



July 2018 Climate Summary



Buffalo roam at Konza Prairie near Manhattan, KS. Photo courtesy of Margaret Crowder. <http://hprcc.unl.edu>

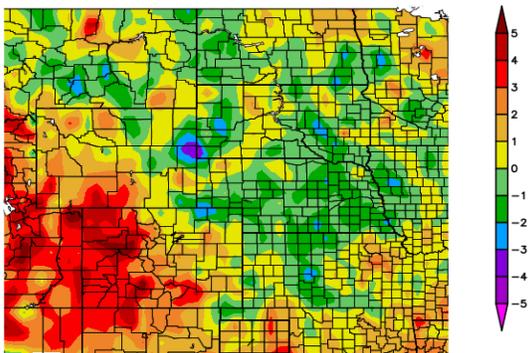
A Month of Extremes

Temperature and precipitation patterns varied across the High Plains in July, and the presence of extremes was no exception this month. Much of the region experienced relief from the heat, particularly in the eastern High Plains where temperatures were slightly below normal. In fact, the second half of July brought fall-like temperatures to areas of the Dakotas, Nebraska, and Kansas. However, the extreme heat continued in the western High Plains, providing no relief to drought-stricken areas of Colorado and southern Wyoming. Heavy rains provided drought relief to southwestern Kansas and portions of the Dakotas, but it also caused flooding in locations such as Brookings, South Dakota. Severe weather was a prominent feature throughout the High Plains in July, as tornadoes, hail, and high winds damaged crops and structures. Meanwhile, eastern Kansas, western Colorado, and southern Wyoming missed out on the rains, and drought impacts continued to mount. Streamflows were indicative of heavy rainfall or the lack thereof throughout the region, with high flows in portions of South Dakota and Nebraska, and low flows in areas of Colorado, Wyoming, and Kansas.

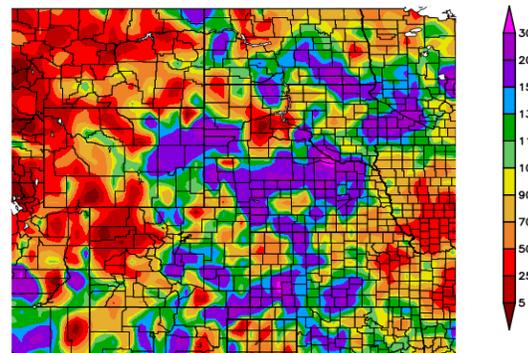
July marked the approximate halfway point through the growing season and, for the most part, crops were faring well. Kansas was the exception where nearly one-quarter of the corn and soybean crops were in poor to very poor condition, according to the July 31st U.S. Department of Agriculture's Weekly Weather and Crop Bulletin. Corn progress was well ahead of schedule due to the heat experienced during the late spring and early summer, and it is expected to mature early across much of the region this year. The winter wheat harvest was nearly wrapped up in Colorado and Kansas, and production was negatively impacted by a combination of drought and hailstorms. Pastureland was suffering in the two states, with 46 percent of pastureland in Colorado and 35 percent of pastureland in Kansas in poor to very poor condition. Throughout the course of the month, topsoil moisture declined in all High Plains states except Colorado. However, it was still faring worst in Colorado, with 35 percent of the state's topsoil moisture rated poor to very poor.

Temperature and Precipitation Overview

Departure from Normal Temperature (F)
7/1/2018 - 7/31/2018



Percent of Normal Precipitation (%)
7/1/2018 - 7/31/2018



Above: Departure from 1981-2010 normal temperature (left) and percent of normal precipitation (right) for July 2018 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 extremes on both sides of the spectrum occurred in the High Plains during July. Excessively wet conditions could be found throughout northern and western Nebraska, southern Kansas, and pockets of the Dakotas. Heavy rains caused flooding in some areas, but were welcomed in others that were suffering from drought. Locations with a top 10 wettest July on record included Brookings 2NE (COOP), SD (2nd wettest), Rapid City, SD (2nd wettest), McCook, NE (9th wettest), and Valentine, NE (9th wettest). Other areas missed out on heavy rains in July. Precipitation was less than 50 percent of normal in western Wyoming, western Colorado, and eastern Kansas, causing drought to spread and intensify across these areas. Topeka, Kansas had its 5th driest July on record, while Grand Junction, Colorado tied for its 9th driest.

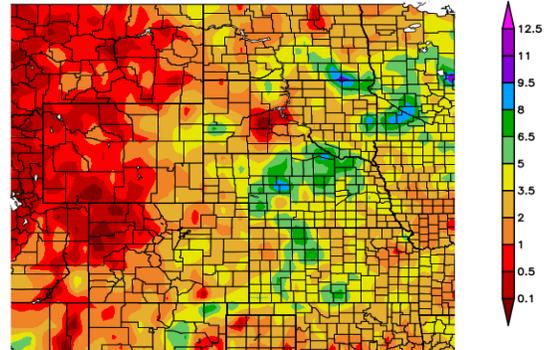
Severe weather ravaged the High Plains during July, with flooding, hail, tornadoes, and high winds causing damage to crops and structures. On the 10th, a tornado struck an RV park in the middle of the night in Watford City, North Dakota, killing one person and injuring 28 others. Rated an EF2 on the Enhanced Fujita Scale, the tornado was estimated to have winds of 127 miles per hour (204 km/hr) and destroyed 122 trailers, manufactured homes, and other structures, according to the National Weather Service in Bismarck.

On the 19th, torrential rains fell in Brookings, South Dakota, causing power outages and basements to flood. An astounding 6.83 inches (173 mm) of rain was recorded at Brookings 2NE (COOP), which was the highest 1-day total precipitation ever recorded in any month for this location (period of record 1893-2018). This crushed the previous record of 5.54 inches (141 mm) set on June 25, 1980.

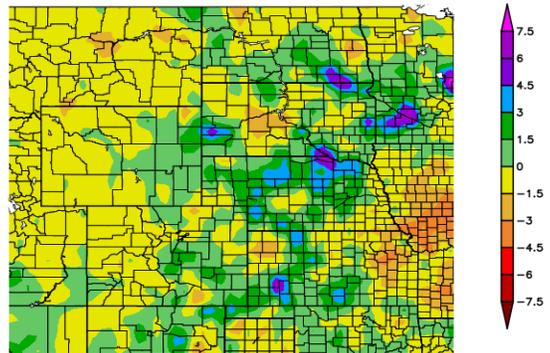
Numerous hailstorms damaged crops and structures throughout the High Plains in July. On the 8th, hail shredded tasseled corn, soybeans, and alfalfa in Oakes, North Dakota. During the last week of July, large hail pummeled portions of Colorado, Wyoming, and South Dakota. Corn was destroyed by baseball-sized hail in Granada, Colorado. According to local producers, widespread crop damage in northern and eastern portions of the state is expected to be costly. Just south of Cheyenne, Wyoming, hail accumulated to three inches deep, causing traffic issues on Interstate 25.

Regional Precipitation

Precipitation (in)
7/1/2018 – 7/31/2018



Departure from Normal Precipitation (in)
7/1/2018 – 7/31/2018



Above: Total precipitation in inches (top) and departure from normal precipitation in inches (bottom) for July 2018. 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

Streamflows varied across the region during July. According to the U.S. Geological Survey, streamflows were much above normal in western and southeastern South Dakota, as well as northern and central Nebraska. These areas were quite wet in July, receiving 150-300 percent of normal precipitation. Due to above-normal snowpack and heavy spring rains in the Upper Missouri River Basin, the U.S. Army Corps of Engineers continued higher-than-average releases from all Missouri River Mainstem projects in July. However, releases from Garrison Dam were reduced during the latter part of the month as they continued to evacuate stored floodwaters. Meanwhile, streamflows were much below normal in areas of the High Plains where drought has persisted, including eastern Kansas, southern and western Colorado, and southern Wyoming.

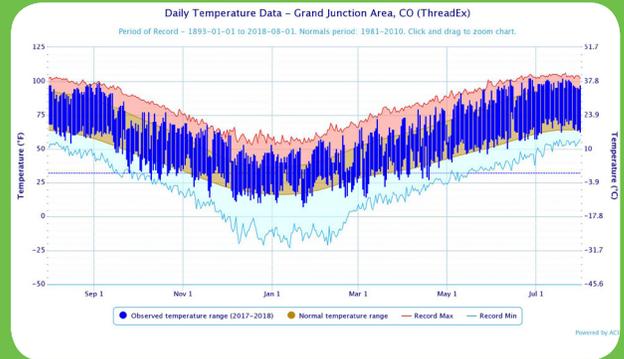
Temperatures

The warm pattern that began in May finally broke for much of the High Plains in July, with the majority of the region experiencing near normal to slightly below normal temperatures for the month. The exception was western Colorado and southern Wyoming, where above-normal temperatures prevailed. Departures in this region ranged from 3.0-5.0 degrees F (1.7-2.8 degrees C) above normal. Grand Junction, Colorado tied 1934 for its 2nd warmest July on record with a temperature departure of 4.3 degrees F (2.4 degrees C) above normal. Maximum daily temperatures were at or above 92.0 degrees F (33.3 degrees C) the entire month at this location, and the daily average temperature departure was above normal every day except July 1st.

July started out quite warm, and the 4th of July was no exception. High heat and humidity prompted the issuance of heat advisories for portions of the region. The period from July 7th-11th was particularly warm, as numerous daily maximum temperature records were broken. However, eastern portions of the High Plains saw relief from the heat and humidity during the latter half of the month.

Despite more seasonable temperatures in corn-producing areas of the region, the extreme warmth during the late spring and early part of the summer caused corn to progress more quickly than normal. The accumulation of corn Growing Degree Days, a way to estimate corn crop progress based on temperature, was well ahead of normal in July, which is an indication that the crop is expected to mature early. A positive outcome of an early maturing corn crop is a lower risk for damage from early fall frosts.

Station Spotlight: Grand Junction, CO



Above: Daily temperatures along with extremes and normals values since August 1, 2017 in Grand Junction, CO.

Drought Conditions

Several improvements and degradations in drought conditions occurred during the past month across the High Plains, according to the U.S. Drought Monitor. Overall, the area experiencing drought or abnormally dry conditions (D0-D4) decreased from 45 percent to 38 percent in the region. Conditions continued to improve in many areas of the Dakotas. Near normal to slightly below normal temperatures and pockets of heavy rainfall allowed for the removal of severe drought (D2) in both states, as well as a reduction in moderate drought (D1) and abnormally dry conditions (D0). Areas of southwestern Kansas and southeastern Colorado received some relief as well, resulting in a one-category reduction in drought severity in southeastern Colorado and the removal of drought in southwestern Kansas.

Areas in drought that missed out on beneficial precipitation saw a deterioration of conditions. While temperatures were mostly normal to slightly below normal in the region for the month, it was quite warm across southern Wyoming and western Colorado, with departures of 3.0-5.0 degrees F (1.7-2.8 degrees C) above normal. Combined with persistent dryness, drought spread and intensified across this region. In western Colorado, wildfires continued to burn, and the recreation and tourism industry experienced revenue loss. Conditions also worsened in eastern Kansas where it was warmer and drier than normal. The Governor of Kansas expanded the number of counties in a drought emergency to 50, and 43 counties were authorized for emergency haying and grazing of Conservation Reserve Program lands.

U.S. Drought Monitor

U.S. Drought Monitor High Plains

July 31, 2018
(Released Thursday, Aug. 2, 2018)
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)				
	None	D0-D4	D1-D4	D2-D4	D3-D4
Current	61.99	38.01	25.99	18.67	10.24
Last Week (7/24/18)	61.25	38.75	26.19	16.68	9.36
3 Months Ago (5/1/18)	44.21	55.79	36.76	21.06	10.79
Start of Calendar Year (1/1/18)	19.28	80.72	29.19	6.34	0.90
Start of Water Year (10/1/17)	56.15	43.85	21.11	8.37	1.32
One Year Ago (8/1/17)	41.61	58.39	31.93	17.83	8.11

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.

Author: Chris Fenimore, NCEM/NEOS/N OAA

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/>.

Climate Outlooks

According to the Climate Prediction Center, ENSO-neutral conditions are present in the Pacific. Equatorial sea surface temperatures are near to above average across most of the Pacific Ocean. ENSO-neutral is favored through summer 2018, with the possibility of El Niño nearing 65 percent by fall and 70 percent by winter. An El Niño Watch is in effect. If you are looking for more information about ENSO, check out the ENSO blog here: <https://www.climate.gov/news-features/department/8443/all>.

According to the National Interagency Fire Center, above-normal wildland fire potential is favored in western North Dakota in August and northern Wyoming through September; otherwise, wildland fire potential is expected to be normal in the High Plains through November.

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

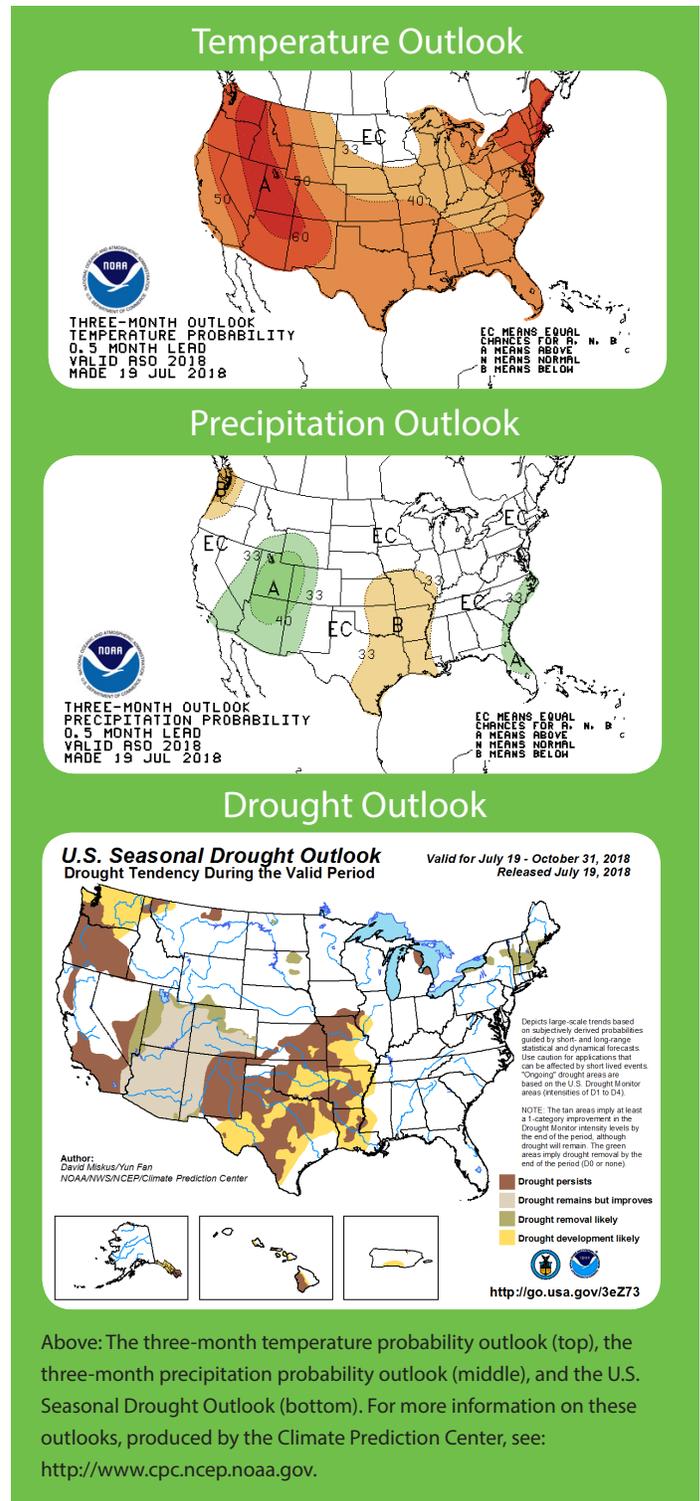
The August-October temperature outlook indicates an increased chance of above-normal temperatures for southern, western, central, and eastern portions of the contiguous U.S. In the High Plains, this includes Colorado, Wyoming, Kansas, Nebraska, the southwestern half of South Dakota, and extreme southwestern North Dakota. Elsewhere, there are equal chances for above-, below-, and near-normal temperatures during the August-October period.

Precipitation

The precipitation outlook for the next three months calls for a higher probability of above-normal precipitation across the Four Corners region and the southeast Atlantic Coast. In the High Plains, this includes much of Wyoming as well as western and central Colorado. Below-normal precipitation is expected in the Pacific Northwest and southern portions of the Plains and Midwest, including the eastern half of Kansas and extreme southeastern Nebraska. Elsewhere, there are equal chances for above-, below-, and near-normal precipitation in the contiguous U.S. during the August-October period.

Drought

The July 19th U.S. Seasonal Drought Outlook shows that drought is expected to persist across parts of the Northwest, Southwest, and Plains regions, as well as eastern Michigan. In the High Plains, this includes areas of drought in Kansas, extreme southeastern Nebraska, and southeastern Colorado. Drought may improve or be removed in the Southwest, the Plains, and the Northeast, including areas of Colorado, southern Wyoming, and the Dakotas. Drought development is likely across the Pacific Northwest, the southern Plains, and parts of the Midwest. In the High Plains, additional drought development is likely in a small portion of eastern Kansas through October.



Above: The three-month temperature probability outlook (top), the three-month precipitation probability outlook (middle), and the U.S. Seasonal Drought Outlook (bottom). 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	88.4	60.5	74.5	0.5	98	07/20+	45	07/01	2.47	-0.08	97
Alamosa San Luis Airport	84.8	49.3	67.1	2.5	91	07/22+	40	07/02	1.05	0.08	108
Colorado Springs Municipal Airport	86.4	58.6	72.5	1.6	97	07/20	52	07/31	4.46	1.62	157
Denver International Airport	90.2	60.3	75.3	1.1	99	07/03	47	07/01	1.03	-1.13	48
Grand Junction Walker Field Airport	97.8	67.1	82.5	4.3	102	07/19	57	07/01	0.08	-0.53	13
Pueblo Memorial Airport	94.3	63.5	78.9	3.1	104	07/19	54	07/31	1.78	-0.28	86

Kansas	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Concordia Municipal Airport	88.4	66.2	77.3	-1.8	97	07/12+	56	07/31	2.55	-1.37	65
Dodge City Regional Airport	92.6	66.2	79.4	-0.2	103	07/20	55	07/31	3.93	0.85	128
Goodland Renner Field	89.6	61.4	75.5	-0.2	100	07/19	50	07/31	1.03	-2.44	30
Topeka Municipal Airport	92.7	67.8	80.3	1.3	101	07/12+	57	07/31	0.49	-3.33	13
Wichita Mid-Continent Airport	92.9	71.3	82.1	1.0	101	07/19	62	07/31+	4.59	1.27	138

Nebraska	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Chadron Municipal Airport	89.0	60.6	74.8	1.2	102	07/08+	47	07/01	1.83	-0.28	87
Grand Island Airport	85.8	64.6	75.2	-1.0	96	07/12	53	07/31	3.58	0.18	105
Lincoln Municipal Airport	88.1	65.1	76.6	-1.0	97	07/12	57	07/31	1.35	-2.05	40
Norfolk Karl Stefan Airfield	84.4	63.3	73.8	-1.2	93	07/12	53	07/27	4.81	1.49	145
North Platte Regional Airport	88.6	62.7	75.6	1.3	98	07/12	47	07/31	2.28	-0.79	74
Omaha Eppley Airport	87.5	67.4	77.5	0.8	98	07/12	57	07/27	2.93	-0.90	77
Valentine Miller Field	88.0	63.8	75.9	1.4	102	07/11	52	07/31	5.94	2.73	185

North Dakota	Temperatures (degrees F)								Precipitation (inches)		
	Averages				Extremes				Totals		
	Max	Min	Mean	Depart	High	Date	Low	Date	Obs	Depart	% Norm
Bismarck Municipal Airport	85.2	58.1	71.6	0.5	98	07/14	47	07/02	3.89	1.00	135
Fargo International Airport	82.3	59.5	70.9	-0.1	92	07/11	46	07/27	2.86	0.07	103
Grand Forks International Airport	82.7	57.3	70.0	1.4	92	07/07	47	07/17	3.76	0.61	119
Theodore Roosevelt Airport	82.7	54.3	68.5	-0.7	94	07/14	45	07/26	2.57	0.13	105
Williston International Airport	83.9	56.8	70.4	0.3	94	07/07	44	07/27	3.00	0.46	118

All data are preliminary and subject to change. + indicates multiple dates, latest date listed. * indicates some missing data for the period. 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 2018 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	85.2	59.6	72.4	1.1	99	07/11	47	07/27	3.64	0.62	121
Huron Regional Airport	85.5	60.7	73.1	-0.6	99	07/11	48	07/27	1.71	-1.21	59
Pierre Regional Airport	88.5	61.3	74.9	-0.5	101	07/10+	50	07/27	0.52	-2.09	20
Rapid City Regional Airport	82.1	58.3	70.2	-2.4	95	07/07	50	07/31+	6.02	4.17	325
Sioux Falls Joe Foss Field Airport	83.8	62.5	73.2	0.2	95	07/12+	52	07/27	4.94	1.85	160

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	89.5	53.6	71.5	1.0	100	07/10+	40	07/01	1.62	0.21	115
Cheyenne Municipal Airport	84.9	55.5	70.2	0.8	96	07/19	42	07/01	2.43	0.24	111
Lander Hunt Field Airport	88.5	56.1	72.3	1.1	98	07/08+	45	07/01	0.67	-0.11	86
Laramie Regional Airport	83.3	48.2	65.8	1.8	93	07/10	34	07/01	0.89	-0.54	62
Rawlins Municipal Airport	88.9	51.6	70.3	3.3	96	07/08	39	07/01	0.14*	-0.70	17
Sheridan County Airport	88.5	53.8	71.2	1.2	103	07/10	42	07/04	1.21	0.03	103

July 2018 Highlights

Monthly Rankings

Precipitation in inches, Temperature in degrees F

Warmest	Temperature / Ranking	Record / Year	Period of Record
Grand Junction, CO	82.5 / 2nd warmest (tie, 1934)	84.1 / 2003	1893-2018
Alamosa, CO	67.1 / 4th warmest (tie, 1951)	68.4 / 2011	1906-2018
Wettest			
Precipitation / Ranking	Record / Year	Period of Record	
Brookings 2NE, SD (COOP)	9.54 / 2nd wettest	12.10 / 1963	1893-2018
Rapid City, SD	6.02 / 2nd wettest	6.13 / 1969	1943-2018
McCook, NE	6.61 / 9th wettest	10.86 / 1905	1895-2018
Valentine, NE	5.94 / 9th wettest	8.96 / 1983	1889-2018
Driest			
Precipitation / Ranking	Record / Year	Period of Record	
Topeka, KS	0.49 / 5th driest	0.03 / 1935	1887-2018
Grand Junction, CO	0.08 / 9th driest (tie, 1979+)	T / 1898	1893-2018

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North Dakota Climate Summary

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Precipitation:

Based on the National Centers for Environmental Information (NCEI), the statewide total July precipitation was 2.74 inches, which was 1.26 inches less than last month, 1.5 inches more than in July 2017, but 0.13 inch less than the 1981-2010 average, making it the 48th wettest July in the 124-year period of record. It was the wettest July since 2016. Below-average precipitation was observed commonly in all parts of the state except for an area in south-eastern North Dakota, where well-above-average conditions were observed (Figure 1). The greatest monthly precipitation accumulation was 9.77 inches, recorded in Ellendale, Dickey County. The greatest 24-hour precipitation was 5.55 inches, recorded in Ellendale, Dickey County, on July 19. Based on historical records, statewide July precipitation showed a positive long-term trend of 0.26 inch per century since 1895. The highest and lowest July precipitation for the state ranged from 7.97 inches in 1993 to 0.64 inch in 1936.

Temperature:

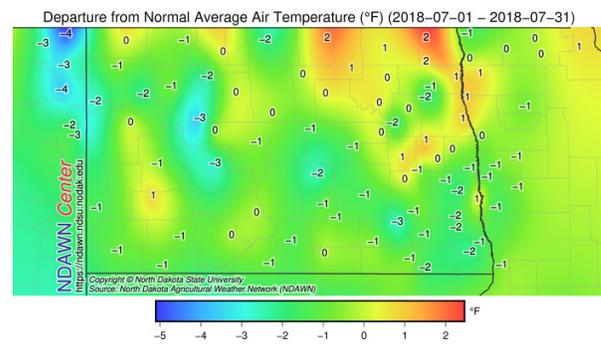
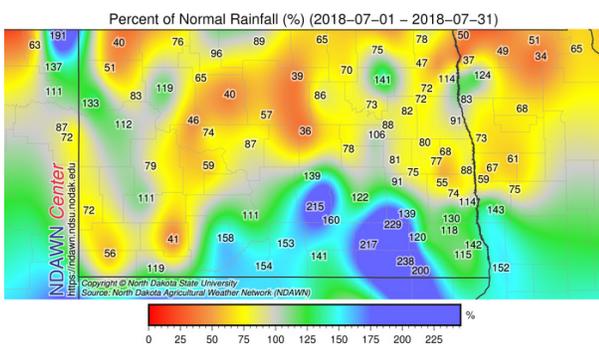
The official state average July temperature was 69.3 F, 1.9 F warmer than last month, 2.9 F cooler than in July 2017, but 0.2 F warmer than the 1981-2010 average, making it the 65th coolest July in the 124-year period of record. It was the warmest July since 2017. Below-average temperatures were observed commonly in the state, except for a small area in north-eastern North Dakota, where above-average conditions were observed (Figure 2). The state's highest and lowest daily temperatures ranged from 101 F on July 15 in Kildeer, Dunn County, to 41 F on July 26 in Taylor, Stark County. Based on the historical records, the state average July temperature showed a positive long-term trend of 0.1 F per decade since 1895. The highest and the lowest monthly state July average temperatures ranged from 80.1 F in 1936 to 61.8 F in 1992.

Drought and other notable impacts:

In general, overall drought conditions improved throughout the month. By the end of July, severe drought conditions in the north-central part were eliminated. Less than 2 percent of the state was experiencing drought by the end of the month (decreasing in coverage by 8 percent, compared with the previous month).

NDAWN's highest peak gust in July was 92 mph, recorded at the Robinson weather station in Kidder County on July 8, 2018. The NOAA Storm Report reported a total of 134 significant storm events in July. Across the observation network of weather stations with at least 30 years of history, a total of 22 daily high and five daily low-temperature-related records were set or tied. A total of 23 highest daily precipitation-related records were set or tied.

Temperature and Precipitation Overview



Above: Percent of normal precipitation (left, figure 1) and departure from normal average temperature (right, figure 2) for July 2018 in North Dakota. Both figures produced by NDAWN.

Kansas Climate Summary

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Split Pattern

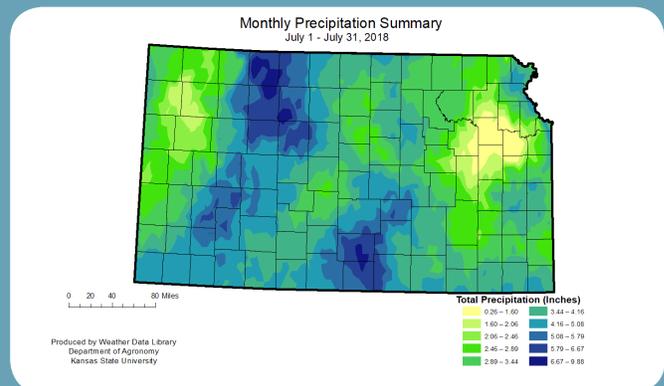
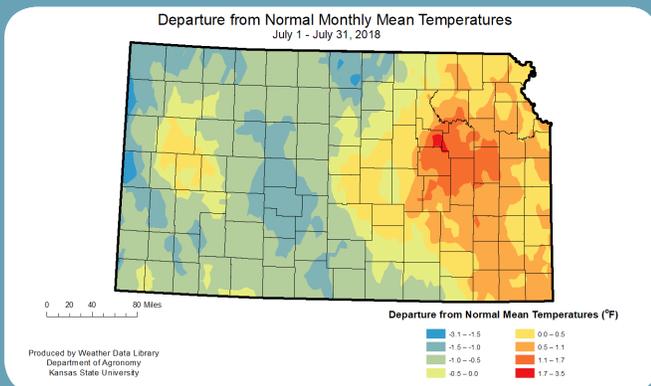
July started on a warm note but ended with a cool pattern. State-wide average temperature for the month was 79.0 oF. This was just 0.4 degrees warmer than normal, and ranks as the 55th warmest since 1895. The East Central Division had the greatest departure with an average of 79.8 oF which was 1.4 degrees warmer than normal. The six divisions in the central and western parts of the state were all within a half a degree Fahrenheit of normal. The Northwest Division was the coldest with an average of 76.2 oF and a departure of -0.5 degrees. There were just 4 new record daily warm maximum temperatures and only 4 new daily record warm minimum temperatures. None of the daily records set new monthly temperature records for July. Similar patterns were seen on the cold side. There were 2 new record coldest maximums and 2 record coldest minimum temperatures. The warmest temperature reported during the month was 112 oF at Ashland, Clark County on the 26th. The coldest temperature reported during July was 42 oF, reported at Brewster 4W, Sherman County, on the 26th.

The July precipitation showed a similar split pattern, with the greatest rainfall totals in the western and central parts of the state. The state-wide average precipitation was 3.94 inches which was 110 percent of normal. The division with the largest surplus was the Southwest Division, with an average of 5.56 inches, or 205 percent of normal. During the last week of the month, 88 out of 106 reporting stations in the Southwest Division had 2 inches or more of precipitation, indicating a more general distribution than was the case in June. The East Central Division had the greatest shortfall, with an average of 2.20 inches creating a deficit of 2.10 inches. That translates to 50 percent of normal. The greatest monthly total for a National Weather Service Cooperative station was at Hill City 1E, Graham County, with 9.88 inches. The Community Collaborative Rain, Hail and Snow network station with the greatest monthly precipitation was Pratt 1.6 SSE, Pratt County, with 10.06 inches on the 20th. Among the Kansas Mesonet stations, the Hill City station in Graham County had the greatest monthly total with 9.56 inches.

With the resurgence of moisture, severe weather reports during the month also increased. Tornado numbers continued on the low side with only 1 tornado reported. Unfortunately wind and hail caused significant damage. Complete damage estimates are not yet available. In one instance, storm damage contributed to a house explosion in Topeka. Several people were injured. Damage to the home was estimated at \$150,000 with damage to neighboring homes at \$100,000. Total storm reports: 1 tornado, 50 hail events, and 135 reports of damaging wind.

Not surprisingly, the above normal rain in the west brought improvements in the drought conditions there. Unfortunately, the lack of rain coupled with warmer temperatures resulted in expansion of the drought in the east. Exceptional drought reappeared, and extreme drought has shifted into Central and East Central Kansas. Currently, 28 percent of the state is drought free, while just under 1 percent is in exceptional drought conditions. The August outlook has equal chances for above or below normal precipitation across the state. The temperature outlook is also neutral statewide. That combination is unlikely to result in significant improvement of the drought conditions in the east, as consistent above normal moisture would be needed to bring relief.

Temperature and Precipitation Overview



Above: July 2018 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:
<https://www.drought.gov/drought/dews/missouri-river-basin/reports-assessments-and-outlooks>

Midwest and Great Plains Monthly Climate and Drought Webinar

To sign up for future webinars:
<https://www.drought.gov/drought/calendar/webinars>

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

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