

MAC-T Monthly Call

Midwest Agriculture and Climate Team

May 6, 2020

For more information:

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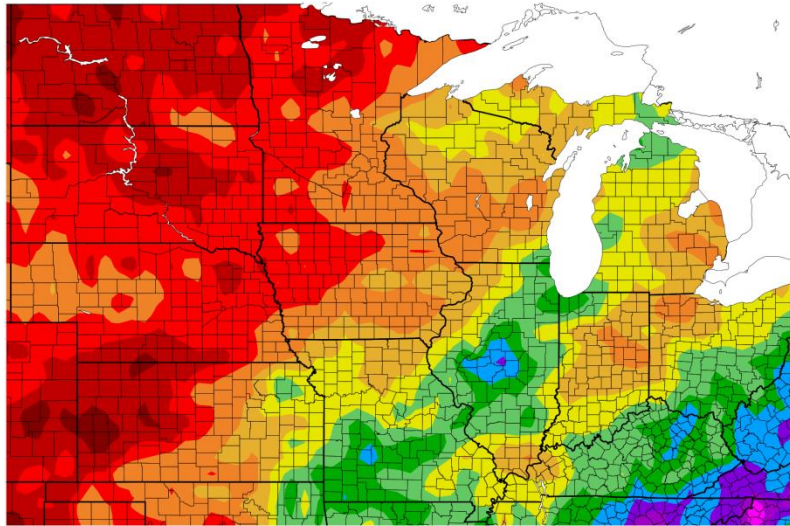


Midwest Climate Hub

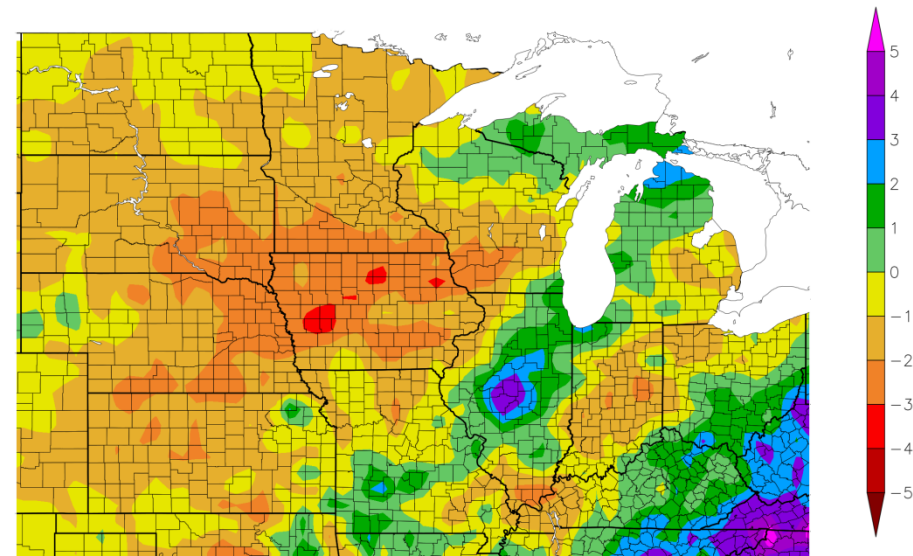
U.S. DEPARTMENT OF AGRICULTURE



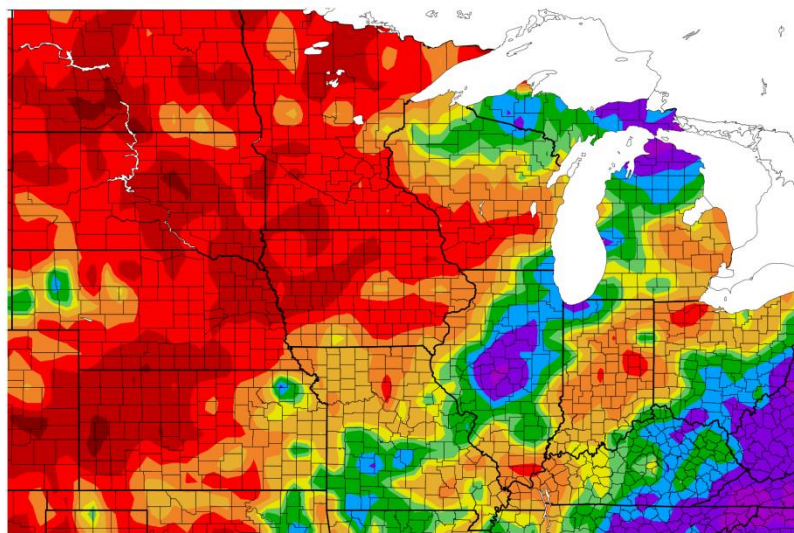
Precipitation (in)
4/4/2020 - 5/3/2020



Departure from Normal Precipitation (in)
4/4/2020 - 5/3/2020



Percent of Normal Precipitation (%)
4/4/2020 - 5/3/2020

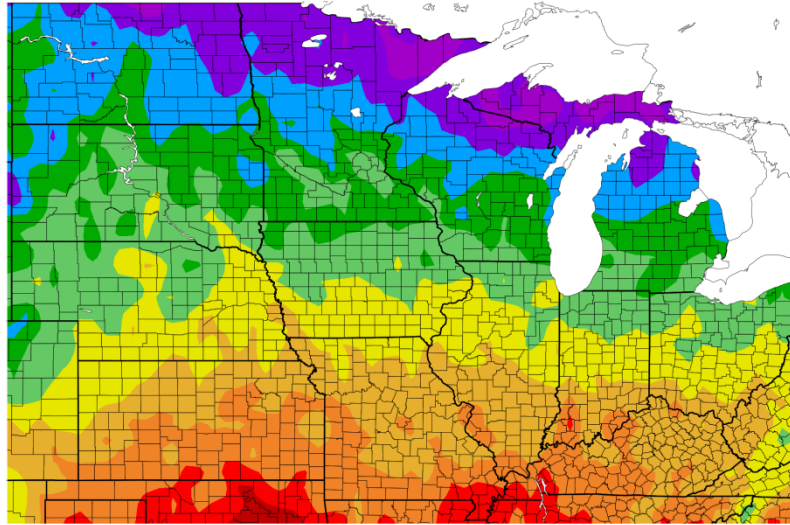


Generated 5/4/2020 at HPRCC using provisional data.

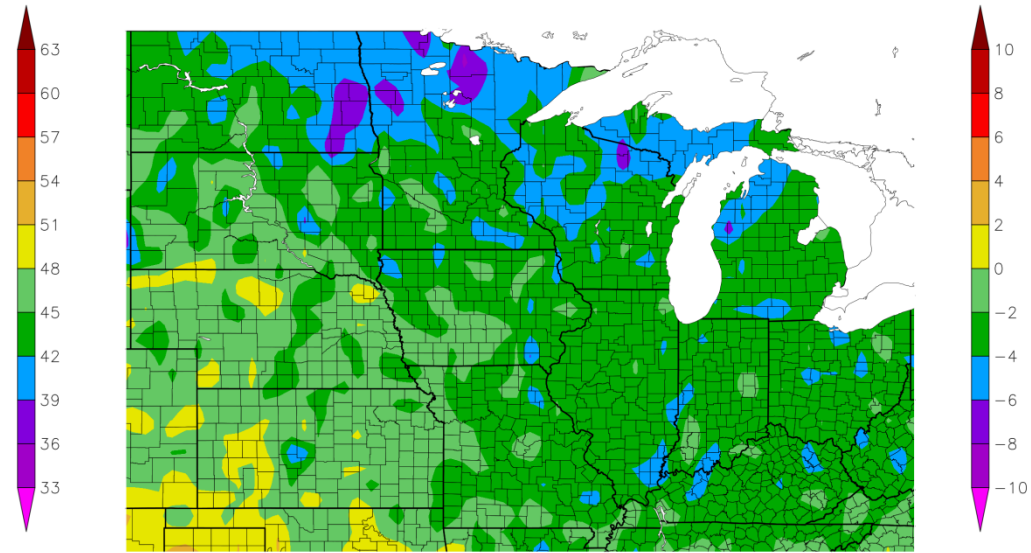
NOAA Regional Climate Centers

- Remarkably dry over much of the plains
- Less than an inch in some places
- Widespread less than 50% - several places less than 25%
- Only pockets above average.
- *Did not capture most recent rains.*

Temperature (F)
4/4/2020 – 5/3/2020



Departure from Normal Temperature (F)
4/4/2020 – 5/3/2020



Generated 5/4/2020 at HPRCC using provisional data.

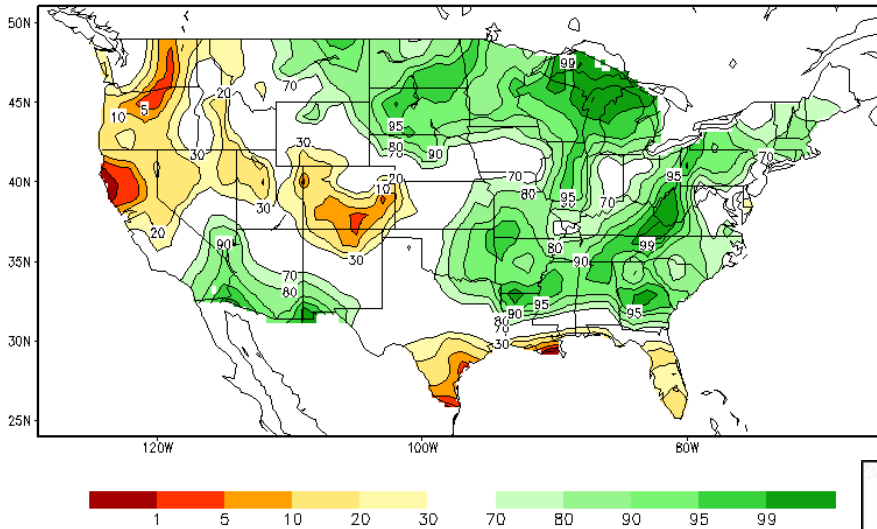
NOAA Regional Climate Centers Generated 5/4/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

- Mid-month cold still dominating overall averages
- 2-4 F below average.
- Several nights of below freezing conditions.

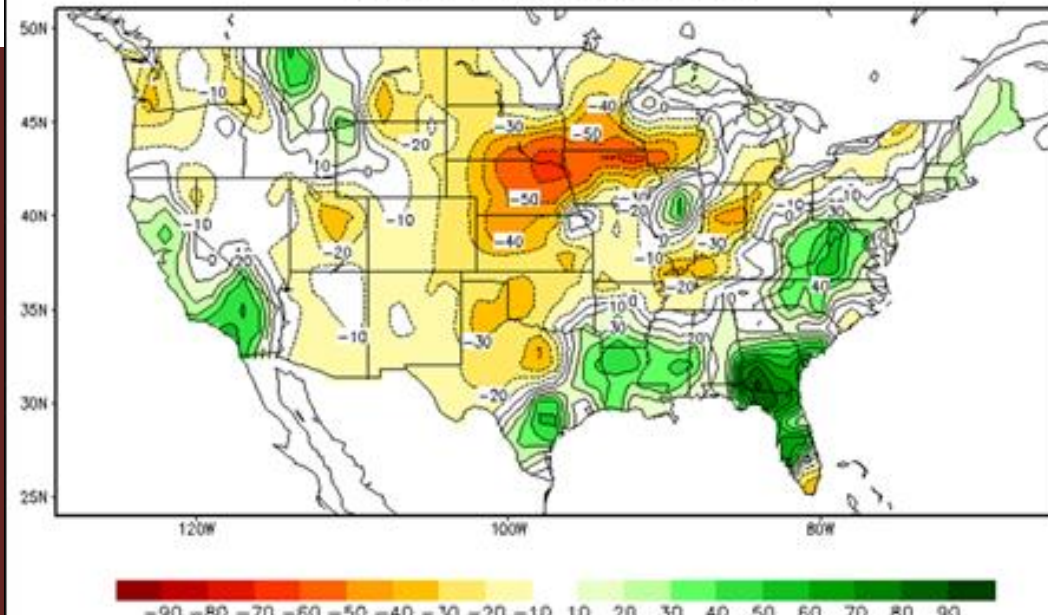
Soil Moisture

Calculated Soil Moisture Ranking Percentile
MAY 04, 2020



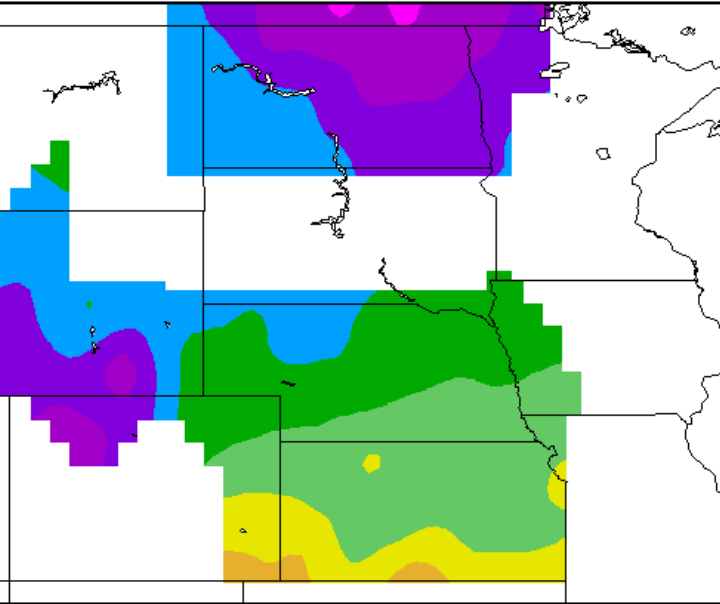
- Rapidly drying out conditions over much of the region.
- Soils still seem to have ample moisture in the profile.
- Surface soils drying out aiding planting.

Calculated Soil Moisture Anomaly Change
APR 30, 2020 from MAR.31



Soil Temperature

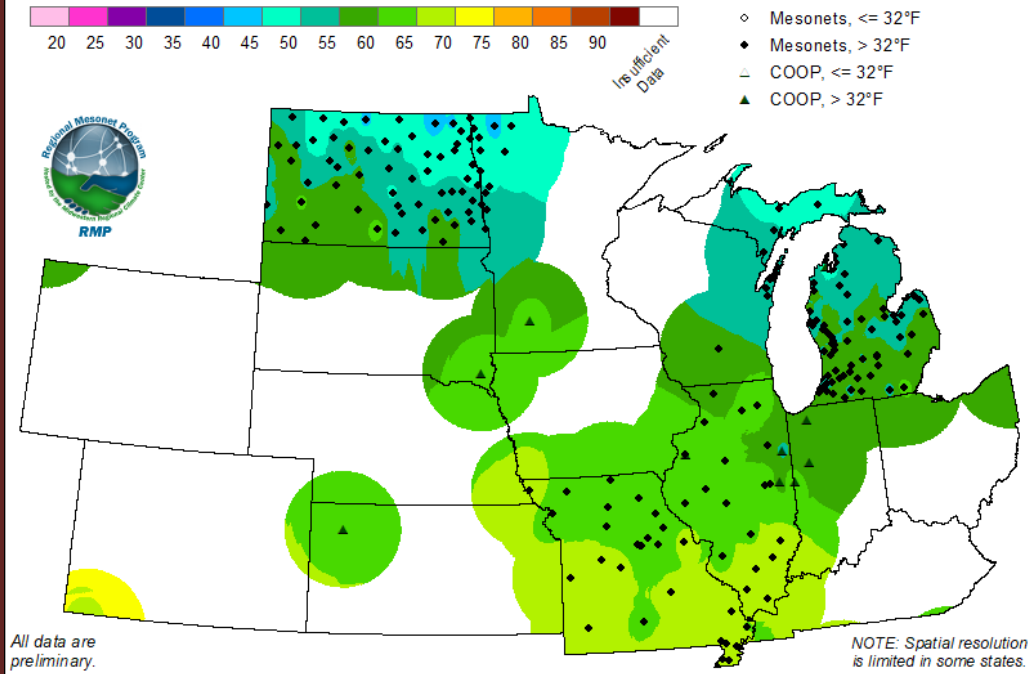
Soil Temperature (F at 4 inches)
5/4/2020 - 5/4/2020



High Plains Regional Climate Center
Generated 5/5/2020 using AWDN data.

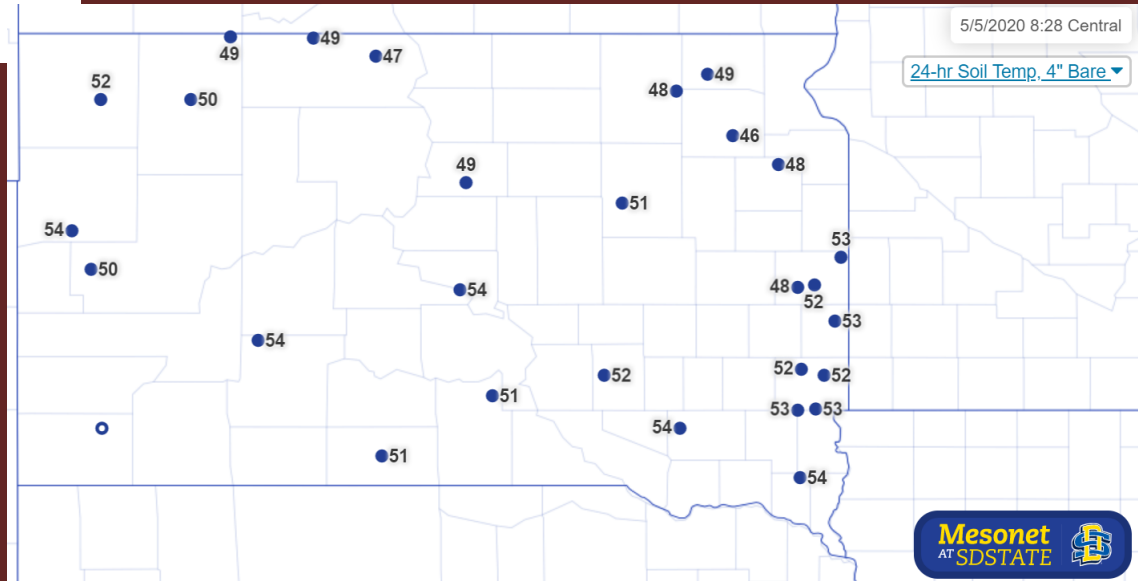
4" Soil Temperature (°F) (Bare)

24-Hour Period Through 5/3/2020



All data are preliminary.

NOTE: Spatial resolution is limited in some states.

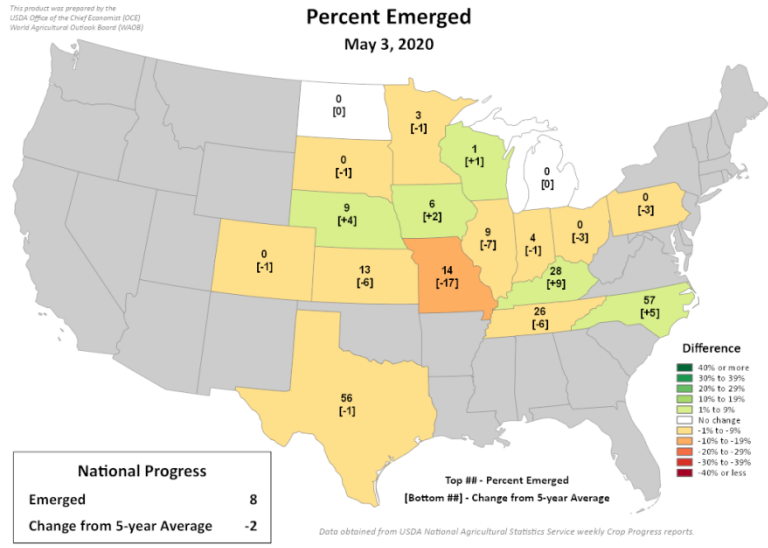


- Recent warmth with drying conditions allowing soils to warm well.
- Above 50 F nearly everywhere (suitable for corn)

Corn Progress

Percent Emerged

May 3, 2020

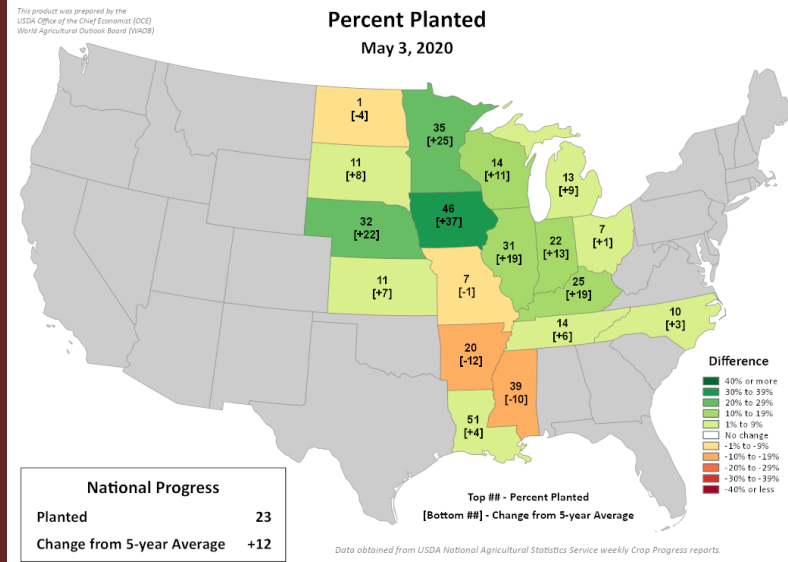


USDA NASS Crop Progress

Soybeans Progress

Percent Planted

May 3, 2020

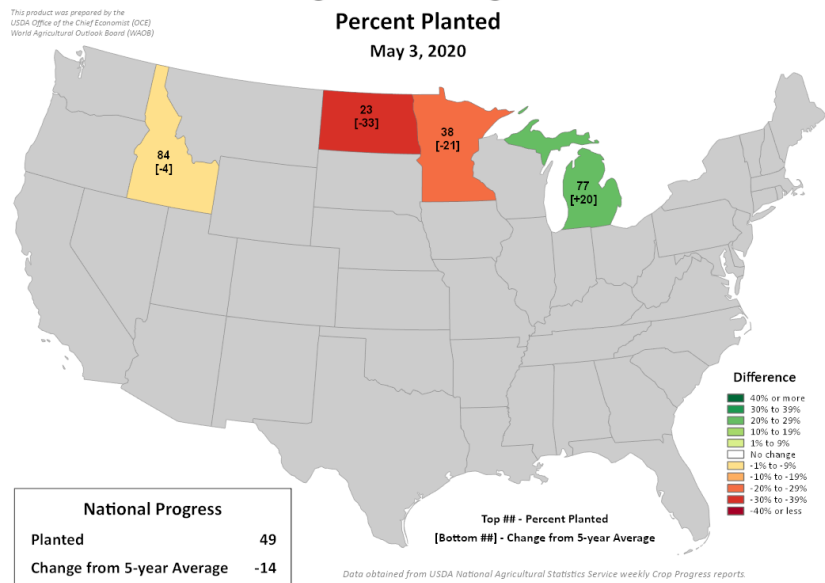


- Corn progress picking up quickly.
- Actually ahead of 5 year avg. many places.

Sugarbeets Progress

Percent Planted

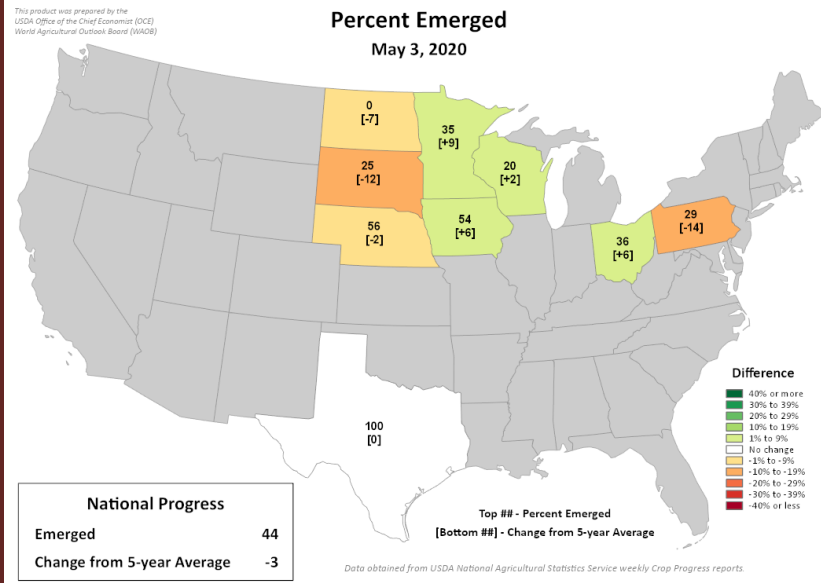
May 3, 2020



Oats Progress

Percent Emerged

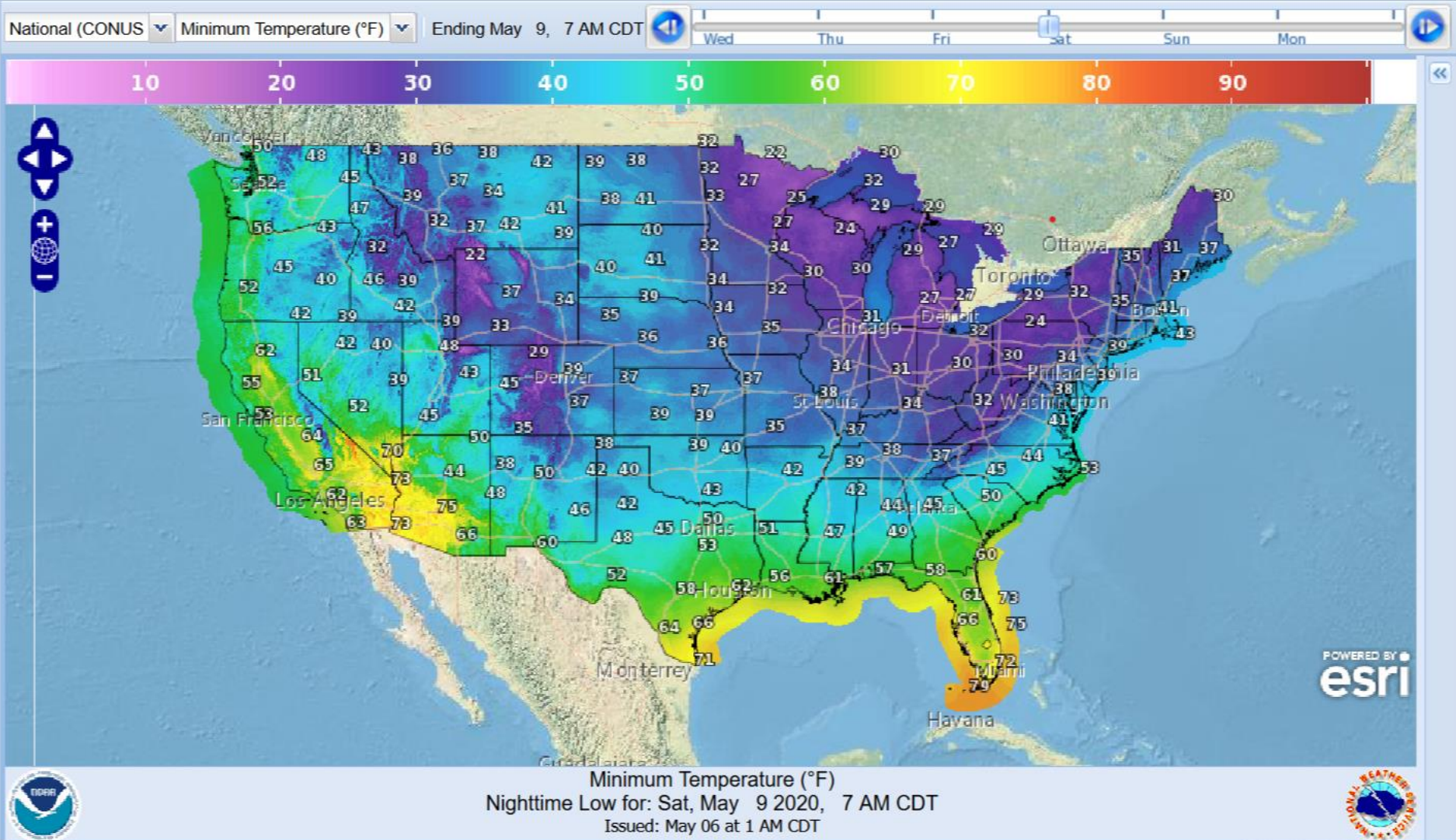
May 3, 2020



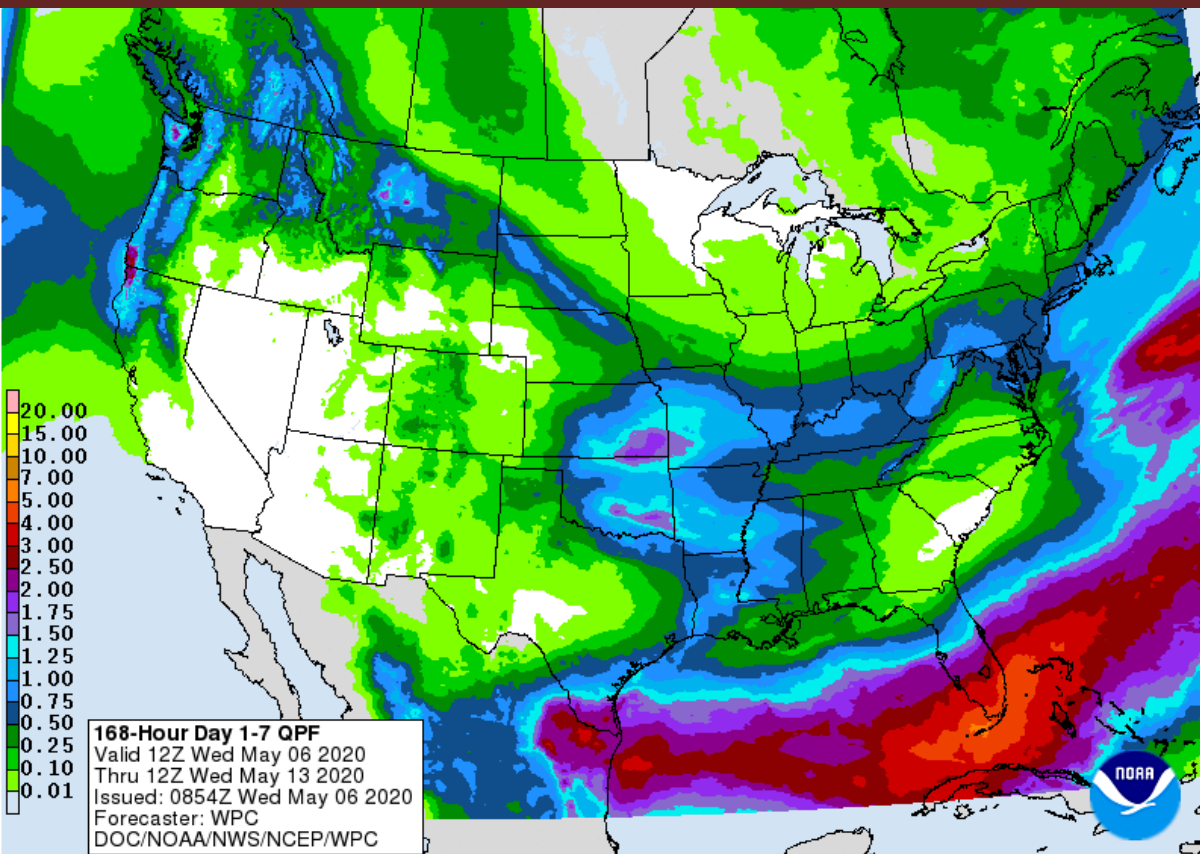
Assorted AG Issues

- Planting making remarkable progress (ahead of 5 year avg.)
- Still slower in the north (esp. ND and MO)
- Surface soils becoming dry and needing a little rain in places – based on various local comments. Recent rains will help.
 - Likely slow SD down somewhat.
- Current dryness overall a positive.

Saturday Lows



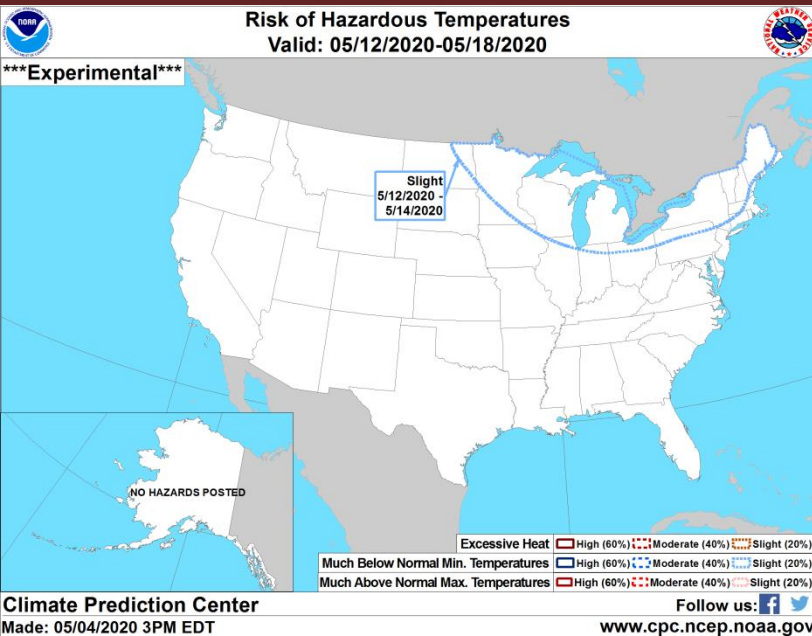
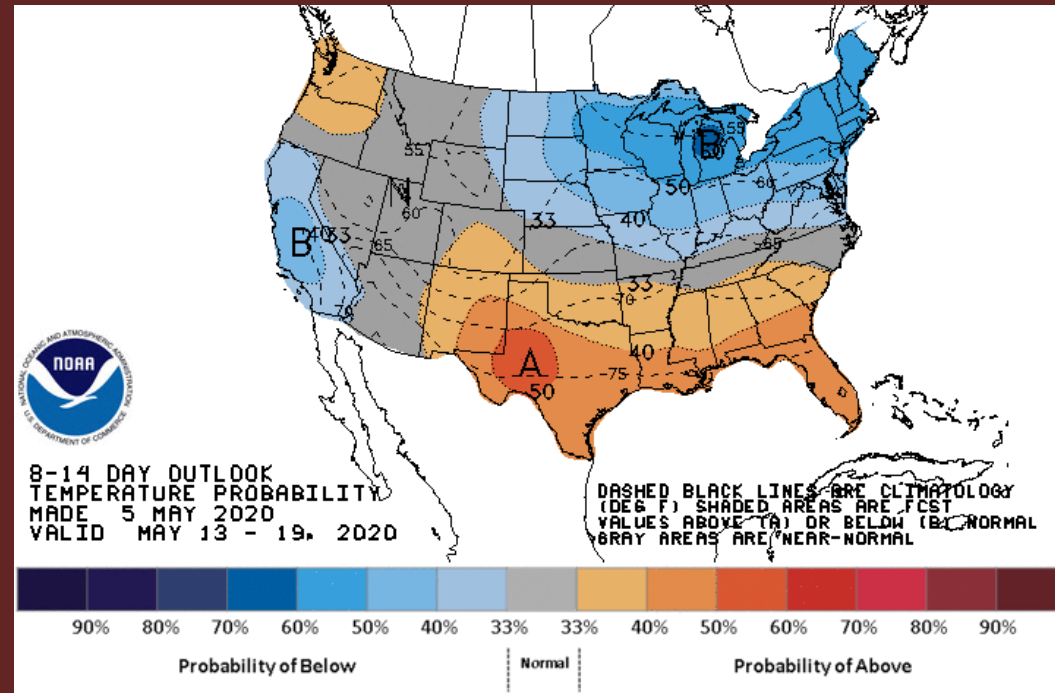
1-7 Day Precip



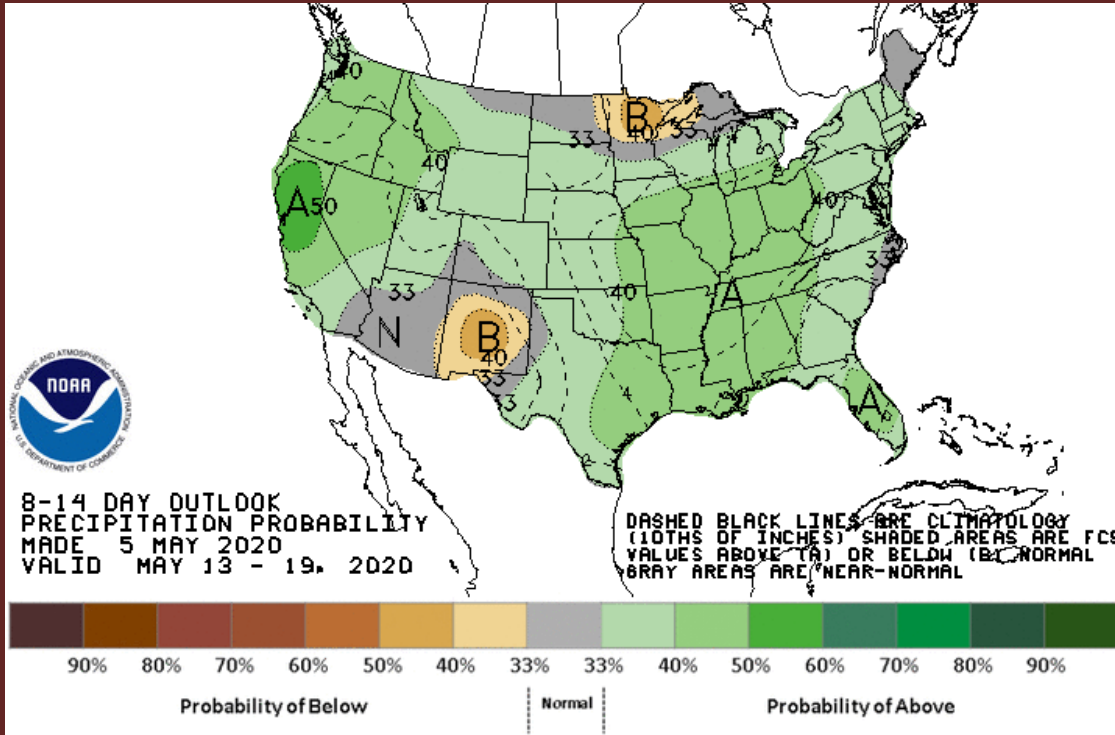
- Precip chances SD to Ohio Valley.
- Drier swath expected around Great Lakes.

Temperature Outlook

- Similar pattern sticking with us
- Colder more likely to the east
- Several chances of cold which will go below freezing around Great Lakes.
- *Communicate with particularly sensitive stakeholders if needed.*



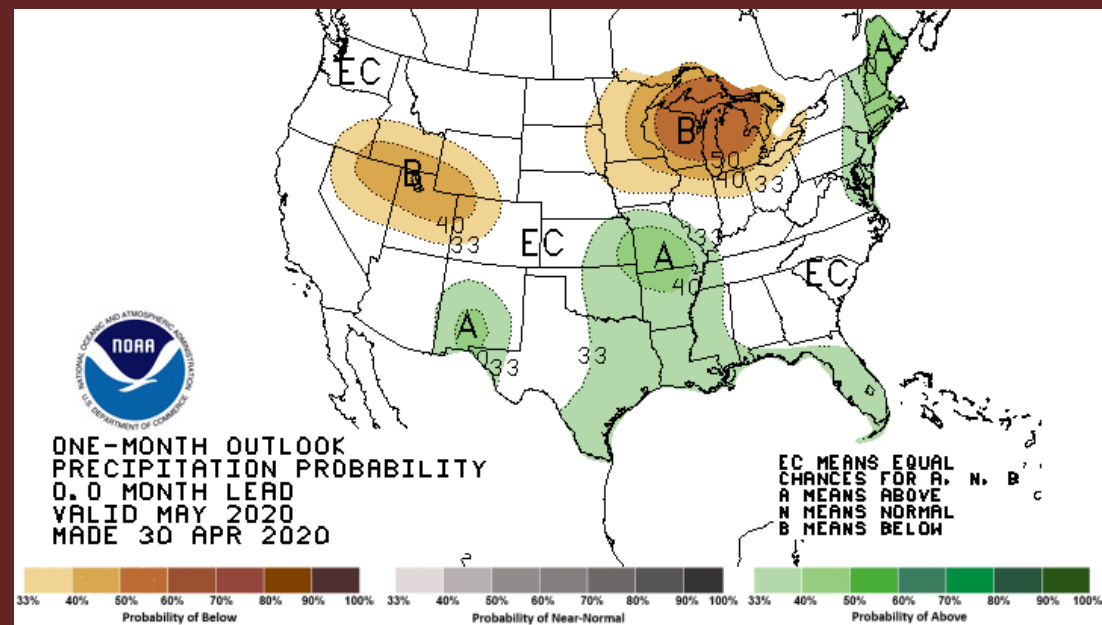
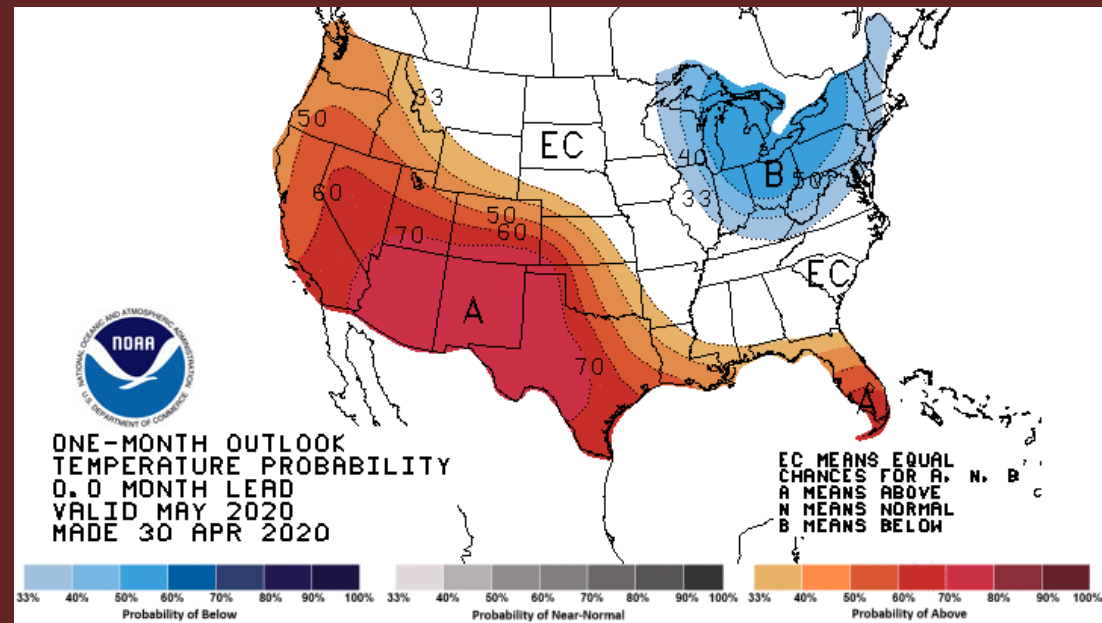
Precipitation Outlook



- 8-14 day leans slightly wet now
- Good for ongoing planting
- A little help for drier soils.

1-Month Outlook

- May pattern similar to 8-14 day day.
- Cold more likely around Great Lakes.
- Warmer into central plains.
- Good chance of dry over Great Lakes.
- Slightly increased chance of wetness centered on Missouri. Would worsen slower planting there.



Drought in the Midwest

U.S. Drought Monitor

USDA Midwest Climate Hub

April 28, 2020

(Released Thursday, Apr. 30, 2020)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	98.38	1.62	0.00	0.00	0.00	0.00
Last Week 04-21-2020	98.26	1.74	0.00	0.00	0.00	0.00
3 Months Ago 01-28-2020	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 12-31-2019	99.71	0.29	0.00	0.00	0.00	0.00
Start of Water Year 10-01-2019	80.58	19.42	4.98	0.39	0.00	0.00
One Year Ago 04-30-2019	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:



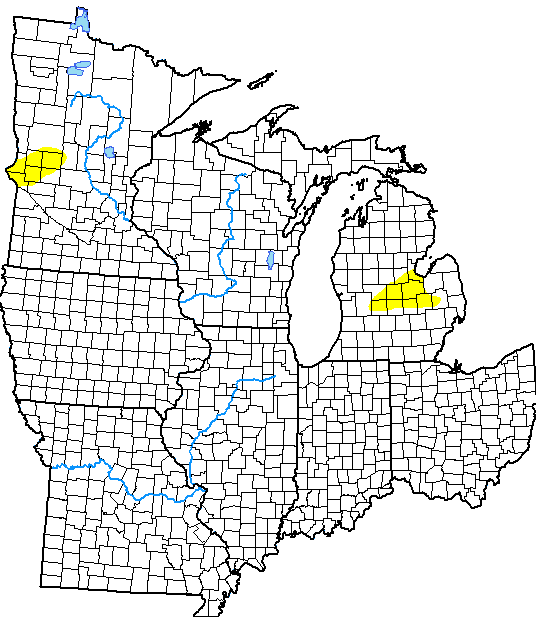
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Deborah Bathke
National Drought Mitigation Center



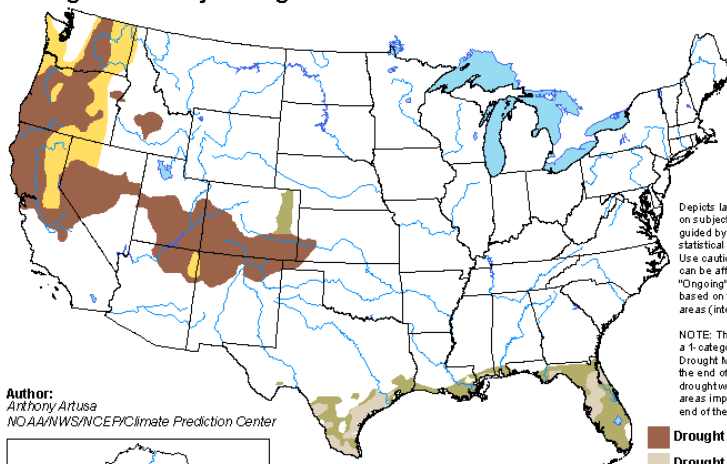
droughtmonitor.unl.edu



The western half of the region saw warmer than normal average temperatures, with departures ranging from 1 degree above normal in eastern Iowa to 8 degrees above normal in western Iowa. In the eastern half, temperatures were 1 to 7 degrees below normal, with the greatest departures generally occurring in the Upper Great Lakes area. Precipitation occurred across much of the region with weekly totals generally between 0.5 and 1.75 inches. A band of 3 to 4 inches of rainfall stretched from southwest Missouri to central Illinois. The only change in the region to this week's map was a small reduction in abnormal dryness (D0) in Minnesota.

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for April 16 - July 31, 2020
Released April 16

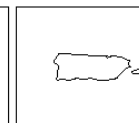
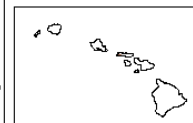


Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D-4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

- Drought persists
- Drought remains but improves
- Drought removal likely
- Drought development likely

Author:
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NOAA/NWS/NCEP/Climate Prediction Center



<http://go.usa.gov/3eZ73>

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

<http://www.cpc.ncep.noaa.gov/>

Summary

- Precip chances in dry for a bit then coming back.
 - Will allow good planting progress – except Dakotas
- Temps likely colder east. Freeze could occur around Great Lakes. Just slow plant emergence other places.
- Monitoring for drought increases in the region.

Next MAC-T Monthly Call

Next Call
June 3rd, 2020