW, WY	2.81 / 5th wettest	3.43 / 2014	1966-2015
Rock Springs AP, WY	2.12 / 3rd wettest	3.67 / 1973	1948-2015
Coollest	Temperature / Ranking	Record / Year	Period of Record
Grand Junction, CO	73.7 / COOLEST	74.7 / 1912+	1893-2015
Redbird, WY	70.1 / 8th coolest	67.1 / 1993	1948-2015
Worland, WY	70.9 / 9th coolest	65.5 / 1993	1960-2015

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

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

# North Dakota Monthly Climate Summary

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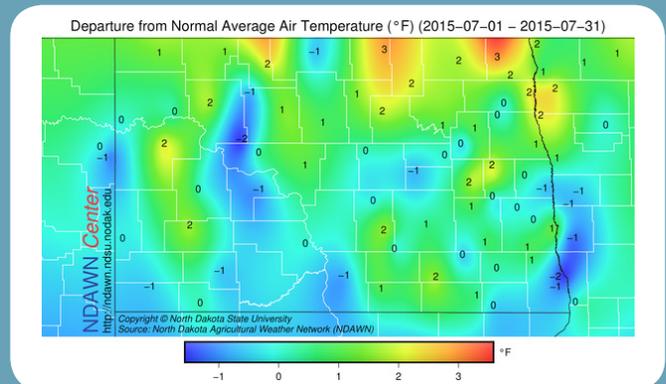
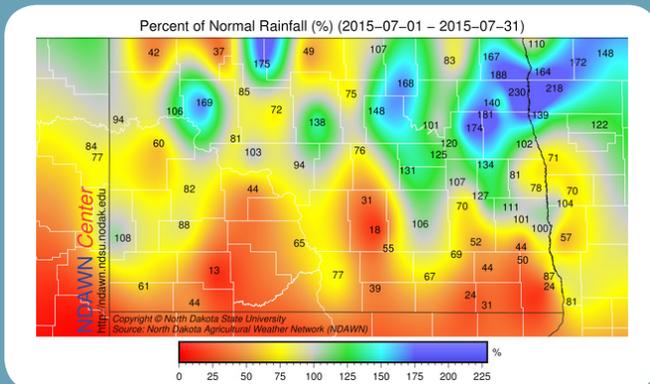
## Precipitation:

Although northeastern North Dakota recorded well above average precipitation in July, much of the rest of the state received minimal rainfall during the month (Figure 1). Southern North Dakota in particular was quite dry with many locations recording less than 50% of normal precipitation. The North Dakota Agricultural Weather Network (NDAWN) average rainfall was 2.77 inches and the National Center for Environmental Information (NCEI) computed a statewide average of 2.46 inches. The average July rainfall is 2.87 inches. Using data from NCEI July 2015 ranked as the 64th driest since 1895.

## Temperature:

Many parts of North Dakota recorded temperatures slightly above average for the month (Figure 2). The NDAWN average temperature was 69.9 degrees and NCEI computed the statewide average at 70.1 degrees. The current July average is 69.1 degrees. That would rank the month as tied for the 45th warmest on record using data from NCEI. Although temperatures were slightly above average, with the exception of the far western portion of the state, temperatures on any given day above 90° were uncommon during the month. With the high heat confined to far western North Dakota it is of no surprise that the warmest NDAWN temperature recorded during the month was a 98° high that occurred in both Watford City and Bowman on July 26.

## 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 July 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](http://www.ksre.ksu.edu/wdl)



## Near Normal

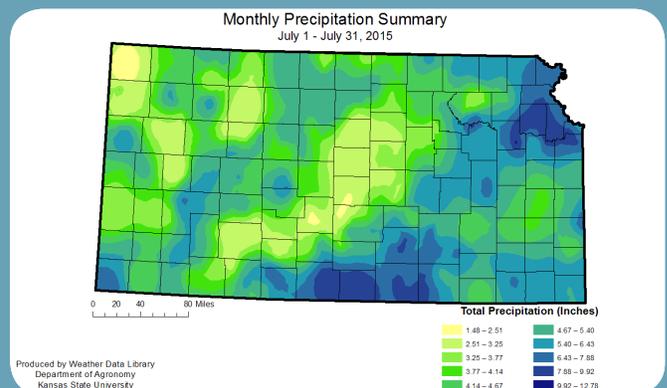
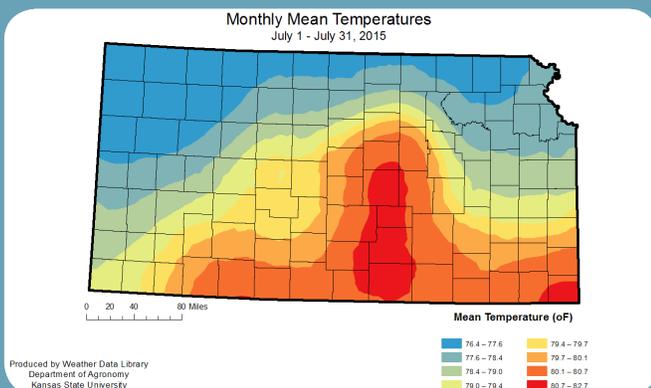
There were swings in both temperature and precipitation, but overall July was very close to normal. Average precipitation was 4.61 inches or 125 percent of normal. The Northwest division of the state saw the lowest average precipitation at 3.07 inches or 84 percent of normal. The other divisions with below normal precipitation were the North Central and Central divisions. In the Central Division, the average was 3.76 inches or 95 percent of normal, while the North Central Division averaged 4.10 inches or 98 percent of normal. Both the Southwest and South Central divisions had the same percent of normal, 176 percent, but the average precipitation was quite different. The Southwest division averaged 4.65 inches while the South Central division averaged 6.02 inches. This ranks as the 25th wettest July on record. The greatest monthly precipitation was 13.80 inches at Sun City 6S, Barber County (NWS) and 12.78 at Topeka 5.5 SE, Shawnee County (CoCoRaHS). While 71 new daily precipitation records were set, none of these were new records for July.

Temperatures were very close to normal. The state-wide average temperature was 78.8F, just 0.1 degree warmer than normal for the month. There were no new record high temperatures set, and only 4 records tied during the month. In contrast, there were 84 new record cold high temperatures, and 22 records that tied. On the low temperature side, the opposite prevailed with 16 new record warm low temperatures and 22 records tied. There was one new record low temperature for the month: 41F at Hoxie (Sheridan County) on the 28th. Not surprisingly, that was also the coldest reading across the state during July. The Southeast Division was the warmest, with an average of 80.0F, or 0.7 degrees warmer than normal. In contrast, the North Central Division was the coolest with an average of 78.4F, or -0.6 degrees cooler than normal. The Northeastern Division averaged 77.9F, exactly normal. The warmest reading was 108F and occurred at two different locations and dates: Lakin (Kearny County) on the 14th and Abilene 1W (Dickinson County) on the 24th. The coolest reading for the state was 41F at Hoxie (Sheridan County) on the 28th. While the temperatures weren't particularly outside of the normal range, late-planted spring crops such as corn and soybeans that had limited root development, continue to show stress.

Tornado activity continued to decline. Preliminary data indicate there were 7 tornadoes, compared to 15 tornadoes reported during June and 99 in May. Hail reports were also fewer with 55 reports this month versus 83 in June and 108 in May. There was an increase in damaging wind reports with 114 damaging wind reports this month, 65 reports in June, and only 52 reports last May.

Drought conditions deteriorated slightly, which was not unexpected in portions of the Northwest, North Central, and Central divisions, where rainfall for July was less than normal. The only remaining moderate drought area is in Northwest and North Central KS, with an expanding area of abnormally dry conditions in the Central. Thirty seven counties in western Kansas remain in drought watch status according to the latest advisory from the Kansas Water Office. A return to normal or above normal precipitation is needed to sustain improvements. Some long-term hydrological deficits are in place affecting some water supplies and reservoirs. For example, Norton, Cedar Bluff, Kirwin and Webster reservoirs are all less than 75 percent of conservation pool.

## Temperature and Precipitation Overview



Above: July 2015 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](http://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](http://www.hprcc.unl.edu/webinars.php)

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