

MAC-T Monthly Call

Midwest Agriculture and Climate Team

May 15, 2019

For more information:

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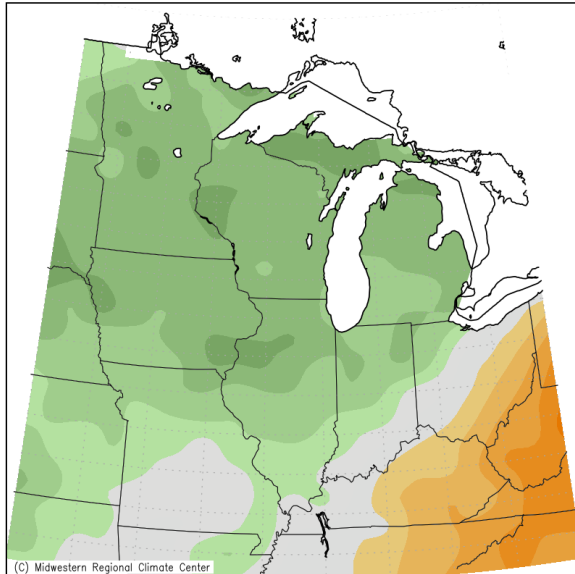
Charlene.Felkley@ars.usda.gov



Midwest Climate Hub

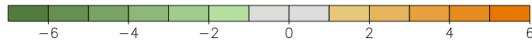
U.S. DEPARTMENT OF AGRICULTURE

Average Temperature (°F): Departure from Mean
April 14, 2019 to May 13, 2019



(C) Midwestern Regional Climate Center

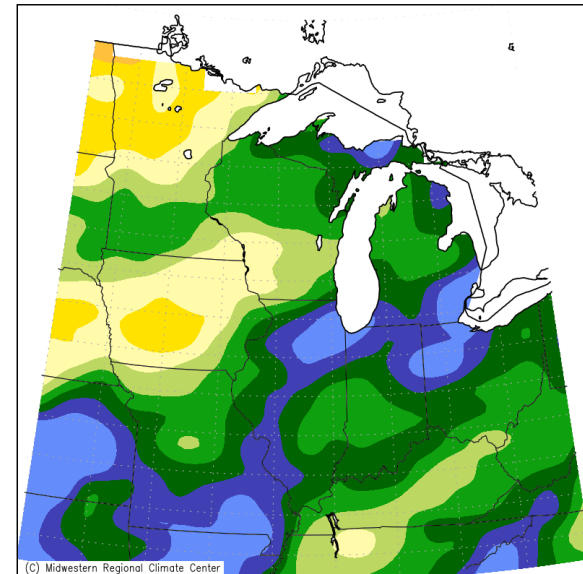
Mean period is 1981–2010.



Midwestern Regional Climate Center

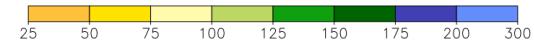
Illinois State Water Survey, Prairie Research Institute
University of Illinois at Urbana–Champaign

Accumulated Precipitation: Percent of Mean
April 14, 2019 to May 13, 2019



(C) Midwestern Regional Climate Center

Mean period is 1981–2010.



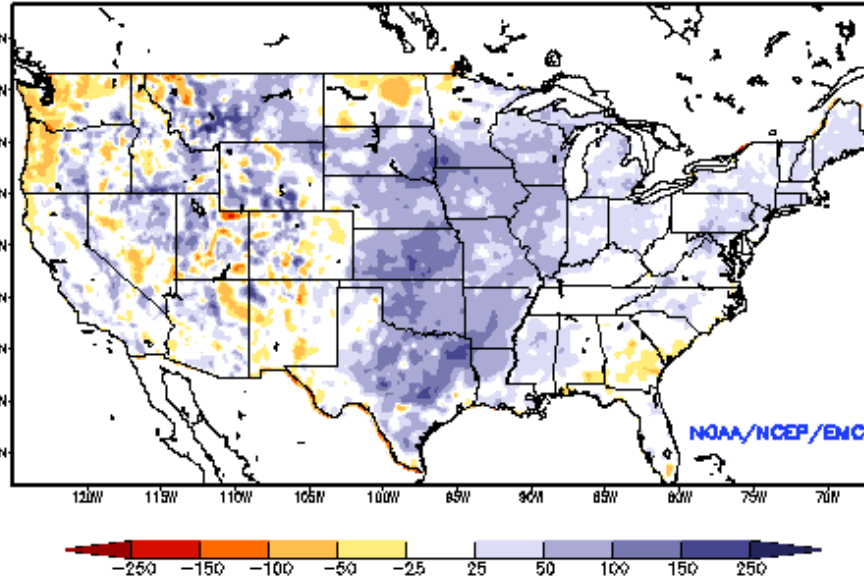
Midwestern Regional Climate Center

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

- Mostly cooler than average temperatures over the last 30 days – slightly warmer in the east.
- Precipitation 150-300% average eastern Corn Belt. Pockets of dryness – close to half average in MN and IA into NE.

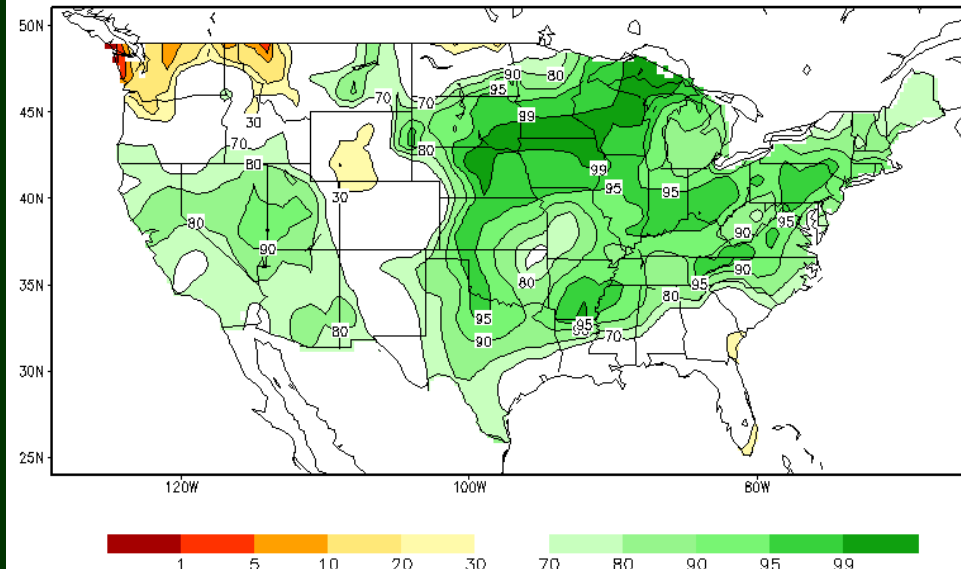
Soil Moisture

Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: MAY 09, 2019



- No surprises in soil moisture. Widely and mostly wet – even in the dry areas of IA. Dry pockets showing up far north.

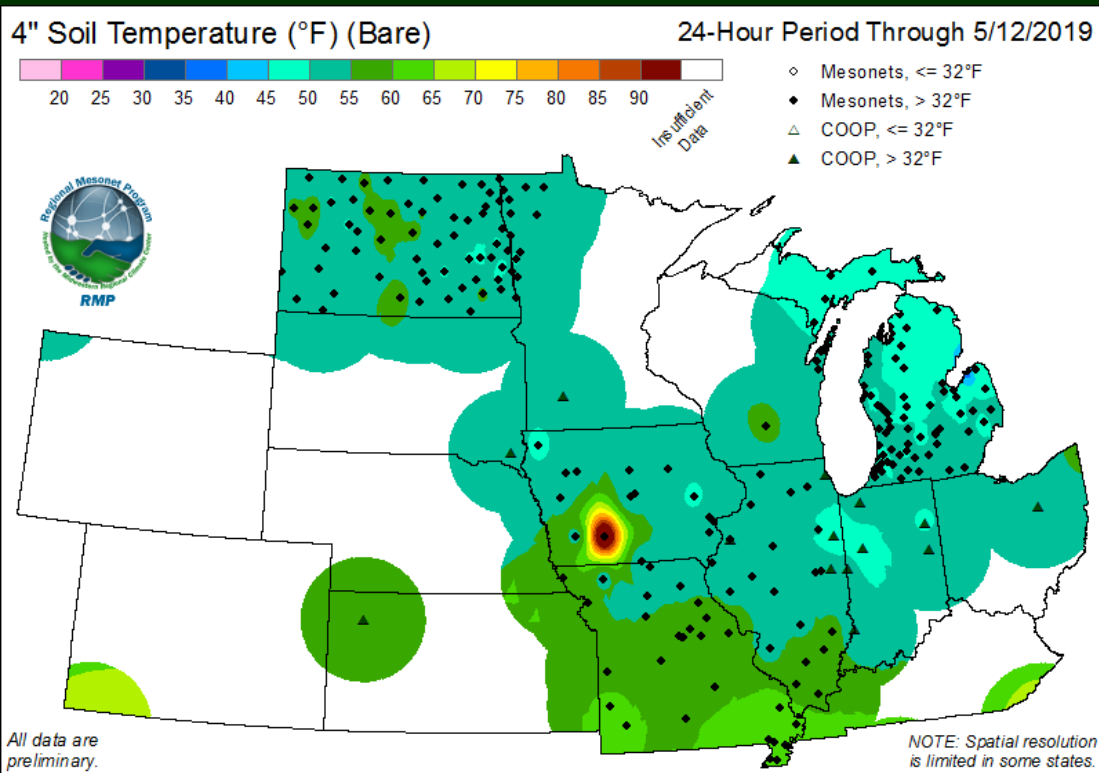
Calculated Soil Moisture Ranking Percentile
APR, 2019



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

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

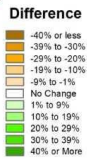
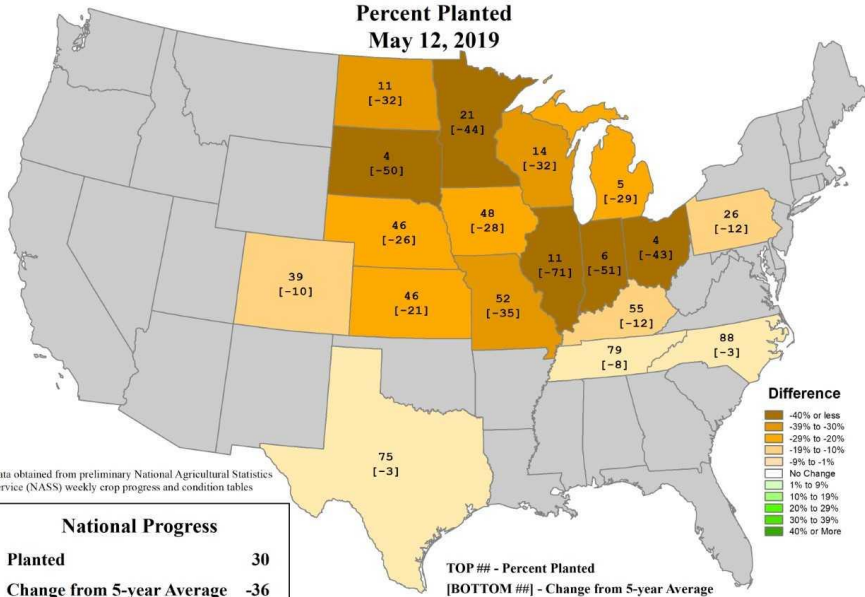
Soil Temperature



- Recent cool temperatures and wet soils have kept soils generally cool (50s) but warm enough for planting and slow crop development.

U.S. Corn Progress

Percent Planted
May 12, 2019



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

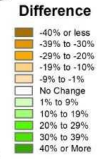
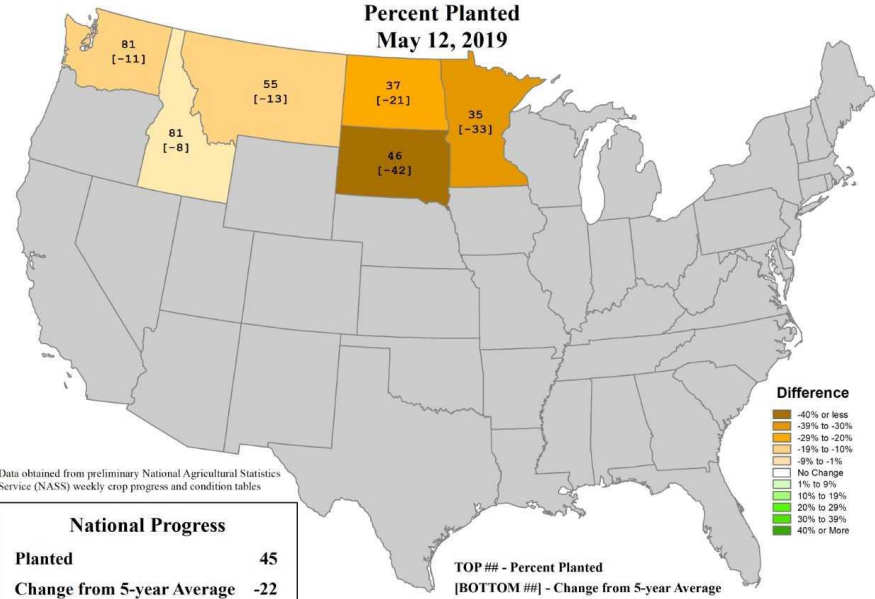
National Progress	
Planted	30
Change from 5-year Average	-36

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

USDA-NASS Crop Progress

U.S. Spring Wheat Progress

Percent Planted
May 12, 2019



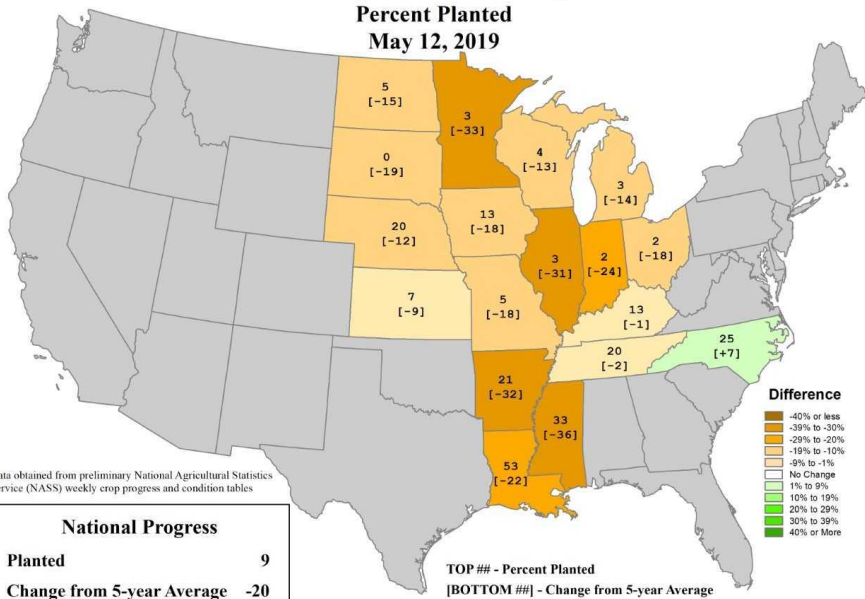
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Planted	45
Change from 5-year Average	-22

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

U.S. Soybeans Progress

Percent Planted
May 12, 2019



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

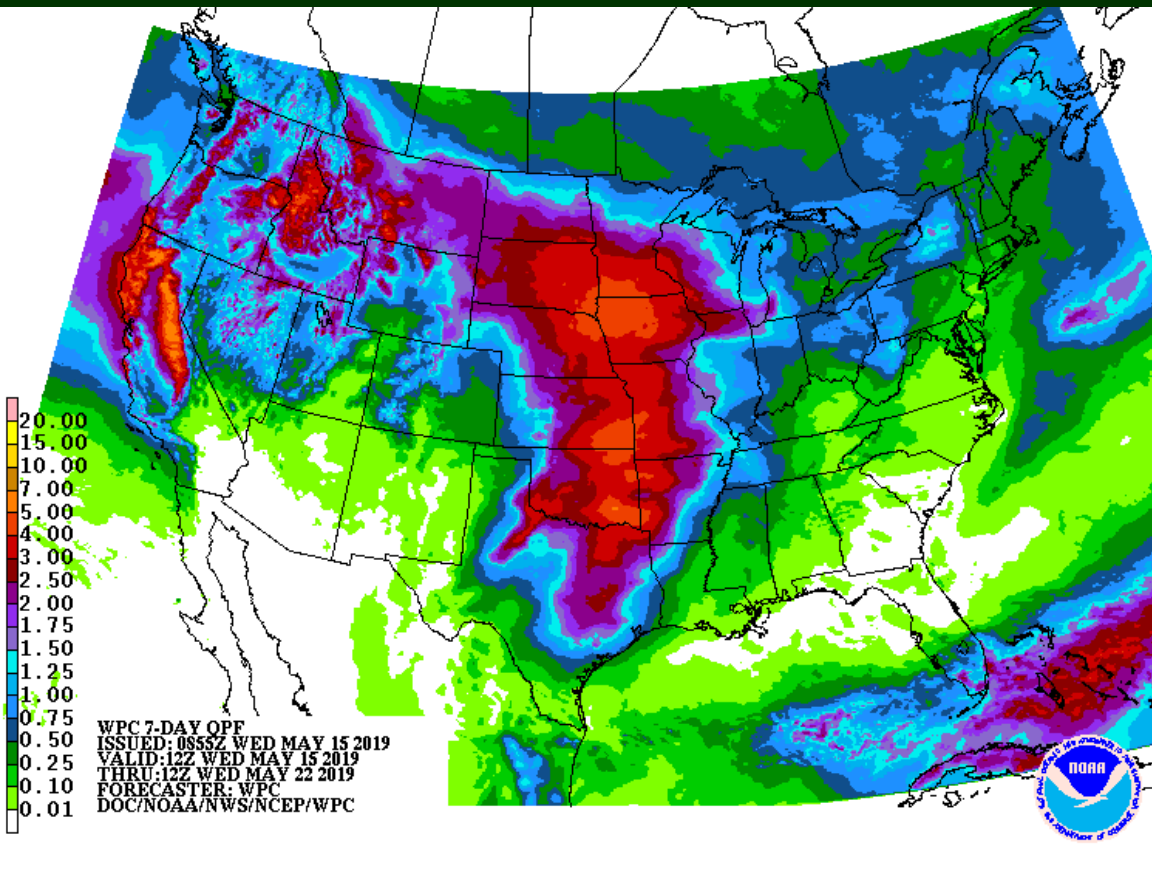
National Progress	
Planted	9
Change from 5-year Average	-20

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

Assorted AG Issues

- Wet/cool soils slowing crop planting progress/development (3rd latest corn planting)
 - Illinois 71% behind.
 - Top 4 ended up below trend yield
- Nearing end of possible small grains northern plains
- Prevent plant becoming more possible
- Replants being mentioned in Missouri (others?)
- Poor alfalfa reported in Iowa (worse than expected)
- Winter wheat delayed but good in the plains – poorer than average east.

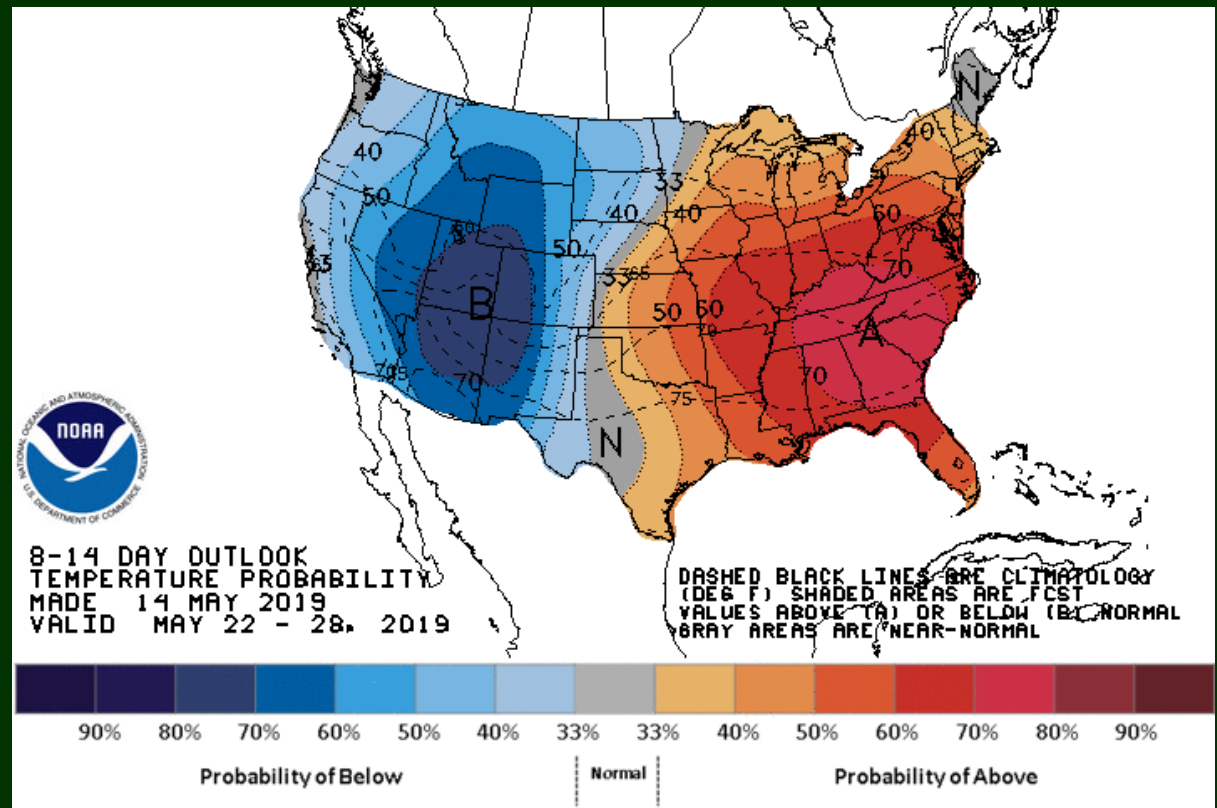
1-7 Day Precip



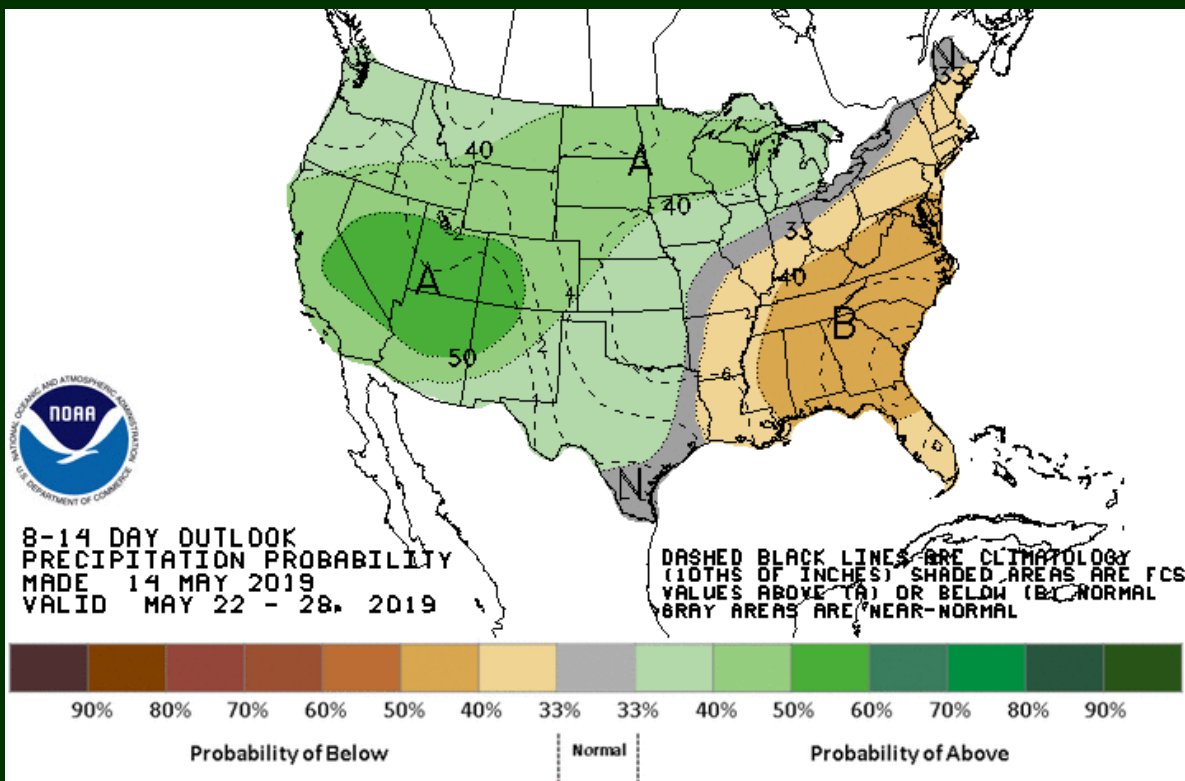
- Little good news. Several more inches possible throughout the middle US.
- Eastern Corn Belt lesser precip amounts possible

Temperature Outlook

- Finally some warmer temperatures more likely in the eastern region
- Continuing likely colder into the Plains

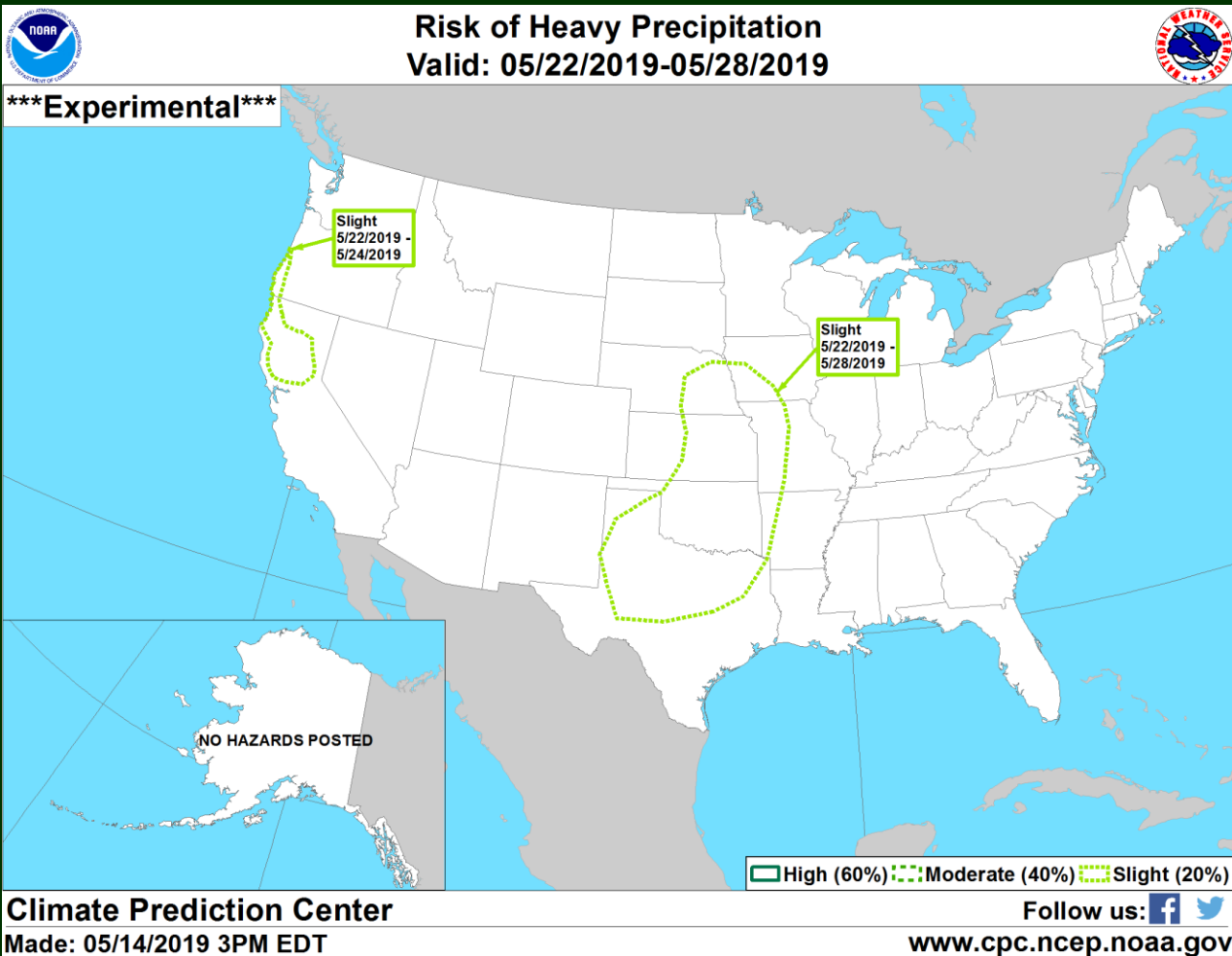


Precipitation Outlook



- Near normal to drier a little more likely in the eastern Corn Belt
- Wetter more likely northern Plains and Great Lakes area

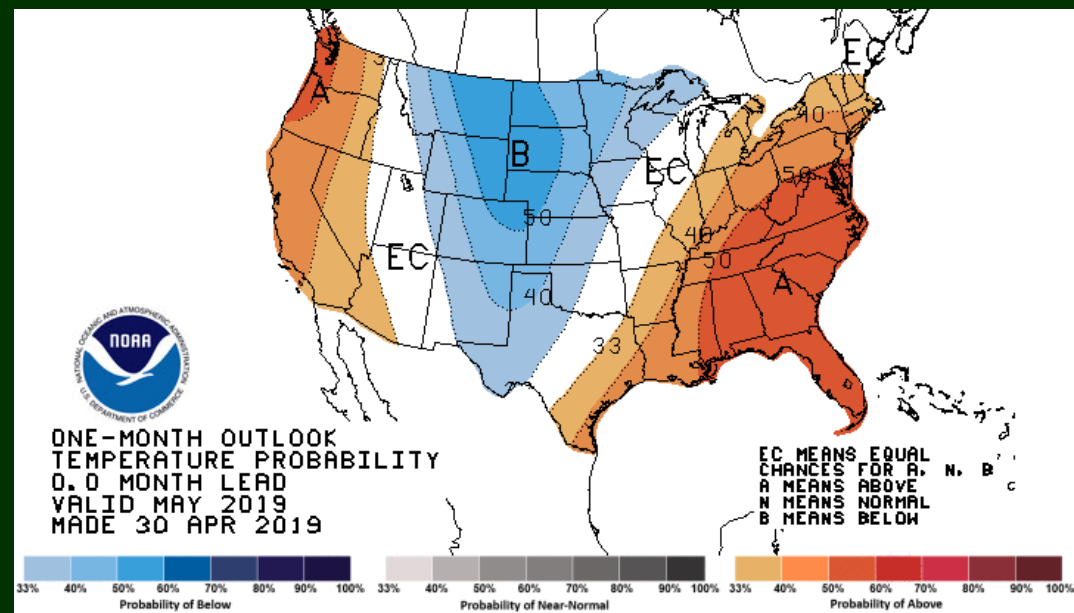
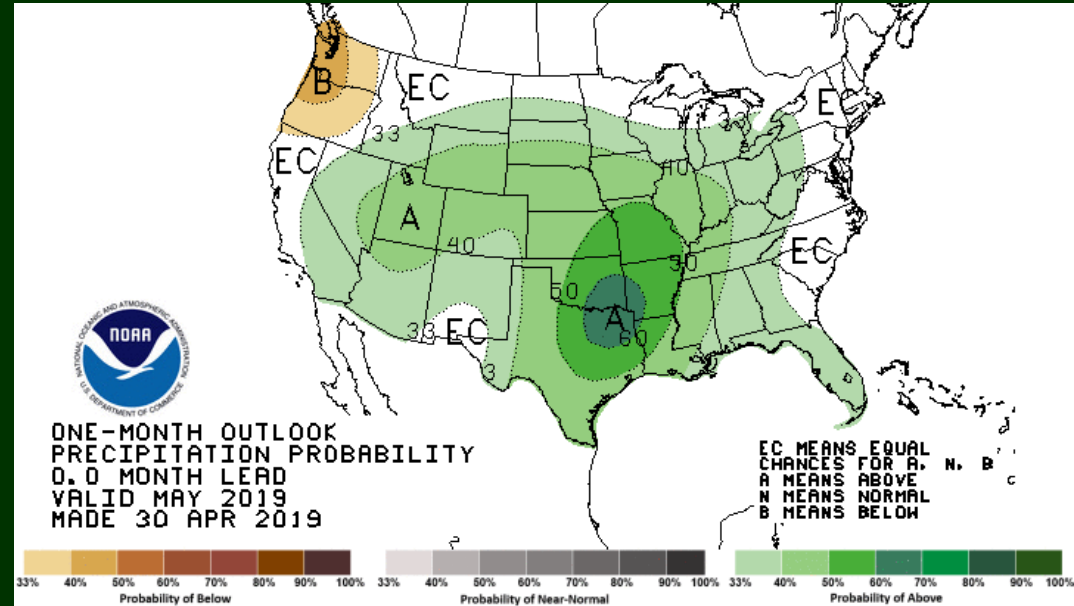
Precipitation Outlook



- Slight risk of heavy precip southern Plains to western Corn Belt through next week.
- Several systems likely to impact the area.

1-Month Outlook

- Text same as May 1 – same outlooks
- 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

U.S. Drought Monitor

USDA Midwest Climate Hub

May 7, 2019

(Released Thursday, May 9, 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 04-30-2019	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 02-05-2019	99.70	0.30	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 05-08-2018	76.71	23.29	4.32	0.00	0.00	0.00

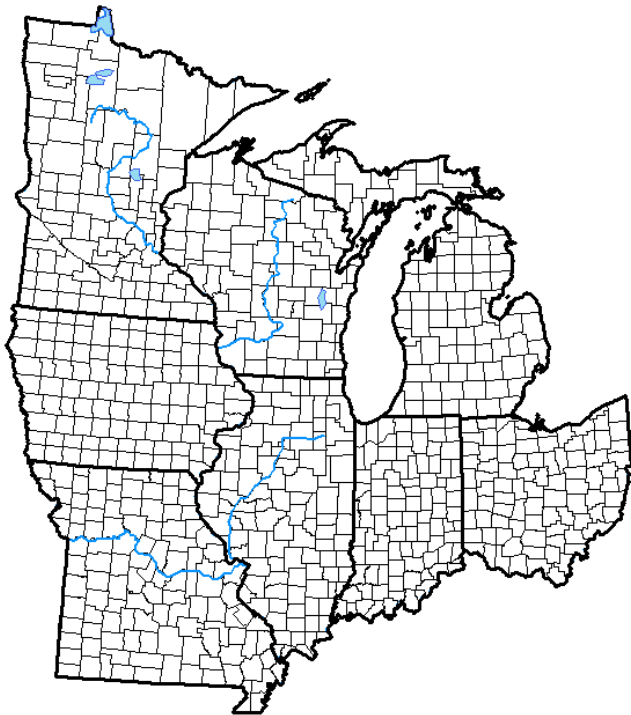
Intensity:

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

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

Author:

Curtis Riganti
National Drought Mitigation Center



The Midwest also remained free of drought or abnormal dryness this week, with Illinois and Missouri receiving widespread moderate to heavy rainfall amounts. Precipitation in the short term in western Iowa has been rather sparse, though this has not led to the development of abnormal dryness.

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

Summary

- Continued mostly wet and cool. But even dry areas had mostly wet soils
- Very delayed crop planting and development (corn and small grains). Soybeans not far behind.
- Winter wheat (good conditions west – worse east)
- Some warmer and drier conditions possible eastern Corn Belt – may allow more progress
- Central/western Corn Belt more chances for rain – some possibly heavy
- New outlooks releases tomorrow. Likely not great news.

Next MAC-T Monthly Call

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