

MAC-T Monthly Call

Midwest Agriculture and Climate Team

May 1, 2019

For more information:

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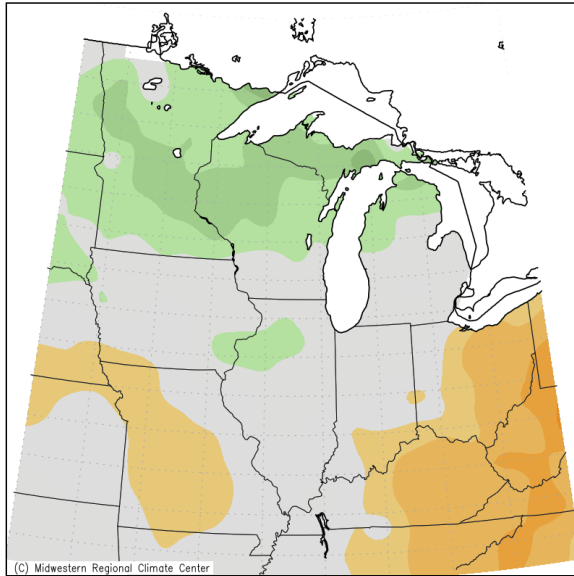
Charlene.Felkley@ars.usda.gov



Midwest Climate Hub

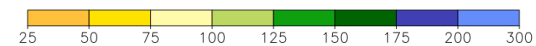
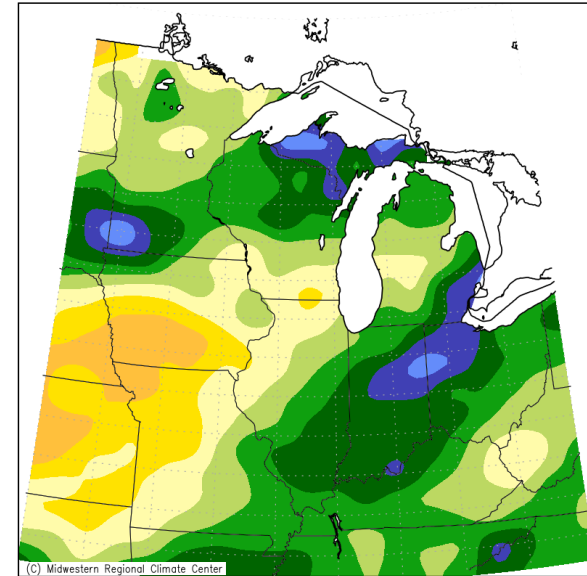
U.S. DEPARTMENT OF AGRICULTURE

Average Temperature (°F): Departure from Mean
March 30, 2019 to April 28, 2019



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

Accumulated Precipitation: Percent of Mean
March 30, 2019 to April 28, 2019

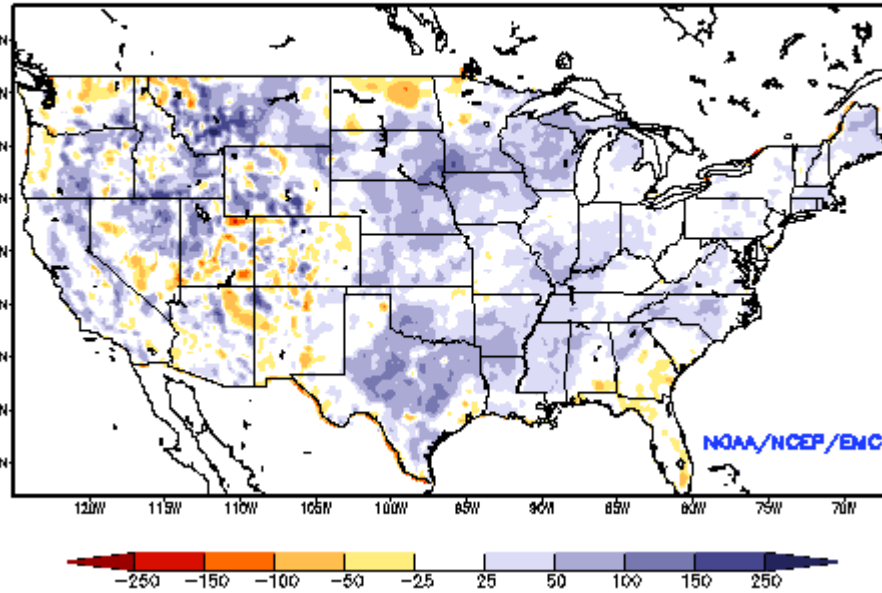


Midwestern Regional Climate Center
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana-Champaign

- Temperatures have been close to average overall except a little colder (north) and a little warmer (east)
- Last 30 days have not been wet everywhere. Dryness has been prevalent in the western Corn Belt. Wetter than average conditions have covered much of the eastern and northern Corn Belt.

Soil Moisture

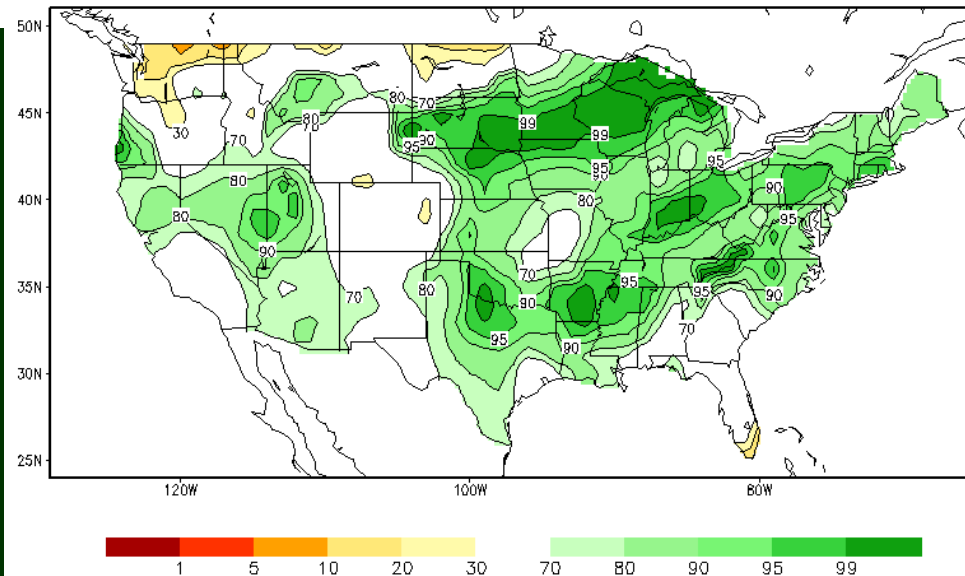
Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: APR 25, 2019



- Despite the shorter term dryness in places, soils are still very wet.

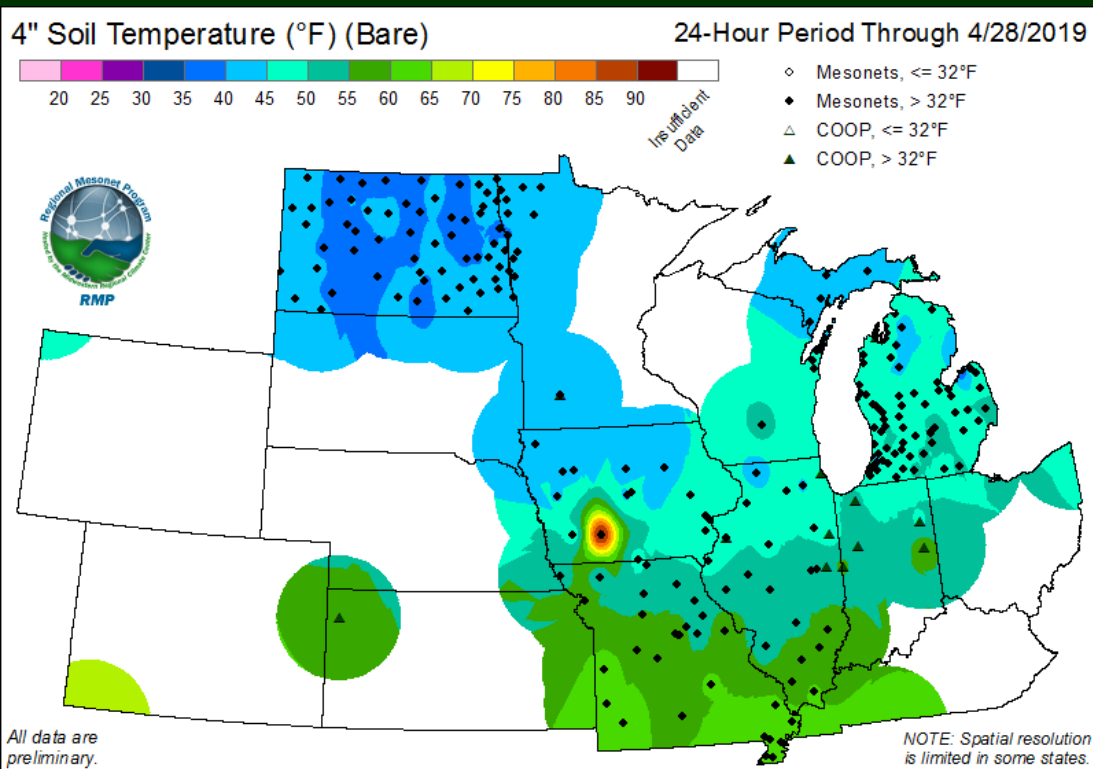
<http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>

Calculated Soil Moisture Ranking Percentile
APR 28, 2019



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

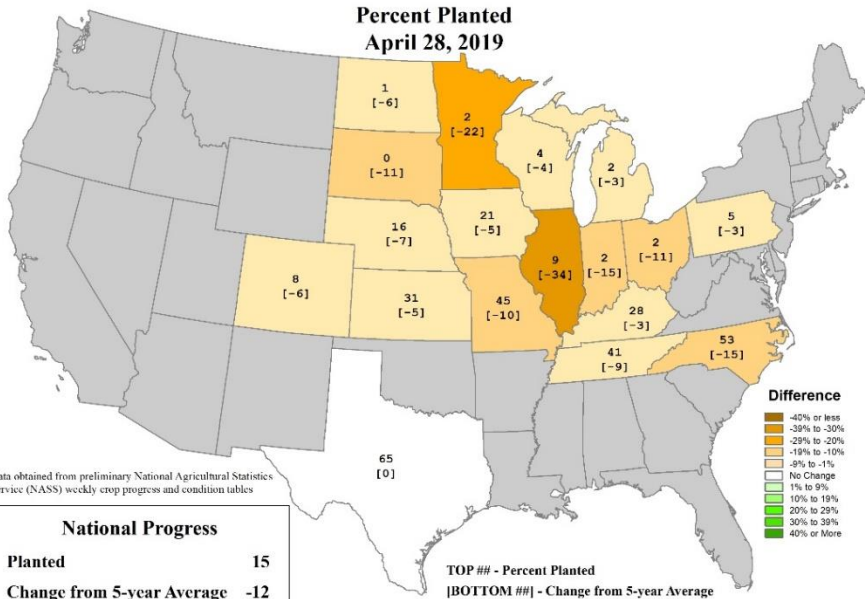
Soil Temperature



- Soil temperatures had made good progress until the cold returned this weekend.
- Crops are sitting in many soils below 50 F.
- Southern Corn Belt areas are somewhat warmer.
- Iowa does have a bad data point reporting.

U.S. Corn Progress

Percent Planted
April 28, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

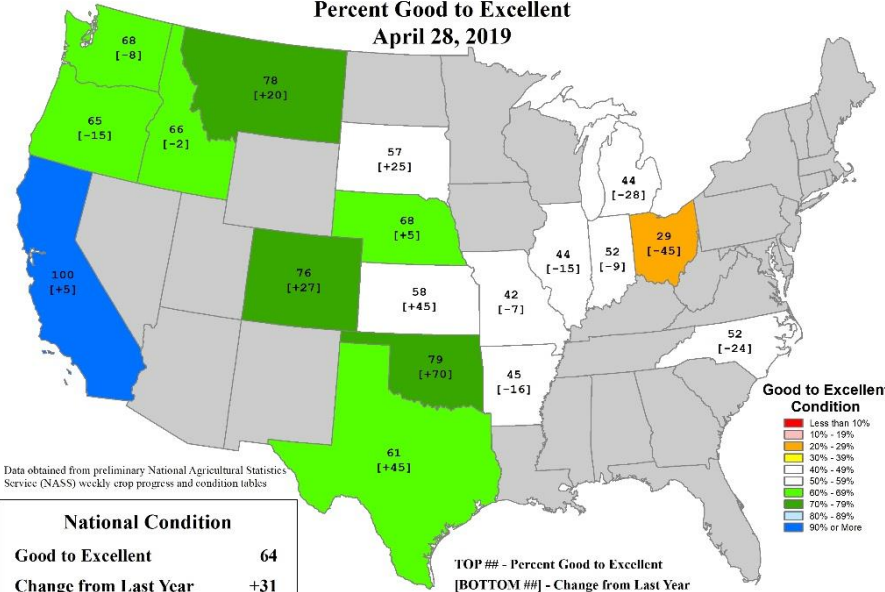
National Progress	
Planted	15
Change from 5-year Average	-12

TOP ## - Percent Planted
[BOTTOM ##] - Change from 5-year Average

USDA-NASS Crop Progress

U.S. Winter Wheat Conditions

Percent Good to Excellent
April 28, 2019



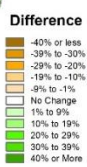
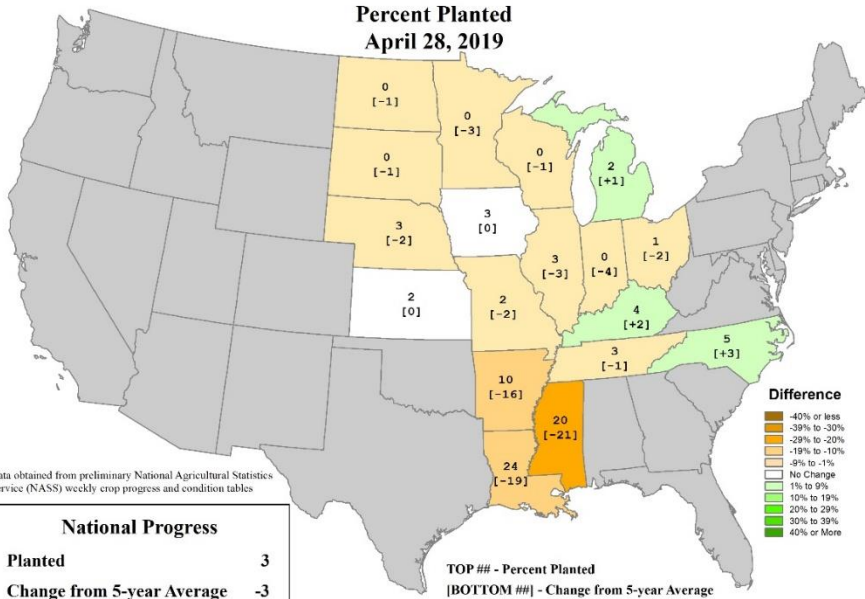
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	64
Change from Last Year	+31

TOP ## - Percent Good to Excellent
[BOTTOM ##] - Change from Last Year

U.S. Soybeans Progress

Percent Planted
April 28, 2019



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

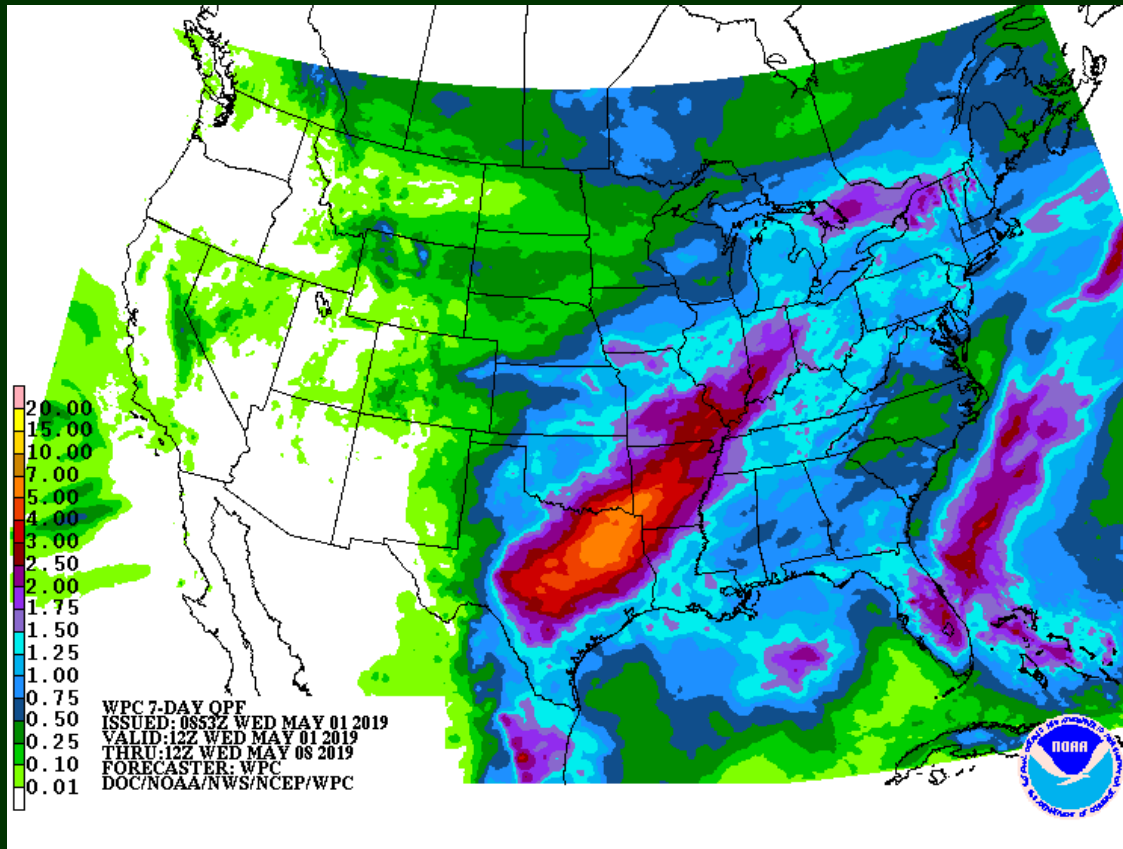
National Progress	
Planted	3
Change from 5-year Average	-3

TOP ## - Percent Planted
[BOTTOM ##] - Change from 5-year Average

Assorted AG Issues

- Crop planting is delayed over much of the region driven mainly by wet soils, but also cool soil temperatures
- Further south planting has moved ahead more.
- Crop conditions are generally acceptable (what has been planted - though delayed). Winter wheat poorer in the eastern wheat areas.
- Some winter kill issues on alfalfa
- Delayed shipments (grain out – fertilizer in) on the Mississippi due to high water
- Many prevent plant acres likely to occur.

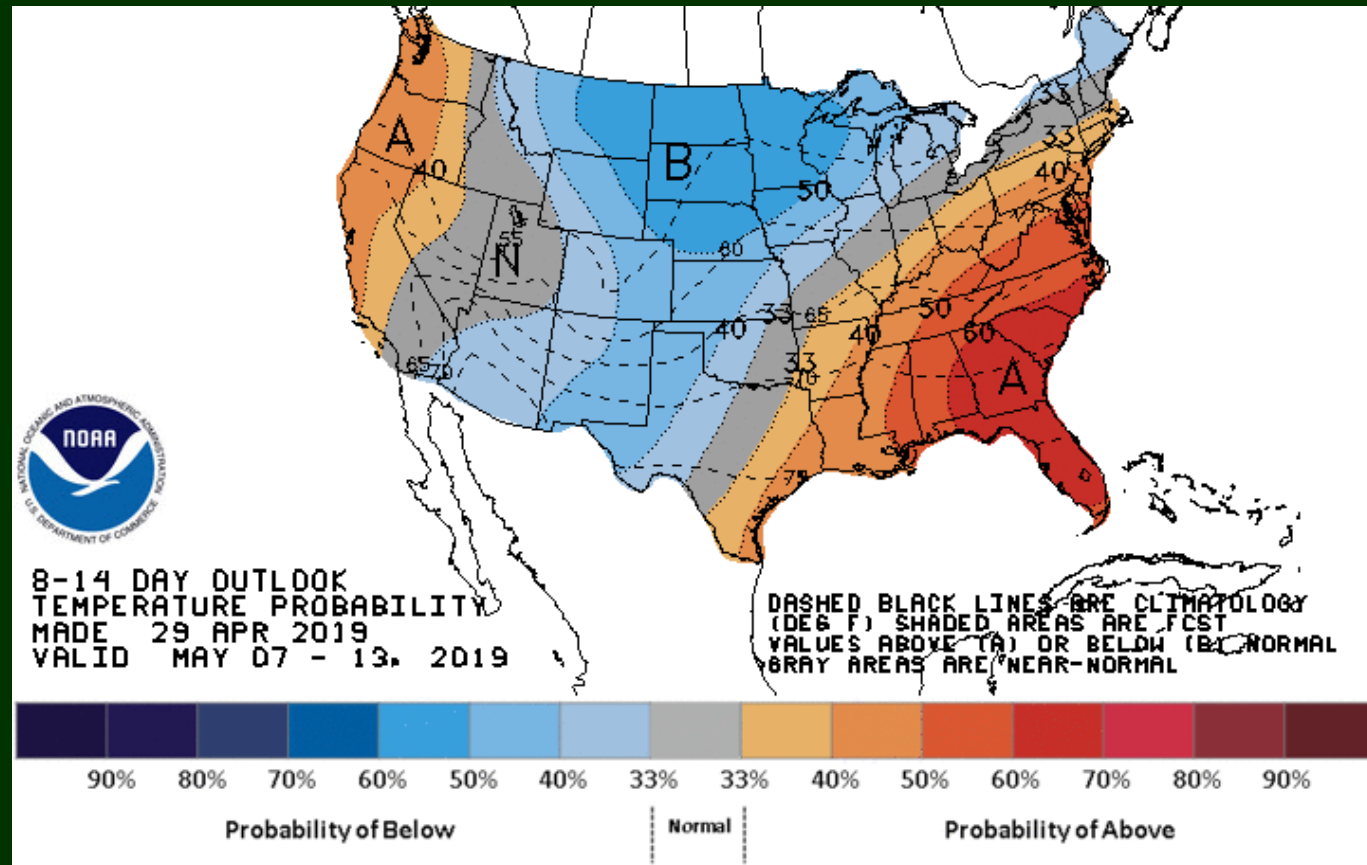
1-7 Day Precip - updated



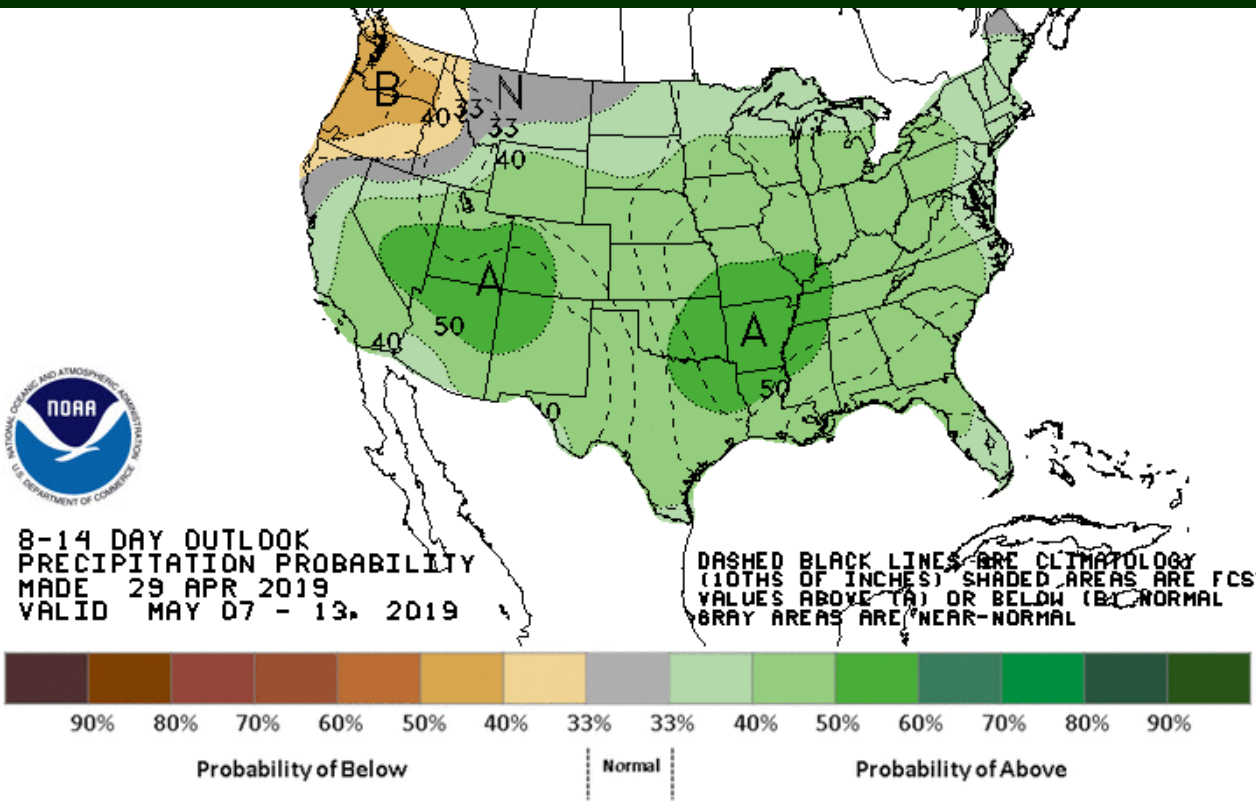
- Wet conditions are likely to stick with much of the region over the next week with 2-3" + possible.
- Northern plains gets a little reprieve.

Temperature Outlook

- Colder temperatures likely to cover the area into the middle of the month.



Precipitation Outlook



- Wetness does not abate too much into the month. These probabilities are only slightly increased. But with current wetness there is still an issue.

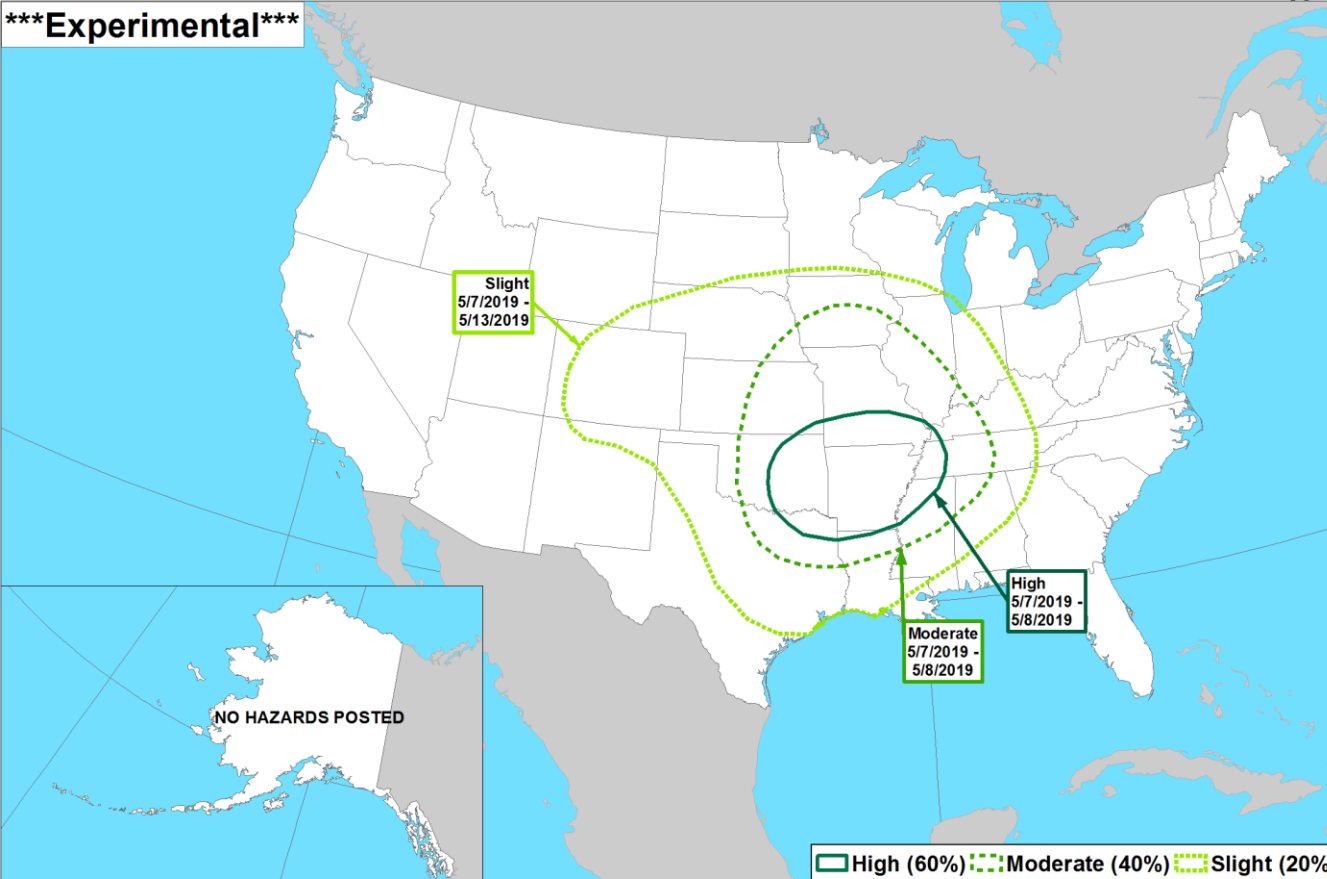
Precipitation Outlook



Risk of Heavy Precipitation
Valid: 05/07/2019-05/13/2019



Experimental



- A risk of heavier precipitation covers much of the Midwest from May 7-13.
- More of a focus on May 7-8.

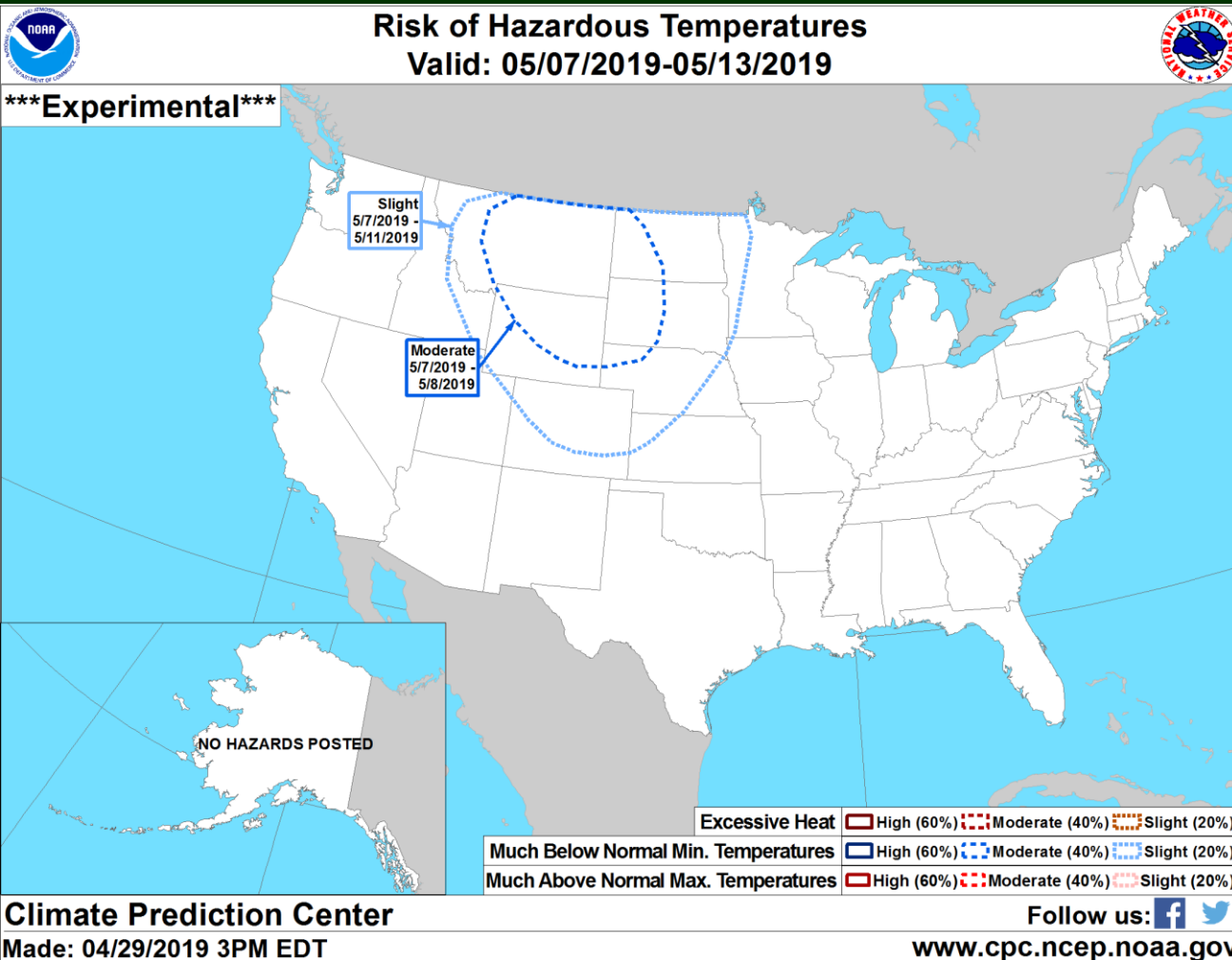
Climate Prediction Center

Made: 04/29/2019 3PM EDT

Follow us:  

www.cpc.ncep.noaa.gov

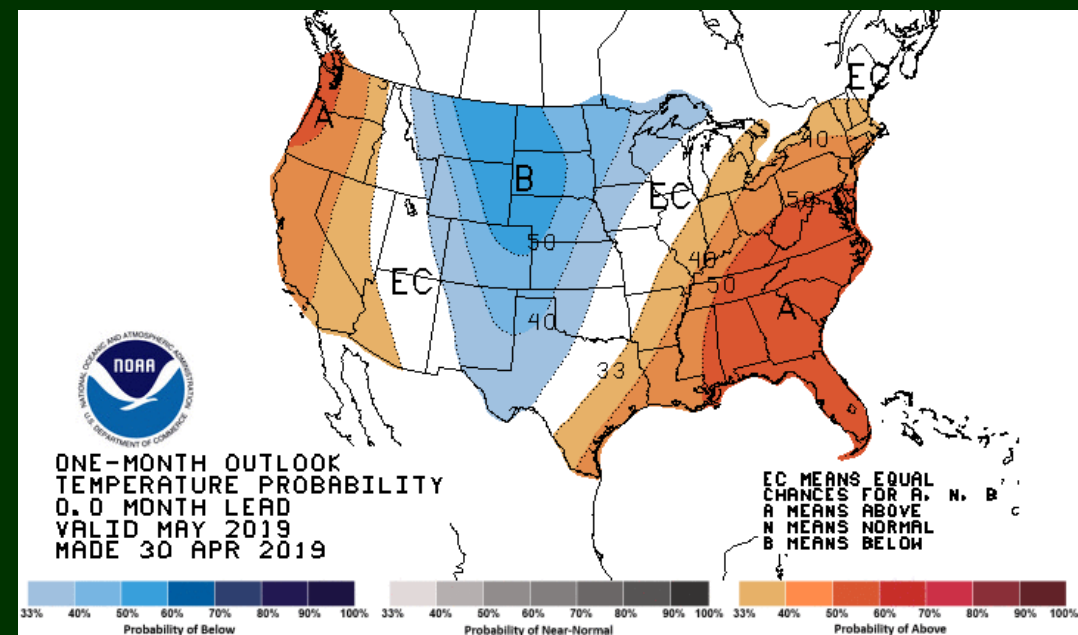
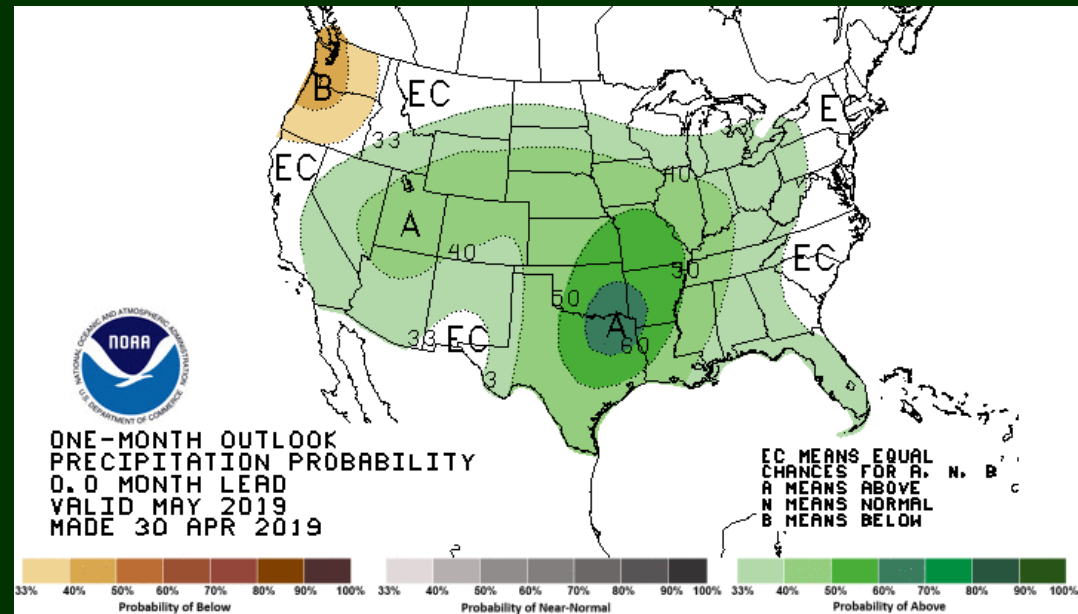
Precipitation Outlook



- More extreme cold chances for the Northern Plains into week 2.

1-Month Outlook - updated

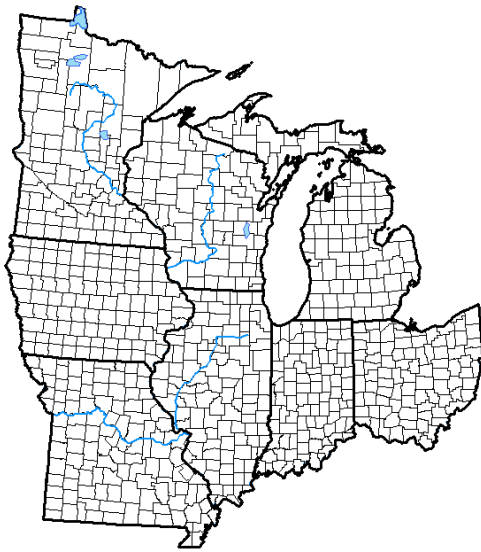
- Wetter than average likely to continue for the month. Best chances south central US.
- Warmer more likely eastern Corn Belt. Colder more likely most of the plains.



Drought in the Midwest

The Midwest remained D0 and drought-free as a wet 2018 and wet 2019 continued to dominate the soils. This week, moderate to heavy rains (1.5-4 inches) fell across southern Minnesota, northern Wisconsin, and the Upper Peninsula of Michigan, while another band of decent rain (1.5-3 inches) was measured from southeastern Michigan southwestward into central and western Kentucky. In contrast, little or no rain was observed across most of Iowa, northern Illinois, northern Missouri, and eastern Ohio. According to USDA/NASS on April 21, every Midwestern state reported little or no topsoil or subsoil moisture shortages (0-2% short or very short), with several states reporting 25-60% surpluses. Some hint of dryness at 1-2 months was showing up in southern Iowa and northern Missouri and it will be watched, but for now it was welcome news for farmers to get into the fields for preparation and planting.

U.S. Drought Monitor USDA Midwest Climate Hub



April 23, 2019

(Released Thursday, Apr. 25, 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 04-16-2019	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 01-22-2019	99.85	0.35	0.00	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 04-24-2018	91.26	8.74	3.47	0.00	0.00	0.00

Intensity

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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

Author

David Miskus
NOAA/NWS/NCEP/CPC



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

Summary

- Delayed field work and planting becoming a concern with limited likelihood of progress
- Cool and wet conditions likely to persist except for Ohio Valley (warm and wet there) into mid-May
- Prevent plant becoming a distinct possibility
- El Nino likely for summer. Watch for overall slow development of corn and delayed into fall. (Not predicting, but is a distinct possibility).

Next MAC-T Monthly Call

Next Call **Wednesday, June 5th.**