

Hydrologic and Climate Assessment

February 20, 2020



Photo Credit: Kat Bledsoe



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Aaron B. Wilson

STATE CLIMATE OFFICE OF OHIO (SCOO)

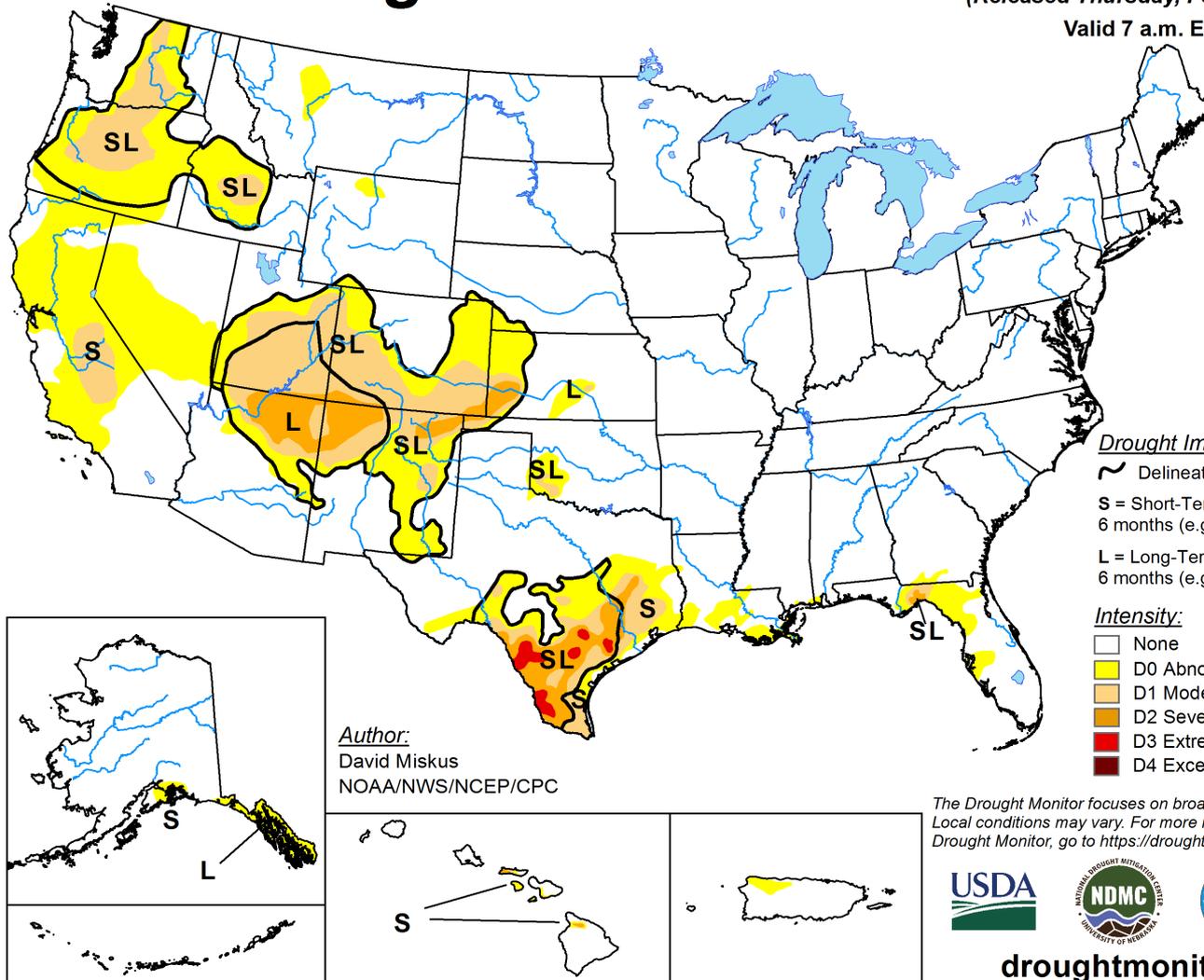
DEPARTMENT OF EXTENSION - CFAES

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U.S. Drought Monitor

February 18, 2020
 (Released Thursday, Feb. 20, 2020)
 Valid 7 a.m. EST



Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

Author:
 David Miskus
 NOAA/NWS/NCEP/CPC

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

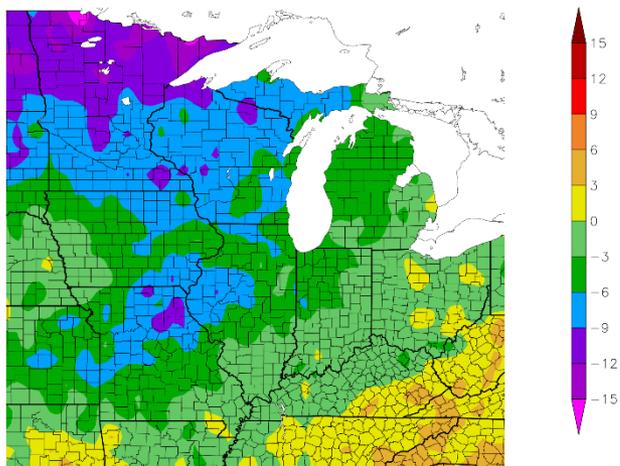


droughtmonitor.unl.edu

Temperature Differences Compared to Average (1981-2010)

7-Day

Departure from Normal Temperature (F)
2/13/2020 – 2/19/2020

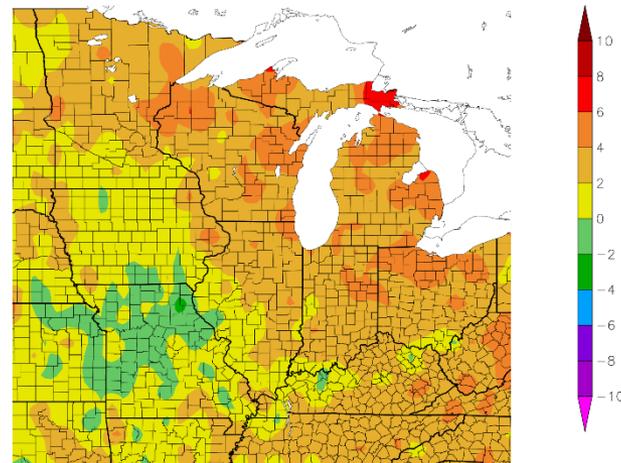


Generated 2/20/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

30-Day

Departure from Normal Temperature (F)
1/20/2020 – 2/18/2020

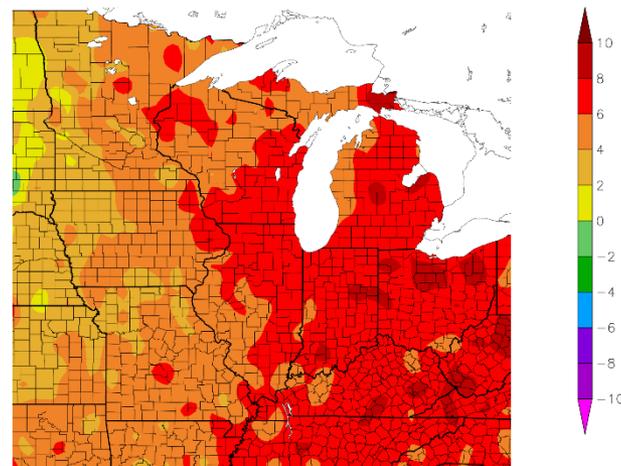


Generated 2/19/2020 at HPRCC using provisional data.

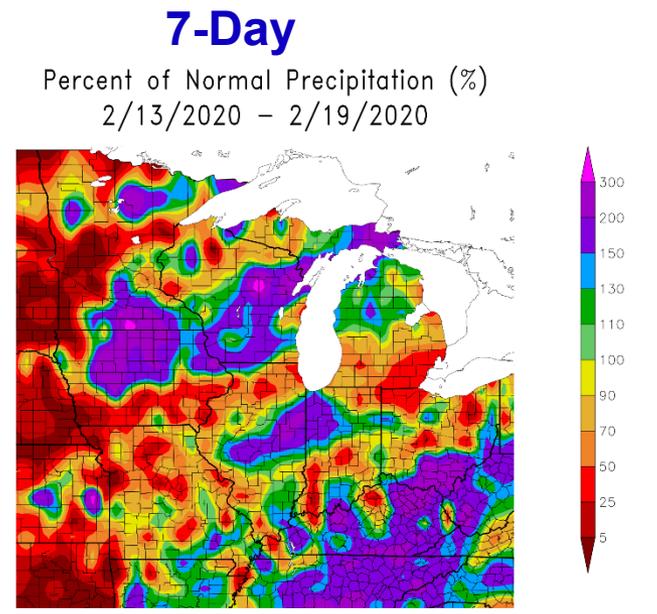
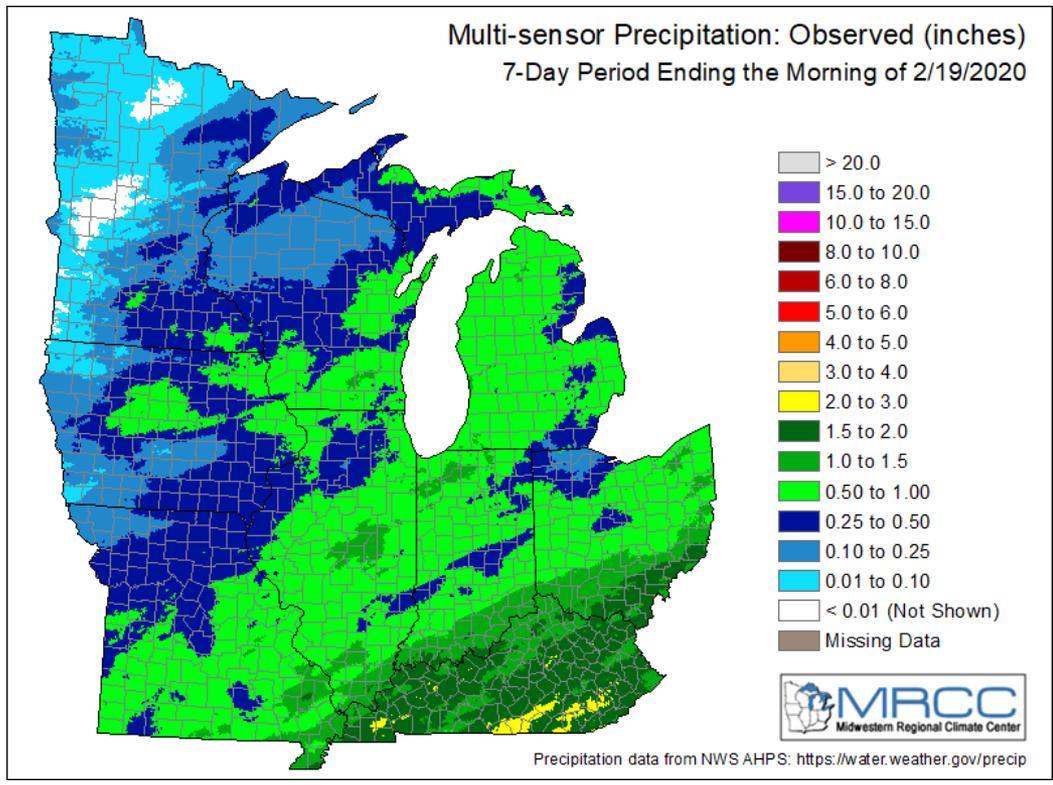
NOAA Regional Climate Centers

60-Day

Departure from Normal Temperature (F)
12/22/2019 – 2/19/2020



This Week's Precipitation



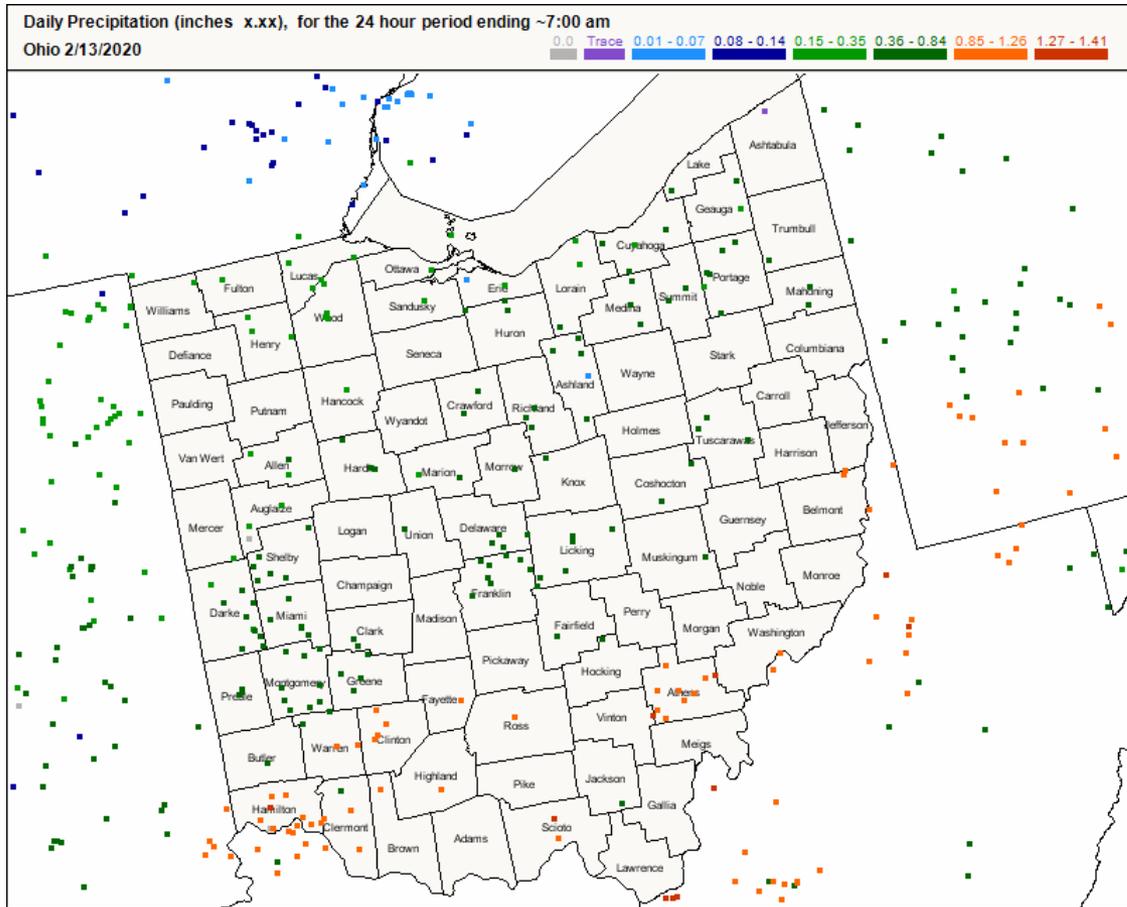
Generated 2/20/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers



CoCoRaHS

Top 10 Wettest



CoCoRaHS Name	Total Precip (inches)
Pataskala 4.1 W	9.26
Polk 5.5 S	8.09
Athens 4.6 ESE	7.79
Athens 7.0 WNW	7.69
Athens 2.3 SSE	7.60
Cincinnati 8.4 NW	7.54
Albany 4.5 WNW	7.42
Fredericktown 4.0 NNW	7.41
Glouster 3.6 SW	7.34
Fayetteville 0.5 W	7.33

<https://cocorahs.org/>



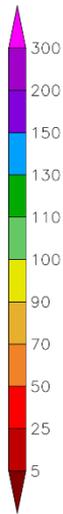
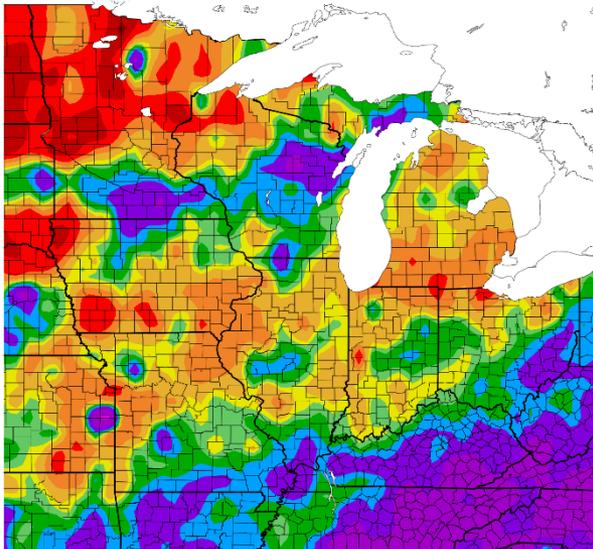
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Precipitation Differences Compared to Average (1981-2010)

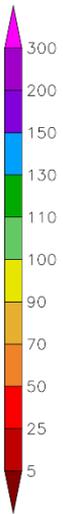
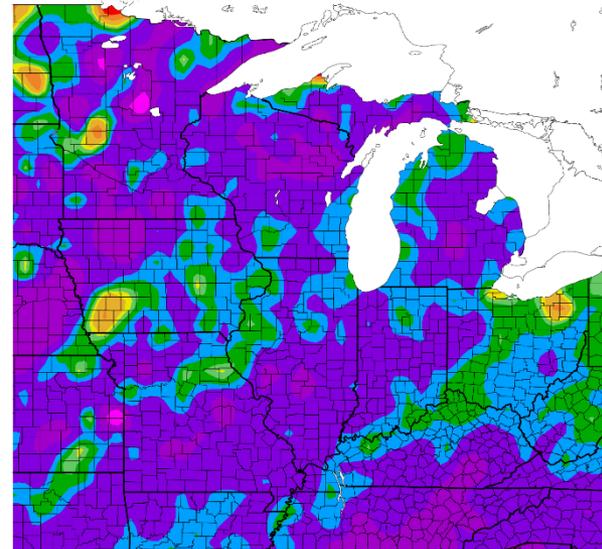
30-Day

Percent of Normal Precipitation (%)
1/20/2020 – 2/18/2020



60-Day

Percent of Normal Precipitation (%)
12/22/2019 – 2/19/2020



Generated 2/19/2020 at HPRCC using provisional data.

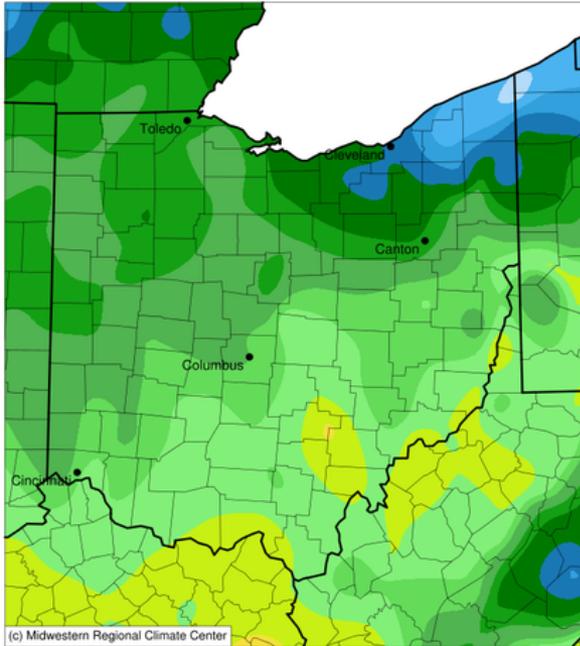
NOAA Regional Climate Centers

Generated 2/20/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

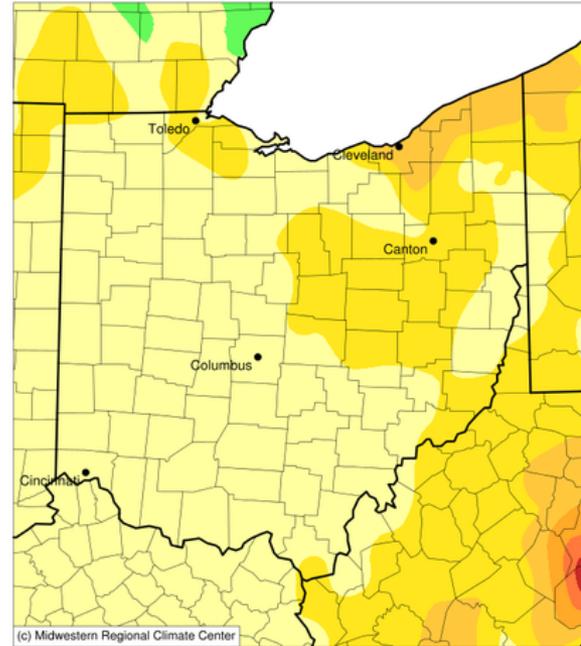
Snowfall and Differences Compared to Average (1981-2010)

Accumulated Snowfall (in)
October 01, 2019 to February 19, 2020



0.01 1 2.5 5 7.5 10 15 20 30 40 50 60 80
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 2/20/2020 8:33:18 AM CST

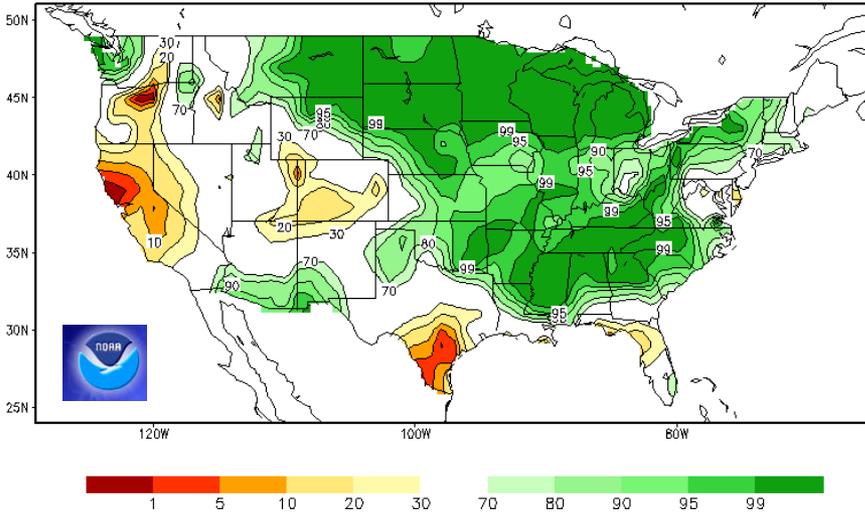
Accumulated Snowfall (in): Departure from 1981-2010 Normals
October 01, 2019 to February 19, 2020



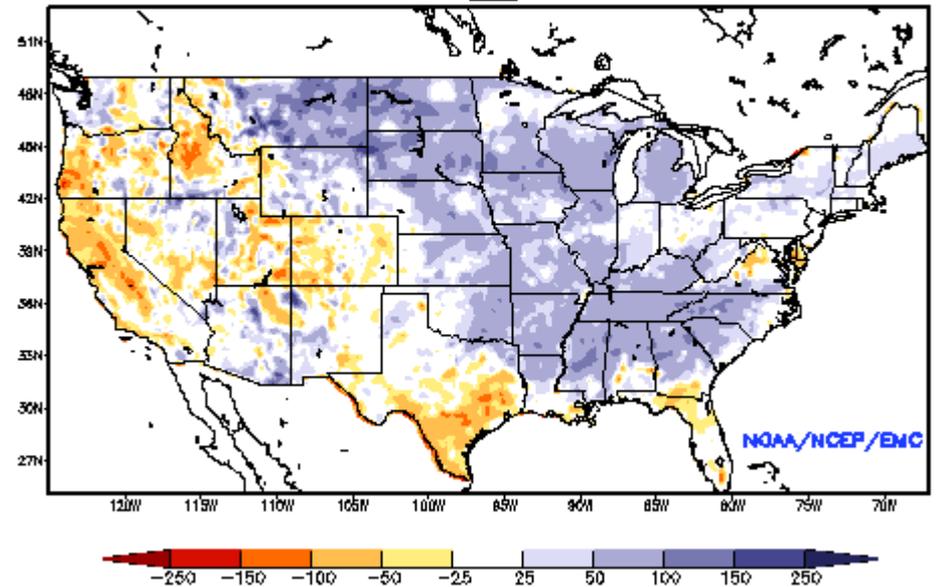
-60 -50 -40 -30 -20 -10 0 10
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 2/20/2020 8:35:27 AM CST

Soil Moisture

Calculated Soil Moisture Ranking Percentile
FEB 19, 2020



Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: FEB 15, 2020



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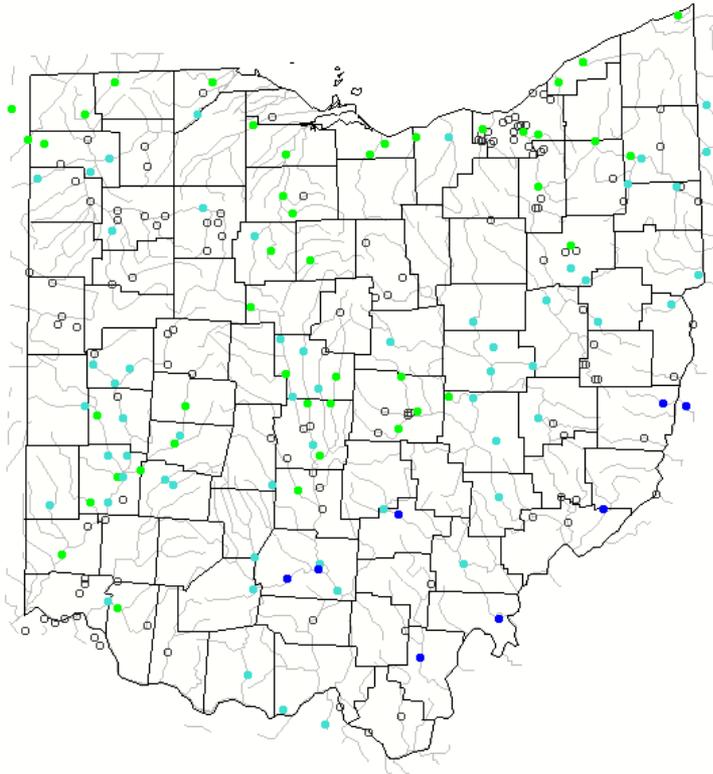
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7-DAY



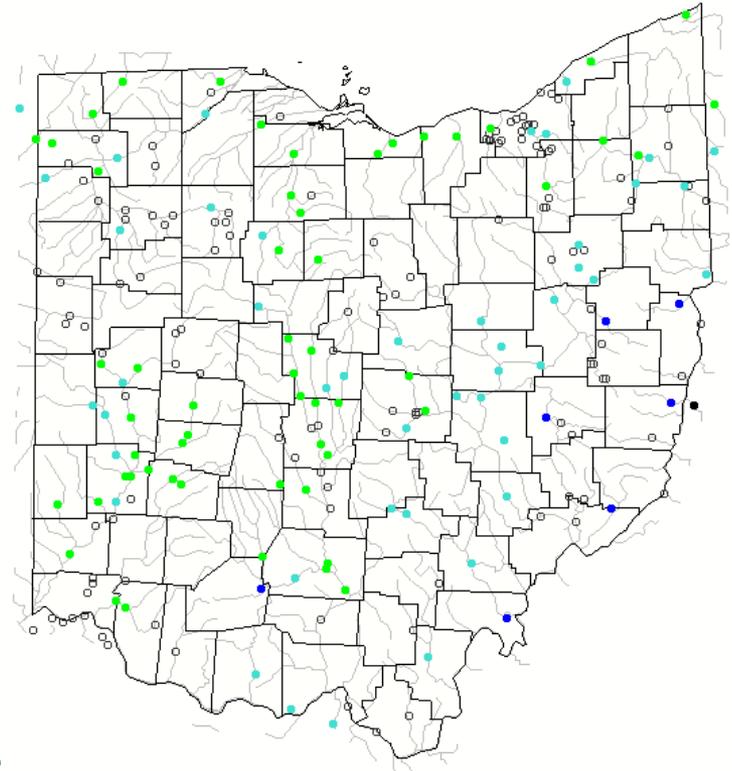
Explanation - Percentile classes

Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

Average streamflow compared to historical streamflow for the day of the year

USGS Streamflow

28-DAY



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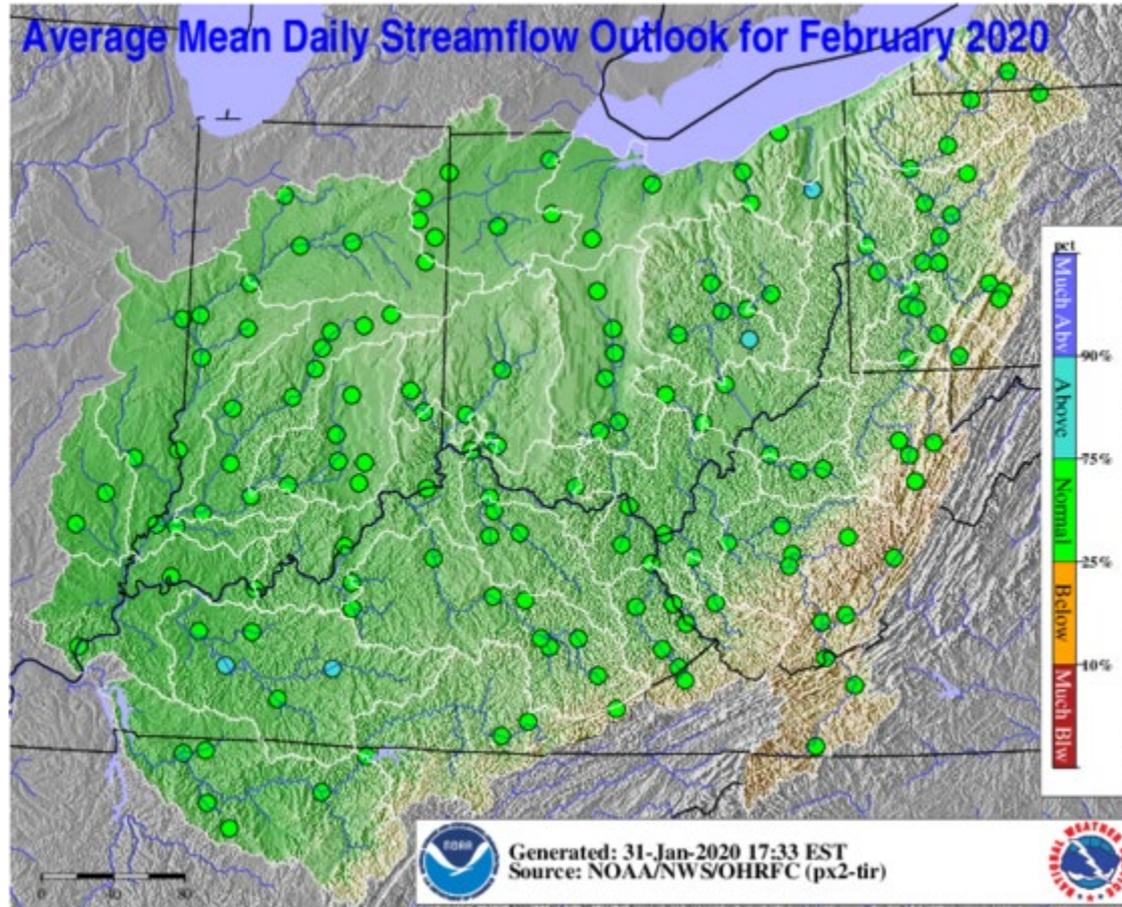
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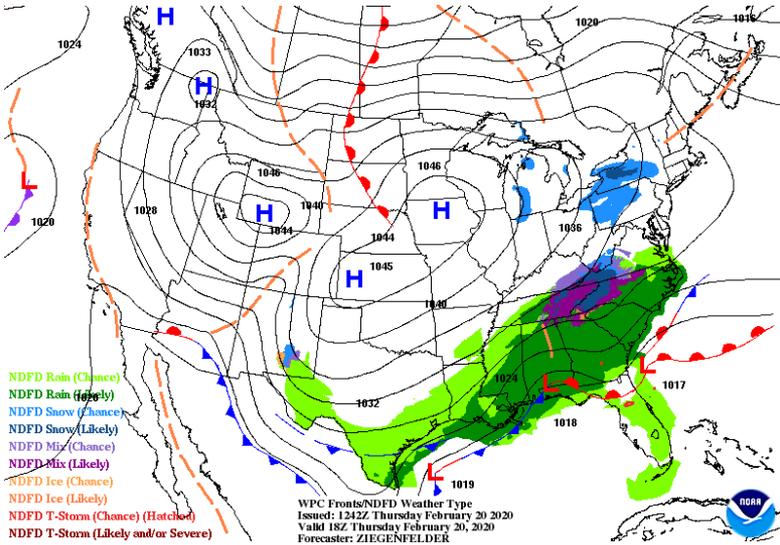


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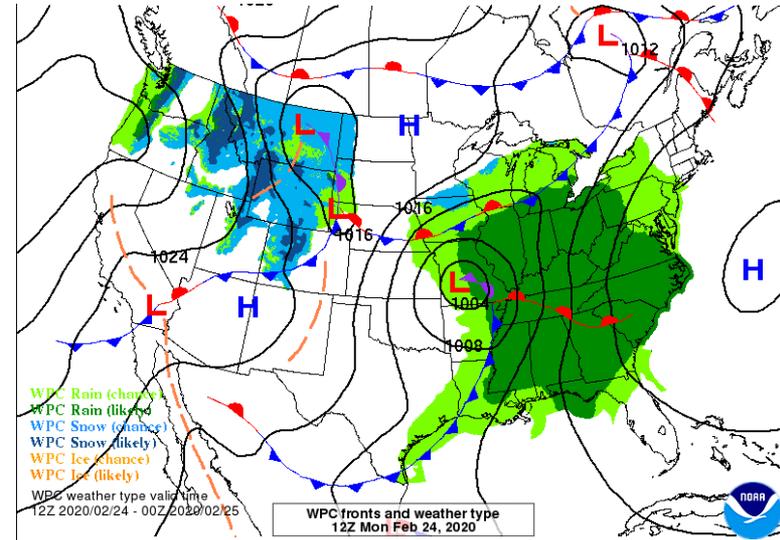
Ohio River Forecast Center 1-3 Month Outlook



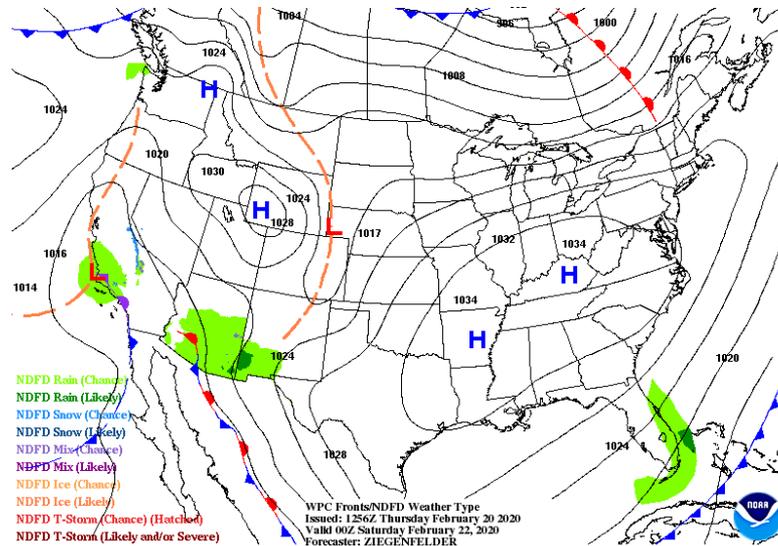
Weather for the Week Ahead



Thursday (today)



Monday



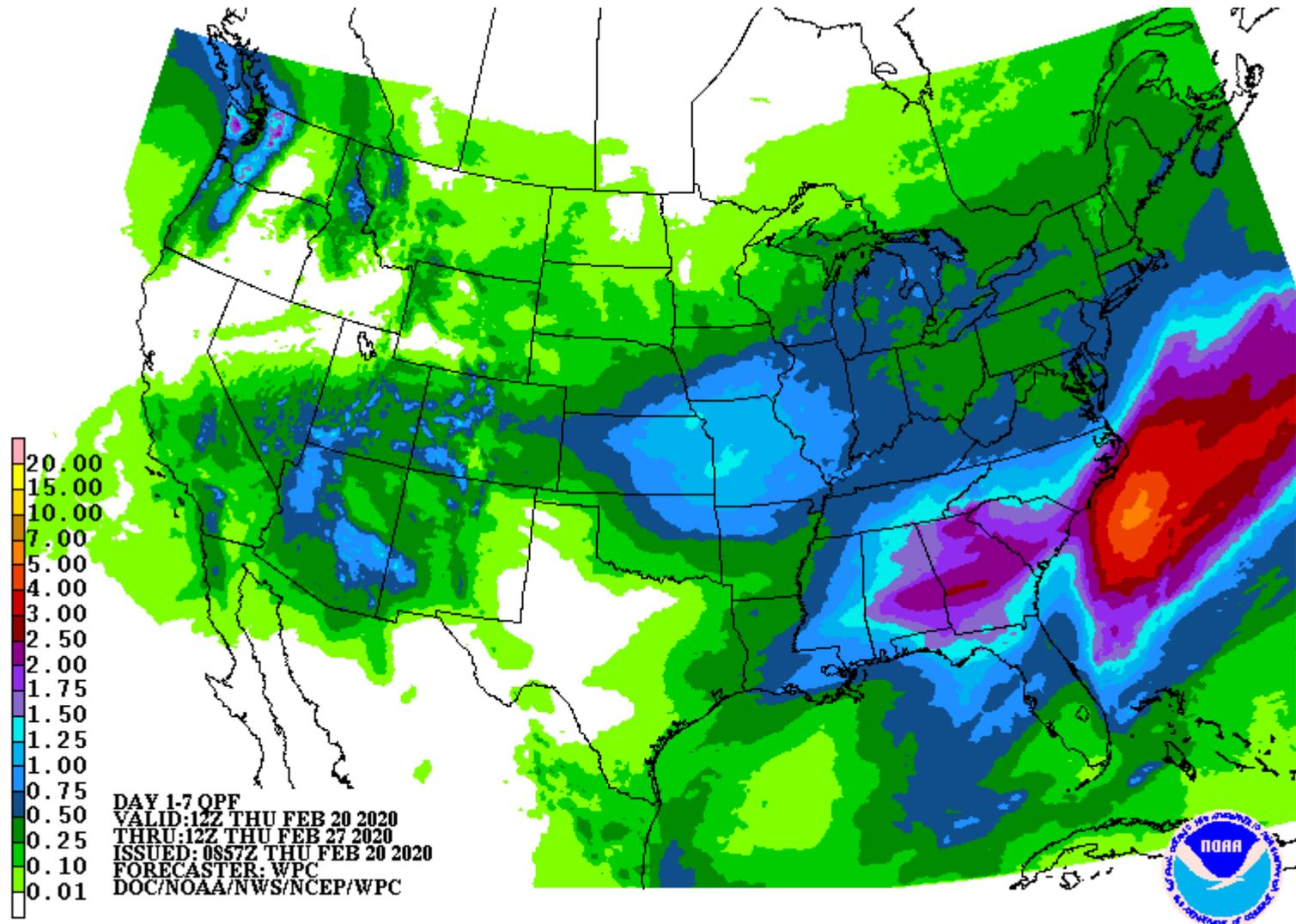
Saturday



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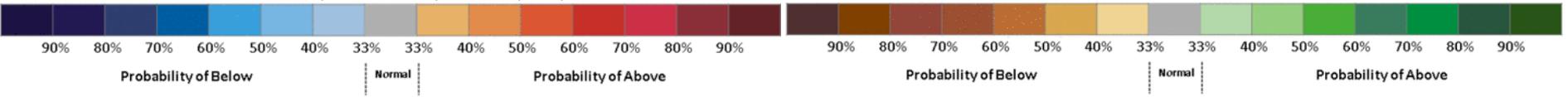
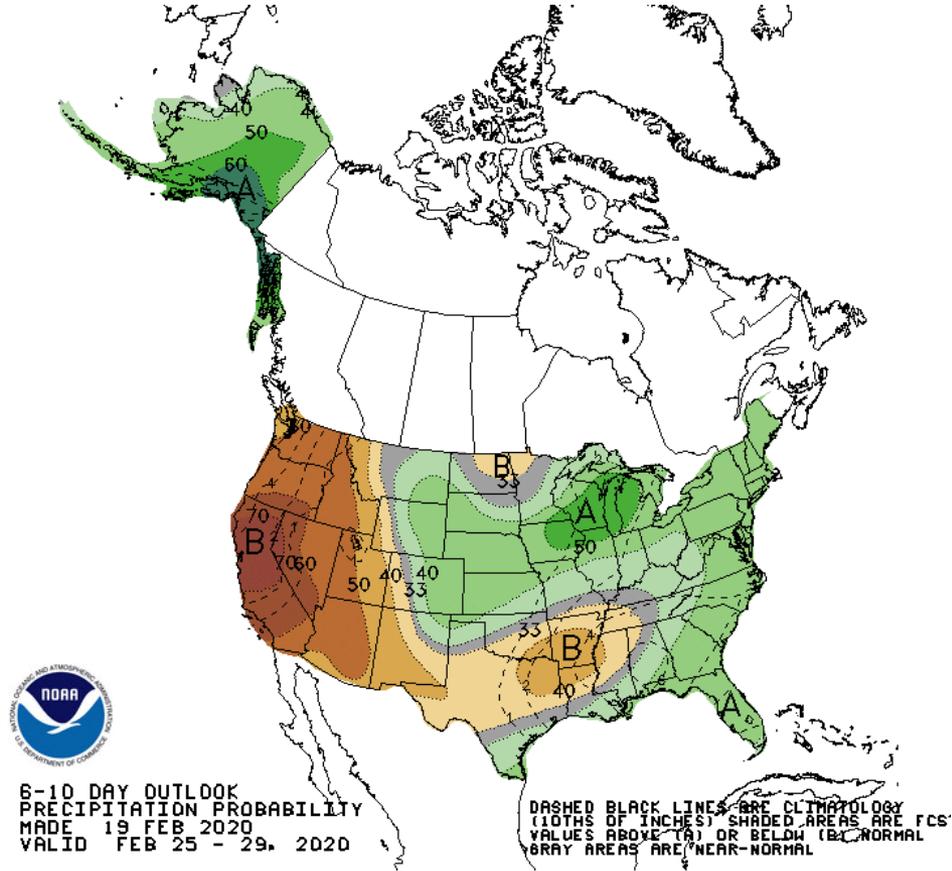
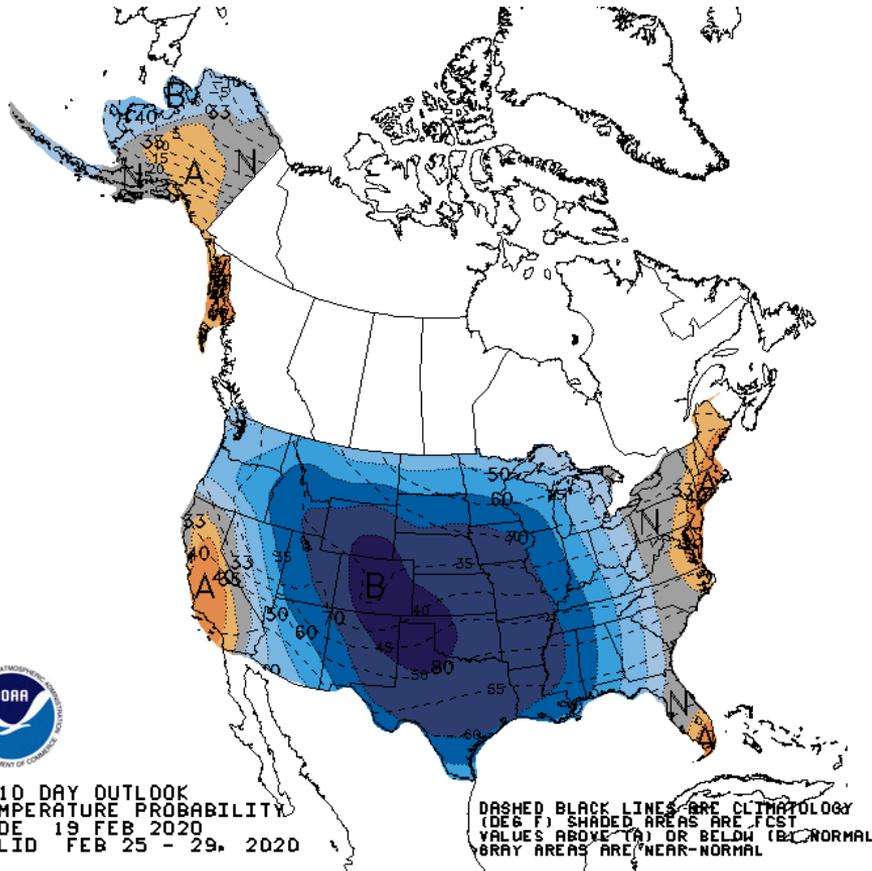
Weather for the Week Ahead



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6-10 Day Outlook



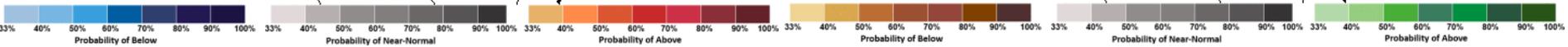
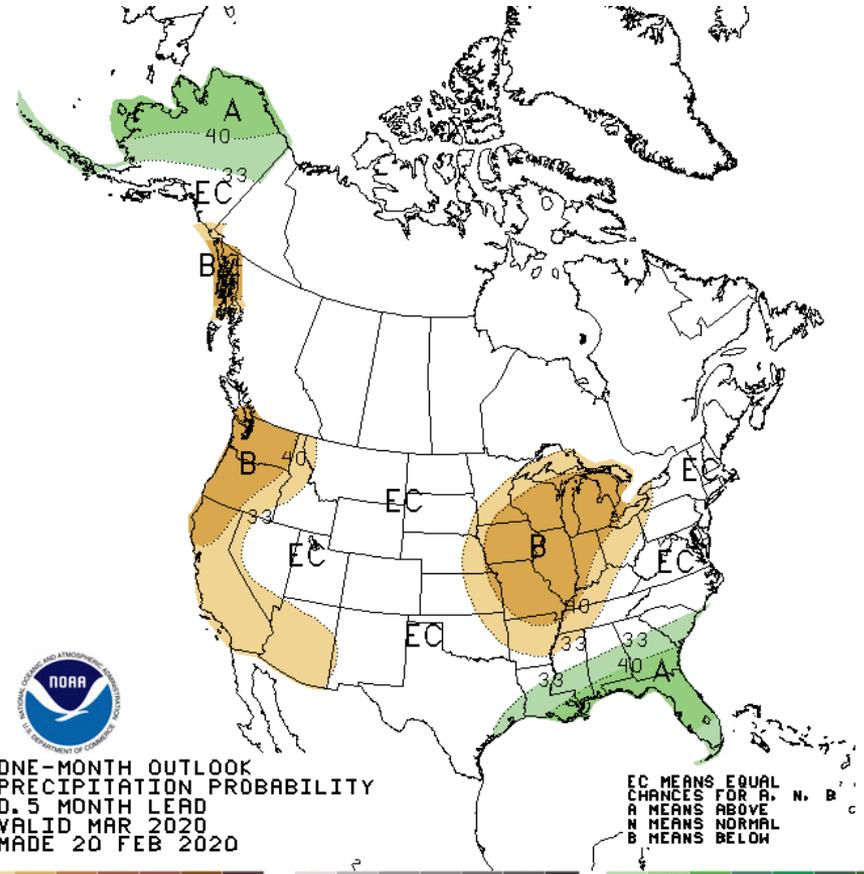
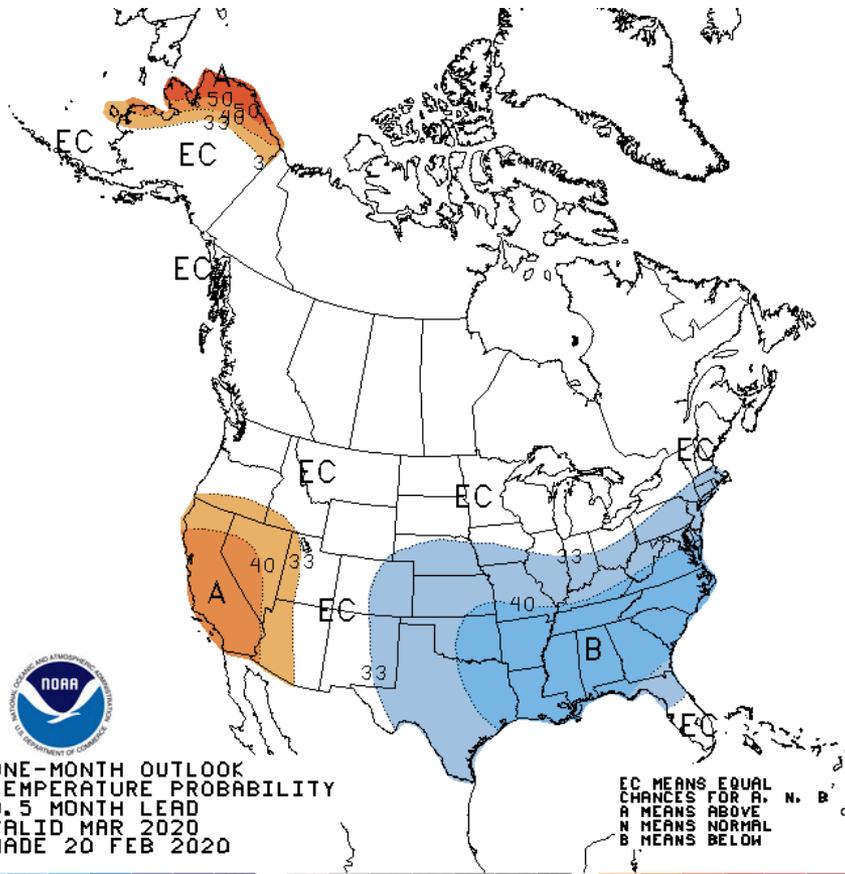
Highs: 38-45°F; Lows: 22-27°F; Precip: 0.50-0.70" (per week)



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March Outlook



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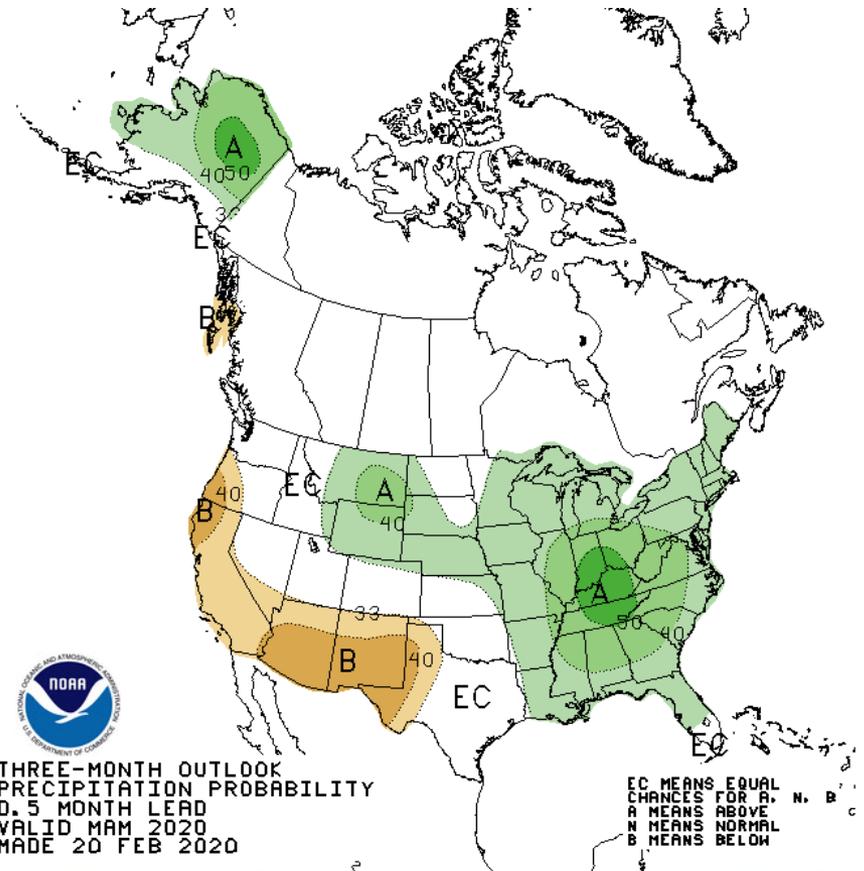
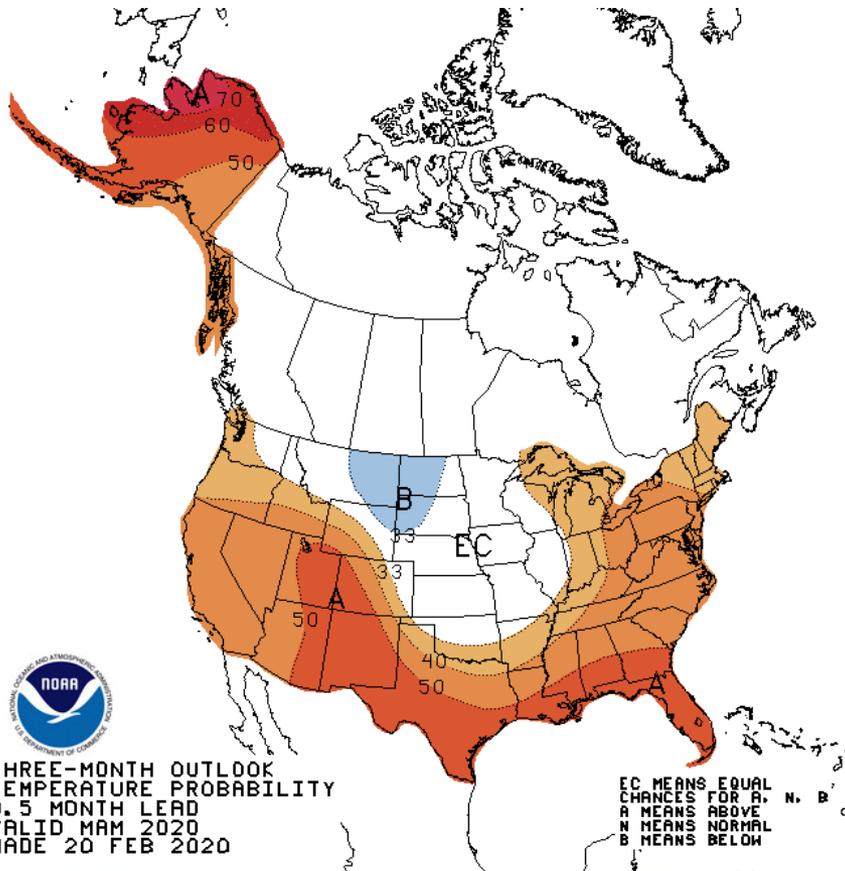
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March – May



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Summary of Conditions



Drought Monitor: None

Climate Recap: Warm winter with little snowfall; Warm soils with ample precipitation

Ahead: Warming trend this week and welcome dry weather; colder and damp next week



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Partners and Additional Information

- SCOO's Website: <https://climate.osu.edu>
- NOAA's National Climatic Data Center: www.ncdc.noaa.gov
 - Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov
- USDA Midwest Climate Hub: <https://www.climatehubs.oce.usda.gov/hubs/midwest>
- Climate Portal: www.climate.gov
- U.S. Drought Portal: www.drought.gov
- National Drought Mitigation Center: <https://drought.unl.edu/>
- Midwest Regional Climate Center: <https://mrcc.isws.illinois.edu>
- Community Collaborative Rain Snow Hail Network (CoCoRaHS): <https://cocorahs.org>
- Song: "Wishful Thinking" by Dan Lebowitz