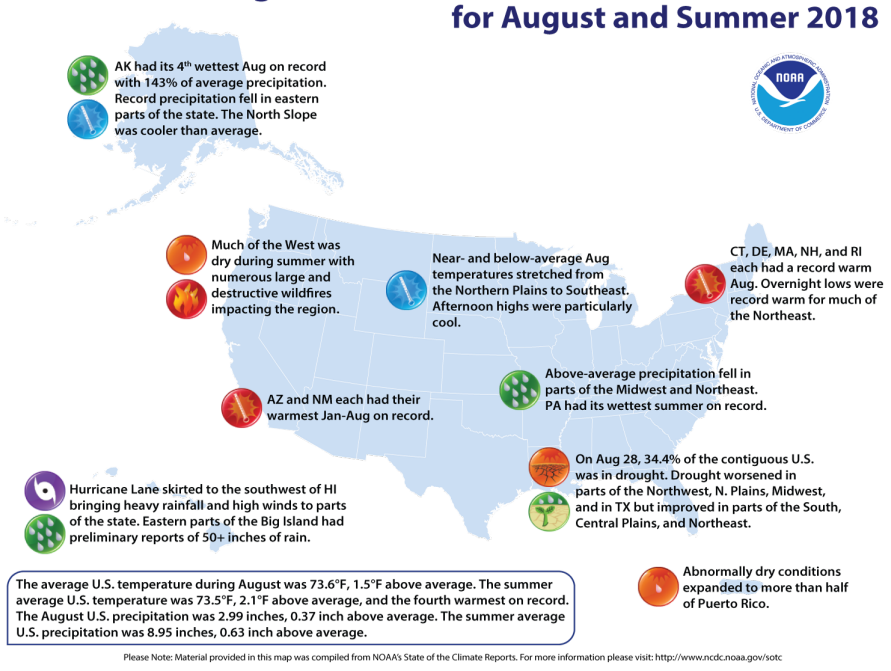
Quarterly Climate Impacts and Outlook

Midwest Region

September 2018

National – *Significant Events for June–August 2018*

U.S. Selected Significant Climate Anomalies and Events for August and Summer 2018



Significant events for June through August 2018 across the United States.

Highlights for the Midwest

Drought in Missouri, southern Iowa, and western Illinois worsened through the summer, peaking in mid-August. In Missouri, exceptional drought covered 5% of the state, extreme drought 25%, and severe drought 54%.

Severe drought also was noted in northern parts of Lower Michigan.

Summer minimum temperatures ranked among the warmest 10% in all nine Midwest states, with Ohio ranking 2nd.

Seventeen people drowned in the Missouri Ozarks on July 19 when a duck boat sank during a severe thunderstorm.

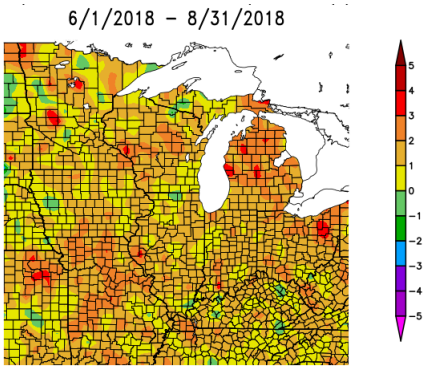
Flooding due to heavy rains was a repeat issue in the region; in northern Iowa June 20–21, Des Moines on July 1, west of Madison on August 20–21, and in southern Wisconsin in late August.

Regional – *Climate Overview for June–August 2018*

Summer Temperatures

Departure from Normal

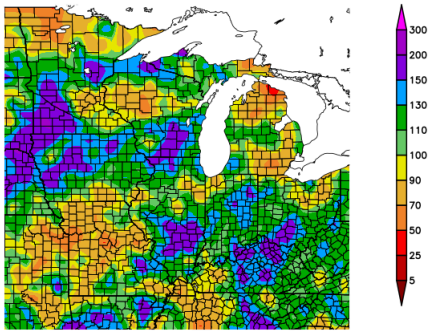
6/1/2018 – 8/31/2018



Summer Precipitation

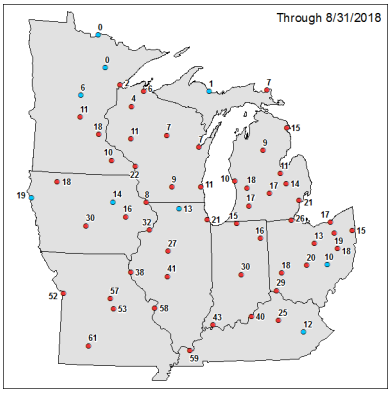
Percent of Normal

6/1/2018 – 8/31/2018



Count of Days Reaching 90°F

Red dots are above average



Summer temperatures were near to slightly above normal across the Midwest. Following a very warm May, June was also warm across the region. Though temperatures returned to near normal for July, August saw a return to warmth especially in the northeastern part of the region. Temperatures reached the 90°F mark in 2018 through August at a pace that was well above normal for most of the region. Daily temperature records in the region during the summer months saw record high minimums (1,412) easily outnumber record high maximums (365), and record low maximums (443) far exceed the number of record low minimums (78).

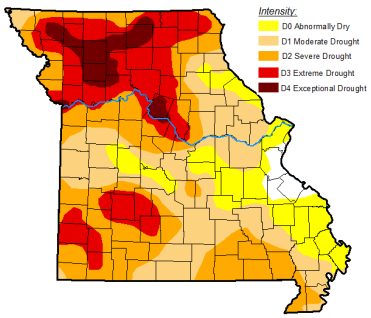
Precipitation was mixed with dryness in northern and central Missouri, southern Iowa, parts of Minnesota, and parts of Michigan. Wet conditions, including flooding events, stretched from southwestern Minnesota and northern Iowa to southern Wisconsin and northern Illinois. Above normal rainfall was also reported in southern Illinois, central and southern Indiana, southern Ohio, and central Kentucky.

Contact: Doug Kluck (doug.kluck@noaa.gov)

Regional Impacts – *June–August 2018*

Drought

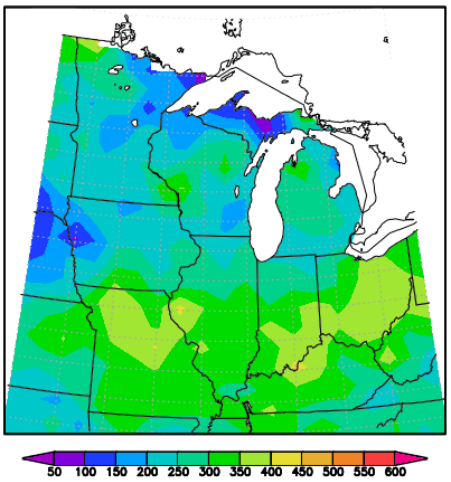
Drought worsened in Missouri and Iowa through mid-August before some relief came. Ponds and streams dried up, cattle were sold off, and crops withered in these areas. Municipal water supplies in parts of Missouri were impacted. Drought reached the exceptional stage in northwestern Missouri. Severe drought emerged in the northern parts of lower Michigan impacting agriculture.



Drought in Missouri on August 14, 2018. This was the peak of the drought status for the summer.

Flooding

Flooding was an issue at many locations in the region during the summer. In mid-June, flooding in northeastern Wisconsin and Upper Michigan washed away roads and led to one death. June 20–21 saw major flooding on multiple rivers in northern Iowa including a record reading on the Little Sioux River. Flood-damaged tracks led to a train derailment that spilled 230,000 gallons of crude oil. Intense rains in Des Moines, Iowa, on July 1st caused flooding across the metro area. On August 20–21 just west of Madison, Wisconsin, 24-hour unofficial rainfall totals of 11–15 inches will likely be found to top the existing Wisconsin record of 11.72 inches from 1946. Lakes Monona and Mendota were flooded with $44 million in damages to Madison infrastructure. There were Amtrak service interuptions and closed roads.



Modified growing degree days departure from normal for May 1 through August 31.

Agriculture

Crop development was a week or two ahead of average despite late planting in most of the region. Southern areas were 300 to 400 degree days above normal. Some low-lying areas were flooded. Disease issues emerged in both wet and dry areas.

Regional Outlook – *October–December 2018*

The outlook for October through December shows an increased chance of above normal temperatures across the entire Midwest. The highest chances are in the northeastern part of the region.

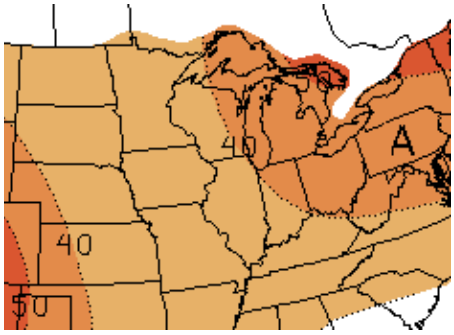
The precipitation outlook for October through December shows equal chances of above and below normal precipitation.

There is an El Niño Watch for the fall and winter with a greater than 60% chance of El Niño developing by the end of the year.

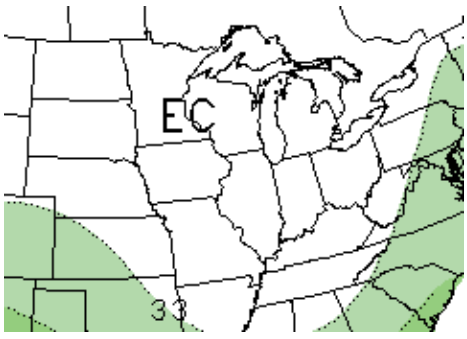
Harvest is likely to progress near or ahead of average except for northern Iowa/southern Minnesota to southern Wisconson/norhtern Illinois where heavy rainfall has caused flooding and inundated fields.

Drought in northern Missouri will require more rains to offset rainfall deficits that have accumulated over the past three dry summers. 30-month deficits exceed 10 inches in northern parts of the state.

Temperature



Precipitation



A = Above normal N = Normal
B = Below normal EC = Equal chances

Midwest Region Partners

Midwestern Regional Climate Center
mrcc.illinois.edu

State Climatologists
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National Oceanic and Atmospheric Administration
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National Centers for Environmental Information
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National Weather Service Central Region
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North Central River Forecast Center
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National Drought Mitigation Center
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National Integrated Drought Information System
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USDA Midwest Climate Hub
www.climatehubs.oce.usda.gov/midwest

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