

Hydrologic and Climate Assessment

March 11, 2020



Photo Credit: Garth Ruff



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Aaron B. Wilson

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DEPARTMENT OF EXTENSION - CFAES

BYRD POLAR & CLIMATE RESEARCH CENTER

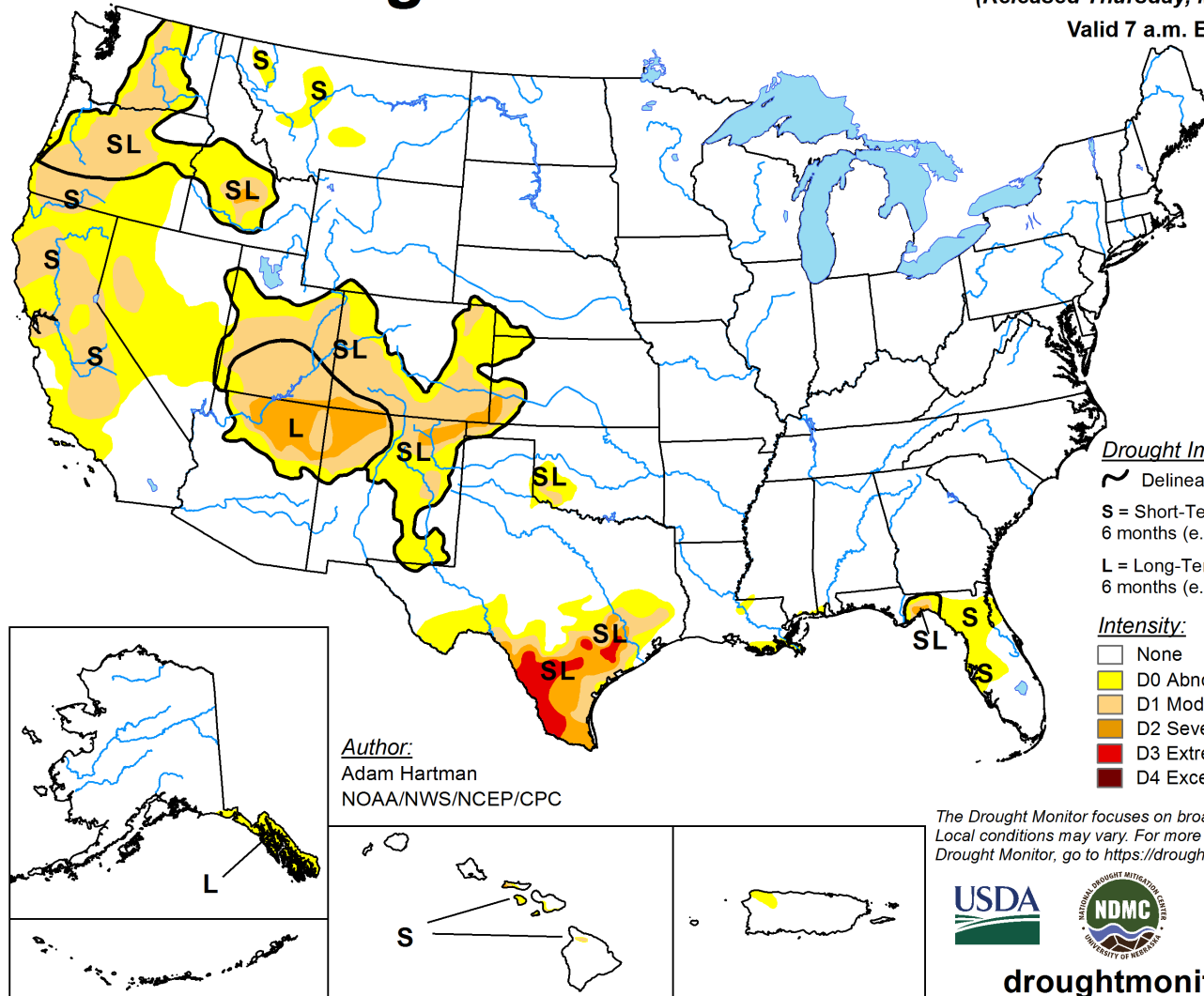
DEPARTMENT OF GEOGRAPHY

U.S. Drought Monitor

March 3, 2020

(Released Thursday, Mar. 5, 2020)

Valid 7 a.m. EST



droughtmonitor.unl.edu



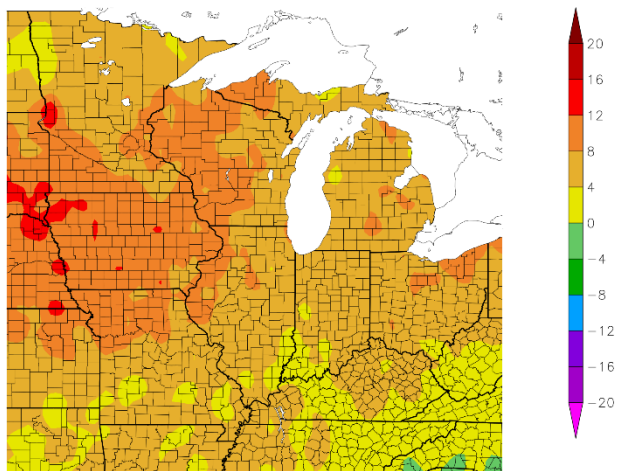
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Temperature Differences Compared to Average (1981-2010)

7-Day

Departure from Normal Temperature (F)
3/3/2020 – 3/9/2020

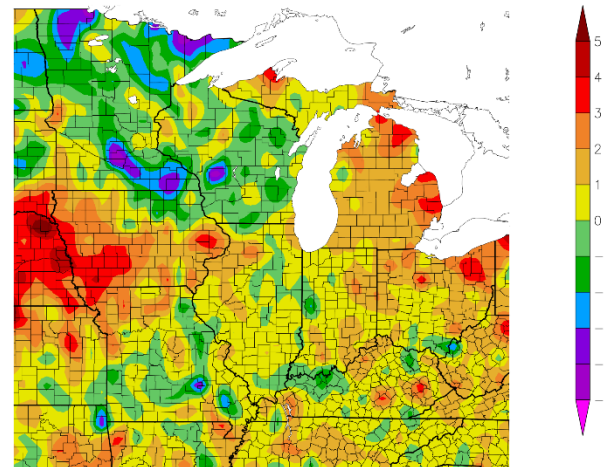


Generated 3/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

30-Day

Departure from Normal Temperature (F)
2/9/2020 – 3/9/2020

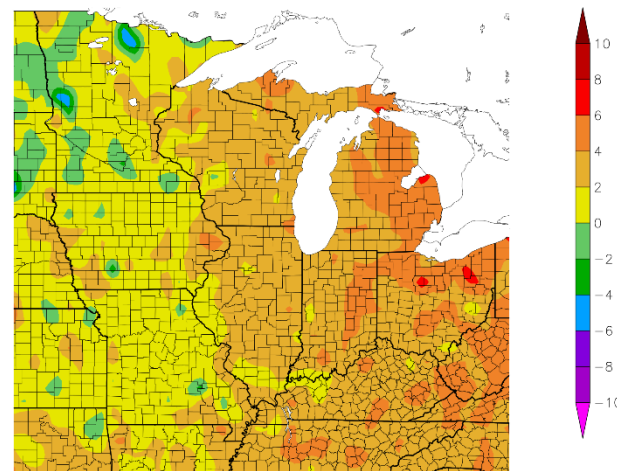


Generated 3/10/2020 at HPRCC using provisional data.

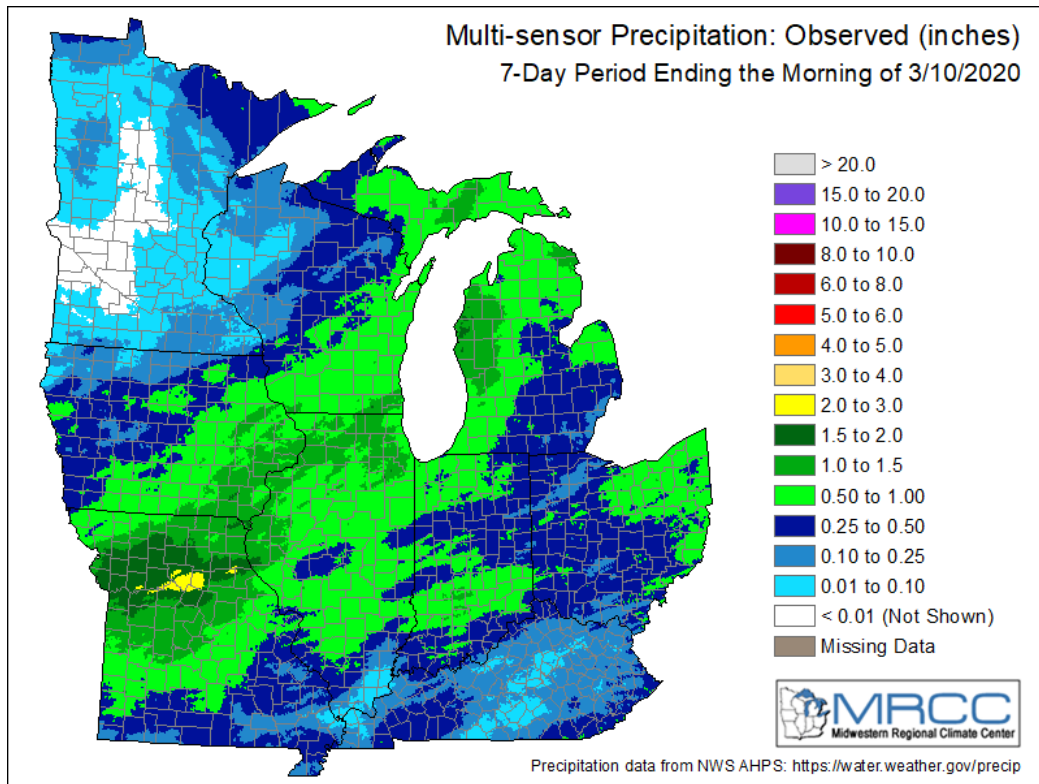
NOAA Regional Climate Centers

60-Day

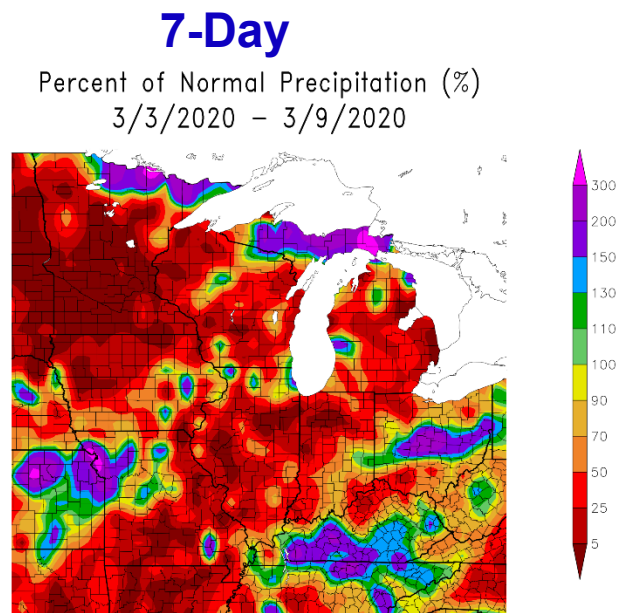
Departure from Normal Temperature (F)
1/10/2020 – 3/9/2020



This Week's Precipitation



Generated 3/10/2020 at HPRCC using provisional data.

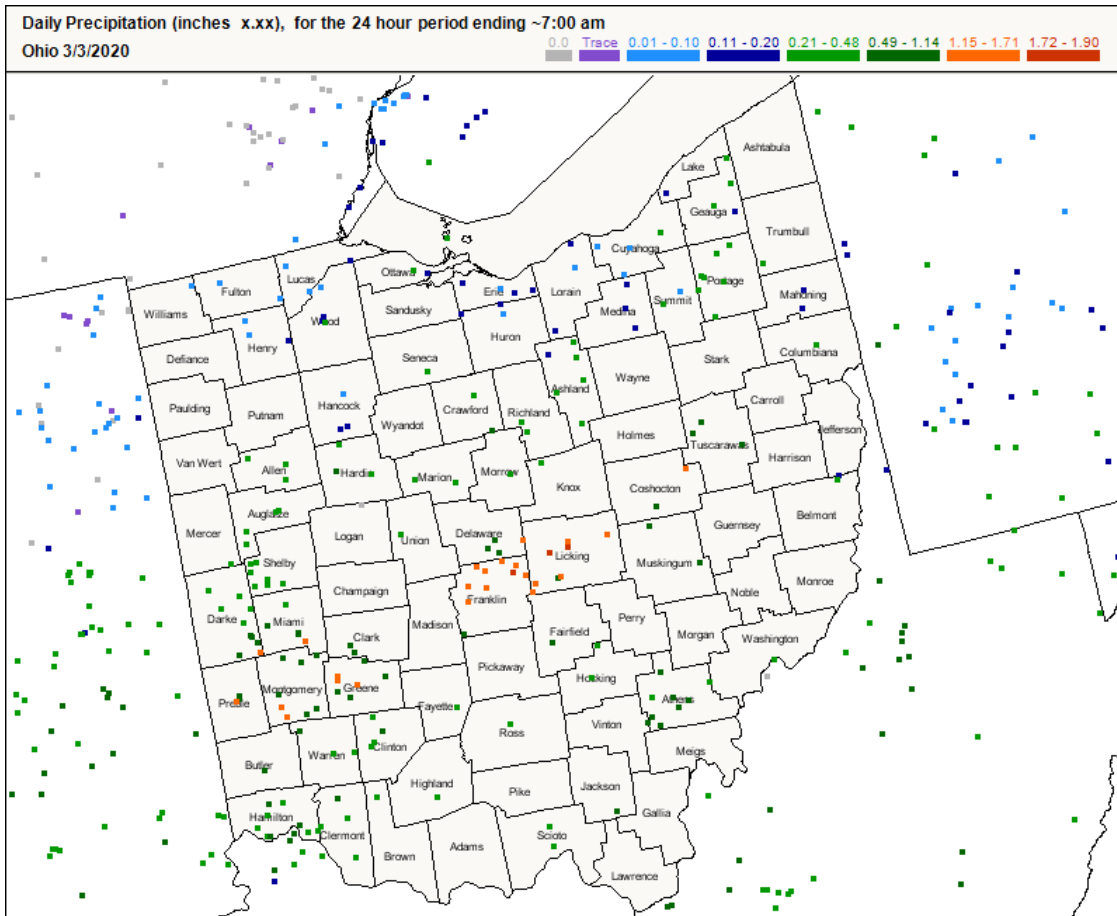


NOAA Regional Climate Centers



CoCoRaHS

Top 10 Wettest



CoCoRaHS Name	Total Precip (inches)
Sunbury 5.7 ESE	9.88
Fayetteville 0.5 W	9.74
Reynoldsburg 1.1 ENE	9.74
Lima 2.7 NE	9.70
Granville 4.0 N	9.70
Eaton 1.0 N	9.58
Columbus 8.2 NE	9.55
Eaton 1.1 WSW	9.52
Athens 2.3 SSE	9.47
Kirkersville 3.3 N	9.45

<https://cocorahs.org/>



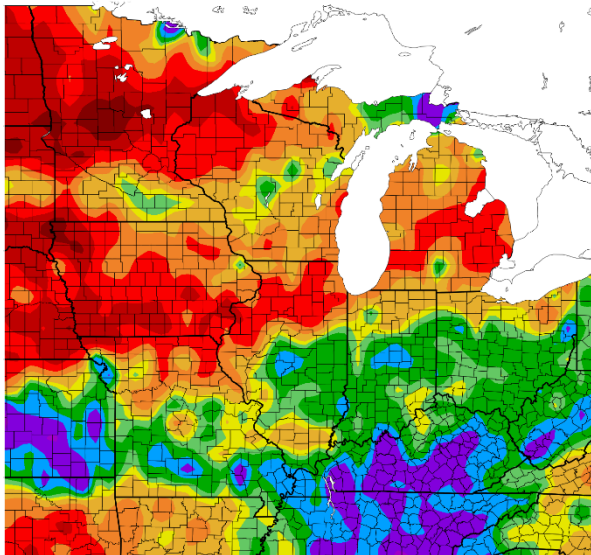
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Precipitation Differences Compared to Average (1981-2010)

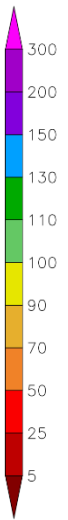
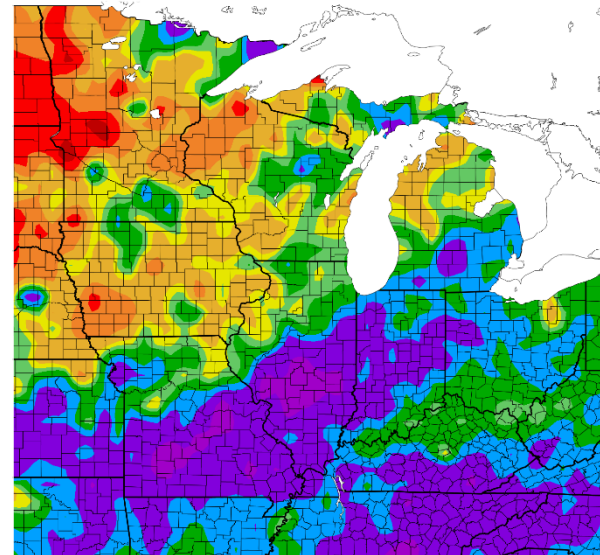
30-Day

Percent of Normal Precipitation (%)
2/9/2020 – 3/9/2020



60-Day

Percent of Normal Precipitation (%)
1/10/2020 – 3/9/2020



Generated 3/10/2020 at HPRCC using provisional data.

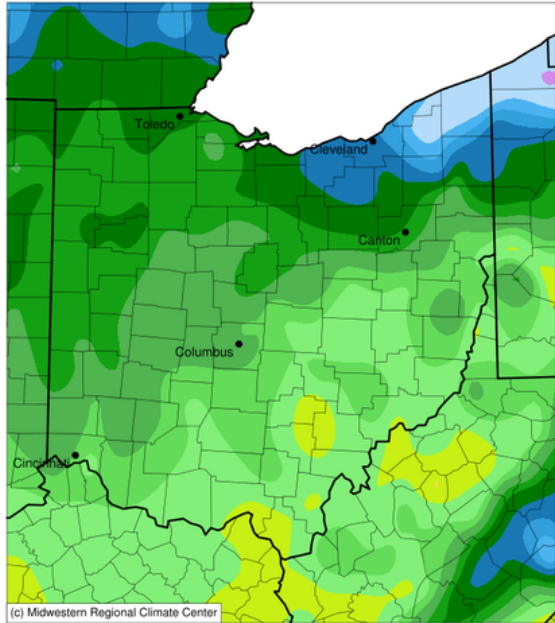
NOAA Regional Climate Centers

Generated 3/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

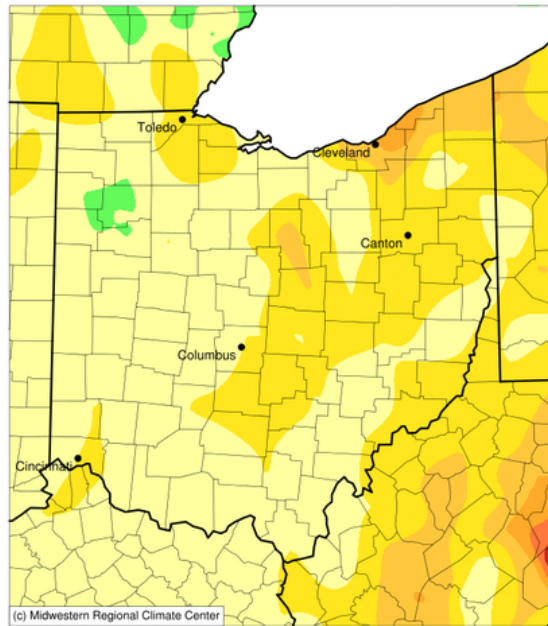
Snowfall and Differences Compared to Average (1981-2010)

Accumulated Snowfall (in)
October 01, 2019 to March 10, 2020



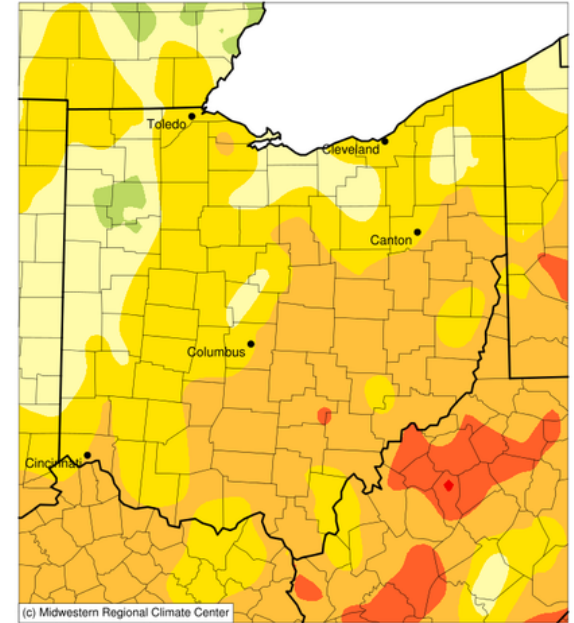
0.01 1 2.5 5 7.5 10 15 20 30 40 50 60 80
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 3/11/2020 8:19:10 AM CDT

Accumulated Snowfall (in): Departure from 1981-2010 Normals
October 01, 2019 to March 10, 2020



-70 -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
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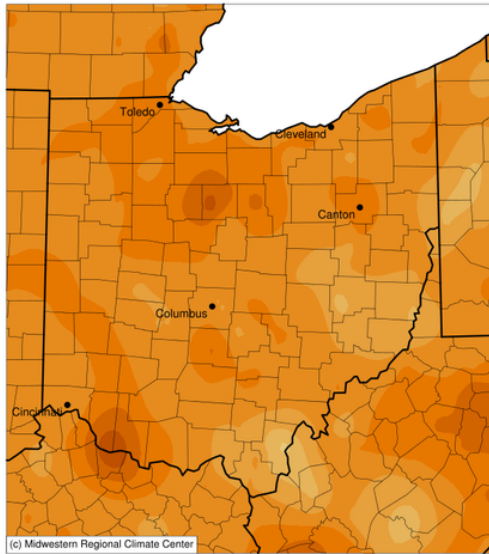
Accumulated Snowfall (in): Percent of 1981-2010 Normals
October 01, 2019 to March 10, 2020



2 5 10 25 50 75 100 125
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
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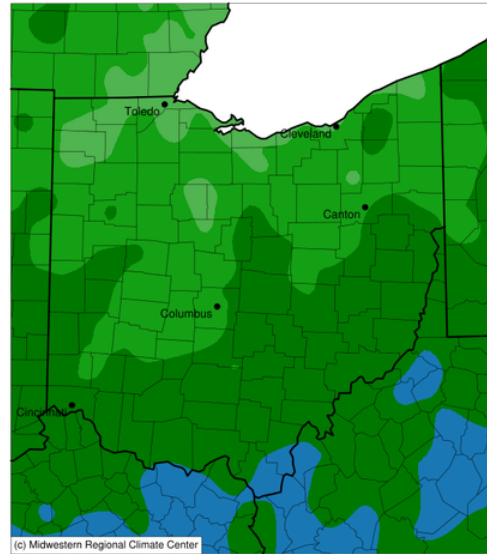
Winter (Dec-Feb) 2020

Average Temperature (°F): Departure from 1981-2010 Normals
December 01, 2019 to February 29, 2020



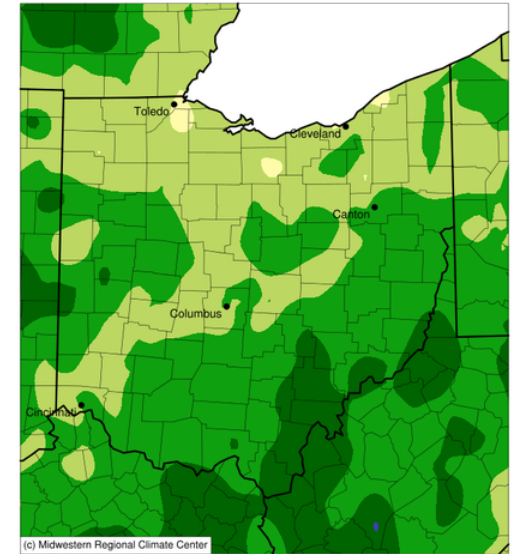
Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwest Regional Climate Center
 cii-MATE: MRCC Application Tools Environment
 Generated at: 3/5/2020 10:34:11 AM CST

Accumulated Precipitation (in)
December 01, 2019 to February 29, 2020



Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwest Regional Climate Center
 cii-MATE: MRCC Application Tools Environment
 Generated at: 3/5/2020 10:38:19 AM CST

Accumulated Precipitation (in): Percent of 1981-2010 Normals
December 01, 2019 to February 29, 2020

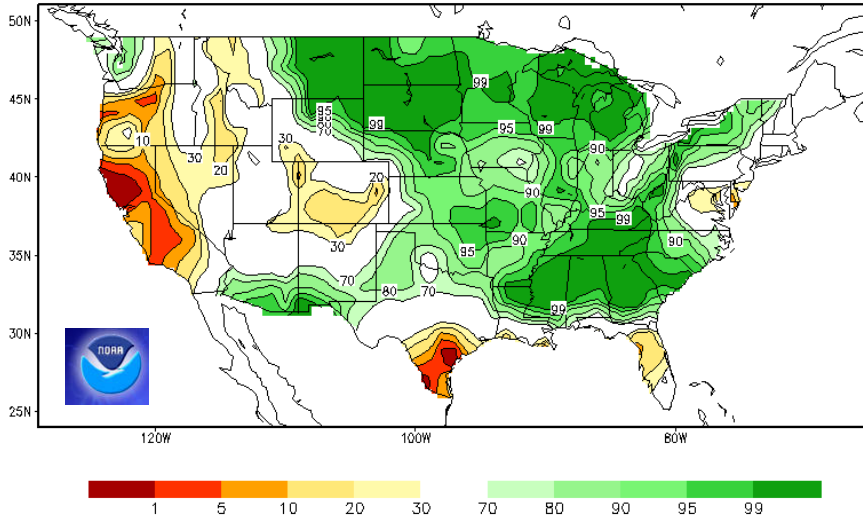


Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI, Midwest Regional Climate Center
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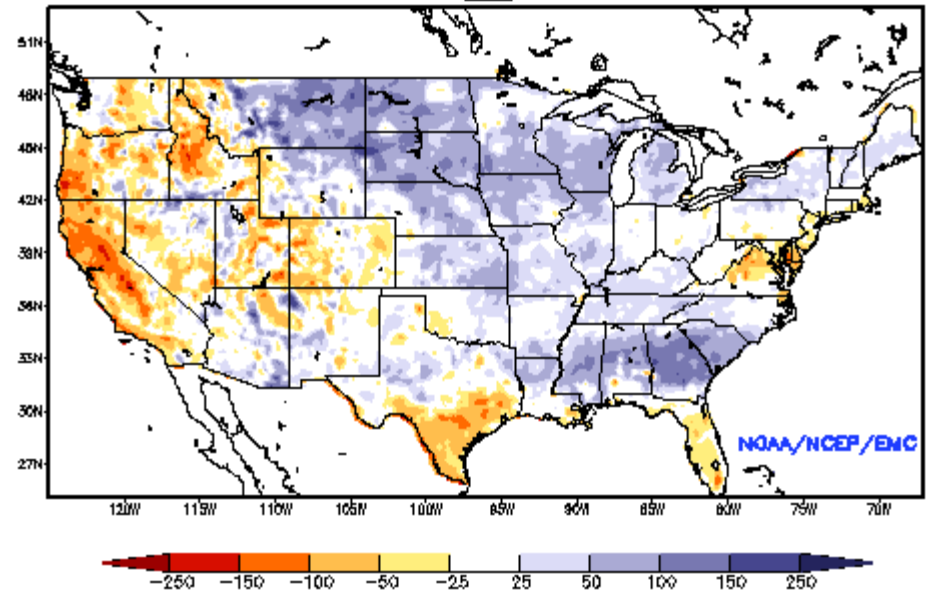
5th Warmest/22nd Wettest (1895-present)

Soil Moisture

Calculated Soil Moisture Ranking Percentile
MAR 09, 2020



Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: MAR 06, 2020



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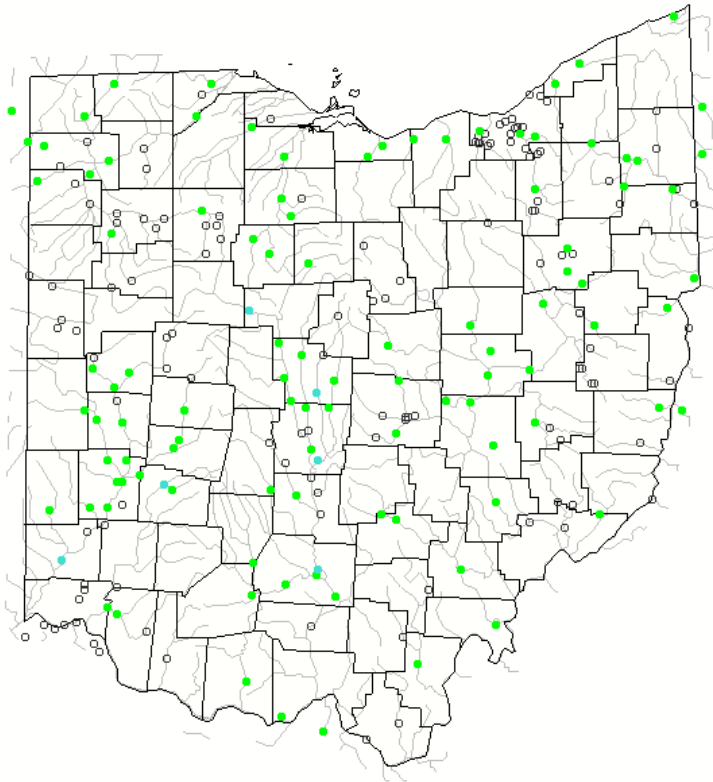
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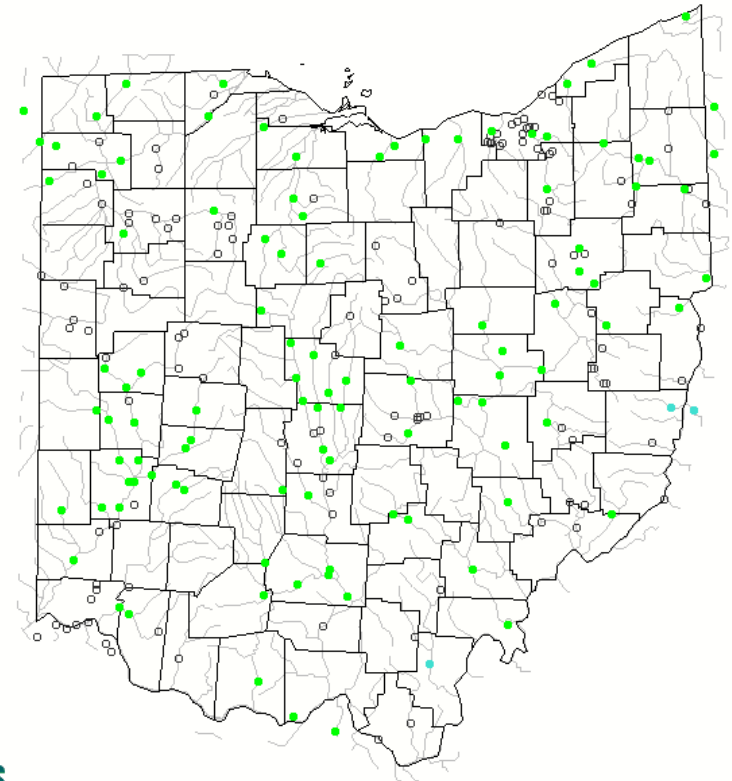
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7-DAY



USGS Streamflow

28-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



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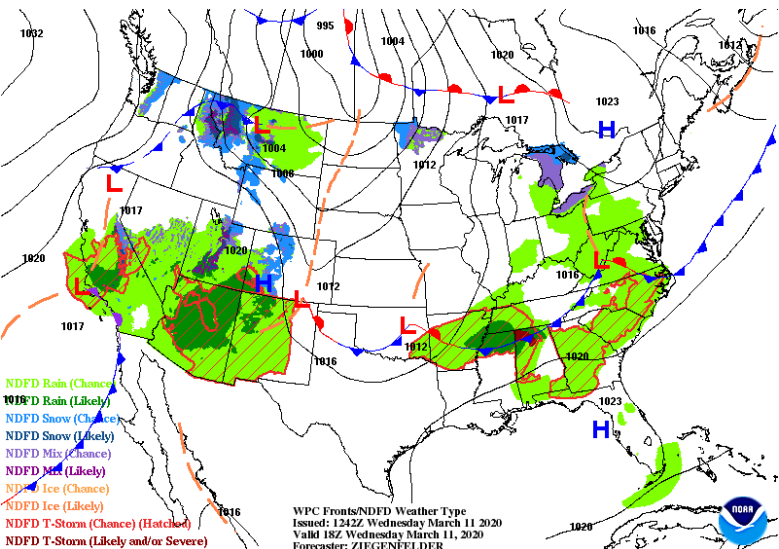
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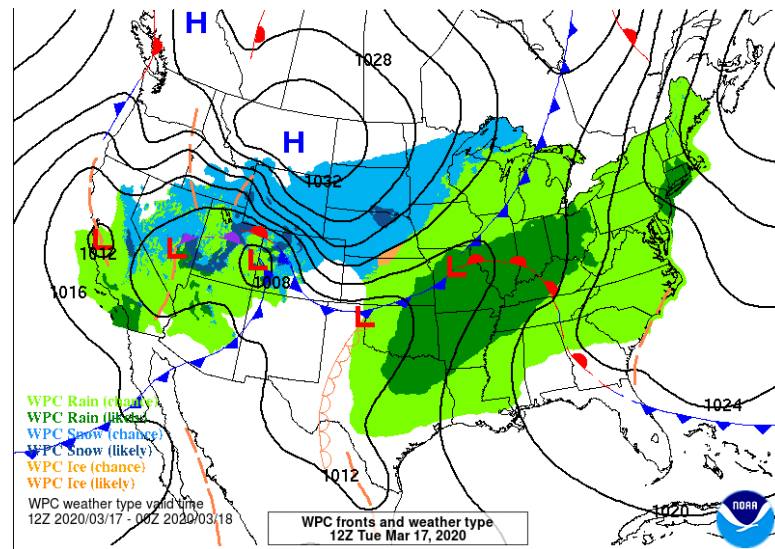


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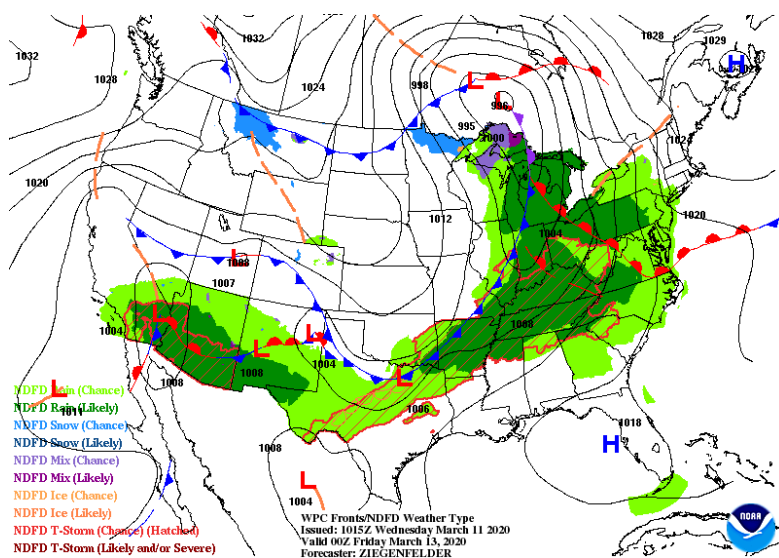
Weather for the Week Ahead



Wednesday (today)



Tuesday



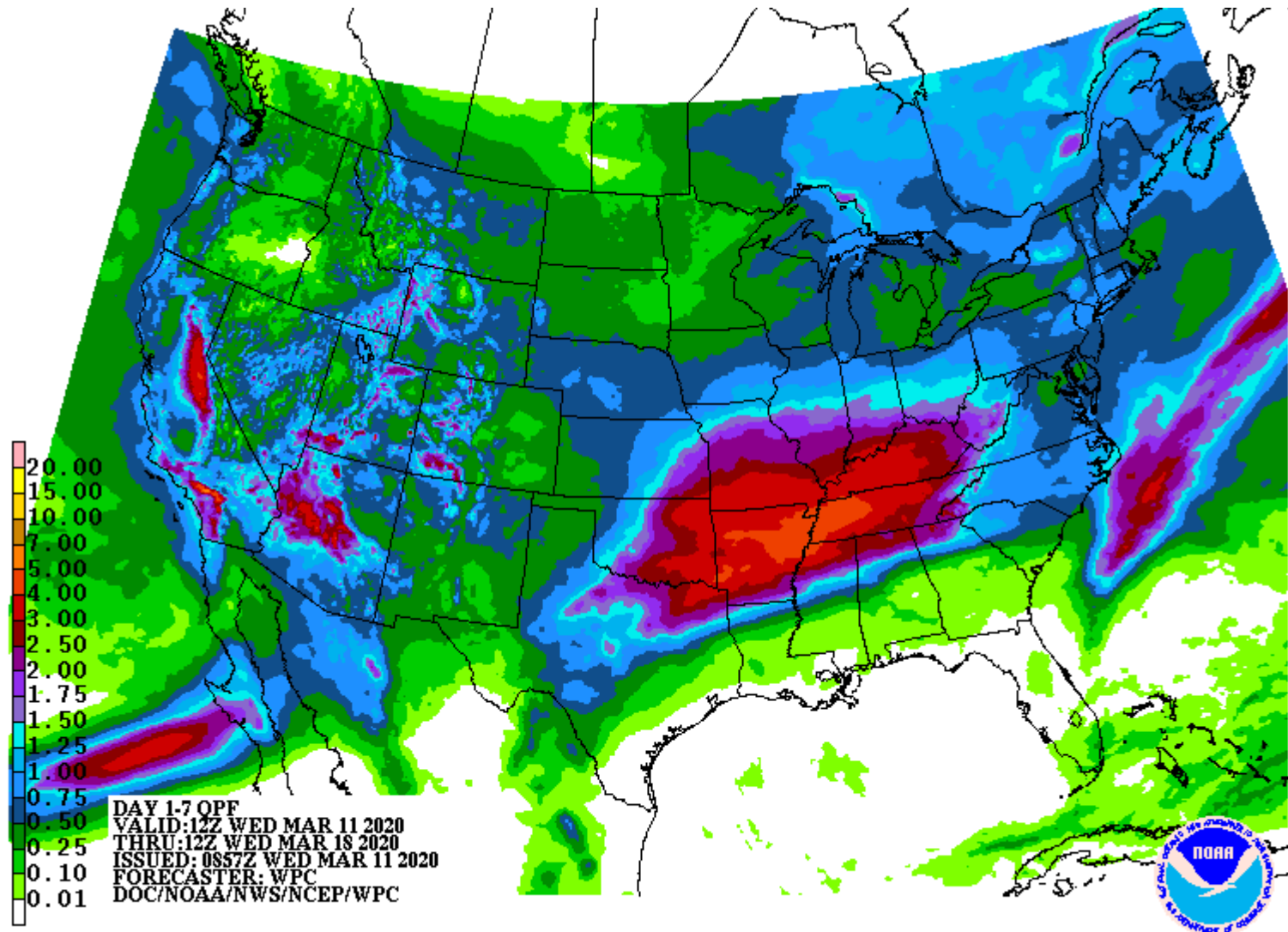
Friday



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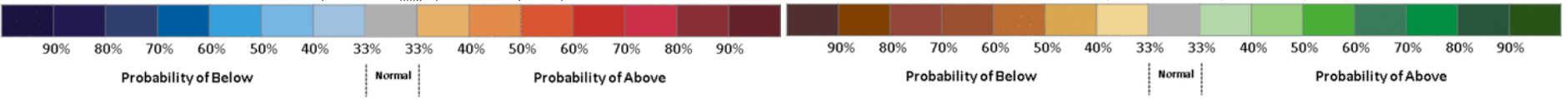
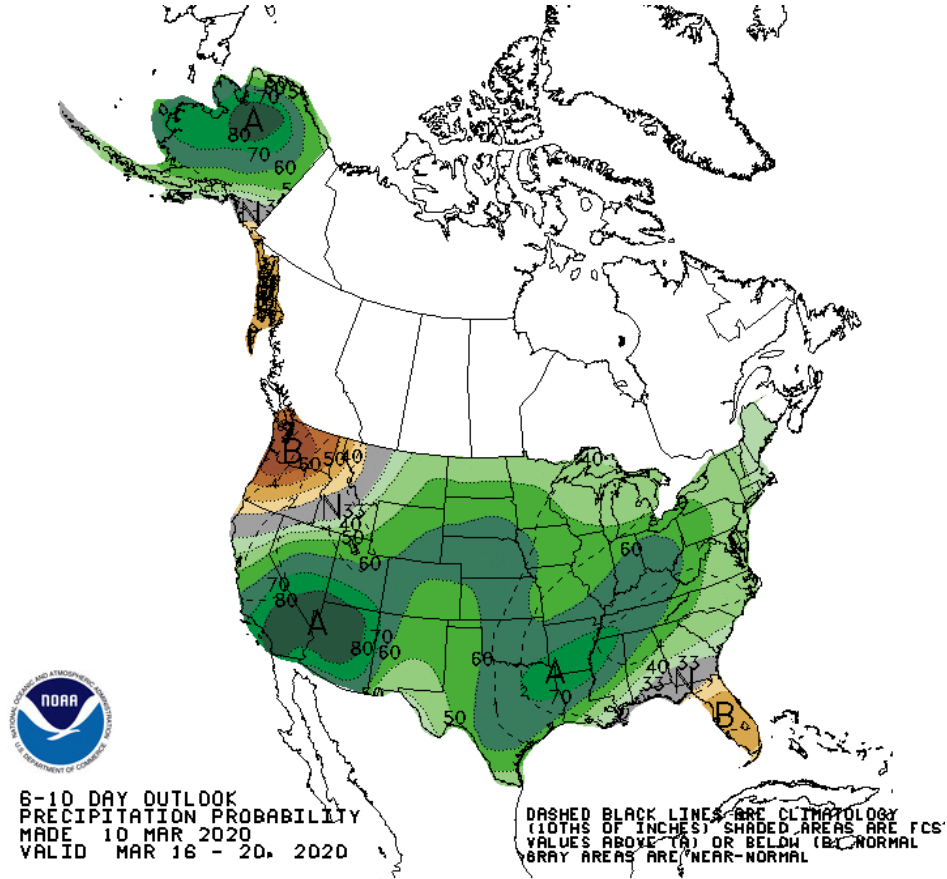
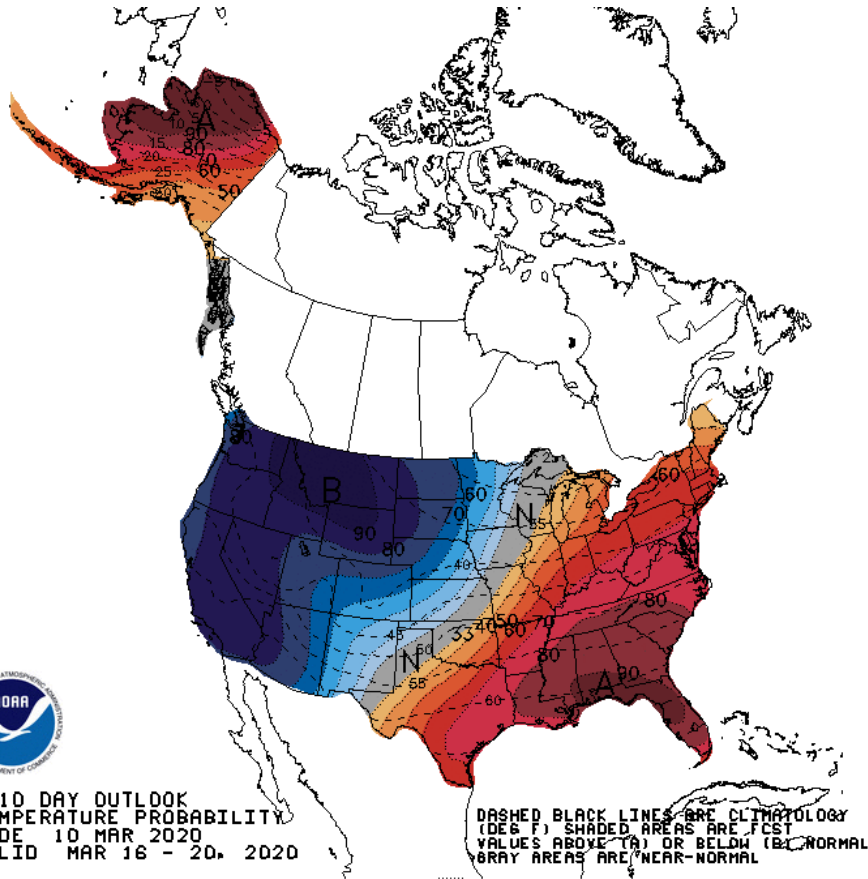
Weather for the Week Ahead



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6-10 Day Outlook



Highs: 45-52°F; Lows: 27-33°F; Precip: 0.70-0.85" (per week)



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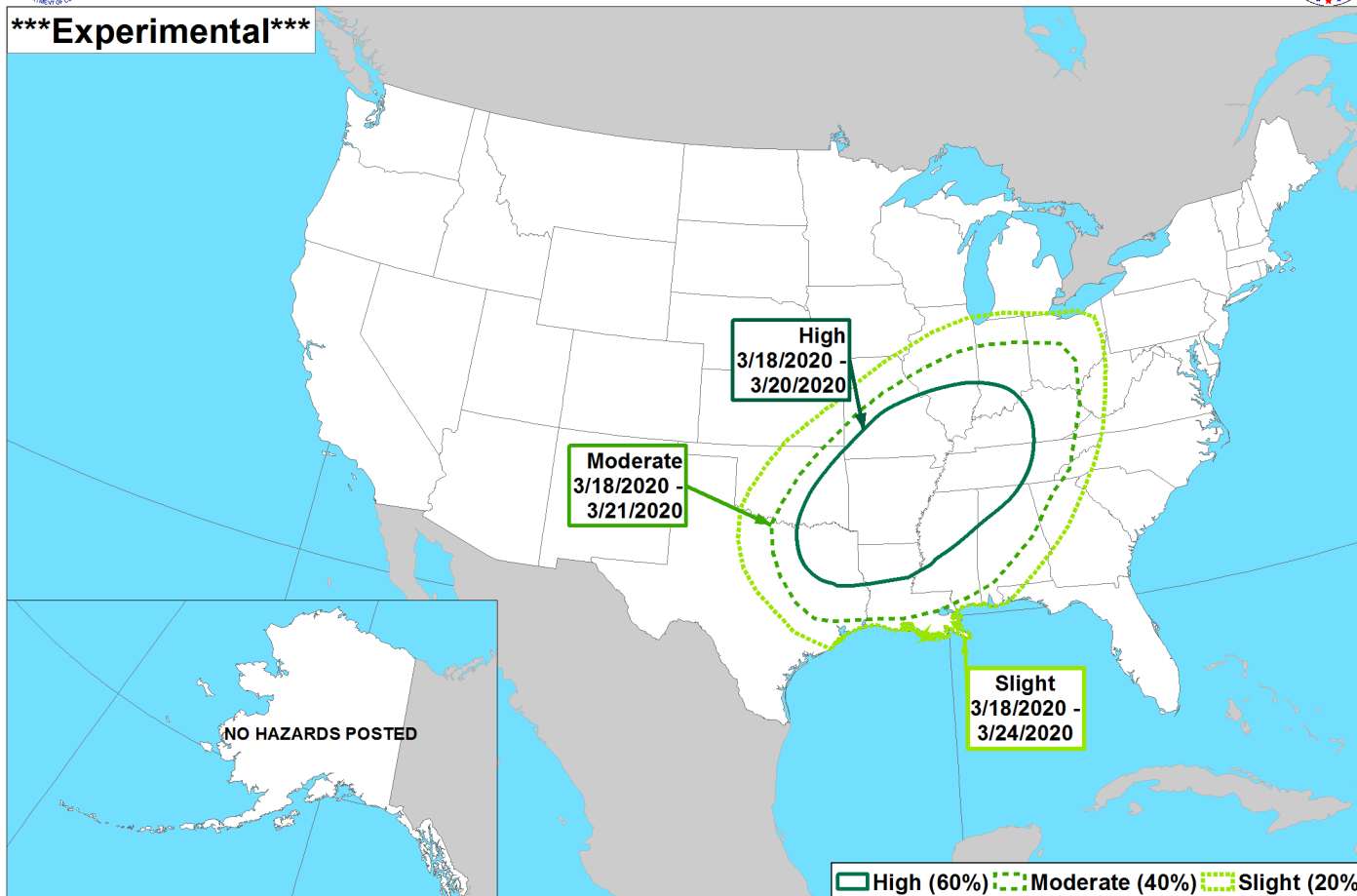
Risk Outlook



Risk of Heavy Precipitation
Valid: 03/18/2020-03/24/2020



Experimental



Climate Prediction Center
Made: 03/10/2020 3PM EDT

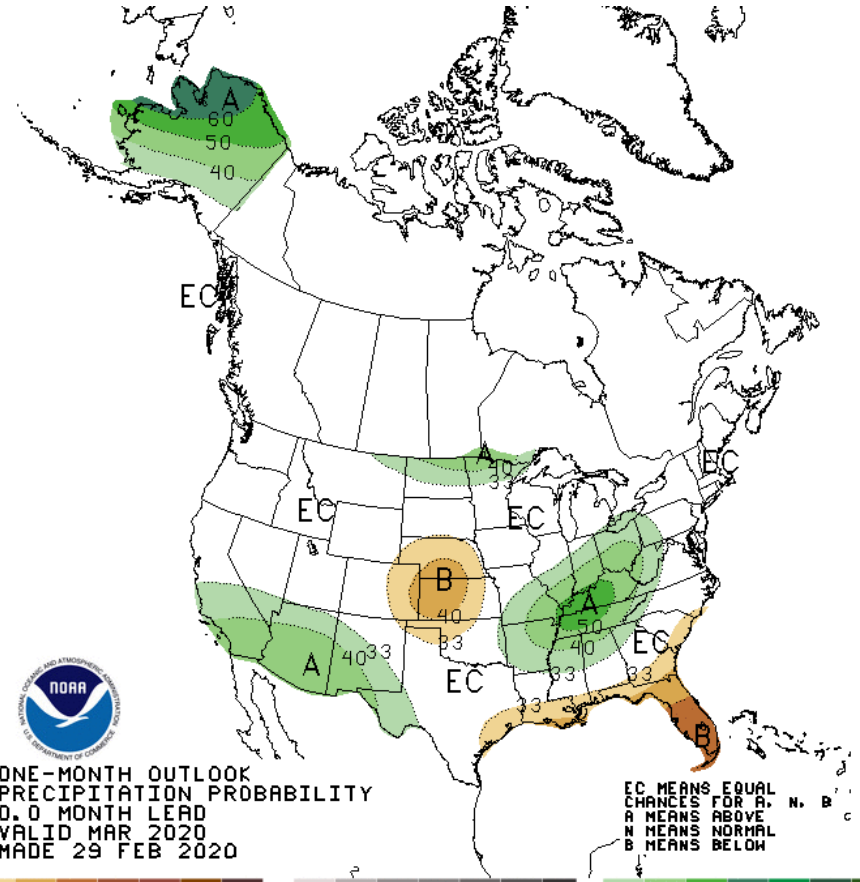
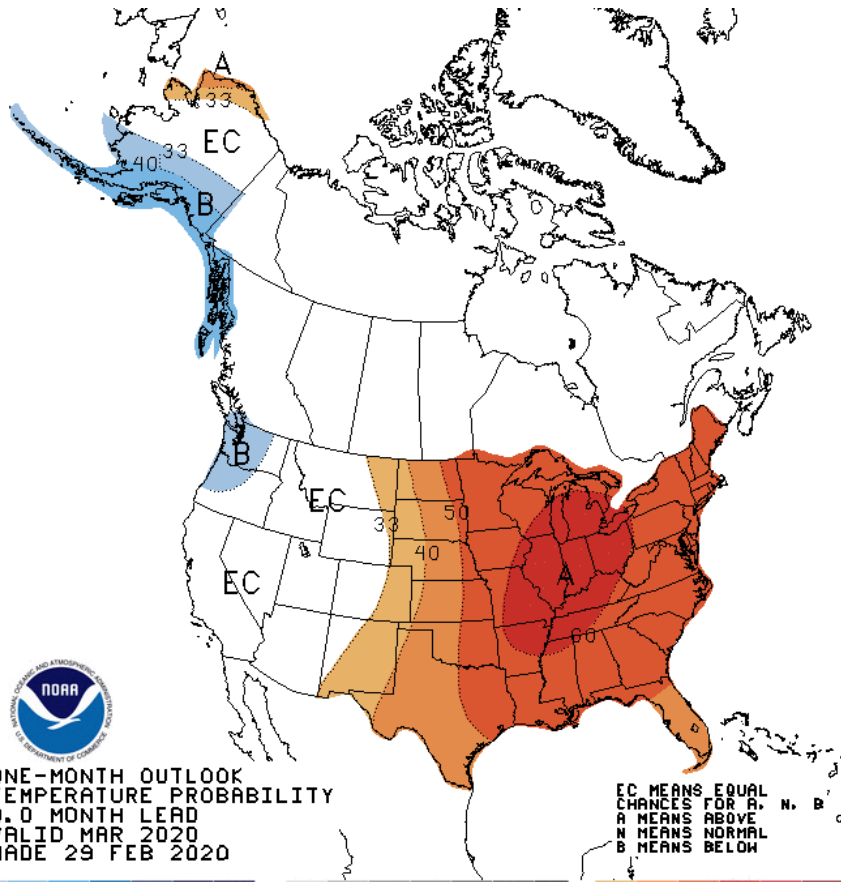
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March Outlook



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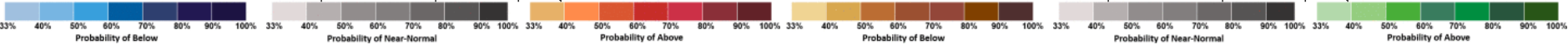
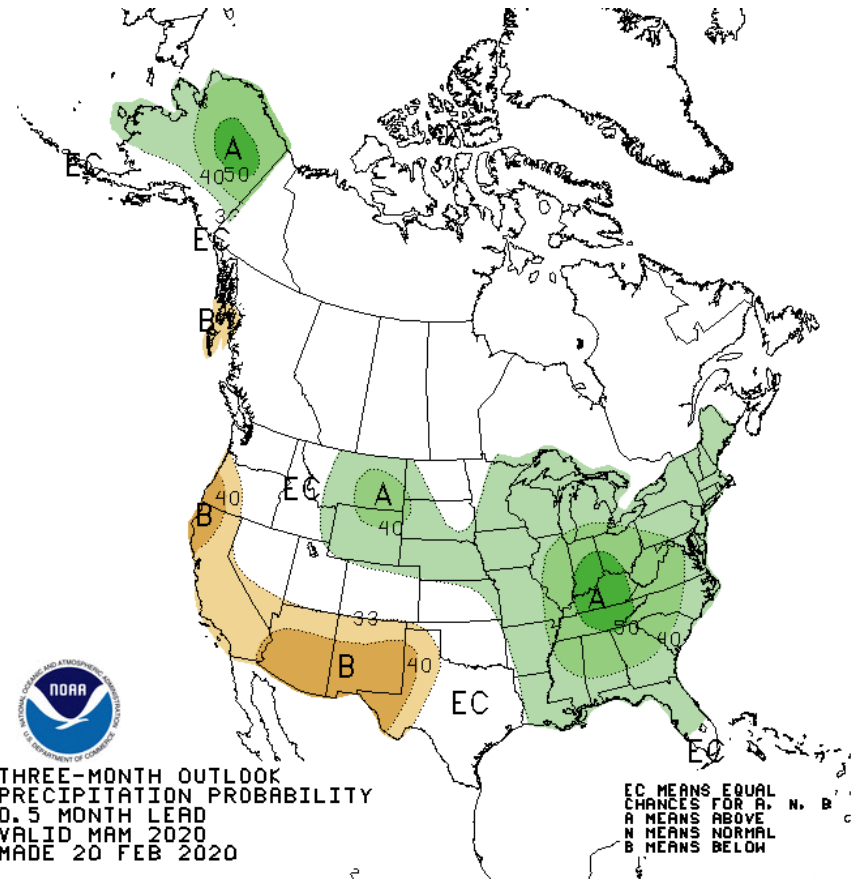
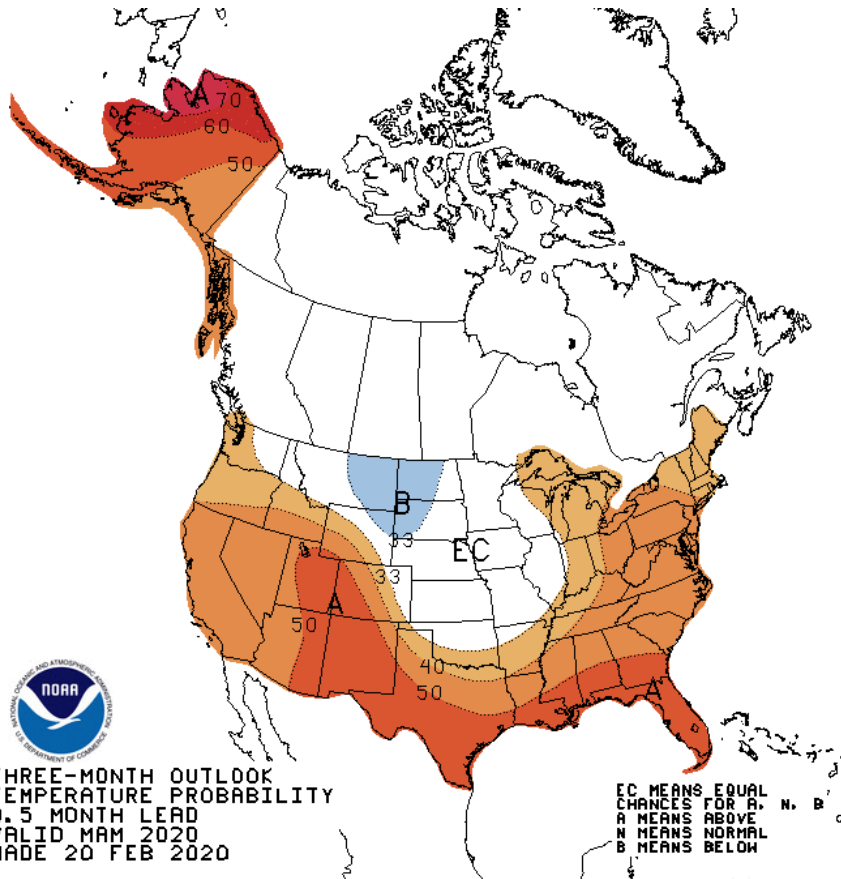
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March – May



Summary of Conditions



Photo Credit: Kat Bledsoe

Drought Monitor: None

Climate Recap: Generally warmer and wetter than average of late

Ahead: Mild temperatures likely to continue with ample opportunities for precipitation



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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