

MAC-T Monthly Call

Midwest Agriculture and Climate Team

April 1, 2019

For more information:

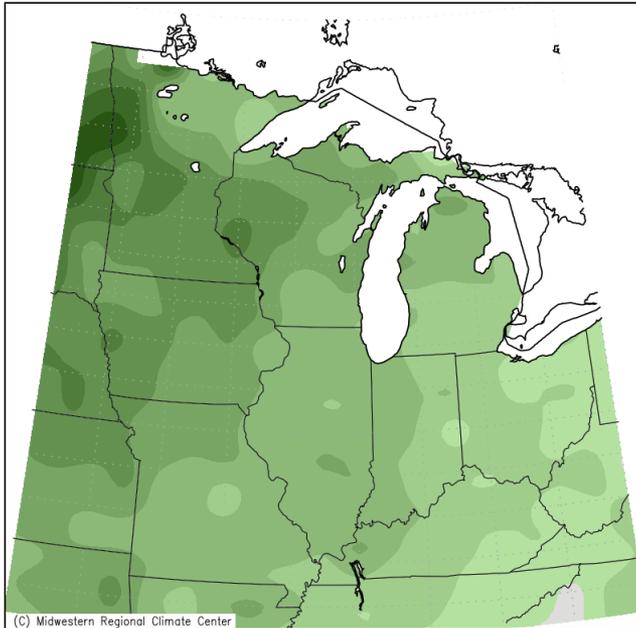
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Midwest Climate Hub
U.S. DEPARTMENT OF AGRICULTURE

Average Temperature (°F): Departure from Mean
March 1, 2019 to March 30, 2019



(C) Midwestern Regional Climate Center

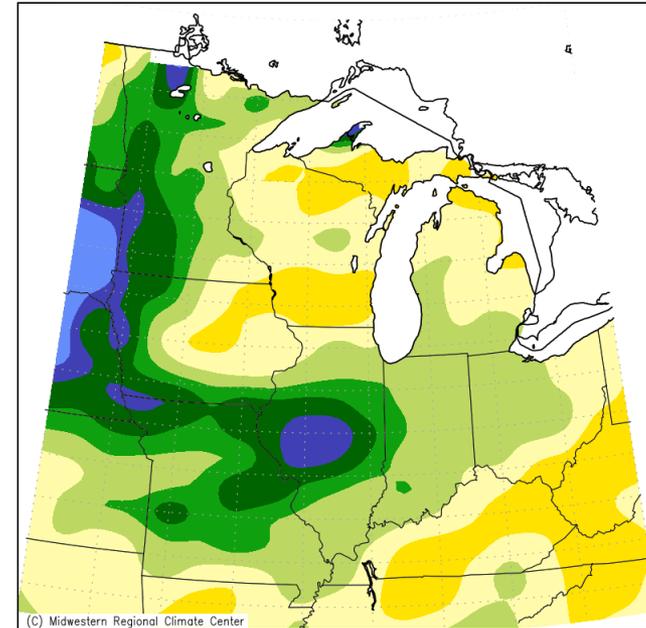
Mean period is 1981–2010.



Midwestern Regional Climate Center

Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

Accumulated Precipitation: Percent of Mean
March 1, 2019 to March 30, 2019



(C) Midwestern Regional Climate Center

Mean period is 1981–2010.



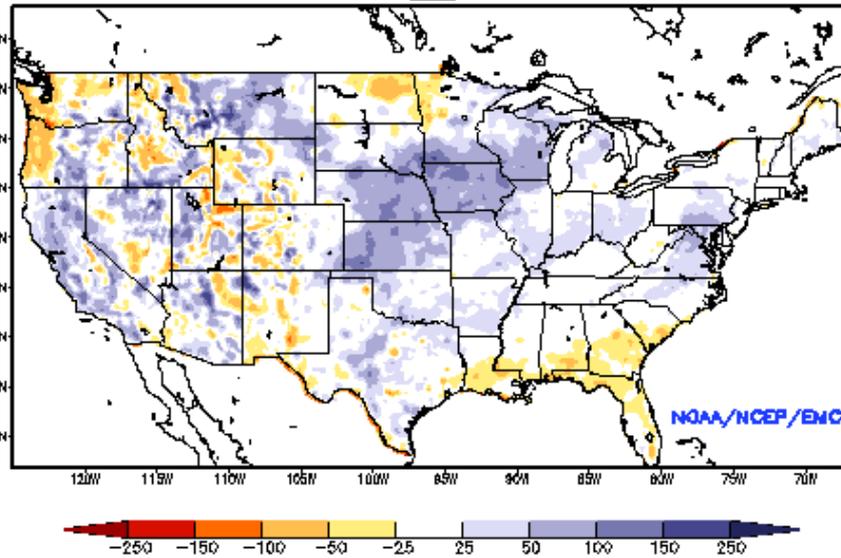
Midwestern Regional Climate Center

Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

- March temperatures (as expected) were below average throughout the region – worse into the Plains. Departures ranged from 1-2°F below avg. in the east to 8-9°F in the west.
- Precipitation was actually below average in large areas including the Great Lakes and south of the Ohio River. Much of the wetter-than-average areas were quite wet with nearly double average precipitation.

Soil Moisture

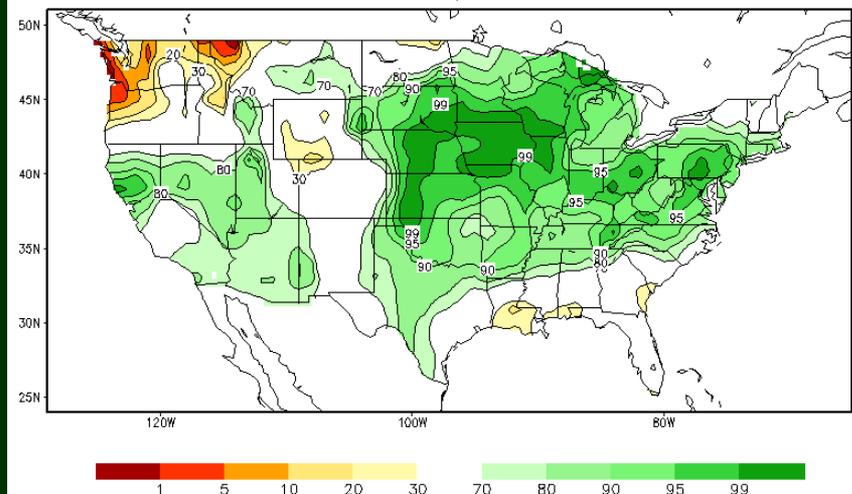
Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: MAR 27, 2019



<http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>

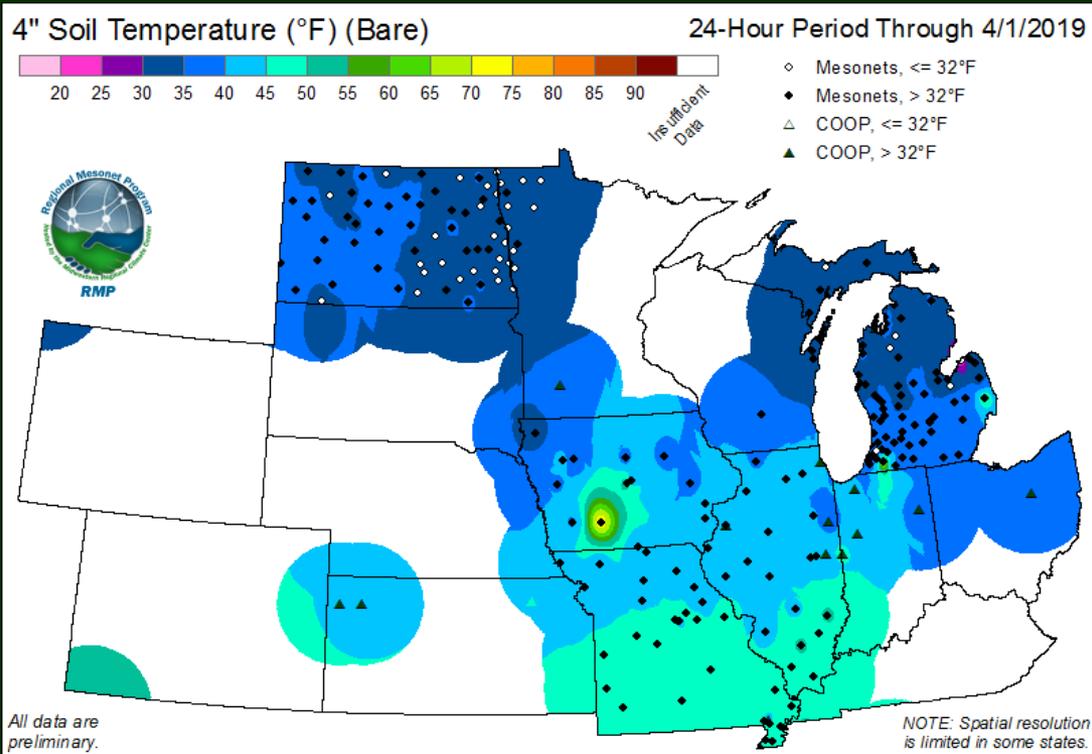
- Heavy precip fell over already wet areas increasing wetness issues.
- Dry areas of the eastern Corn Belt have helped starting to dry soils approaching planting.
- Soils are still in the 90th percentile over most of the region with 99th centered on Iowa and central plains.

Calculated Soil Moisture Ranking Percentile
MAR 31, 2019



http://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#

Soil Temperature

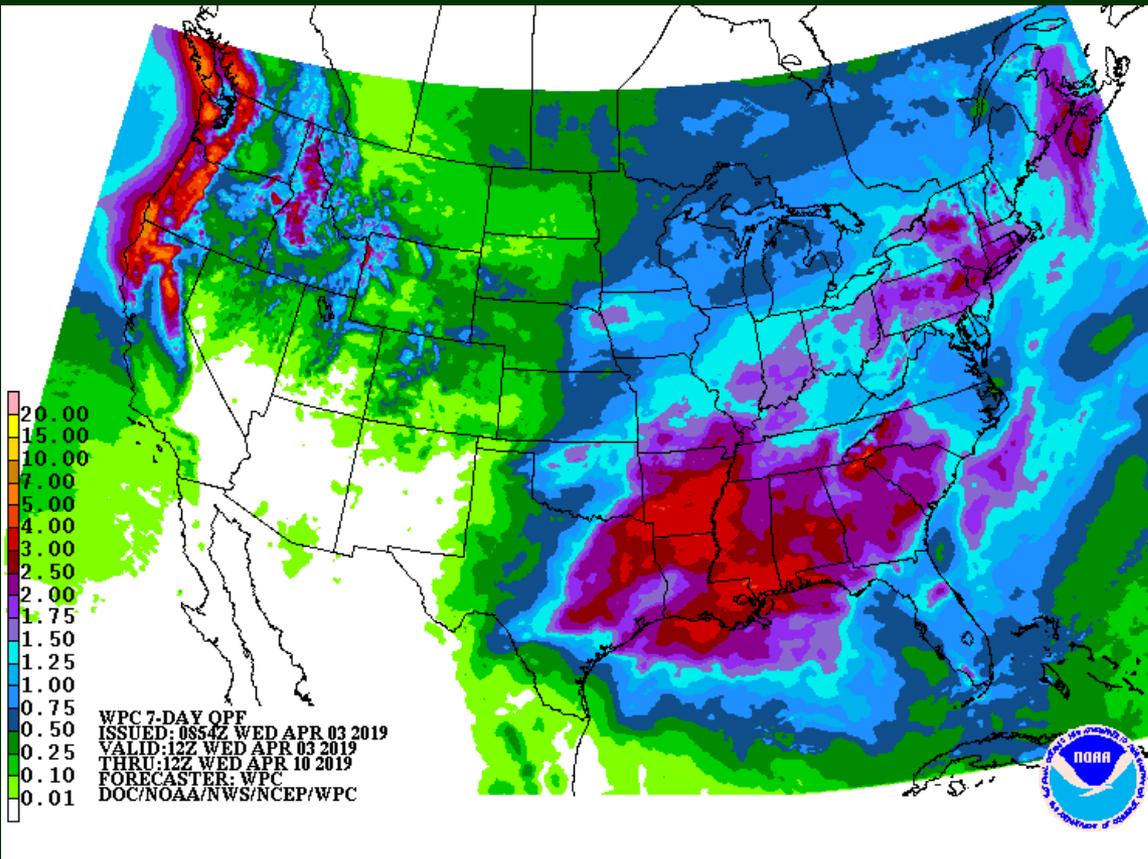


- Soil temperatures are still well below potential planting. But areas are generally above freezing except some further north.

Assorted AG Issues

- Wet soils will continue to be an issue slowing initial field activity.
- Flooding is still possible along major rivers. Recovery efforts just getting started in worst hit areas of western Corn Belt.
- High water levels will slow river transport on the Mississippi
- Potential for early season seedling diseases with wet conditions.
- Just starting bud-break/green-up of perennials. Cold still possible in later April – monitor for freeze problems.

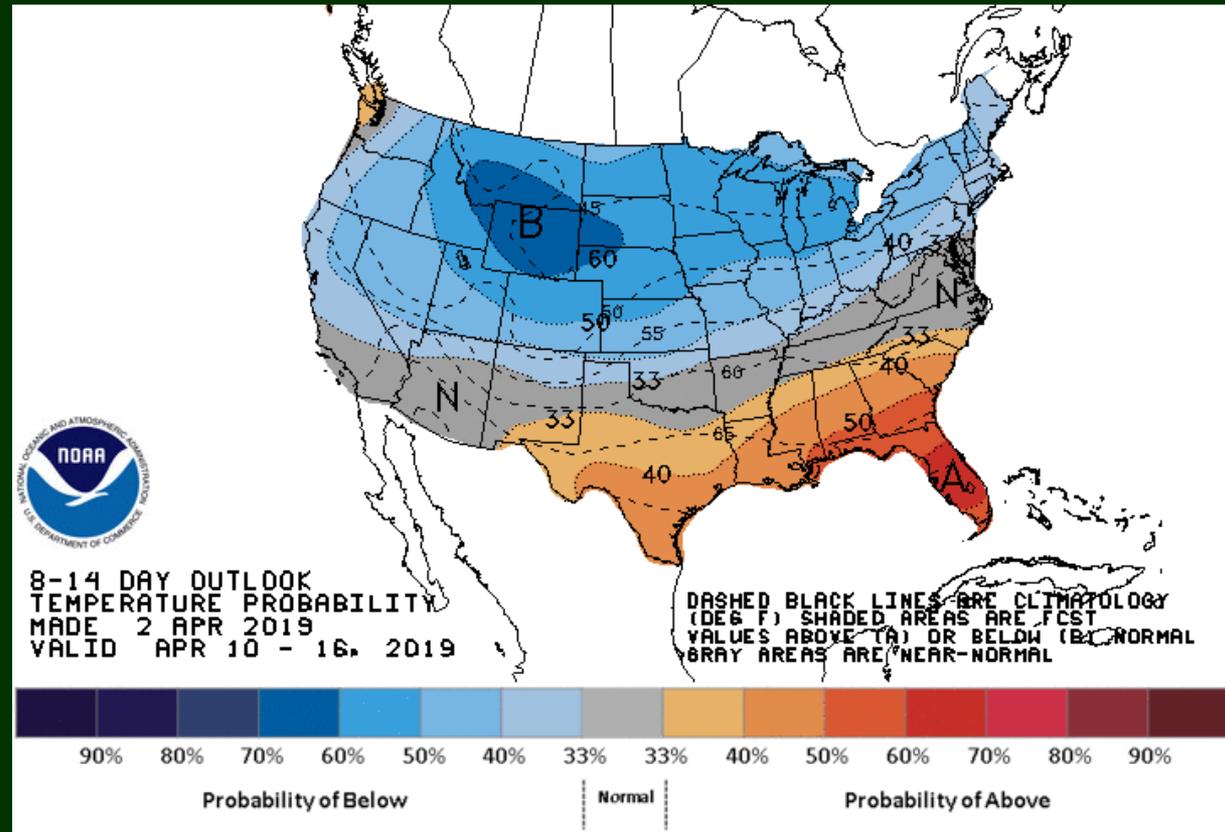
1-7 Day Precip (updated)



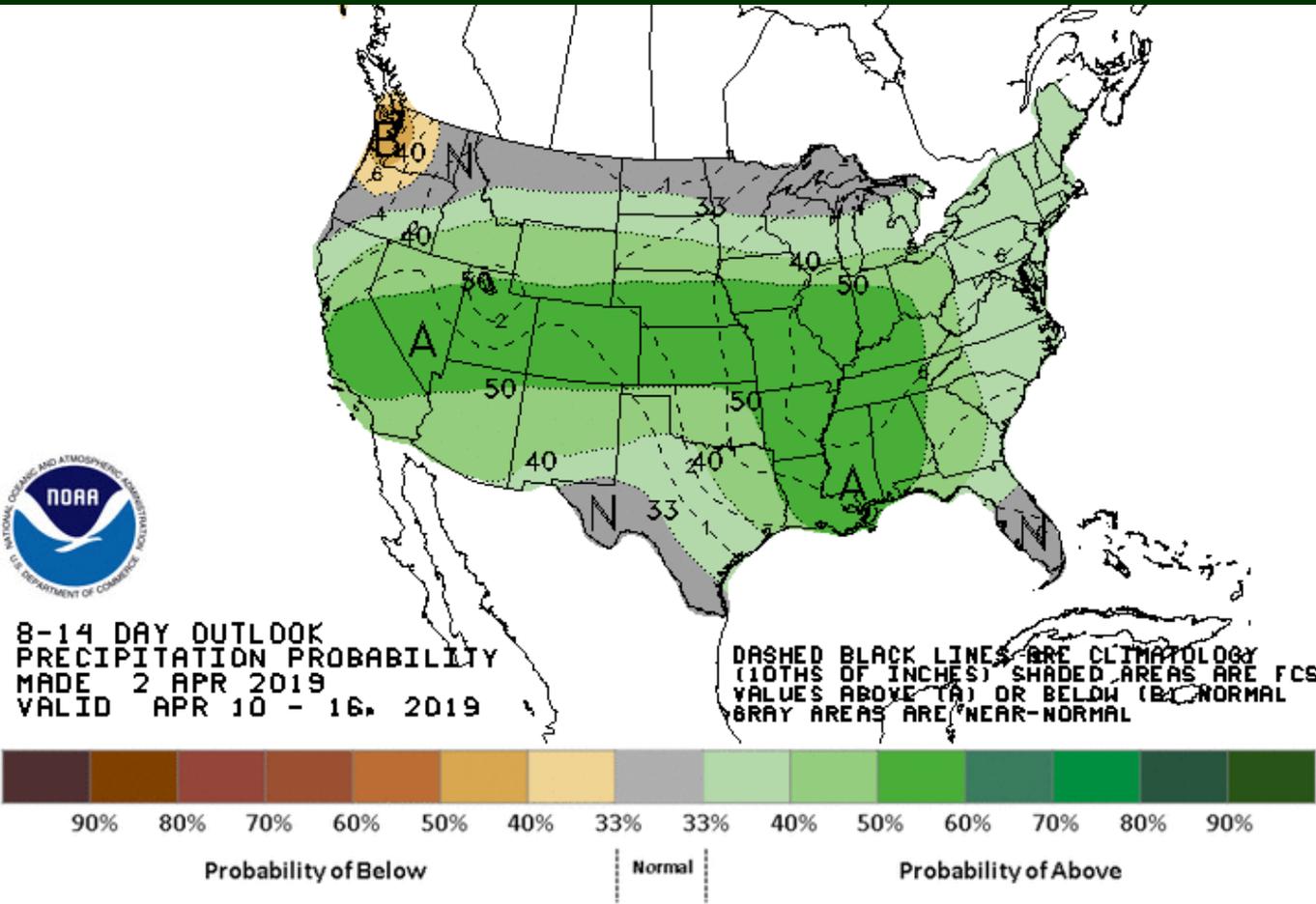
- Several expected precip amounts (some possibly heavier), which will keep soils wet.
- ~~Eastern Corn Belt continues to be drier.~~
- Northern areas (which are still melting snow and running off) fortunately are expecting less precip in the next week.

Temperature Outlook

- Warmer early April gives way to likely colder conditions over most of the region.
- Near normal likely elsewhere.



Precipitation Outlook



- A more active pattern seems likely to continue with several precip events into mid-April.

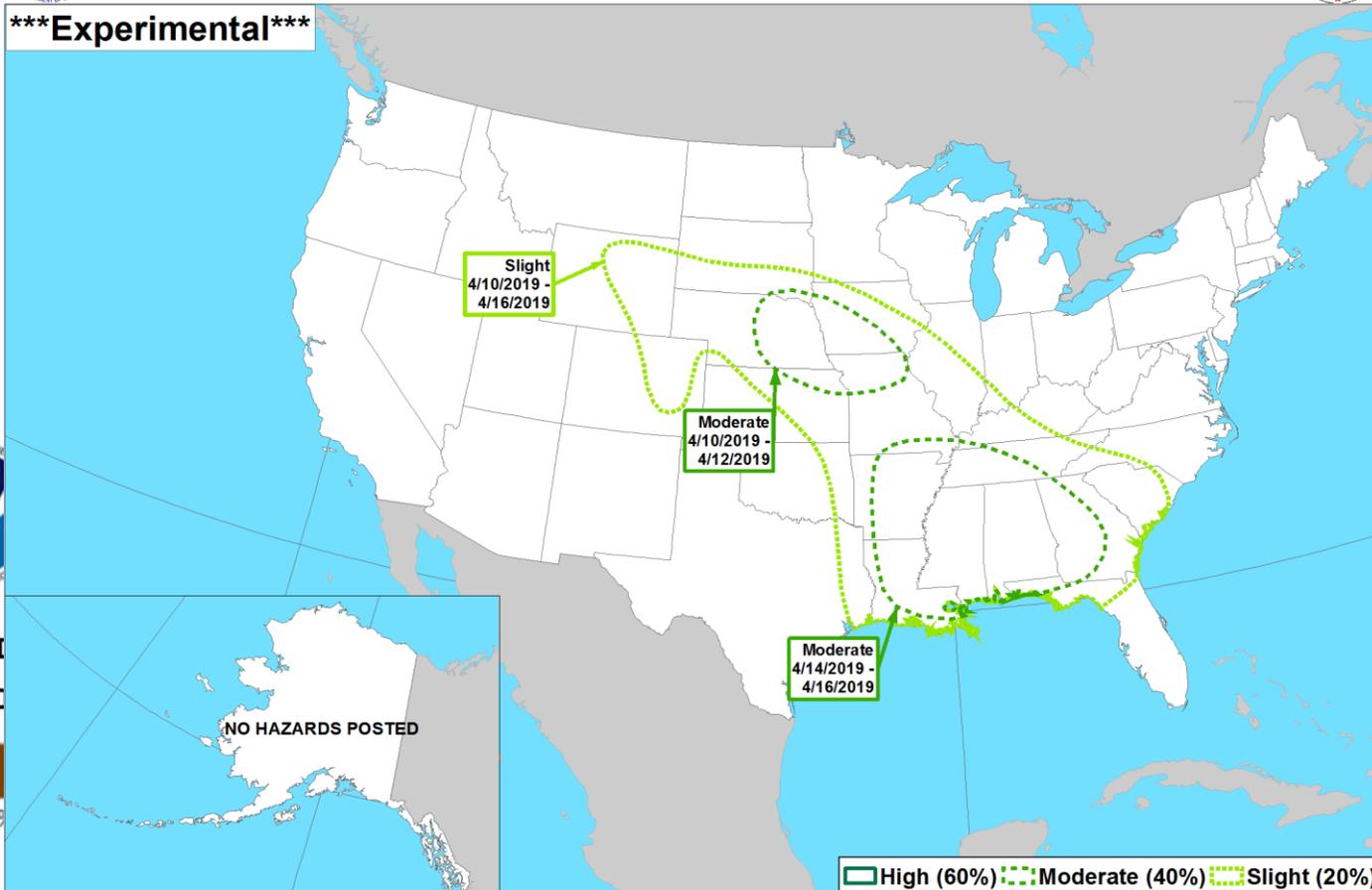
Precipitation Outlook



Risk of Heavy Precipitation
Valid: 04/10/2019-04/16/2019



Experimental



more active pattern
ms likely to
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-April.

Climate Prediction Center

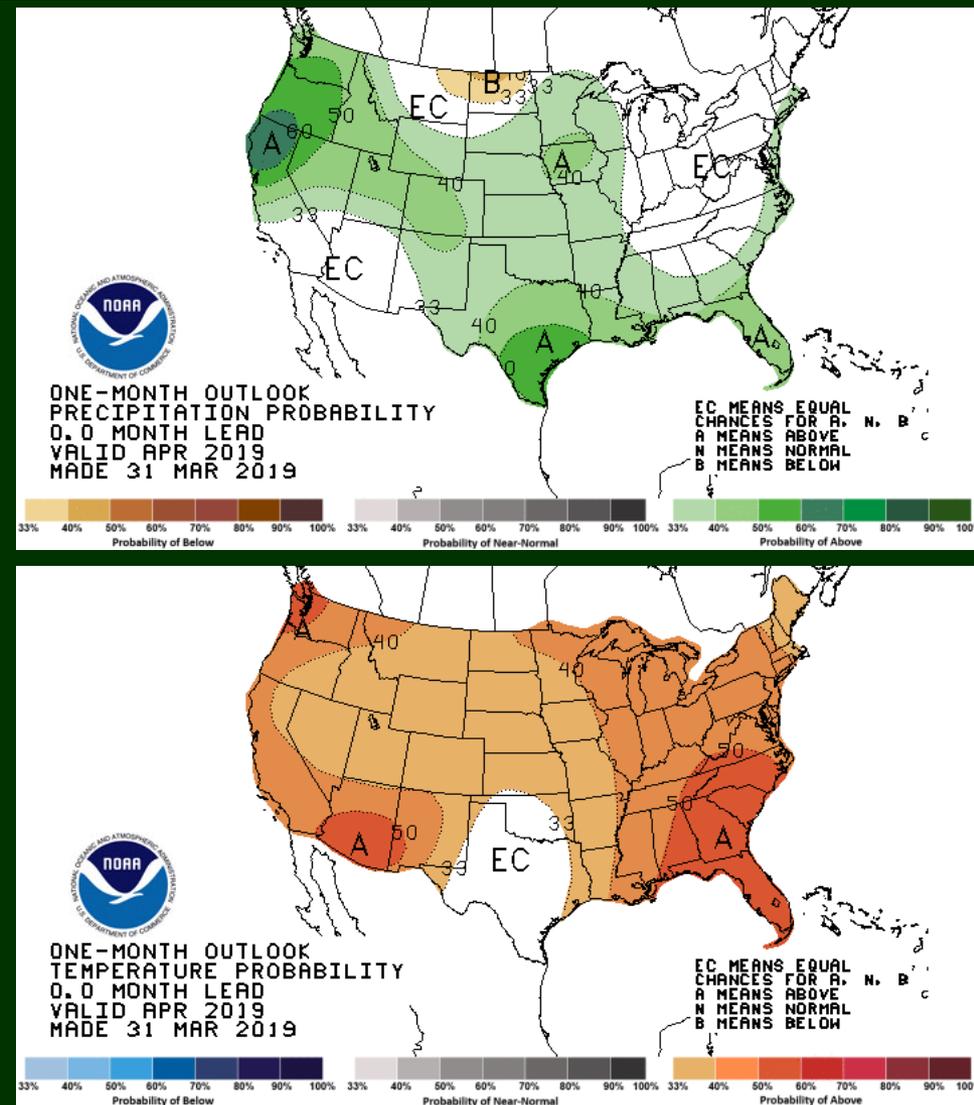
Made: 04/02/2019 3PM EDT

Follow us:

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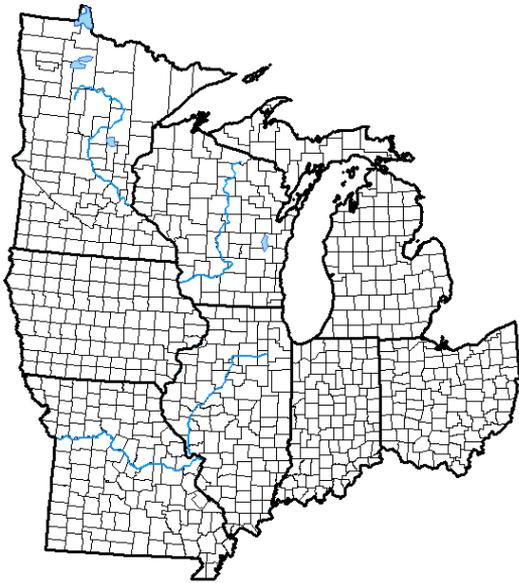
1-Month Outlook

- Precip chances are slightly increased for April except for eastern states.
- Slightly higher chance of warmer-than-average temperatures over the whole region.
- Eastern Corn Belt has the better chance of moving on planting earlier.
- Central Corn Belt likely to be somewhat delayed in activity.



Drought in the Midwest

U.S. Drought Monitor USDA Midwest Climate Hub



March 26, 2019

(Released Thursday, Mar. 28, 2019)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	100.00	0.00	0.00	0.00	0.00	0.00
Last Week 03-19-2019	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 12-25-2018	97.28	2.72	0.43	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	99.21	0.79	0.00	0.00	0.00	0.00
Start of Water Year 09-25-2018	79.61	20.39	9.31	1.86	0.40	0.01
One Year Ago 03-27-2018	81.73	18.27	2.79	0.00	0.00	0.00

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Eric Luebehusen
U.S. Department of Agriculture



<http://droughtmonitor.unl.edu/>

The Midwest remained free of drought, with significant flooding impacting the Mississippi River and its tributaries.

**In the history of the USDM (since 2000) the Midwest Climate Hub region has never had a multi-week run with nothing noted in the region (now 5 consecutive weeks). There have only been two single weeks of no coverage previously.

Summary

- March was cold, but varyingly wet/dry across the region.
- Soils are generally much wetter than average, but somewhat better in the eastern Corn Belt.
- Generally wetter conditions, but warmer are more likely into at least early April.
- Field activity more likely in the eastern Corn Belt.
- Wetness problems should continue in soils and runoff.

Next MAC-T Monthly Call

Next Call **Wednesday, May 1st.**