

MAC-T Monthly Call

Midwest Agriculture and Climate Team

April 1, 2019

For more information:

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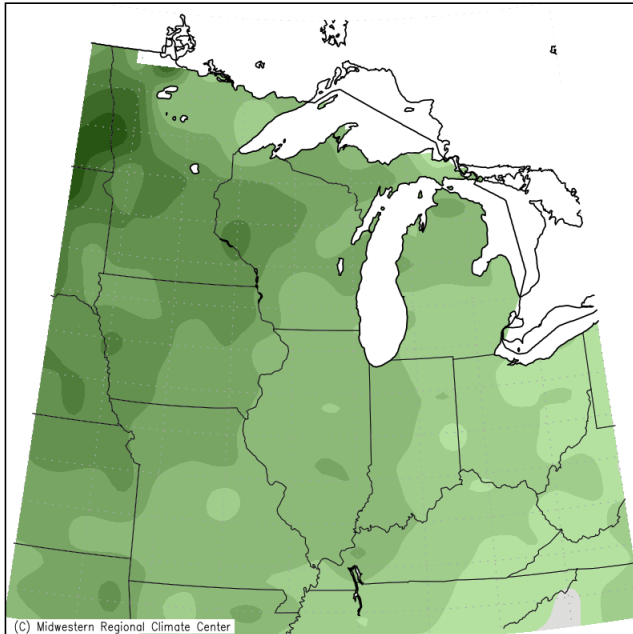
Charlene.Felkley@ars.usda.gov



Midwest Climate Hub

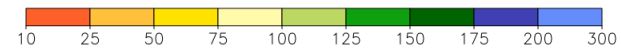
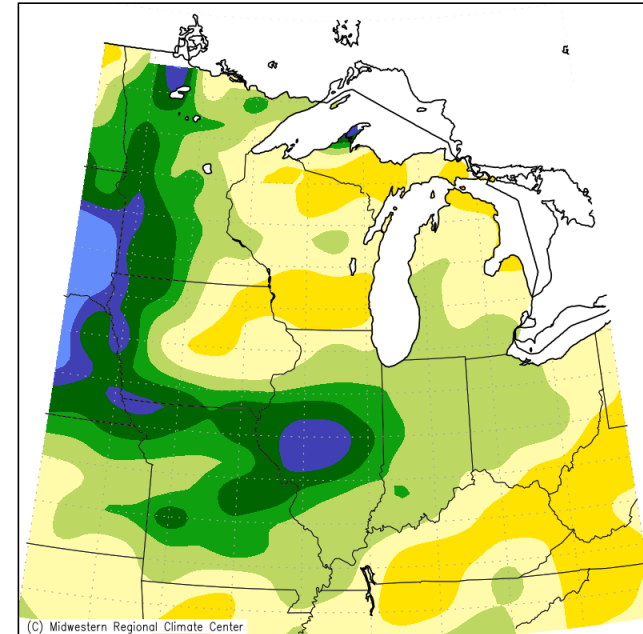
U.S. DEPARTMENT OF AGRICULTURE

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



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

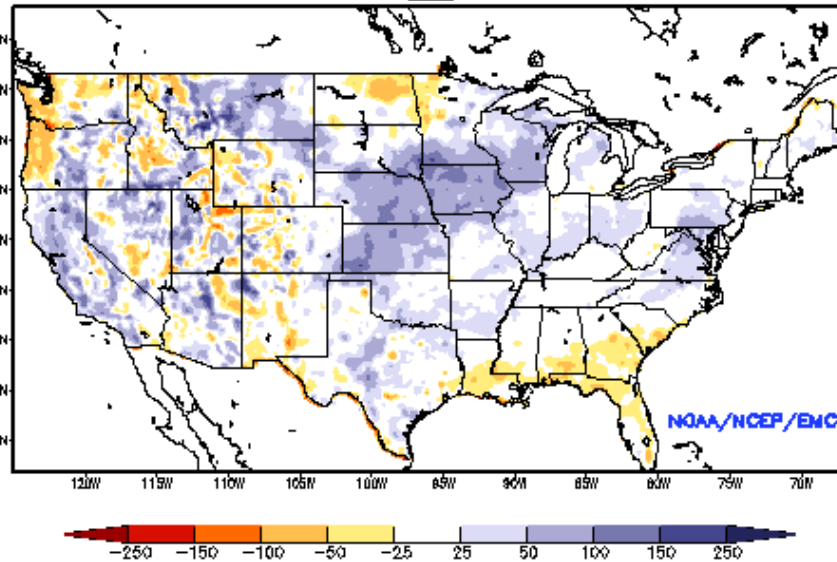


Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

- 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

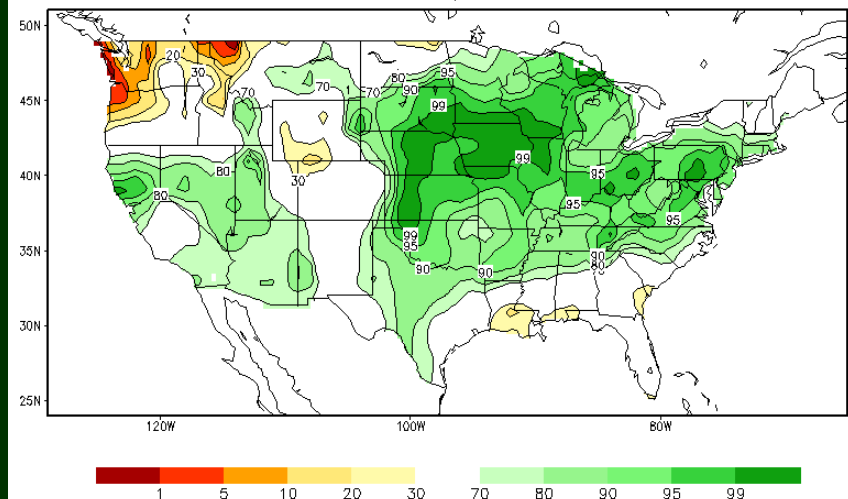
Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: MAR 27, 2019



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

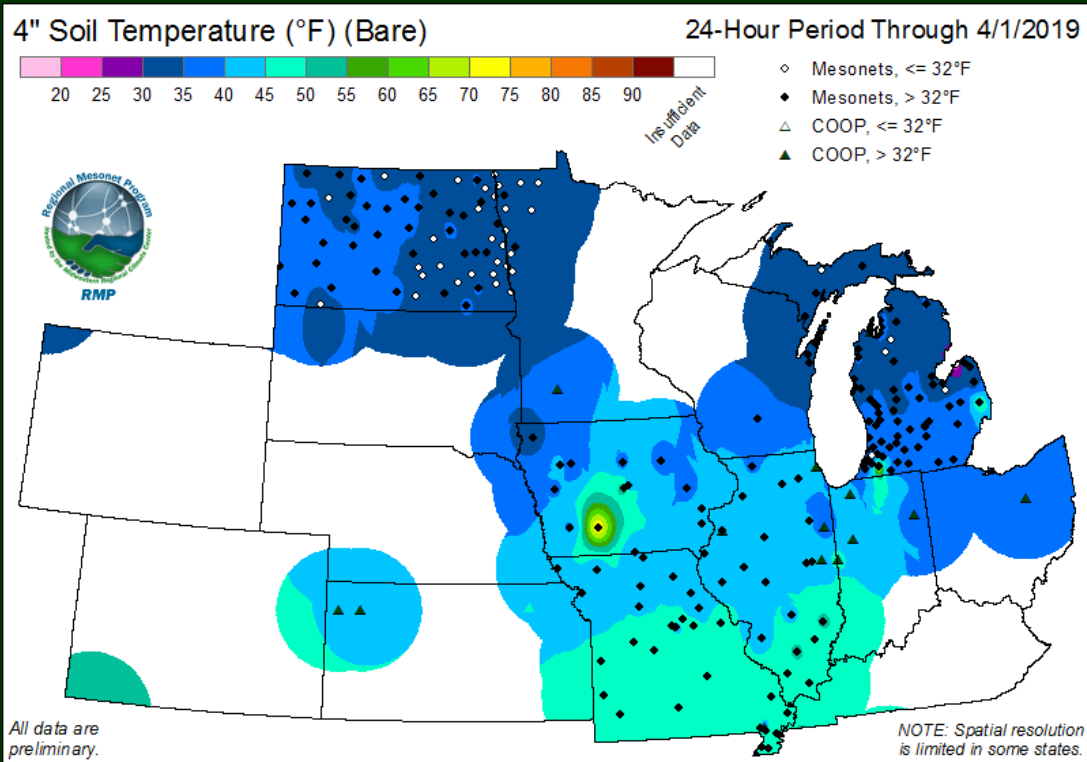
- Heavy precip fell over already wet areas increasing wetness issues.
- Dry areas of the eastern Corn Belt have helped starting to dry soils approaching planting.
- Soils are still in the 90th percentile over most of the region with 99th centered on Iowa and central plains.

Calculated Soil Moisture Ranking Percentile
MAR 31, 2019



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

Soil Temperature

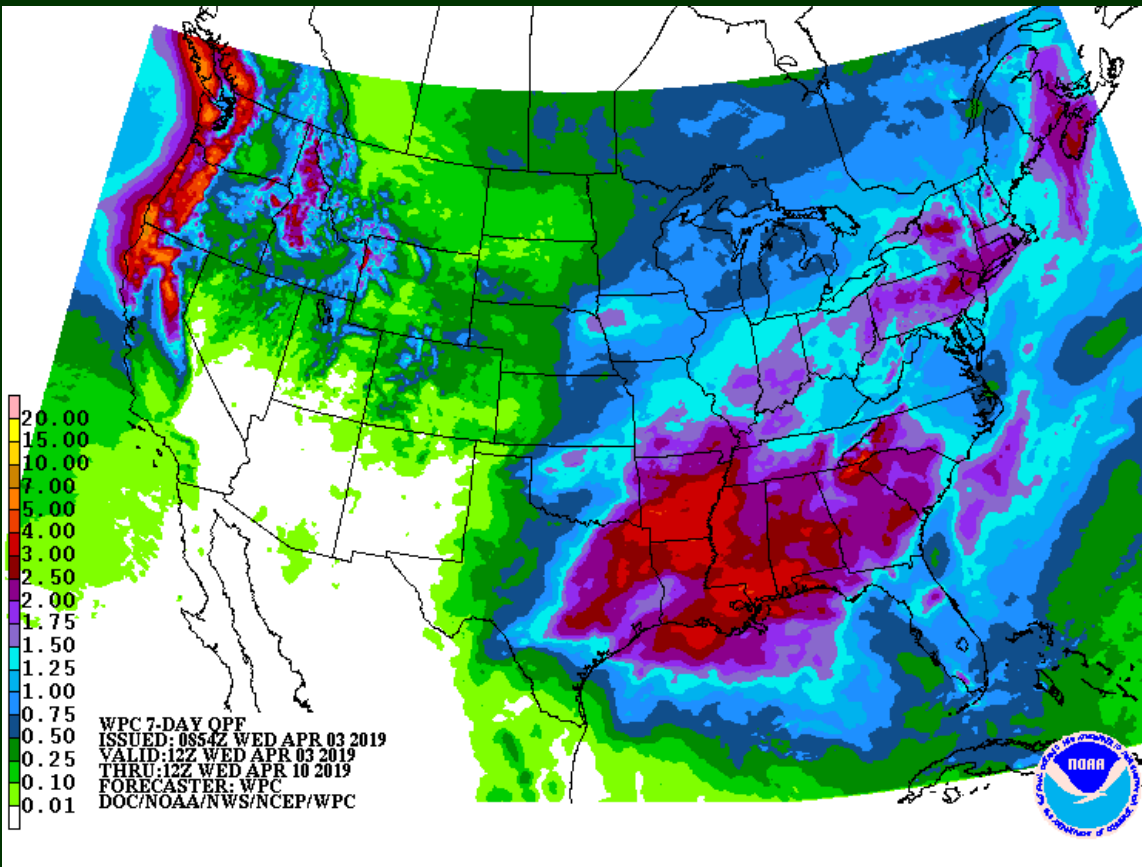


- Soil temperatures are still well below potential planting. But areas are generally above freezing except some further north.

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.

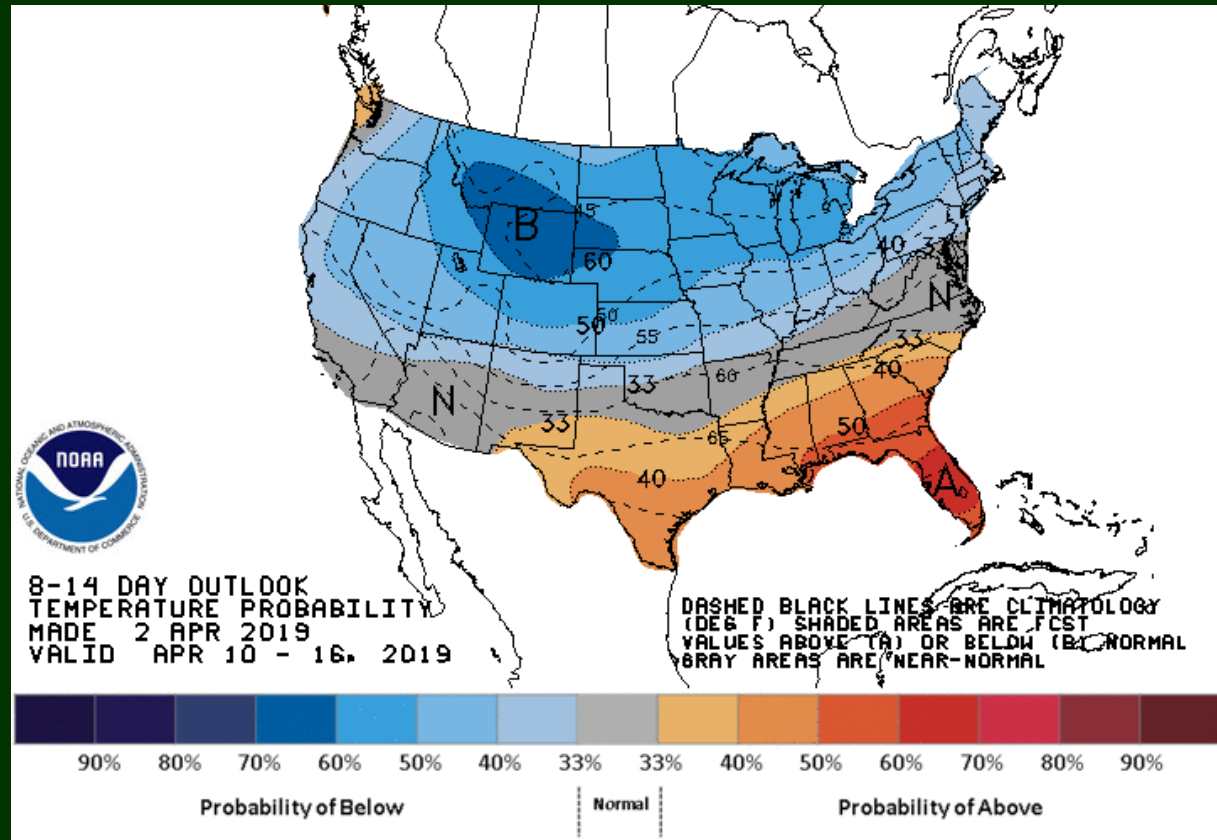
1-7 Day Precip (updated)



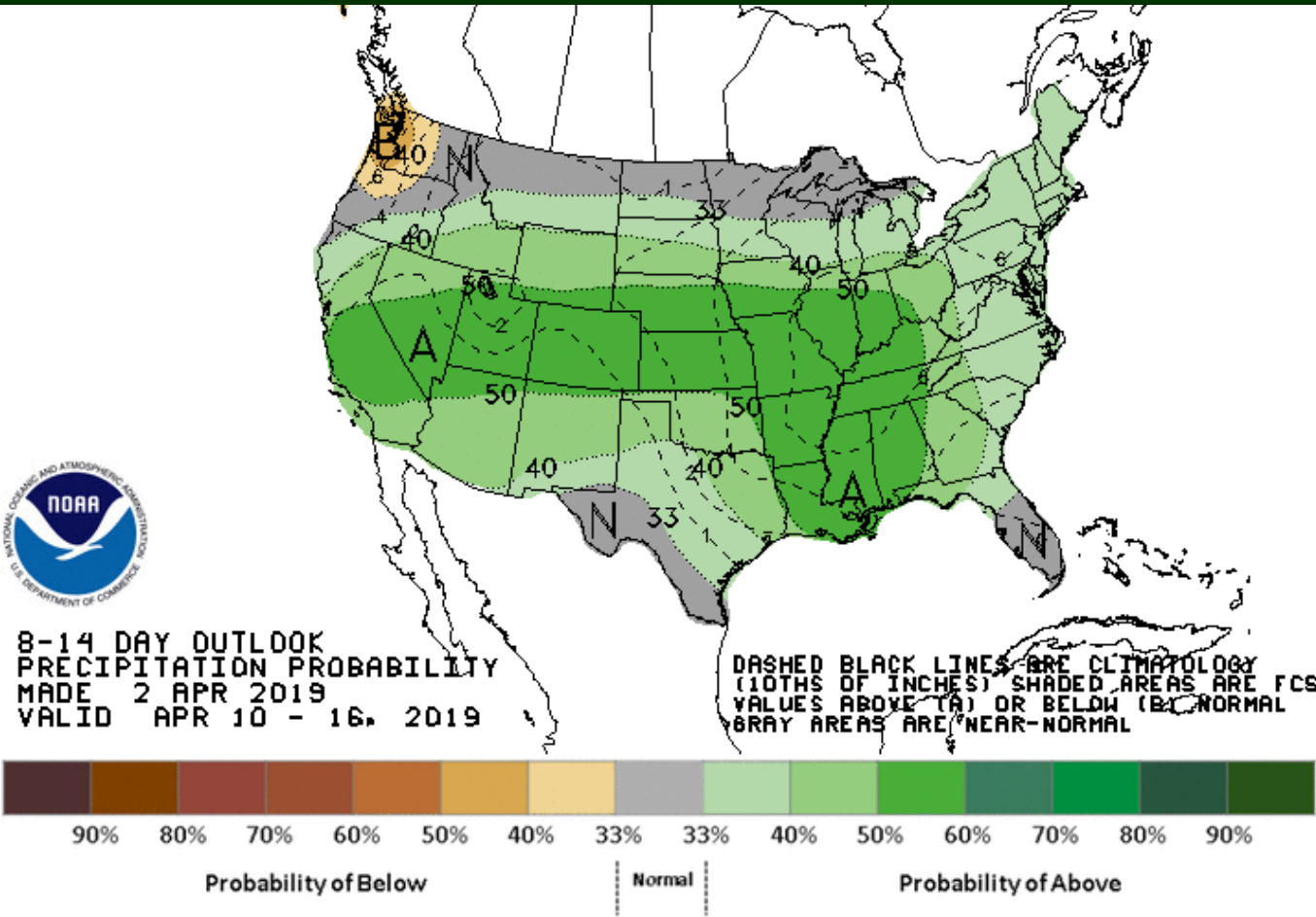
- Several expected precip amounts (some possibly heavier), which will keep soils wet.
- ~~Eastern Corn Belt continues to be drier.~~
- Northern areas (which are still melting snow and running off) fortunately are expecting less precip in the next week.

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.

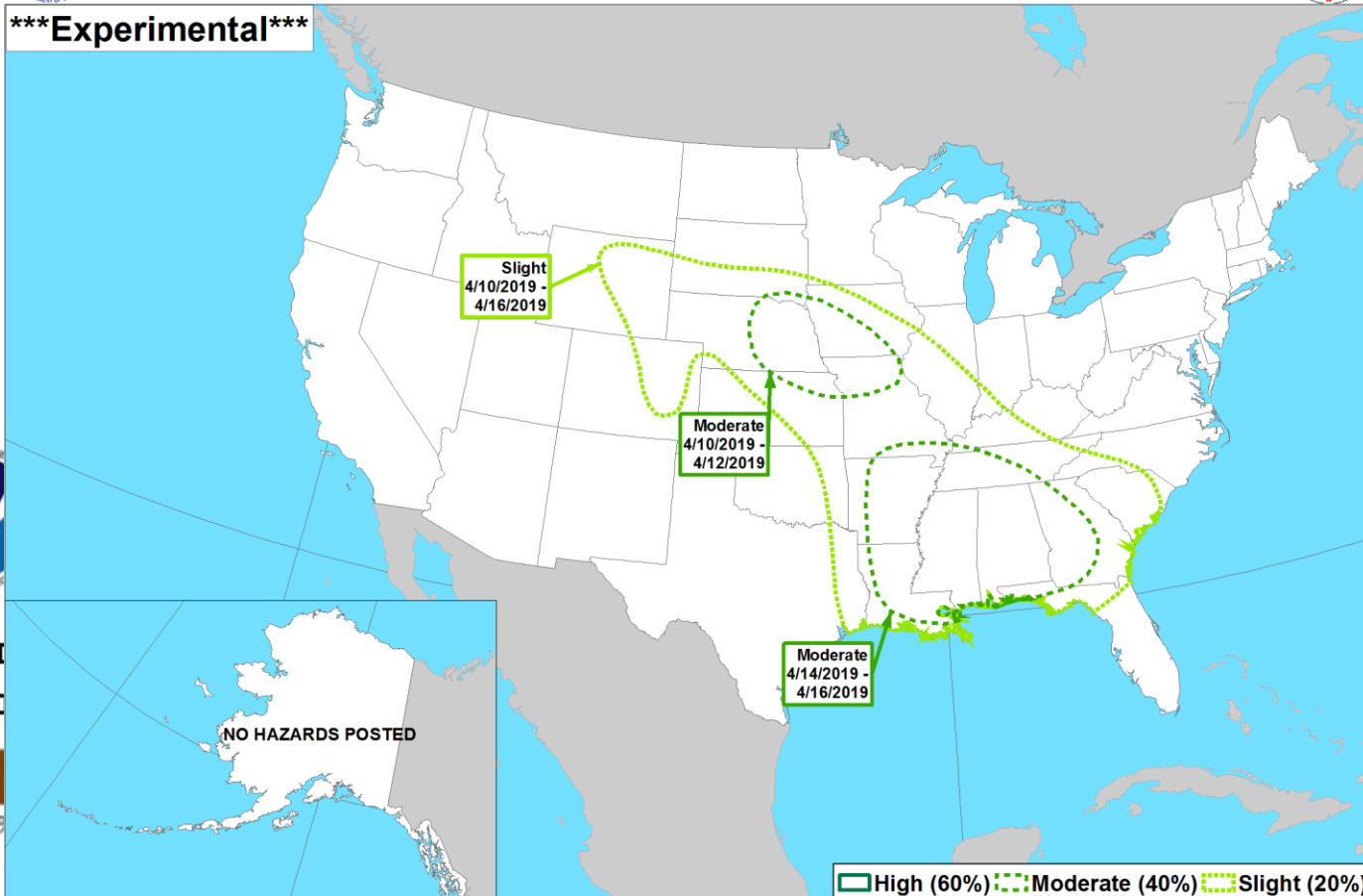
Precipitation Outlook



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



Experimental



more active pattern
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-April.



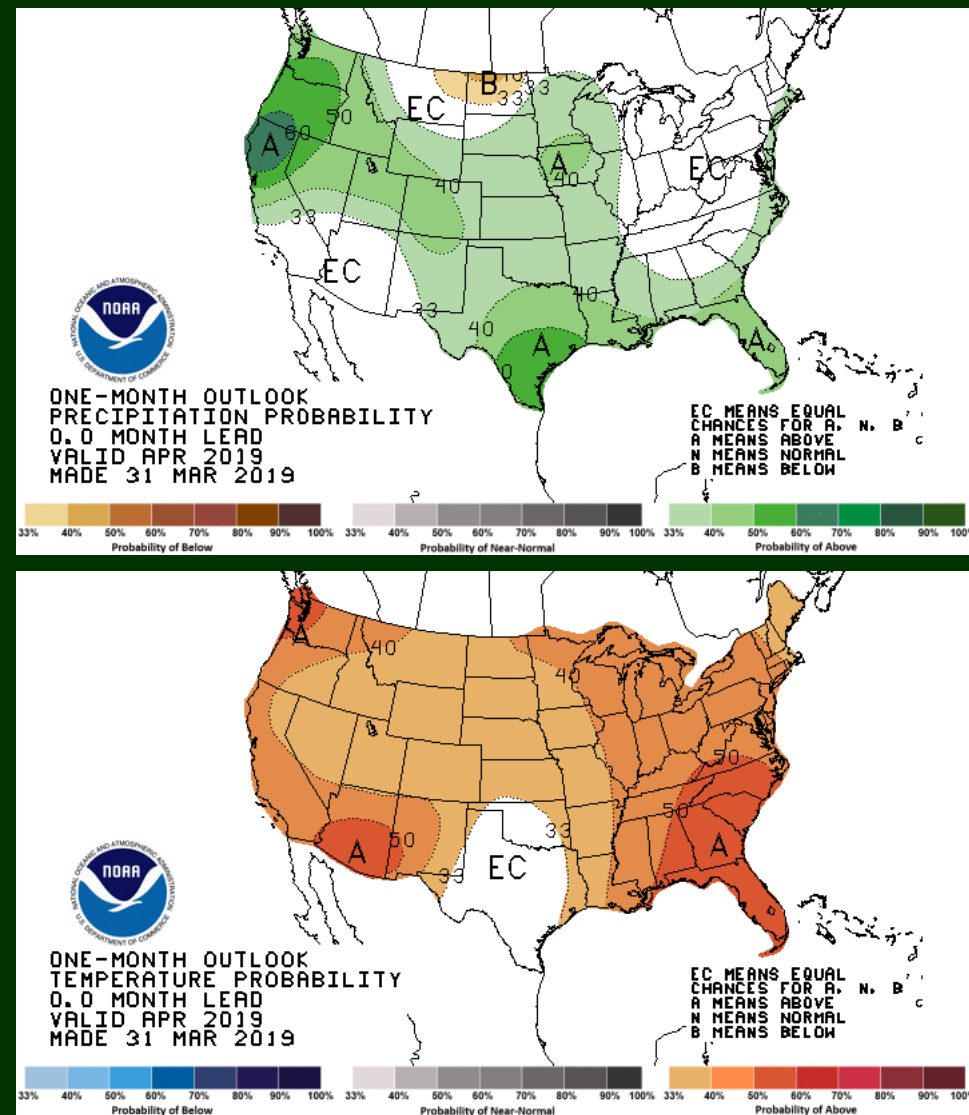
8-14
PRECI
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Climate Prediction Center
Made: 04/02/2019 3PM EDT

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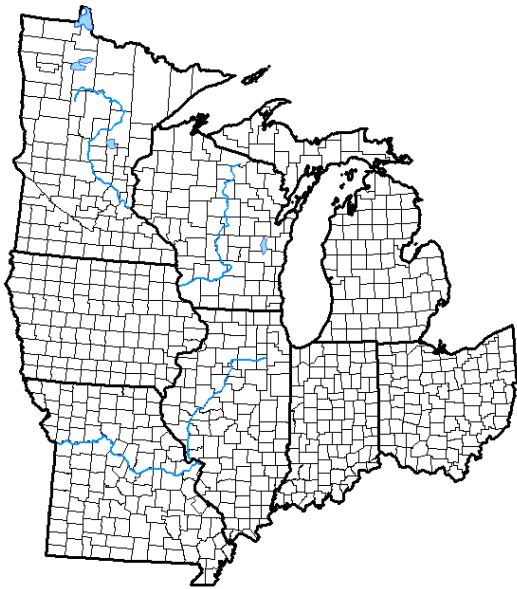
1-Month Outlook

- 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.**