

MAC-T Monthly Call

Midwest Agriculture and Climate Team

Jan 31, 2020

For more information:

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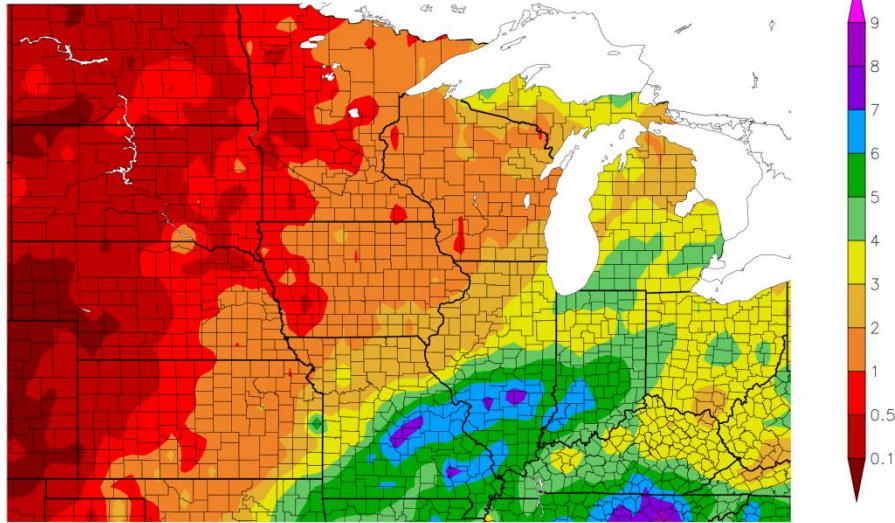


Midwest Climate Hub

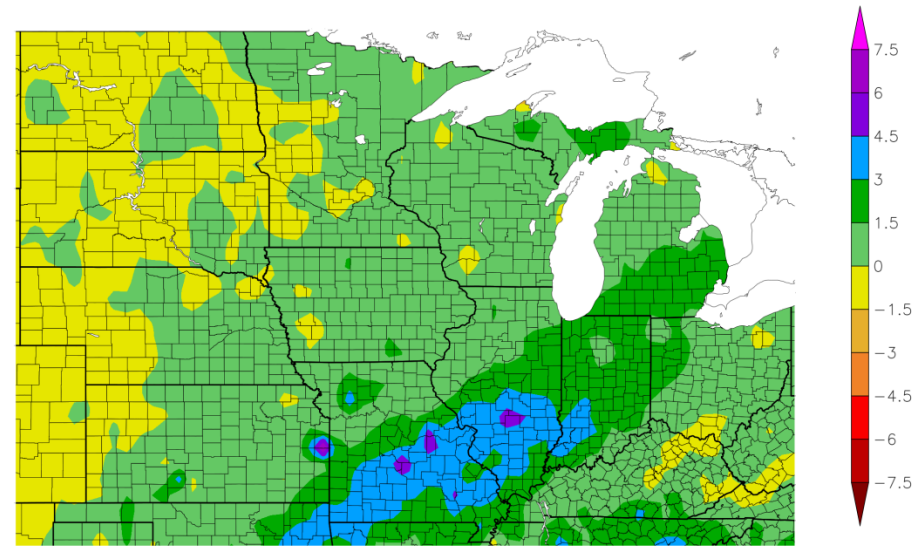
U.S. DEPARTMENT OF AGRICULTURE



Precipitation (in)
12/31/2019 – 1/29/2020



Departure from Normal Precipitation (in)
12/31/2019 – 1/29/2020



Generated 1/30/2020 at HPRCC using provisional data.

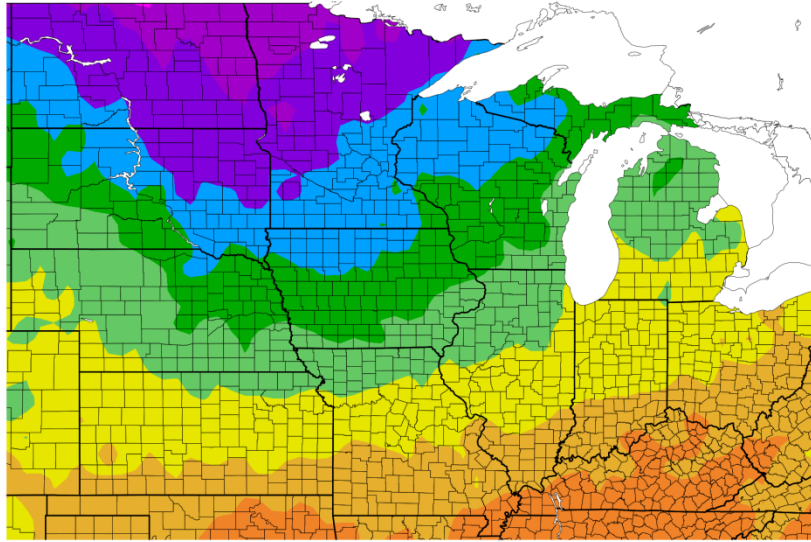
NOAA Regional Climate Centers

Generated 1/30/2020 at HPRCC using provisional data.

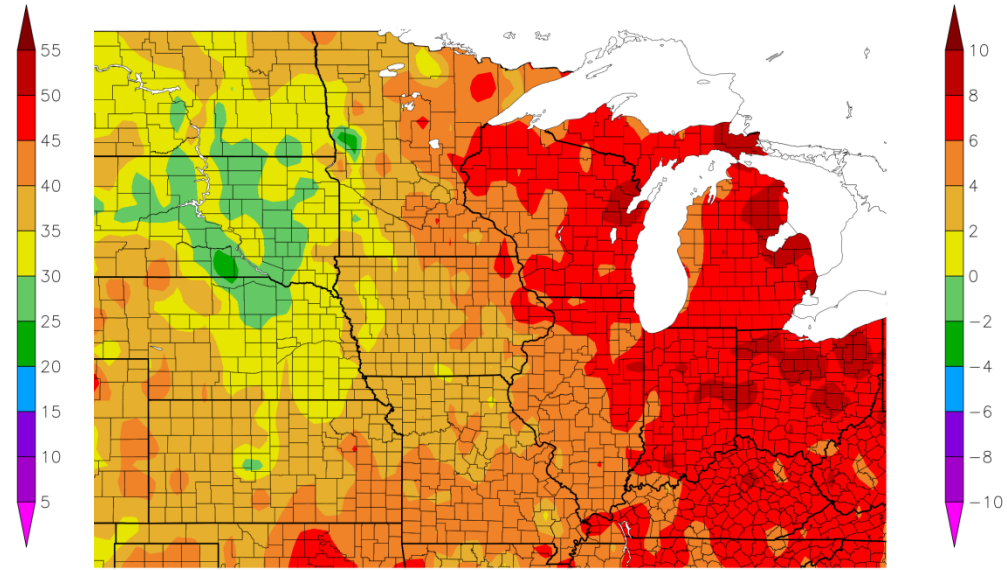
NOAA Regional Climate Centers

- Heavier precipitation amounts (as usual) in the southeast part of the region.
- This is also the area that is most above average with 3”+ departures in places.
- Slighter drier than average in the western plains.

Temperature (F)
12/31/2019 – 1/29/2020



Departure from Normal Temperature (F)
12/31/2019 – 1/29/2020



Generated 1/30/2020 at HPRCC using provisional data.

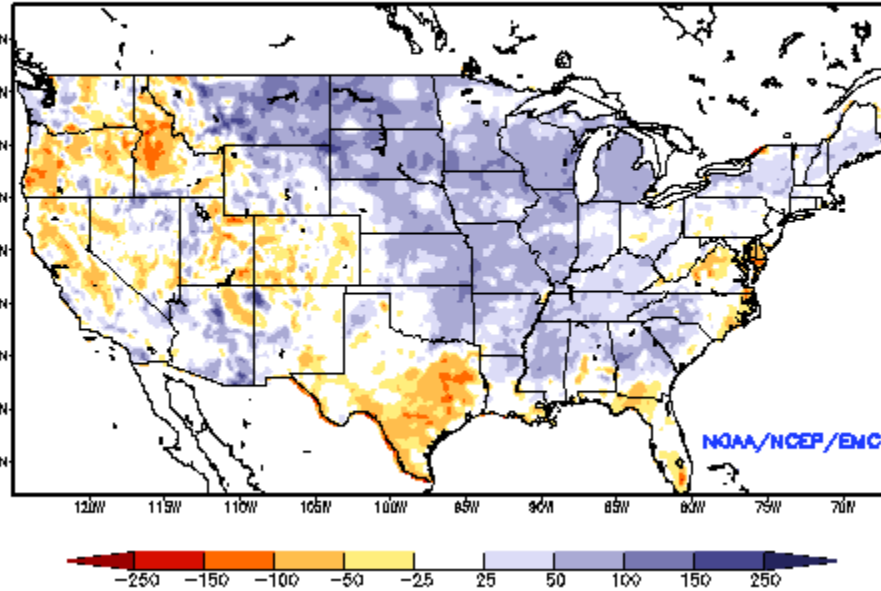
NOAA Regional Climate Centers stid 1/30/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

- A small area of below average temperatures in the Dakotas and Nebraska
- Continued much above normal in the eastern Corn Belt and eastern Great Lakes
- Earlier this week, South Bend, IN reported it was the 2nd warmest on record for the climatological winter so far (since Dec. 1).

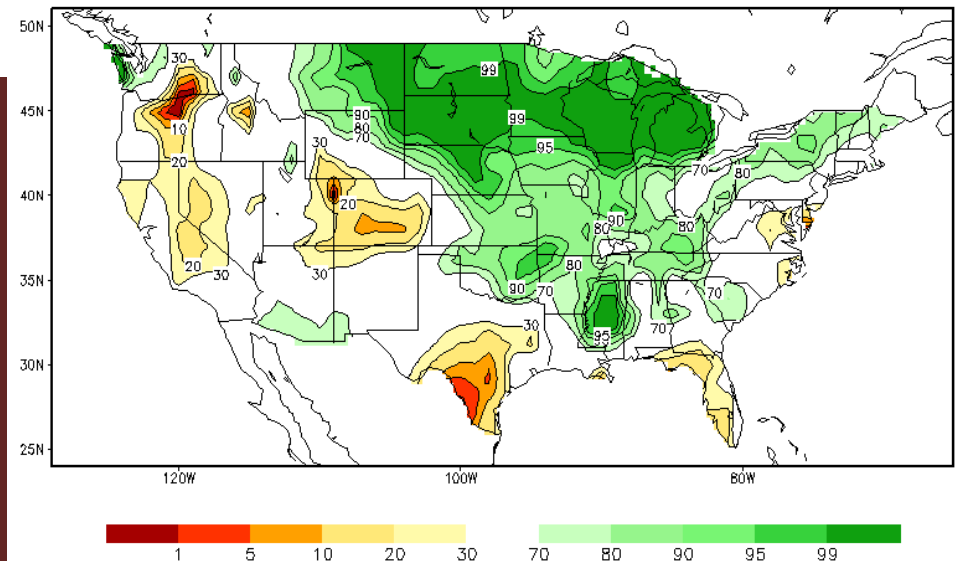
Soil Moisture

Ensemble-Mean - Current Total Column Soil Moisture Anomaly (mm)
NCEP NLDAS Products Valid: JAN 26, 2020



- Winter does not lead to much change in soil moisture (drier). But can add soil moisture in non-frozen areas.
- Eastern Corn Belt wetting more to join nearly the whole region having several inch above average moisture contents.

Calculated Soil Moisture Ranking Percentile
JAN 30, 2020

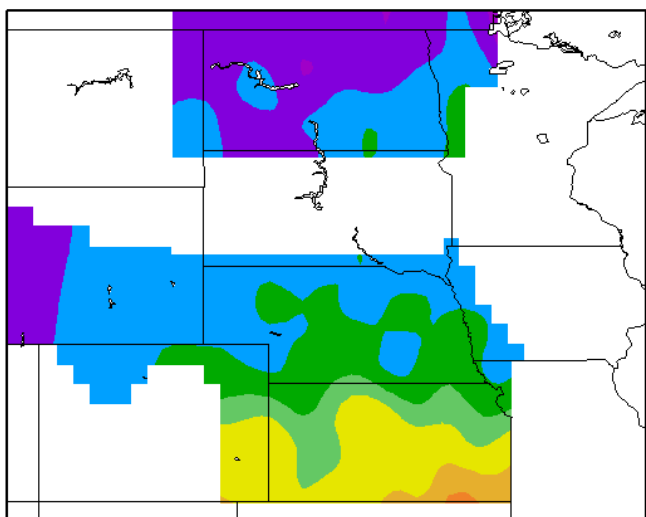


<http://www.emc.ncep.noaa.gov/mmb/nldas/drought/>

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

Soil Temperature

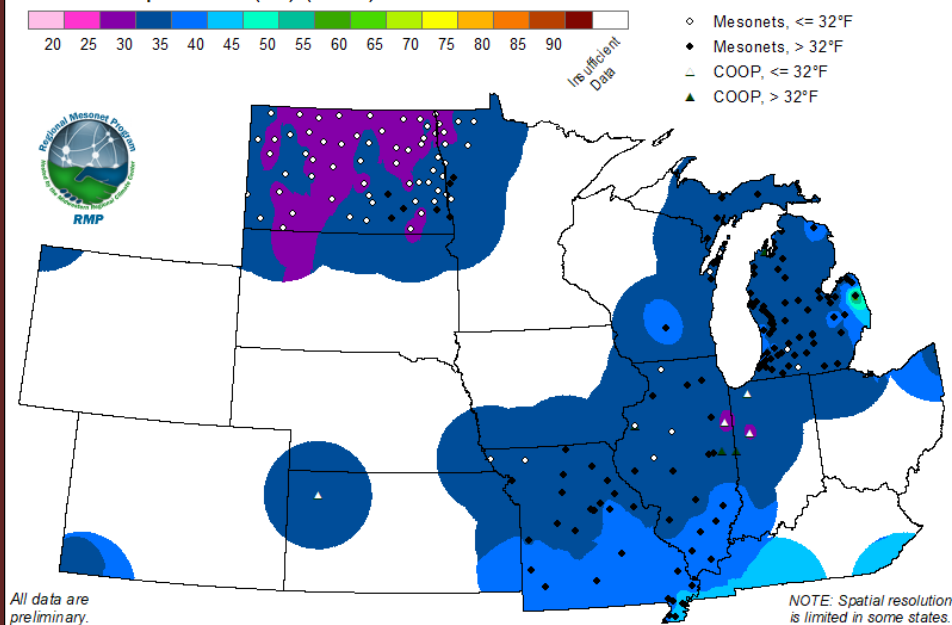
Soil Temperature (F at 4 inches)
1/30/2020 – 1/30/2020



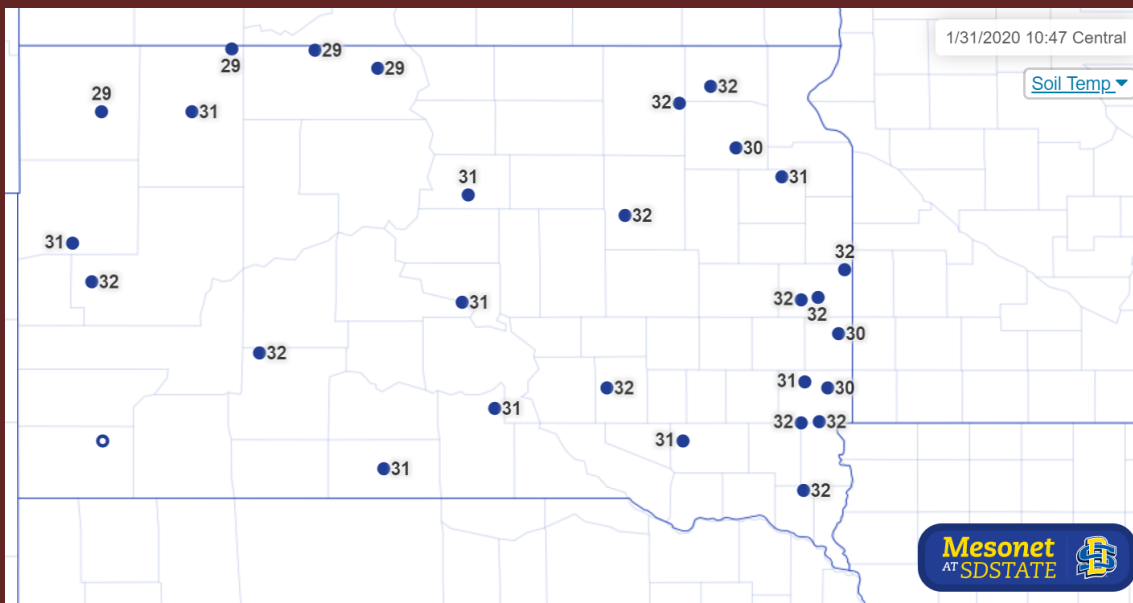
High Plains Regional Climate Center
Generated 1/31/2020 using AWDN data.

4" Soil Temperature (°F) (Bare)

24-Hour Period Through 1/29/2020



- Frozen soils in Dakotas and extended some southward into nrn MO, IL and parts of MI.
- Warm temperatures and snow cover have limited some of the freezing.



<https://mrcc.illinois.edu/RMP/currentMaps.html>
<https://hprcc.unl.edu/maps.php?map=AWDNMaps>
<http://climate.sdstate.edu>

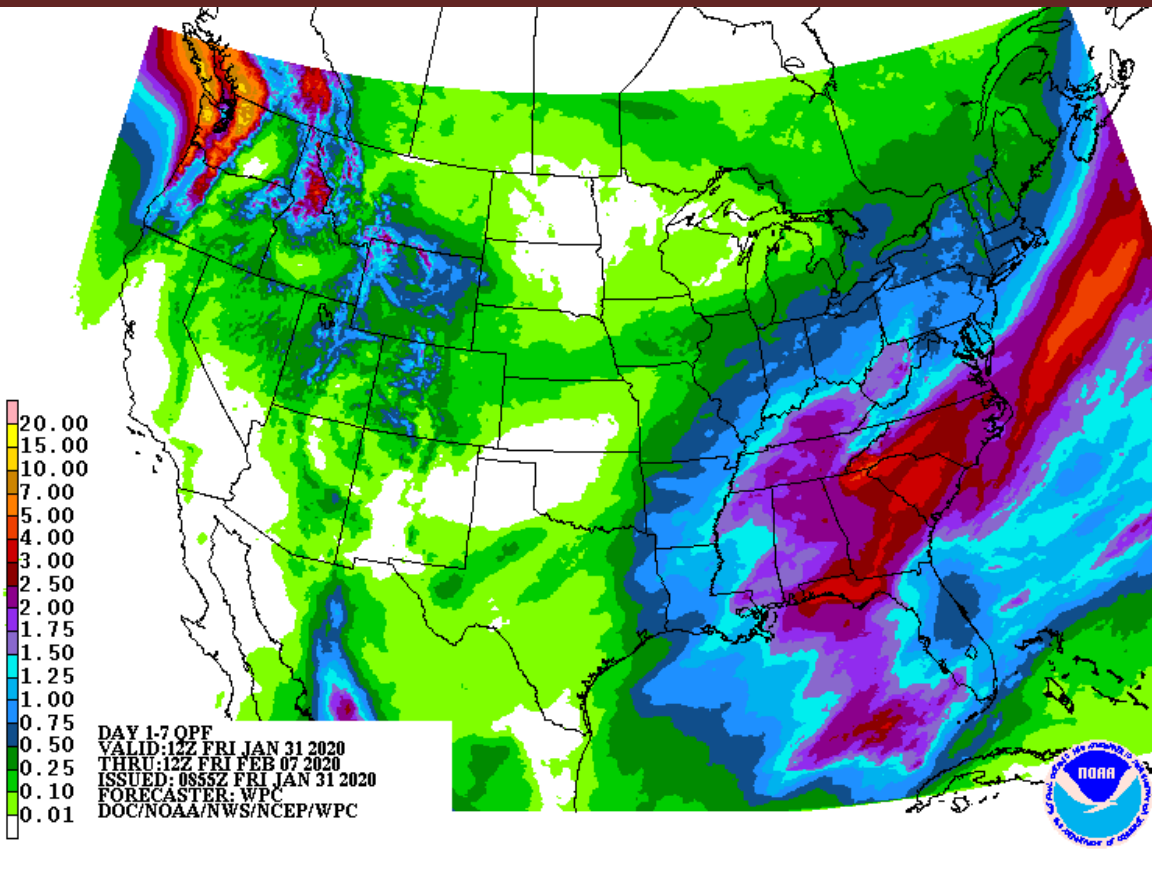
USDA NASS Crop Progress Corn

- No additional maps
 - ND still around 50% corn in the field
 - SD reporting a few % still in the field also

Assorted AG Issues

- Fairly mild conditions overall
- Winter wheat reported greening-up in Ohio
- Freezing depths not deep enough, that tiles are still running, removing some additional soil moisture.

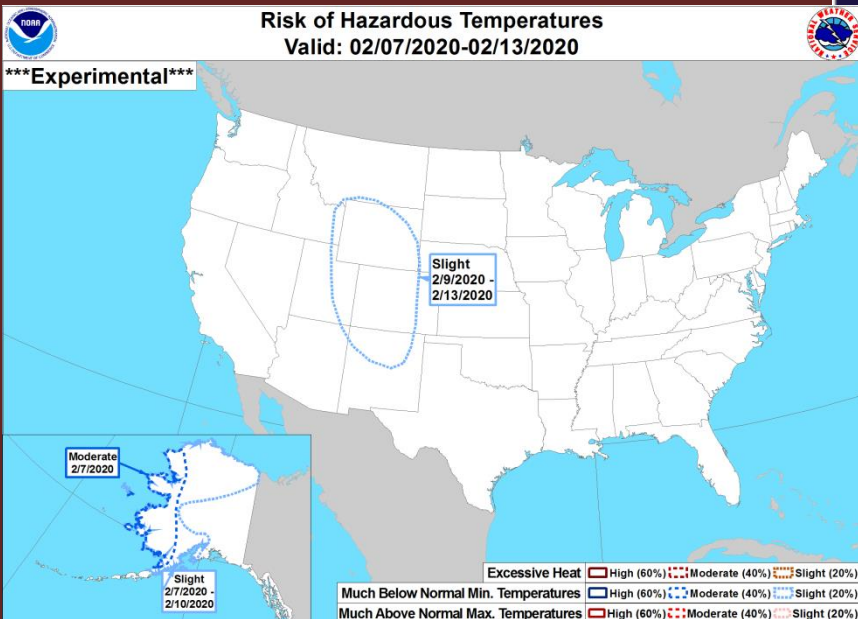
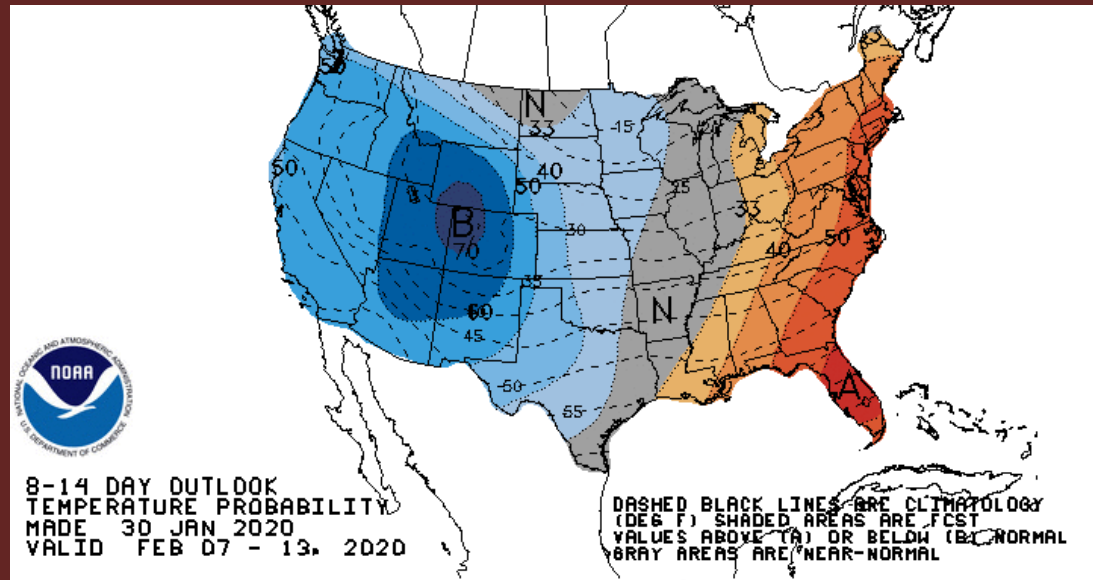
1-7 Day Precip



- Ohio Valley most likely to have most precip – up to an inch possible.
- Some snow possible NE into IA middle of week.
- Quiet nrn plains.

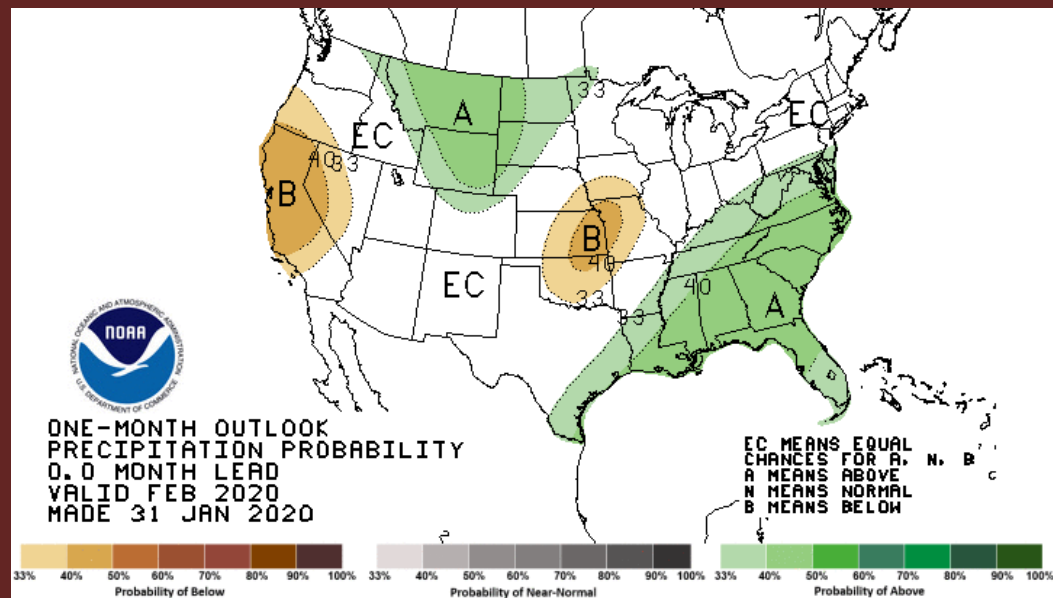
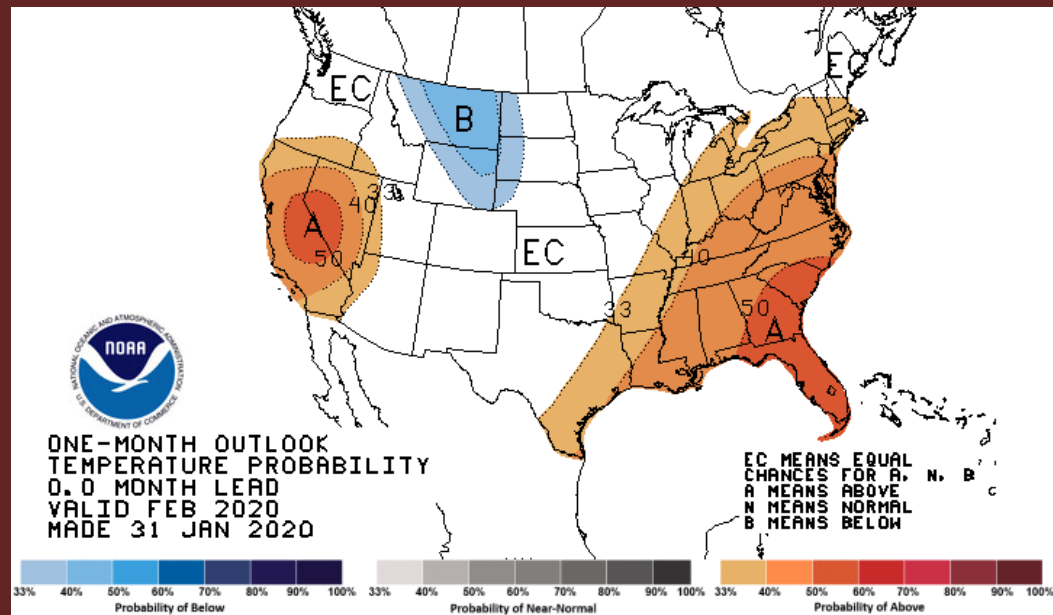
Temperature Outlook

- Cold push into the west. Higher likelihood of cold further into plains.
- Some risk of extreme cold WY/CO.
- Less risk eastern corn belt.



1-Month Outlook

- Contrasting conditions more likely for Feb. Colder more likely NW plains but more likely warmer Ohio Valley – eastern Corn Belt.
- Precipitation – pocket of dryness KS-MO with wetter more likely nrn plains and south of Ohio River.
- Better news for dry area and planting. More concerns for wetness in plains (already very wet soils).



Drought in the Midwest

U.S. Drought Monitor

USDA Midwest Climate Hub

January 28, 2020

(Released Thursday, Jan. 30, 2020)

Valid 7 a.m. EST

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 01-21-2020	100.00	0.00	0.00	0.00	0.00	0.00
3 Months Ago 10-29-2019	91.03	8.97	2.78	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 01-29-2019	99.65	0.35	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.asp>

Author:

Richard Heim
NCEI/NOAA

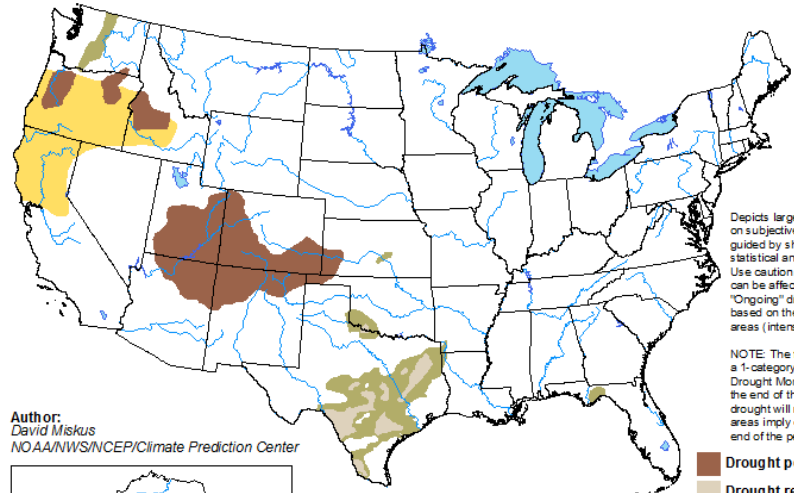


droughtmonitor.unl.edu

Less than 0.25 inch of precipitation fell across most of Minnesota and parts of southeast Illinois to southwestern Indiana, while most of the Midwest received half an inch or more, and locally more than an inch. With most of the region experiencing wet conditions for the last 1 to 12 months, there was no drought or abnormal dryness in the Midwest this week.

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

Valid for January 16 - April 30, 2020
Released January 16



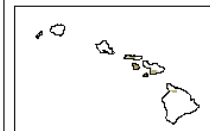
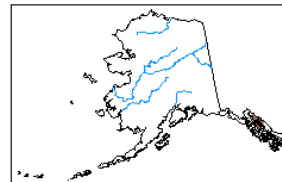
Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

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:
David Miskus

NOAA/NWS/NCEP/Climate Prediction Center



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

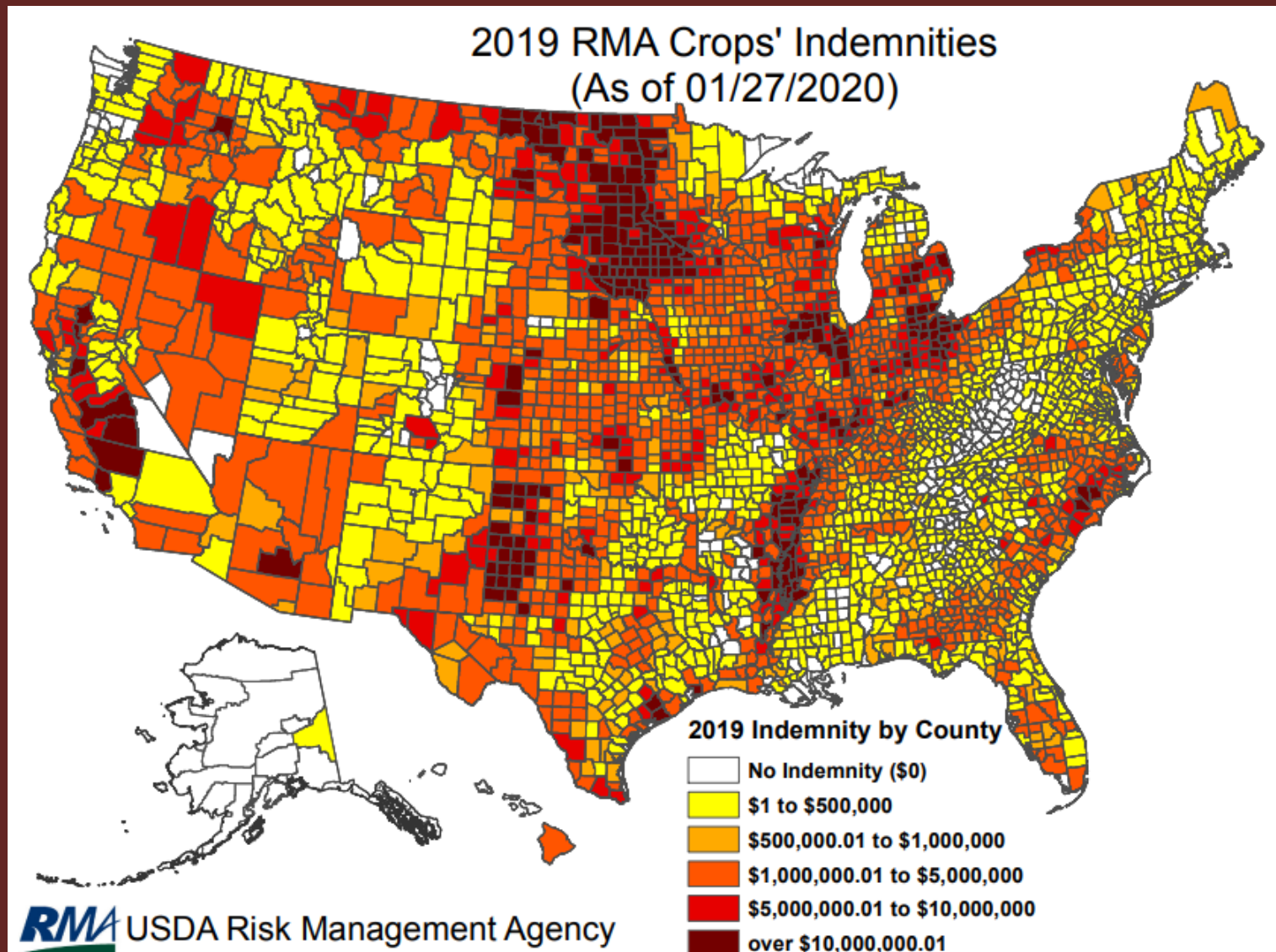
<http://droughtmonitor.unl.edu/>

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

Summary

- Wet soils continue
- Few major storms recently.
- Near-term monitor for increased storm chances in plains and additional precip Ohio Valley.
- Spring planting and flood risks continue with high soil moisture and increased precip chances over much of the region.
- Maybe slightly better chances southern Corn Belt on the planting side.

2019 Crop Indemnities



Next MAC-T Monthly Call

Next Call
March 4th, 2020