



### Midwest – Significant Events for December 2020–February 2021

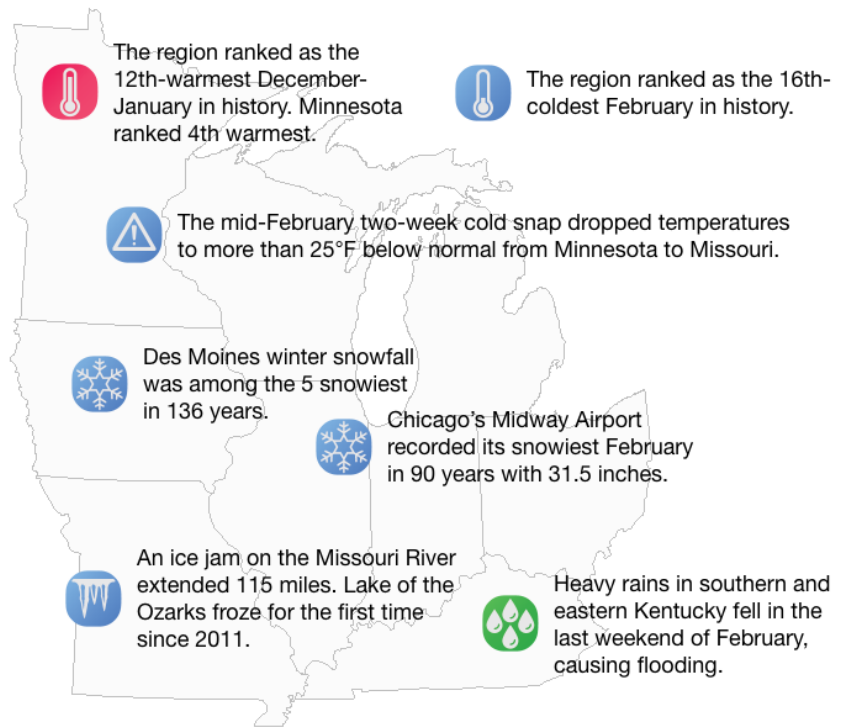
A two-week cold snap in mid-February brought very cold temperatures to the region, particularly to the western half of the region.

The severe cold snap caused ice jams on many rivers, including a 115-mile ice jam near Jefferson City, Missouri. Lake of the Ozarks froze for the first time since 2011.

Winter snowfall was below normal for much of the northern states and above normal for much of the other six states. Parts of Iowa and the Ohio River Valley had twice their normal snow.

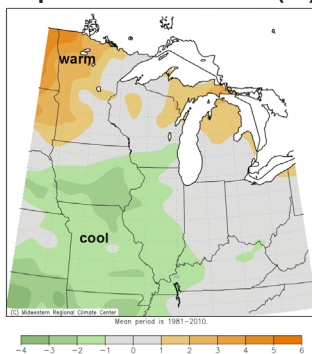
Drought in Missouri was eliminated during the winter months. Drought in Iowa, Illinois, and Indiana showed reductions in coverage during winter, but extreme drought remained in northwestern Iowa. Drought developed and spread in northern Minnesota over the winter.

Heavy rains in southern and eastern Kentucky in the last few days of February caused record flooding on a portion of the Kentucky River.

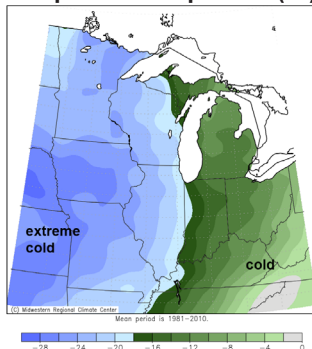


### Regional – Climate Overview for December 2020–February 2021

#### Winter Temperature Departure from Normal (°F)



#### February 7–20 Temperature Departure (°F)

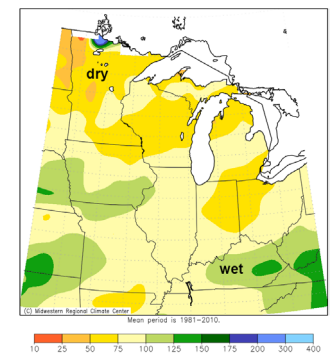


Winter temperatures averaged to within a few degrees of normal across the region, but averaging hid the big temperature swings seen this winter. Temperatures were well above normal in December, January, and into the first days of February. Then a two-week period of exceptionally cold weather, particularly in the western half of the region, settled in. A few stations in Missouri had a daily high temperature remain below the old record low minimum. Regionwide temperatures ranked as the 12th-warmest December–January two-month period since 1895 followed by the 16th-coldest February in the same time period.

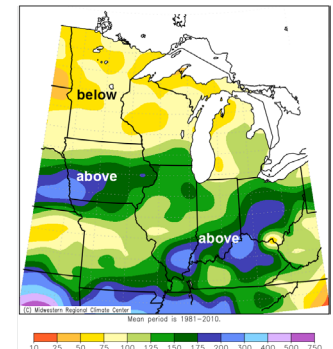
Winter precipitation was generally below normal across the Midwest. Some areas with above-normal totals were in western areas of Missouri and Iowa, along the Iowa–Missouri border, and in central and eastern Kentucky. The wettest area was in eastern Kentucky with more than 125% of normal, in part due to heavy rains on the last weekend of the season.

Winter snowfall in the Midwest was generally below normal in Minnesota, Wisconsin, much of Michigan, and west central Missouri. The rest of the region, primarily in the southern half of the region, had snowfall that was above normal for the season. Seasonal snowfall more than doubled the normal amounts in southwestern Iowa, southern Illinois, and northern Kentucky.

#### Winter Precipitation % of Normal



#### Winter Snowfall % of Normal



## Regional Impacts – December 2020–February 2021

### Cold Outbreak

Blizzard conditions in early February in Iowa closed eastbound I-80 due to a 40–50 vehicle accident. The cold weather in mid-February led to a 115-mile ice jam on the Missouri River. Rolling power outages in Iowa and Missouri were due to the cold and extreme power demand in the



Missouri River near Jefferson City, Missouri shortly after the ice jam released on February 23, 2020. Credit: USGS.

Midwest and Plains states. Heavy snow in Chicago led to dozens of building collapses. Freezing rain in Kentucky on February 10th and 11th caused travel woes. The extreme cold will likely have impacts on fruit and berry crops this year in Missouri and Iowa. Lake of the Ozarks froze for the first time since 2011. Damage to boats and infrastructure was worsened by falling water levels due to the increase in hydroelectric generation.

### Flooding

On the last few days of February, heavy rain fell in southern and eastern Kentucky. A few stations reported six, or even seven, inches of rain in the storm. Record flood levels on the Kentucky River were recorded in Booneville at 44.3 feet. Flooding downstream in Beattyville was at levels not seen since 1957. As the water moved downstream, flooding extended to the Ohio River.



View from Kentucky Mesonet station in Butler County on May 19, 2020 and on March 3, 2021 showing the extensive flooding from rain in late February. Credit: Stu Foster/Kentucky Mesonet.

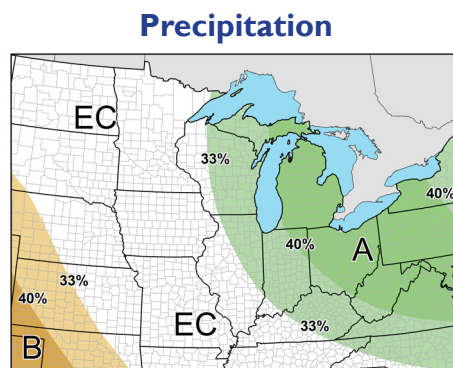
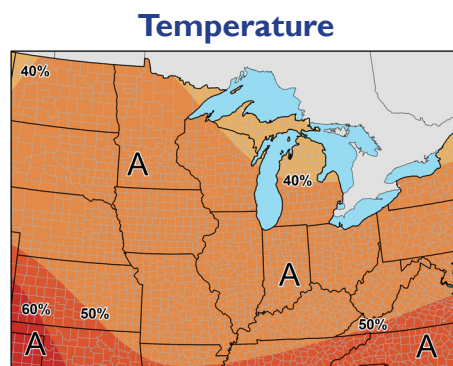
## Regional Outlook – April–June 2021

The outlook for April–June shows increased chances for above-normal temperatures across the Midwest. The chances for above-normal temperatures increase from northern Michigan to the south and to the west.

Ohio and Michigan have increased chances of above-normal precipitation. Parts of nearby states also have slightly increased chances of above-normal precipitation. The remaining areas farther west have equal chances for above-, below-, or near-normal precipitation.

Extreme drought remains in northwestern Iowa and the upper Midwest has become increasingly dry over the winter. About 10% of the Midwest is in drought and another 40% of the region is now considered abnormally dry as of mid-March. These areas will need spring and summer rains to provide moisture for developing crops as there is limited water available in the soils. If warmer-than-normal temperatures are realized, the chances for dryness will increase due to higher evapotranspiration demand. This increase in demand would likely be even with normal rainfall.

## Midwest Region Partners



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

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