

Hydrologic and Climate Assessment

June 15, 2018



Aaron B. Wilson

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DEPARTMENT OF EXTENSION - CFAES

BYRD POLAR & CLIMATE RESEARCH CENTER

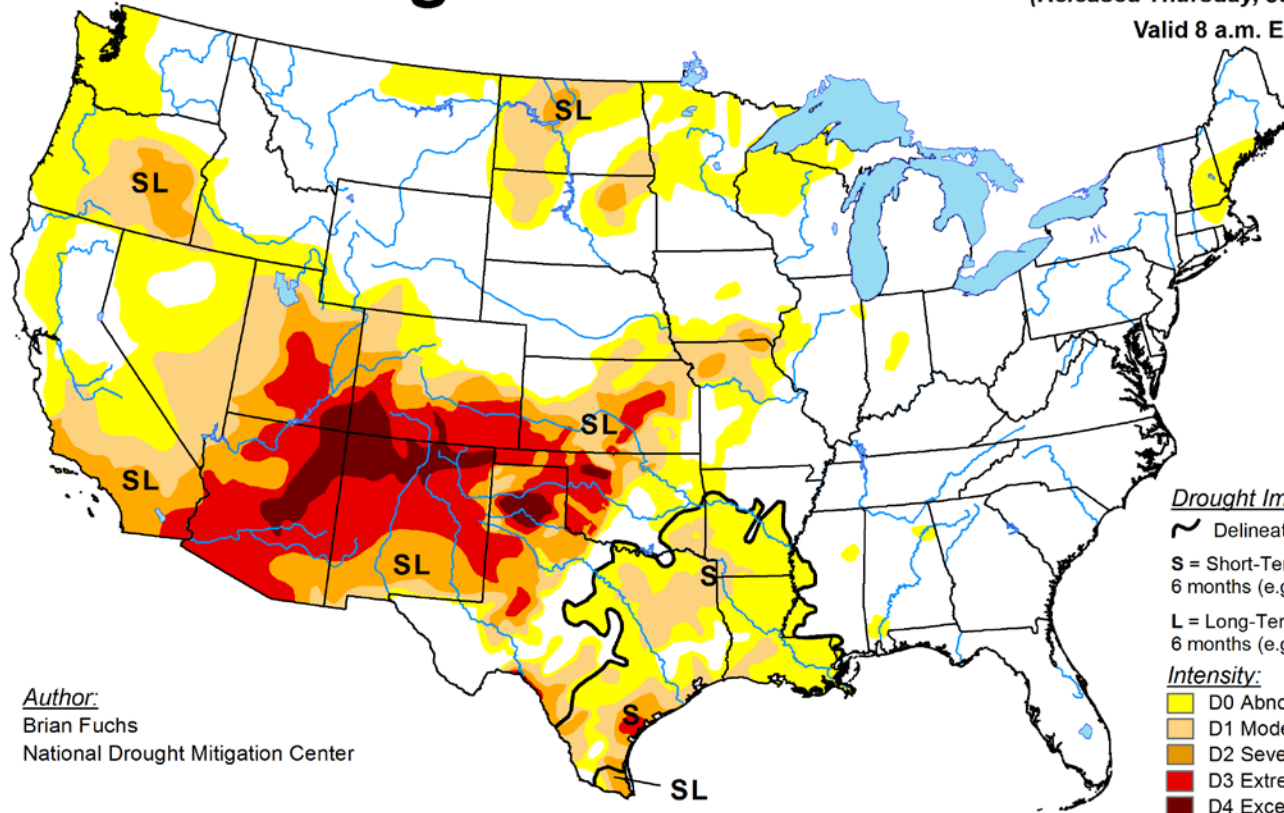
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U.S. Drought Monitor

June 12, 2018
 (Released Thursday, Jun. 14, 2018)
 Valid 8 a.m. EDT



Author:
 Brian Fuchs
 National Drought Mitigation Center

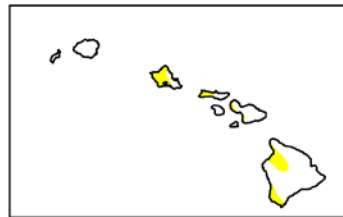
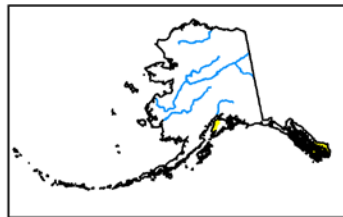
Drought Impact Types:

- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Orange: D2 Severe Drought
- Red: D3 Extreme Drought
- Dark Red: D4 Exceptional Drought

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



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



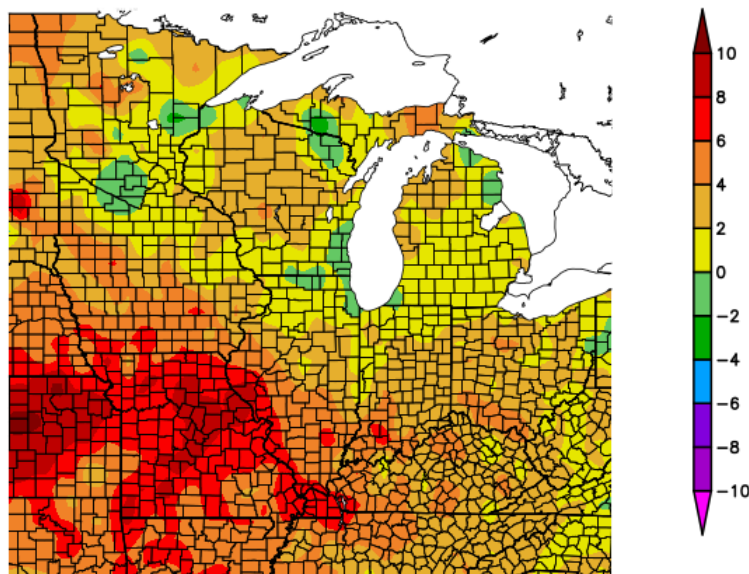
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Temperature Differences Compared to Average (1981-2010)

7-Day

Departure from Normal Temperature (F)
6/8/2018 – 6/14/2018



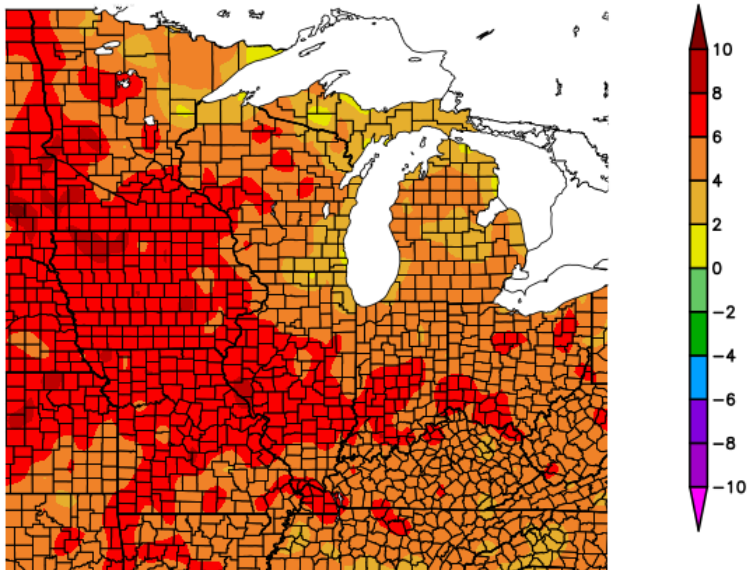
Generated 6/15/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

Temperature Differences Compared to Average (1981-2010)

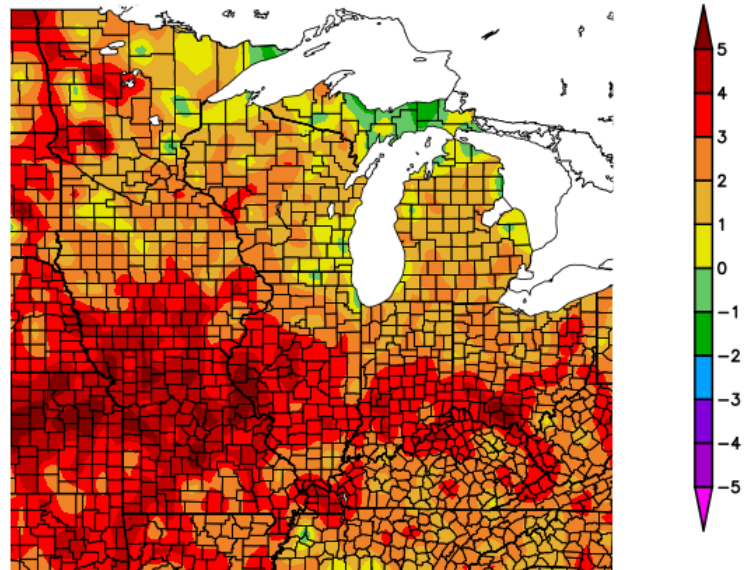
30-Day

Departure from Normal Temperature (F)
5/16/2018 – 6/14/2018



60-Day

Departure from Normal Temperature (F)
4/16/2018 – 6/14/2018



Generated 6/15/2018 at HPRCC using provisional data.

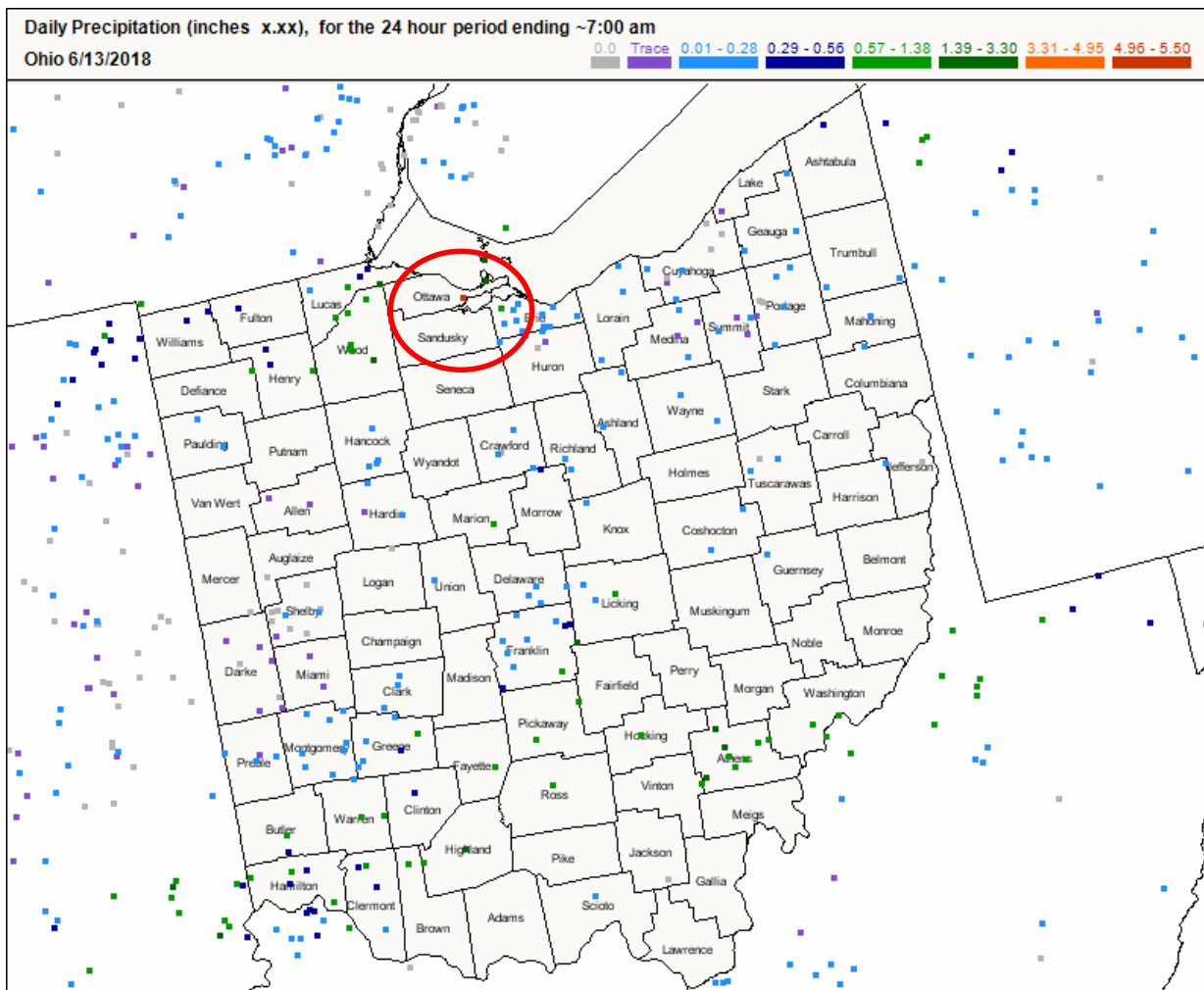
NOAA Regional Climate Centers Generated 6/15/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers



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CoCoRaHS Observed Precipitation: June 13



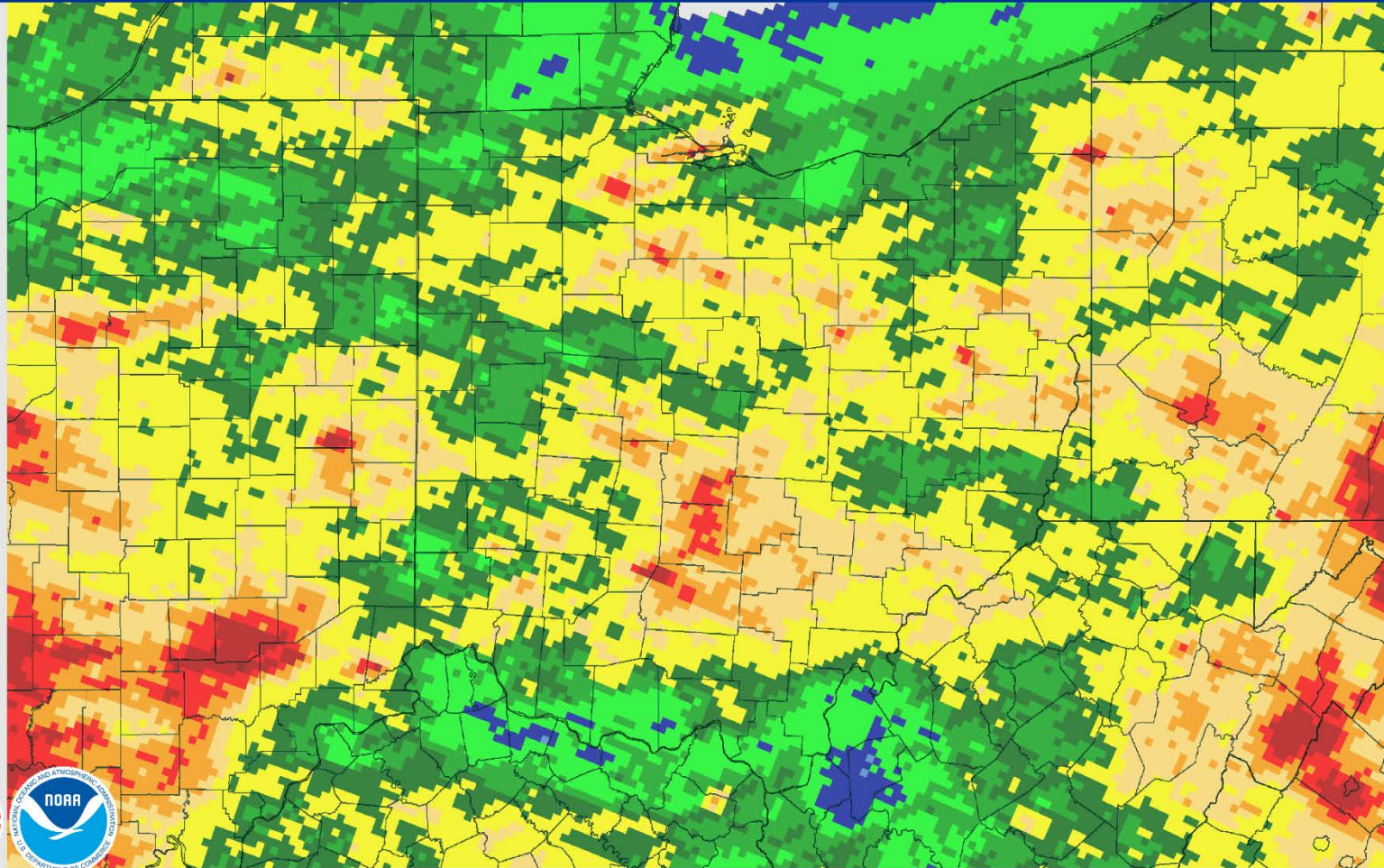
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Previous 14-Day Precipitation: Total

June 15, 2018 14-Day Observed Precipitation

Created on: June 15, 2018 - 14:30 UTC

Valid on: June 15, 2018 12:00 UTC



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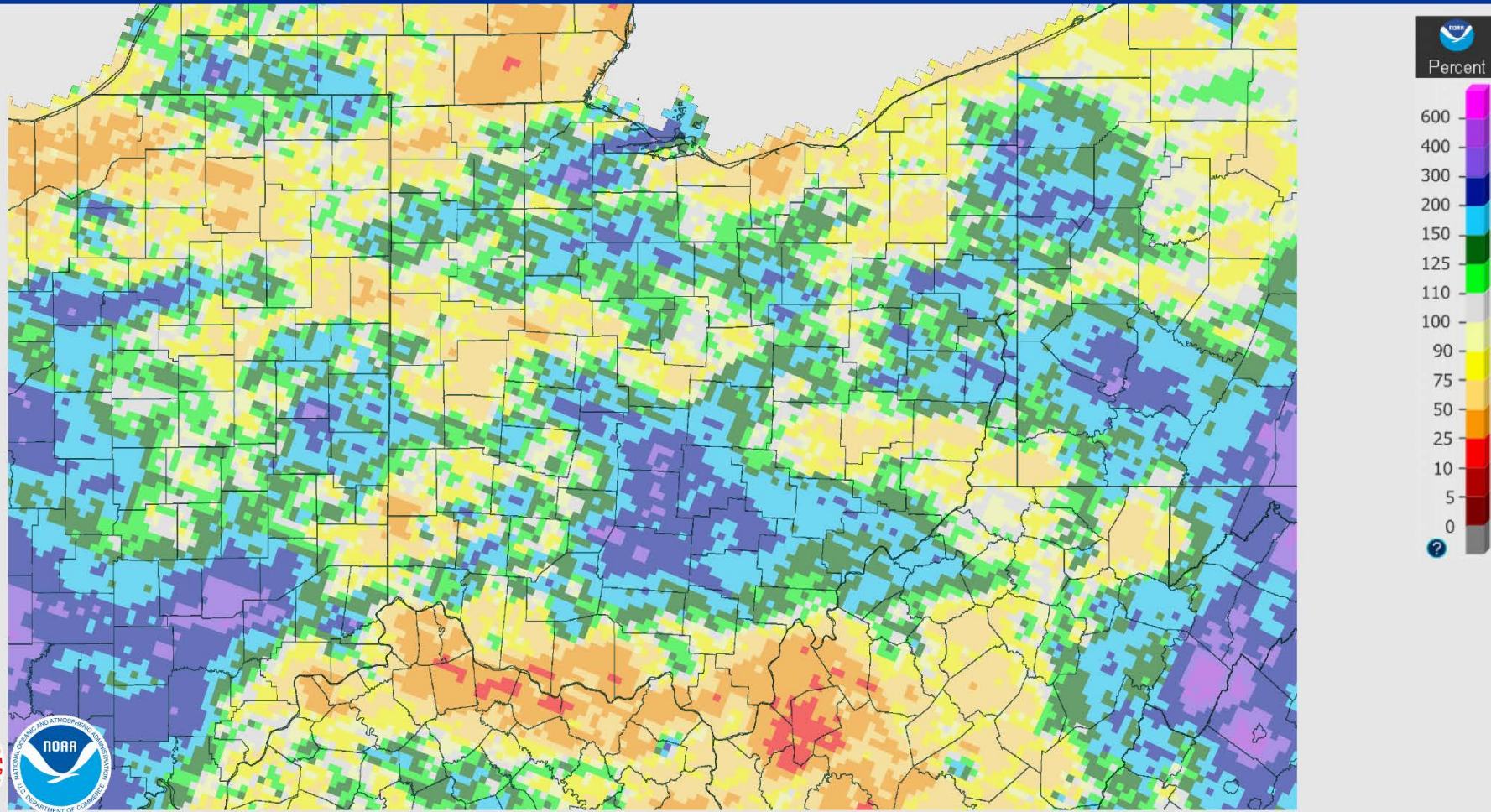
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Previous 14-Day Precipitation: Percent of Normal

June 15, 2018 14-Day Percent Precipitation

Created on: June 15, 2018 - 14:30 UTC

Valid on: June 15, 2018 12:00 UTC



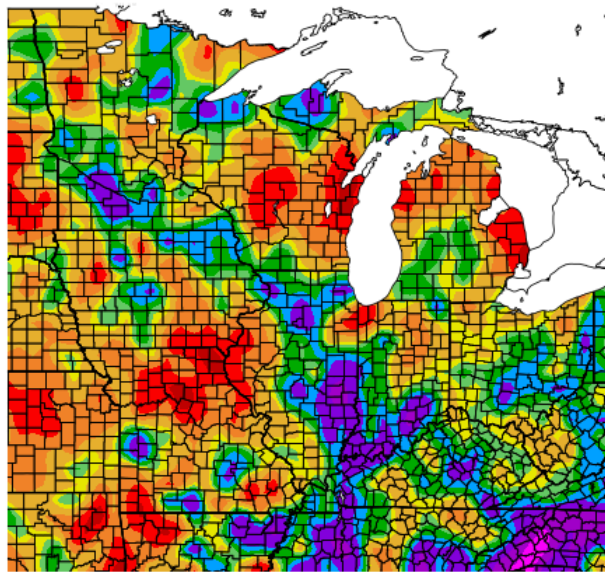
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Precipitation Differences Compared to Average (1981-2010)

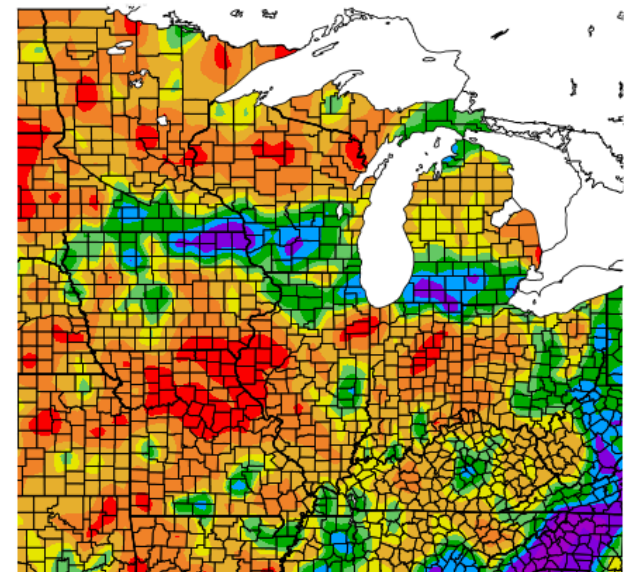
30-Day

Percent of Normal Precipitation (%)
5/16/2018 – 6/14/2018



60-Day

Percent of Normal Precipitation (%)
4/16/2018 – 6/14/2018



Generated 6/15/2018 at HPRCC using provisional data.

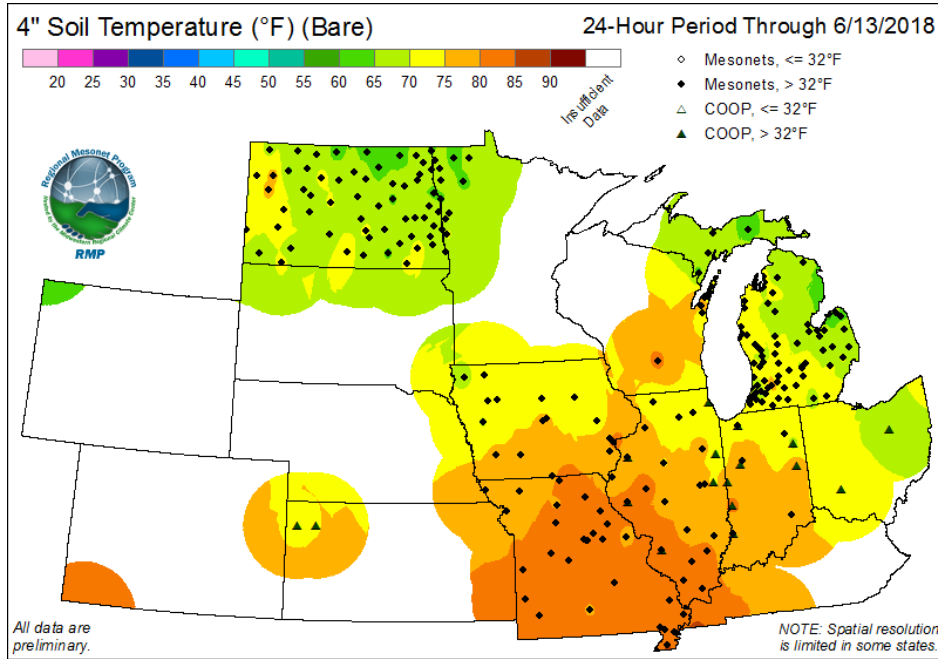
NOAA Regional Climate Centers Generated 6/15/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers



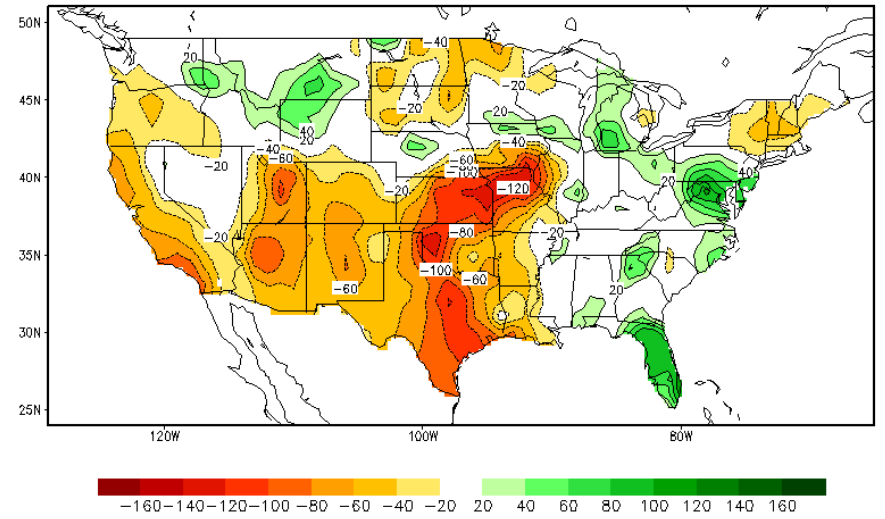
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Soil Temperature/Moisture

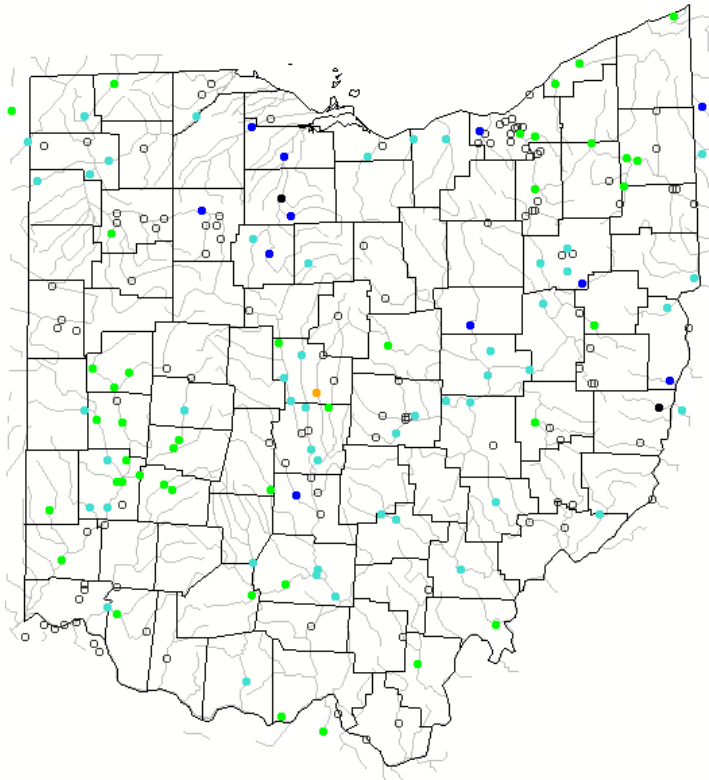


http://mrcc.isws.illinois.edu/cliwatch/special_topics/agriculture.html

Calculated Soil Moisture Anomaly (mm)
JUN 14, 2018



7-DAY



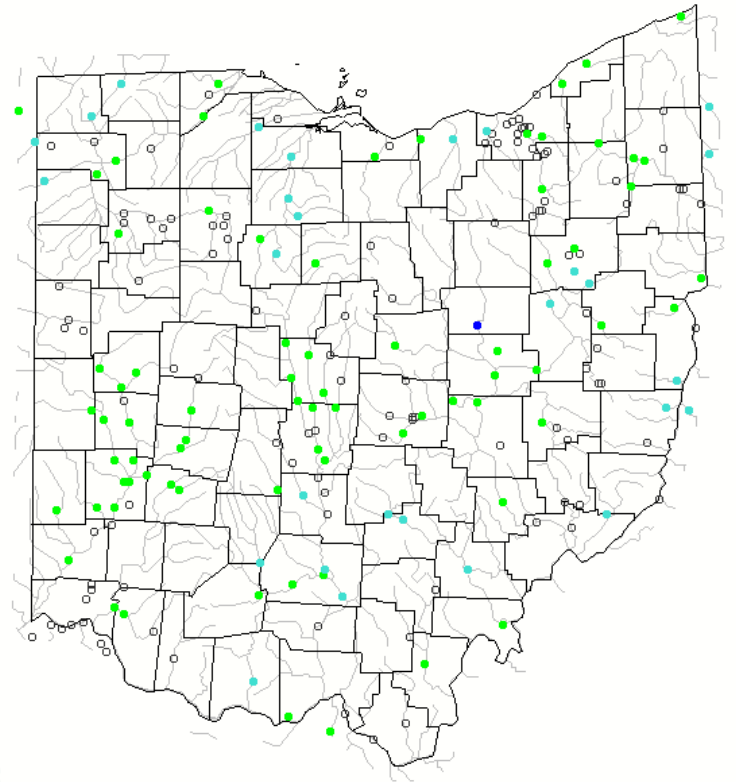
Explanation - Percentile classes

Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High	Not-ranked

Average streamflow compared to historical streamflow for the day of the year

USGS Streamflow

28-DAY



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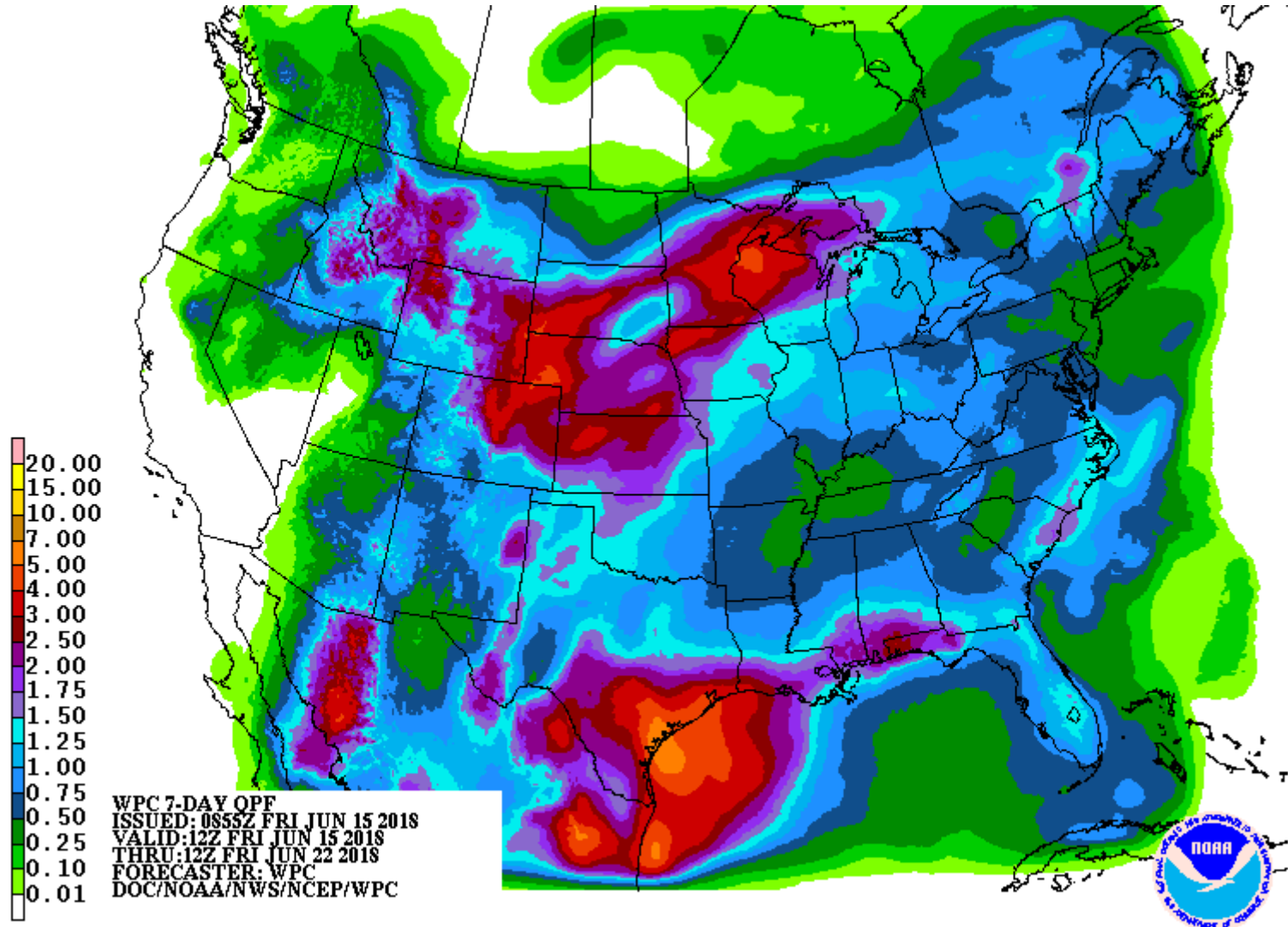
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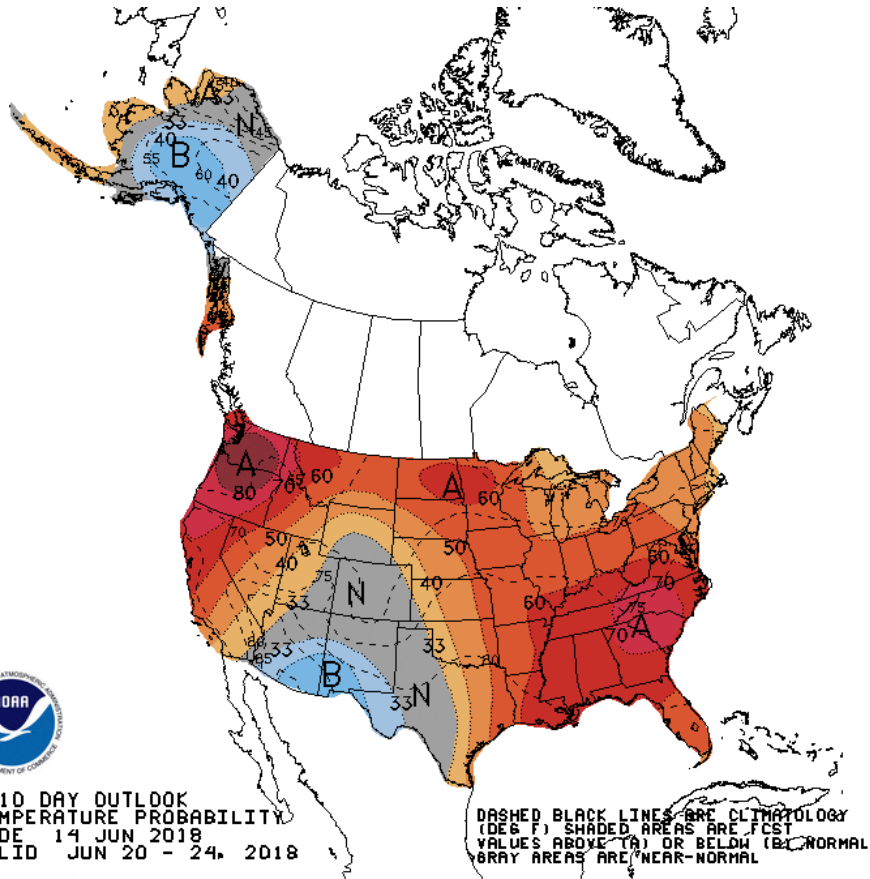
Weather for the Week Ahead



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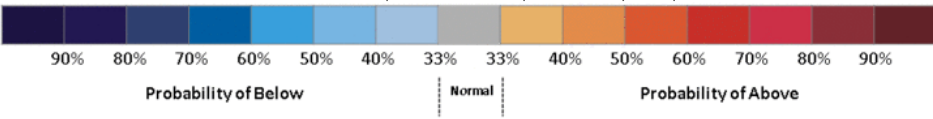
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6-10 Day Outlook

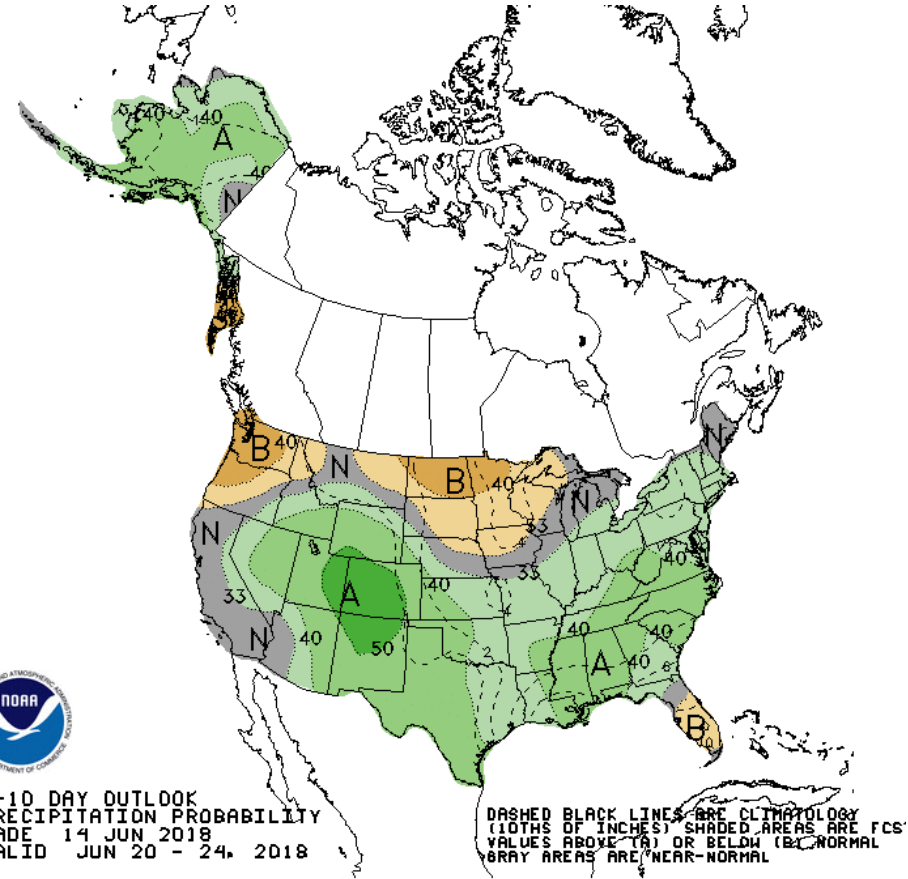


6-10 DAY OUTLOOK
TEMPERATURE PROBABILITY
MADE 14 JUN 2018
VALID JUN 20 - 24, 2018

DASHED BLACK LINES ARE CLIMATOLOGY (DEG F). SHADED AREAS ARE FCS (VALUES ABOVE 'A') OR BELOW ('B') NORMAL. GRAY AREAS ARE 'NEAR-NORMAL'

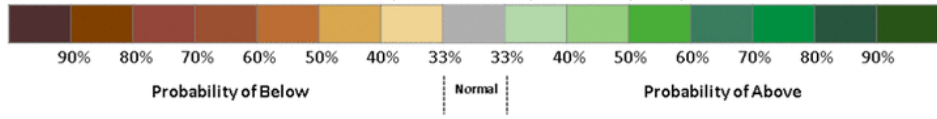


Highs: Upper 70s to Low 80s



6-10 DAY OUTLOOK
PRECIPITATION PROBABILITY
MADE 14 JUN 2018
VALID JUN 20 - 24, 2018

DASHED BLACK LINES ARE CLIMATOLOGY (TENTHS OF INCHES). SHADED AREAS ARE FCS (VALUES ABOVE 'A') OR BELOW ('B') NORMAL. GRAY AREAS ARE 'NEAR-NORMAL'



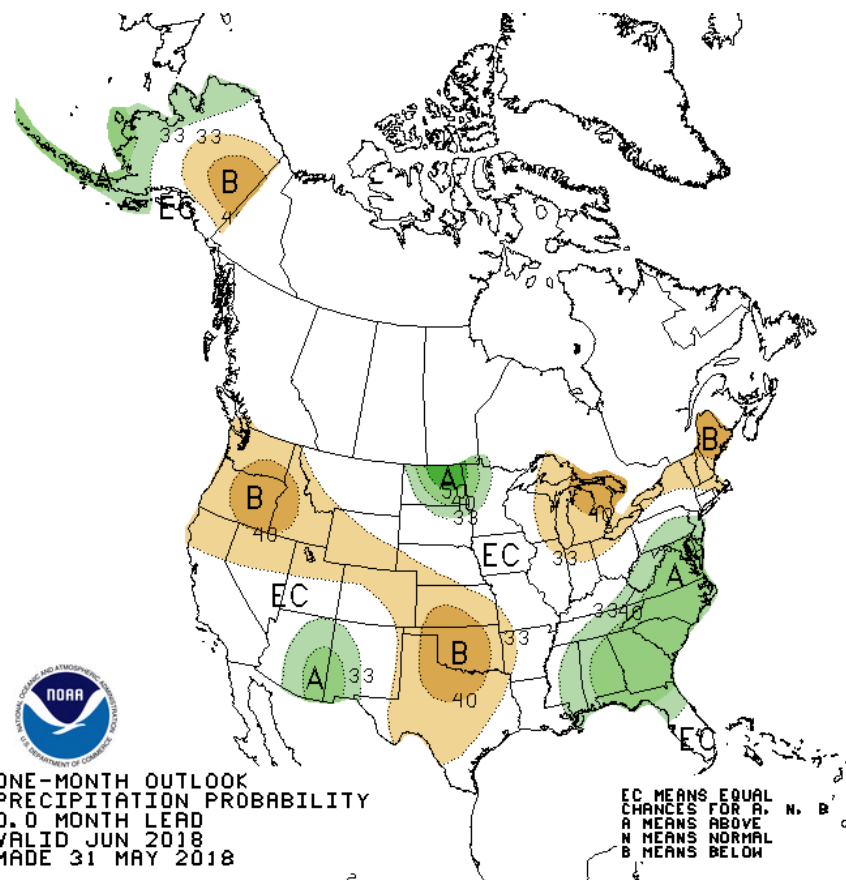
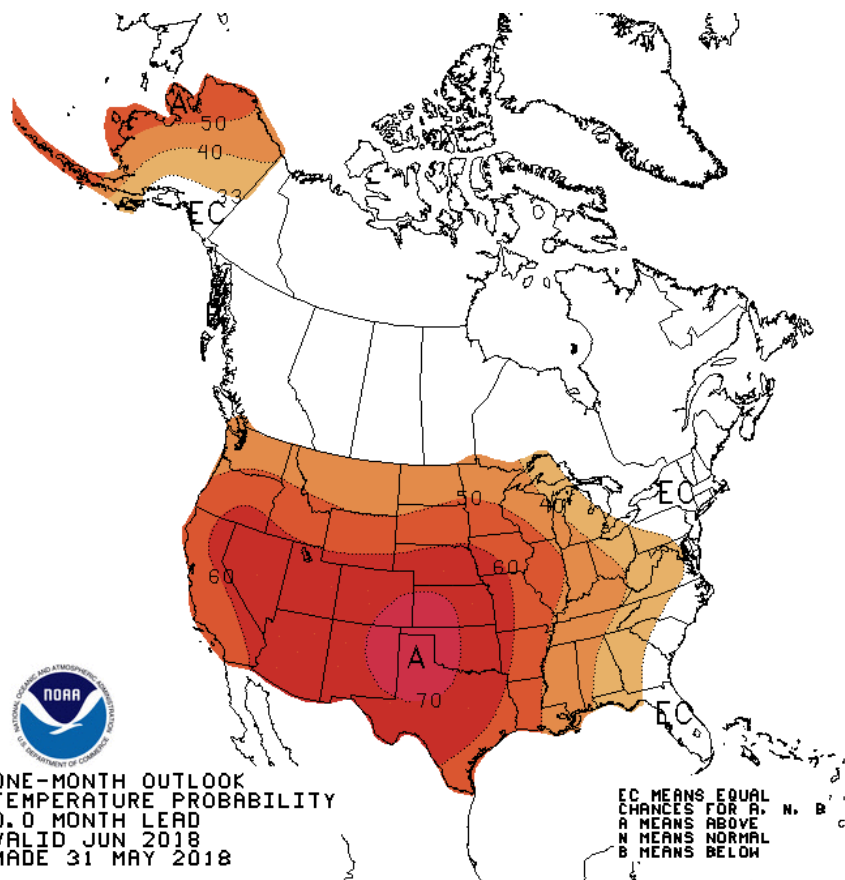
Lows: Upper 50s to low 60s



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June Outlook



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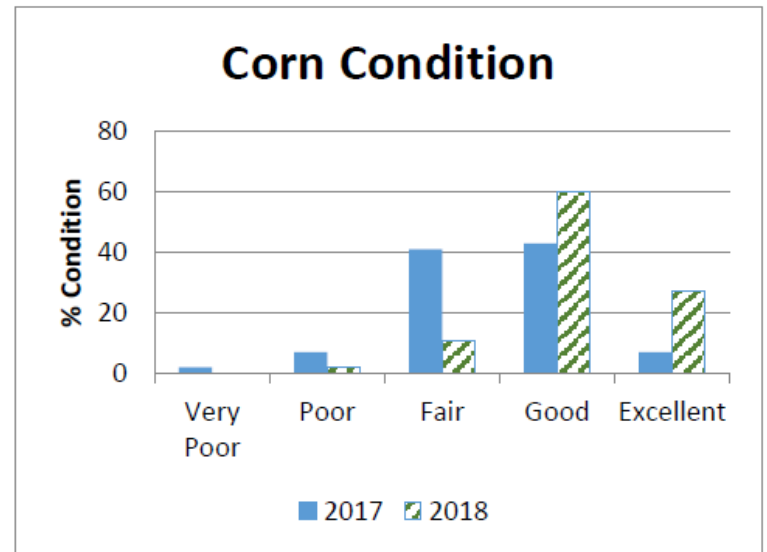
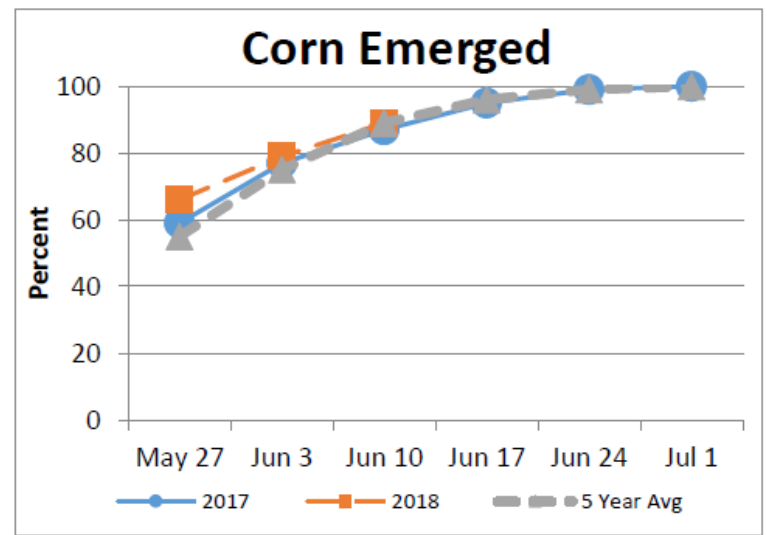
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Ag Highlights

- 4.7 days suitable for work
- Corn planted; soybean close
- Hay cuttings have been challenging



NASS: Cheryl Turner –

https://www.nass.usda.gov/Statistics_by_State/Ohio/Publications/Crop_Progress_&_Condition/2017/cw3017oh.pdf



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Summary of Conditions



Drought Monitor: No Formal drought in Ohio

30-Day and 60-Day: Sporadically wet/dry conditions; driest in W. Central Ohio

The week ahead: Dry and hot conditions through early next week; some rain toward mid-week next week