

Hydrologic and Climate Assessment

June 1, 2018



Wayne Dellinger: Extension Educator, Agriculture
and Natural Resources – Union County

Aaron B. Wilson

STATE CLIMATE OFFICE OF OHIO (SCOO)

DEPARTMENT OF EXTENSION - CFAES

BYRD POLAR & CLIMATE RESEARCH CENTER

DEPARTMENT OF GEOGRAPHY



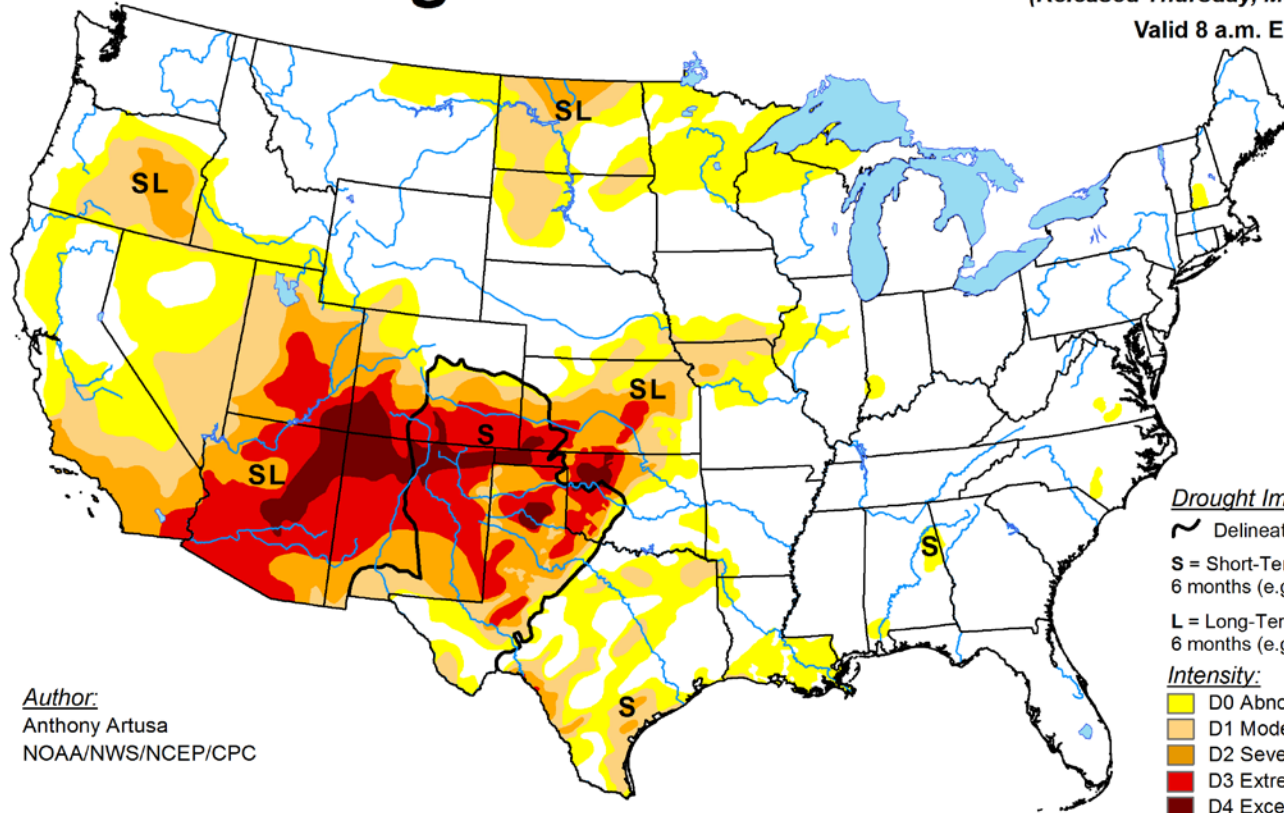
THE OHIO STATE UNIVERSITY

U.S. Drought Monitor

May 29, 2018

(Released Thursday, May. 31, 2018)

Valid 8 a.m. EDT



Author:
Anthony Artusa
NOAA/NWS/NCEP/CPC

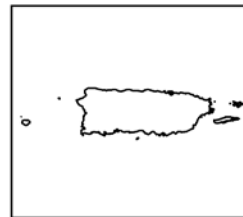
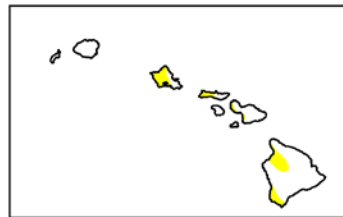
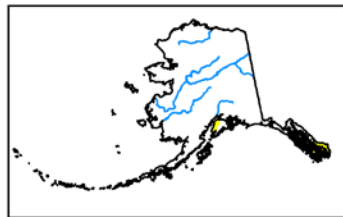
Drought Impact Types:

- ~ 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/>



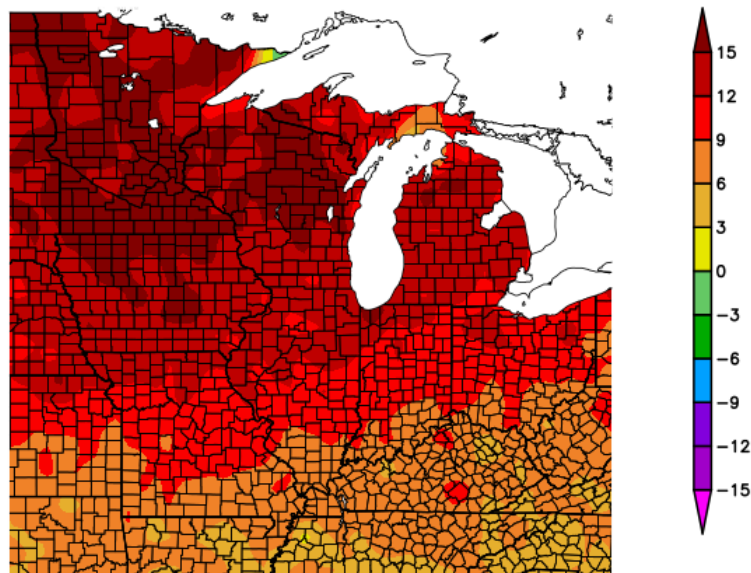
THE OHIO STATE UNIVERSITY

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Temperature Differences Compared to Average (1981-2010)

7-Day

Departure from Normal Temperature (F)
5/24/2018 – 5/30/2018



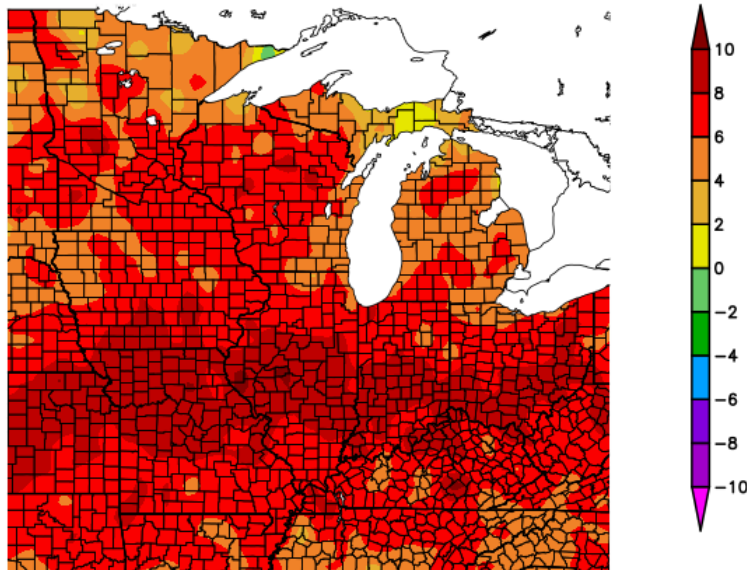
Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

Temperature Differences Compared to Average (1981-2010)

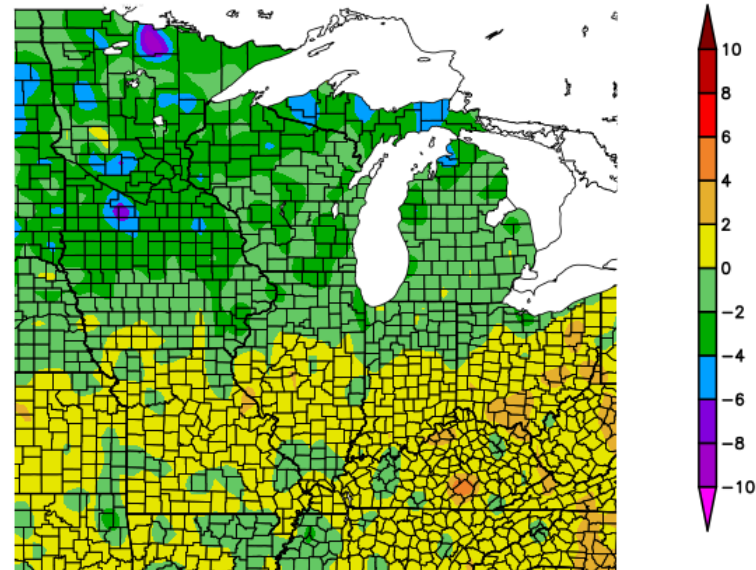
30-Day

Departure from Normal Temperature (F)
5/1/2018 – 5/30/2018



60-Day

Departure from Normal Temperature (F)
4/1/2018 – 5/30/2018



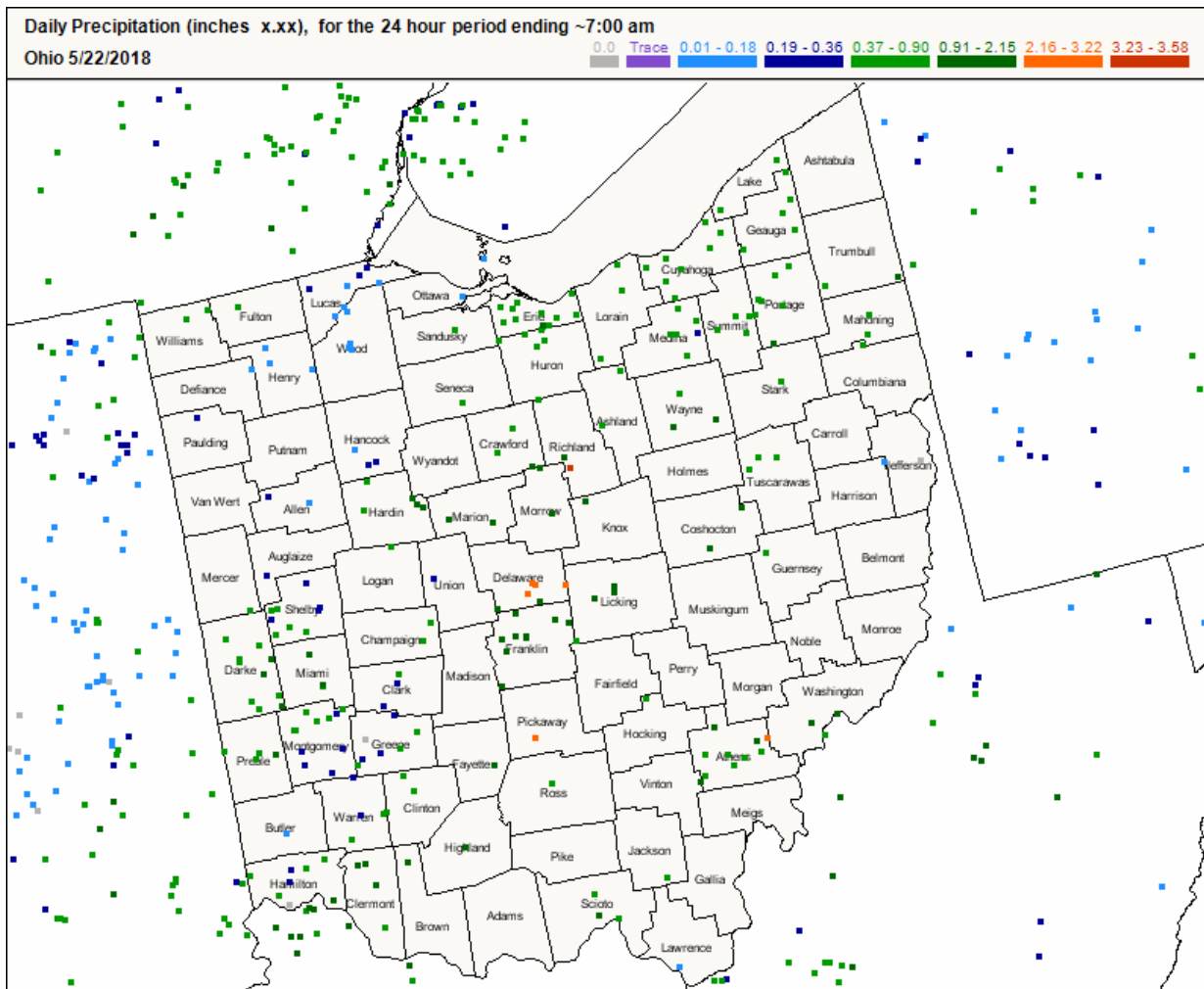
Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers



CoCoRaHS Observed Precipitation: May 22



THE OHIO STATE UNIVERSITY

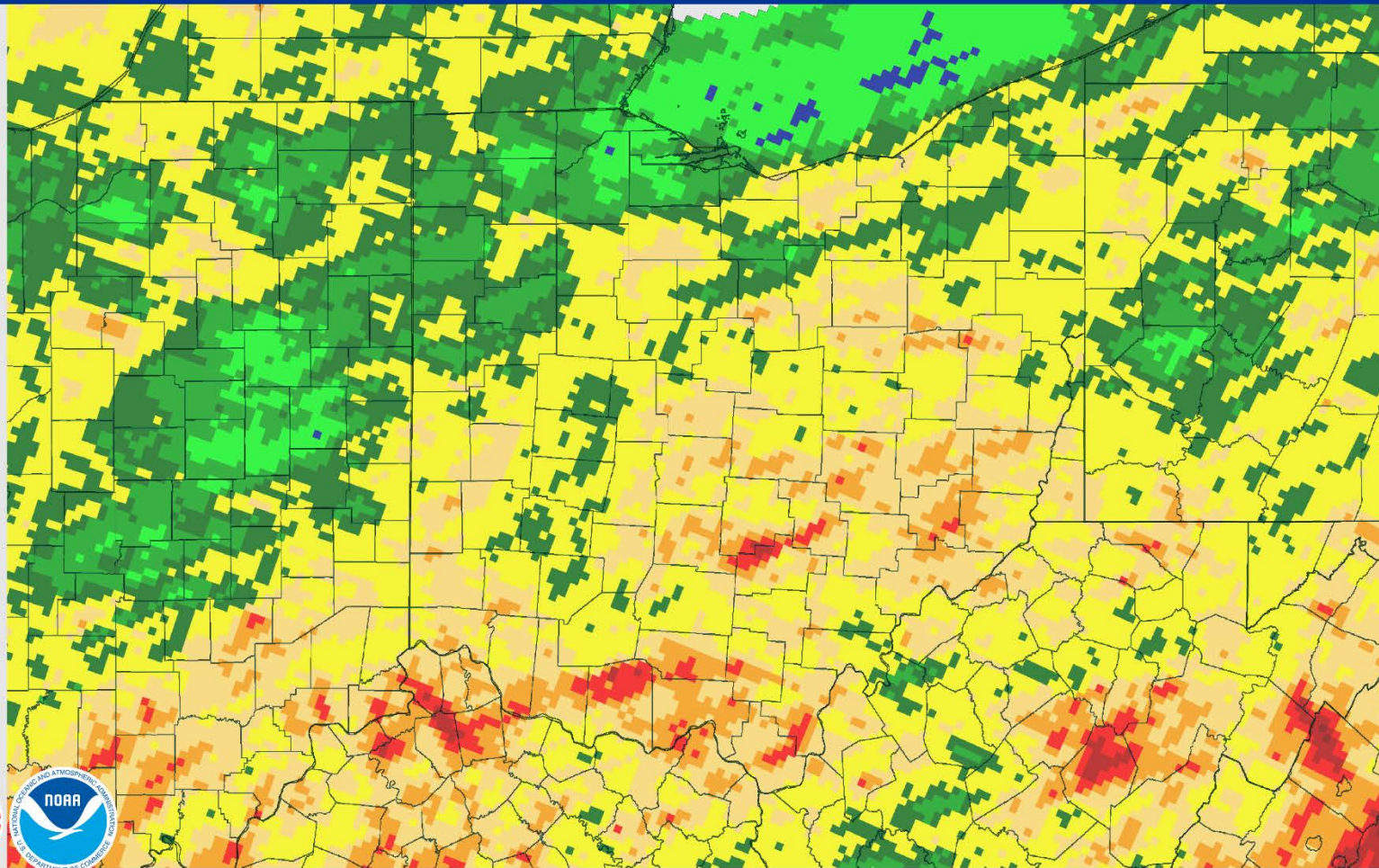
STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Previous 14-Day Precipitation: Total

June 01, 2018 14-Day Observed Precipitation

Created on: June 01, 2018 - 13:53 UTC

Valid on: June 01, 2018 12:00 UTC



THE OHIO STATE UNIVERSITY

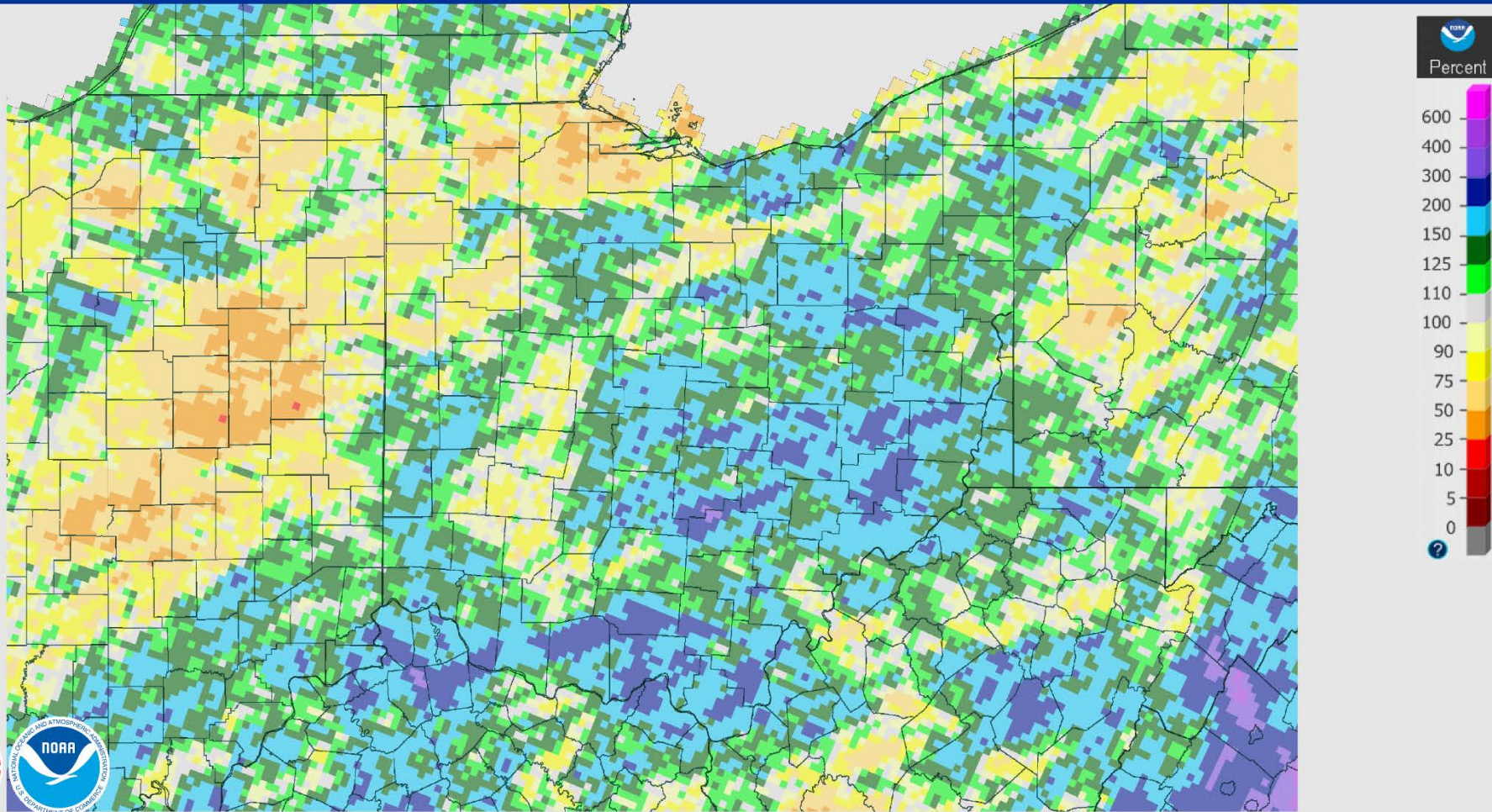
STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Previous 14-Day Precipitation: Percent of Normal

June 01, 2018 14-Day Percent Precipitation

Created on: June 01, 2018 - 13:53 UTC

Valid on: June 01, 2018 12:00 UTC



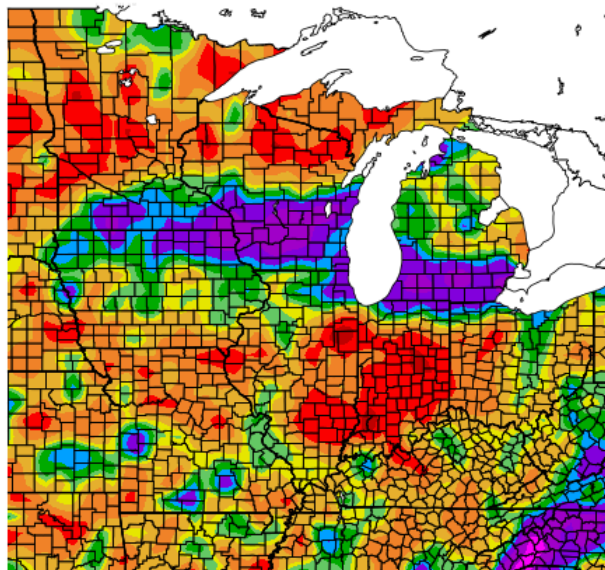
THE OHIO STATE UNIVERSITY

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Precipitation Differences Compared to Average (1981-2010)

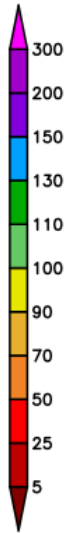
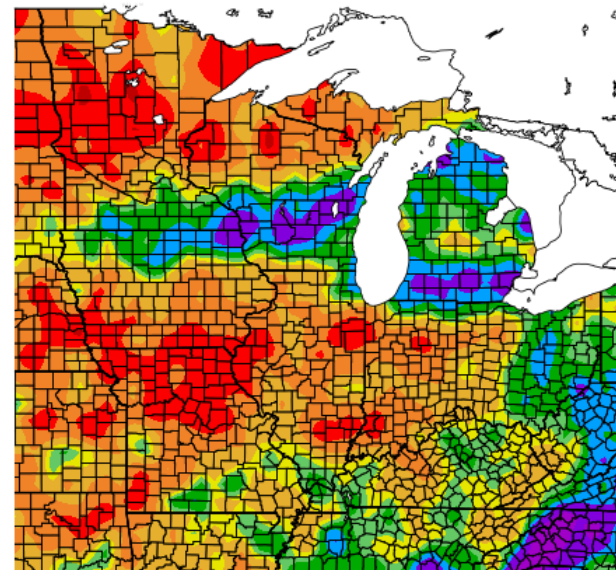
30-Day

Percent of Normal Precipitation (%)
5/1/2018 – 5/30/2018



60-Day

Percent of Normal Precipitation (%)
4/1/2018 – 5/30/2018



Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers

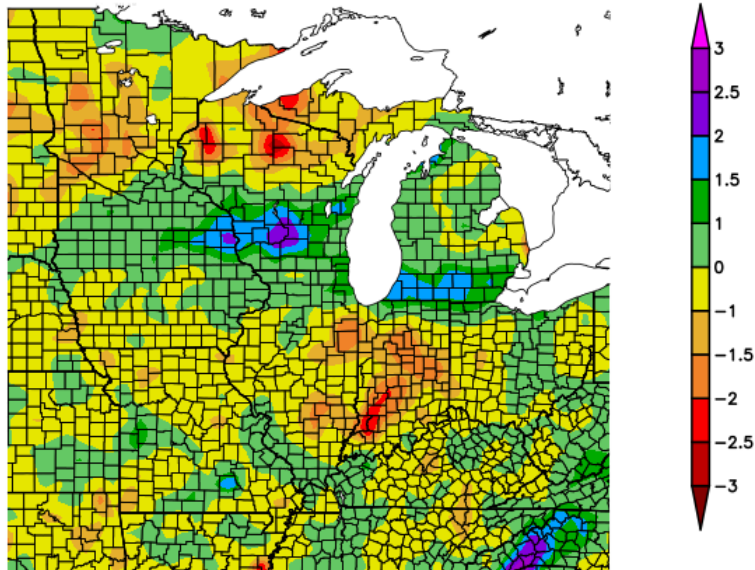


STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Standard Precipitation Index (SPI)

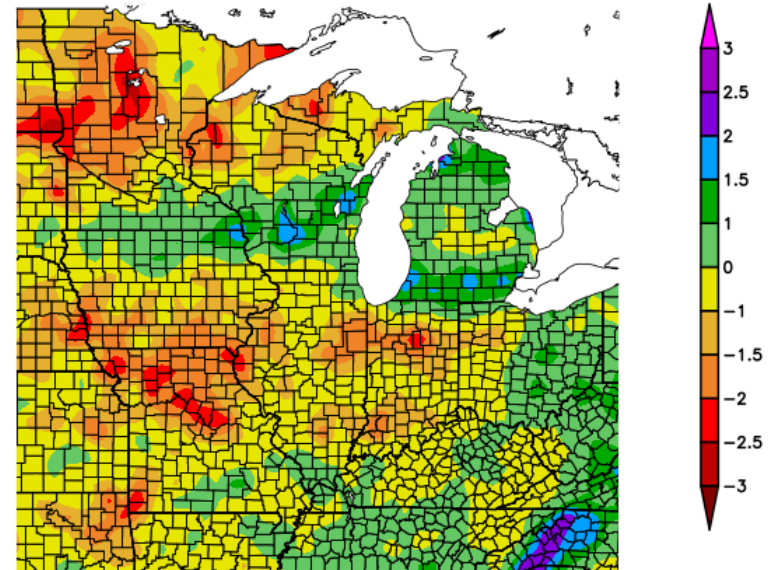
30-Day

30 Day SPI
5/1/2018 - 5/30/2018



60-Day

60 Day SPI
4/1/2018 - 5/30/2018



Generated 5/31/2018 at HPRCC using provisional data.

NOAA Regional Climate Centers Generated 5/31/2018 at HPRCC using provisional data.

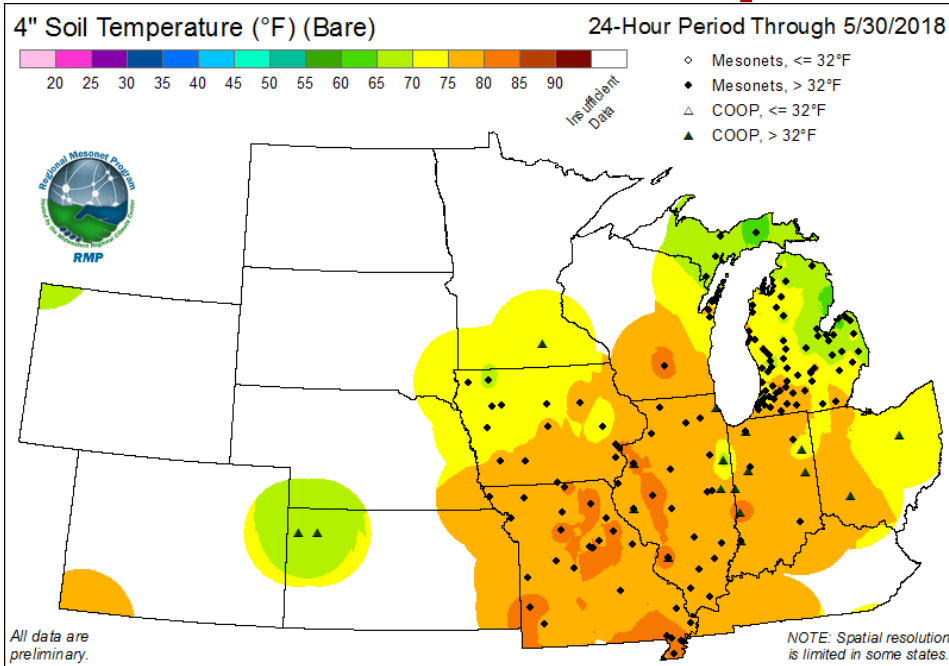
NOAA Regional Climate Centers



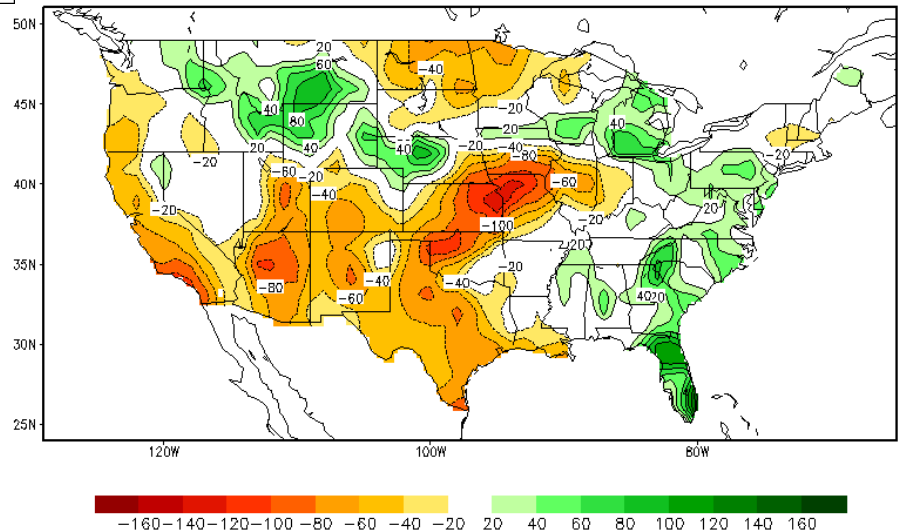
THE OHIO STATE UNIVERSITY

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Soil Temperature/Moisture

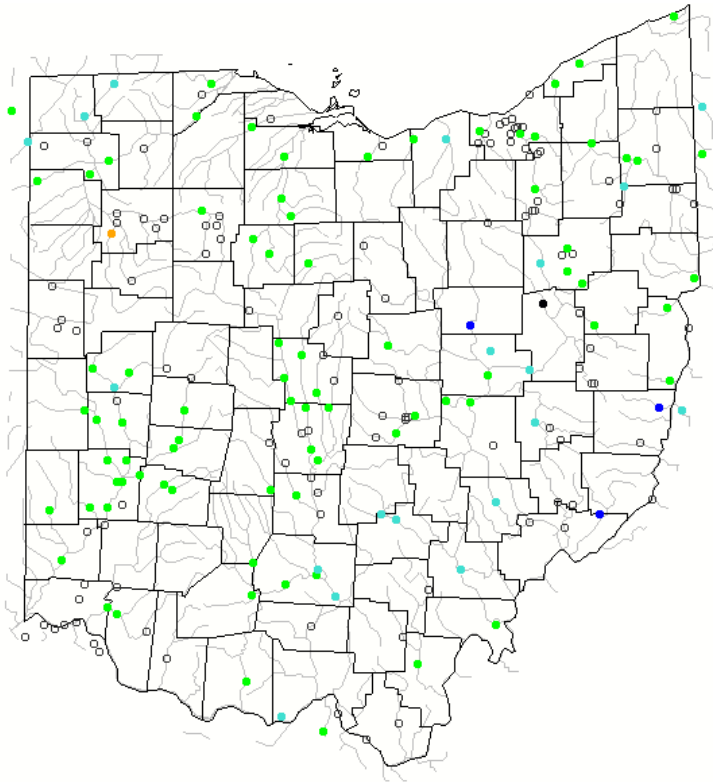


Calculated Soil Moisture Anomaly (mm)
MAY 31, 2018



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

7-DAY



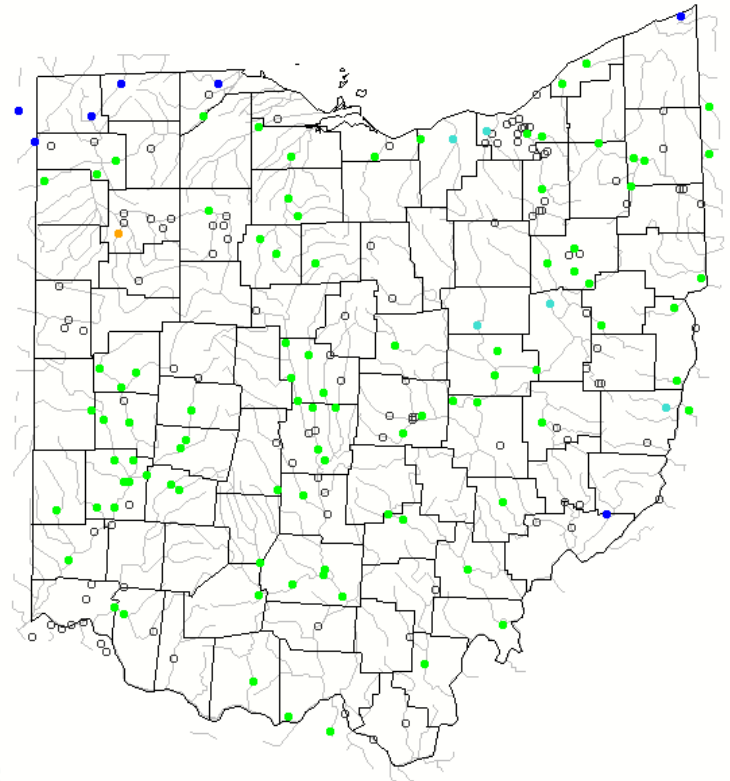
Explanation - Percentile classes

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



STATE CLIMATE OFFICE OF OHIO (SCOO)

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF EXTENSION

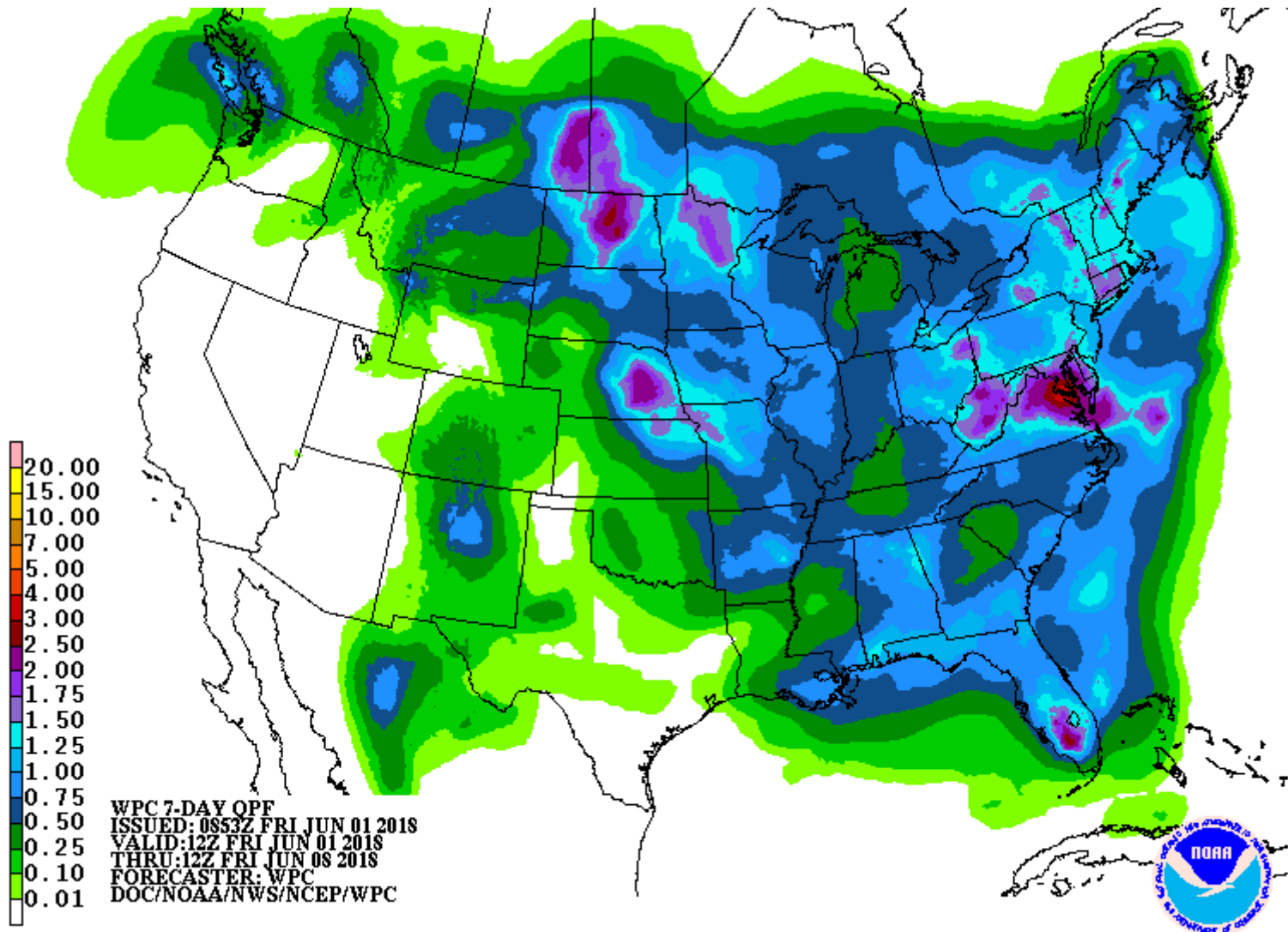
BYRD POLAR & CLIMATE RESEARCH CENTER

DEPARTMENT OF GEOGRAPHY



THE OHIO STATE UNIVERSITY

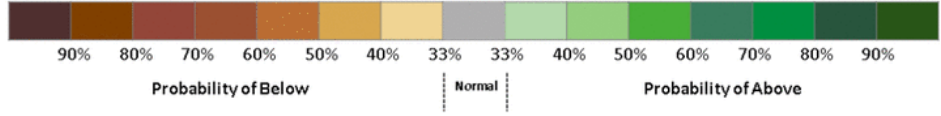
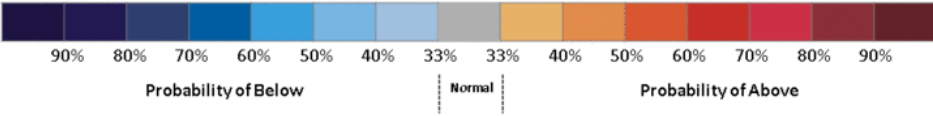
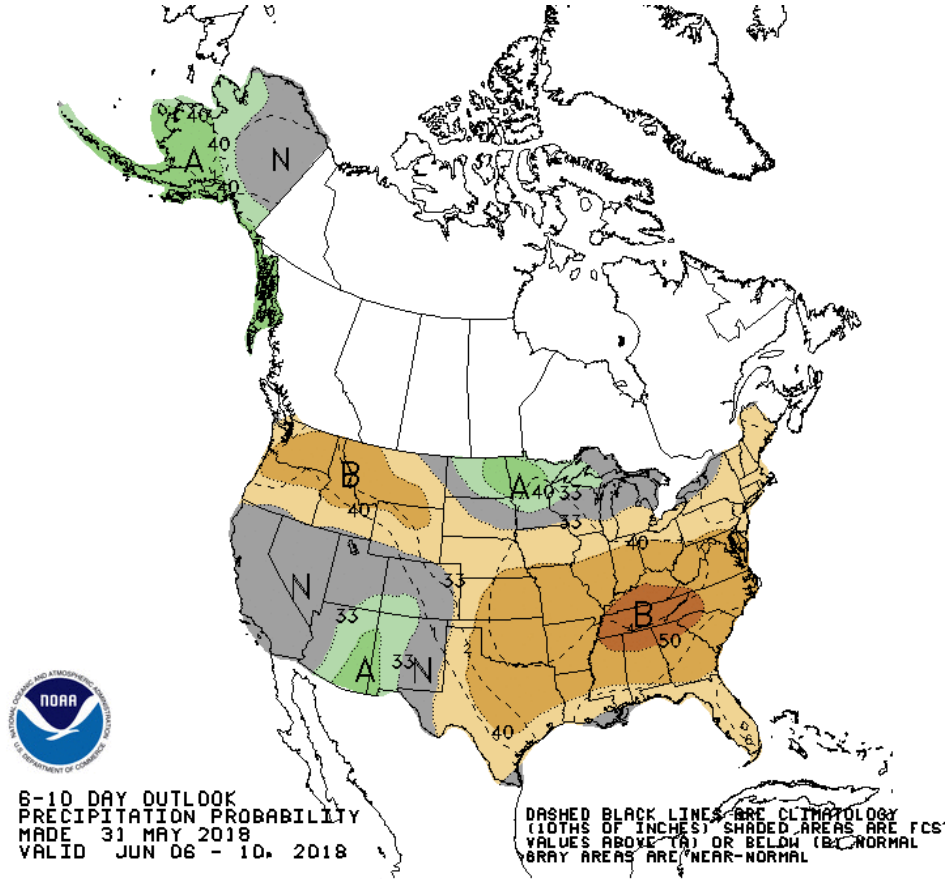
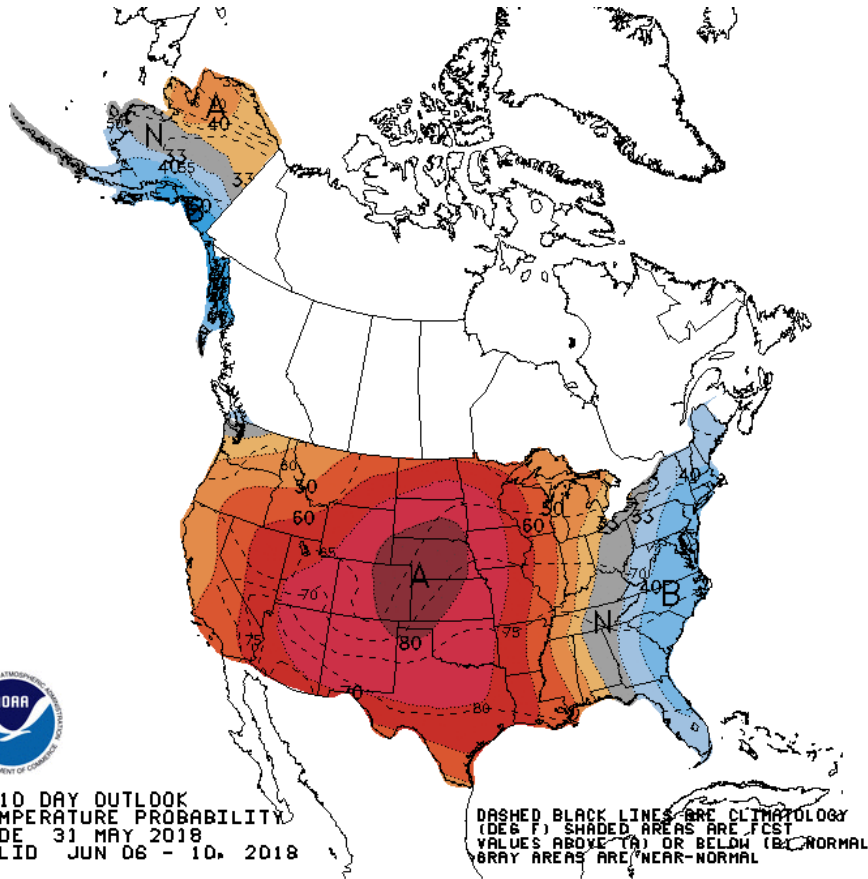
Weather for the Week Ahead



THE OHIO STATE UNIVERSITY

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

6-10 Day Outlook



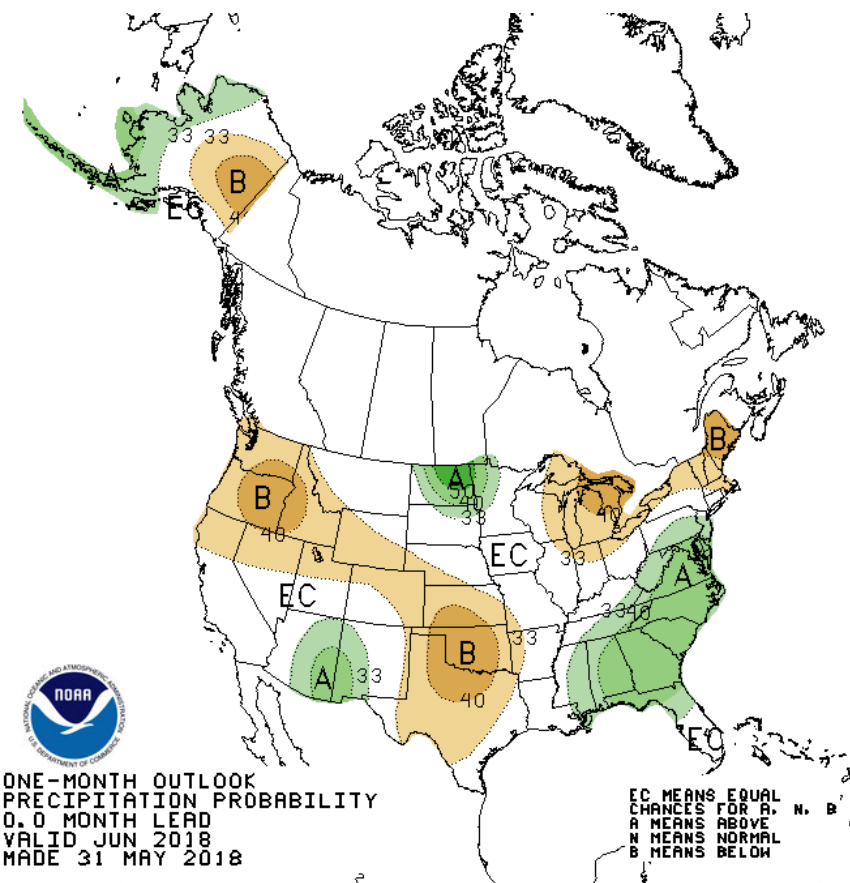
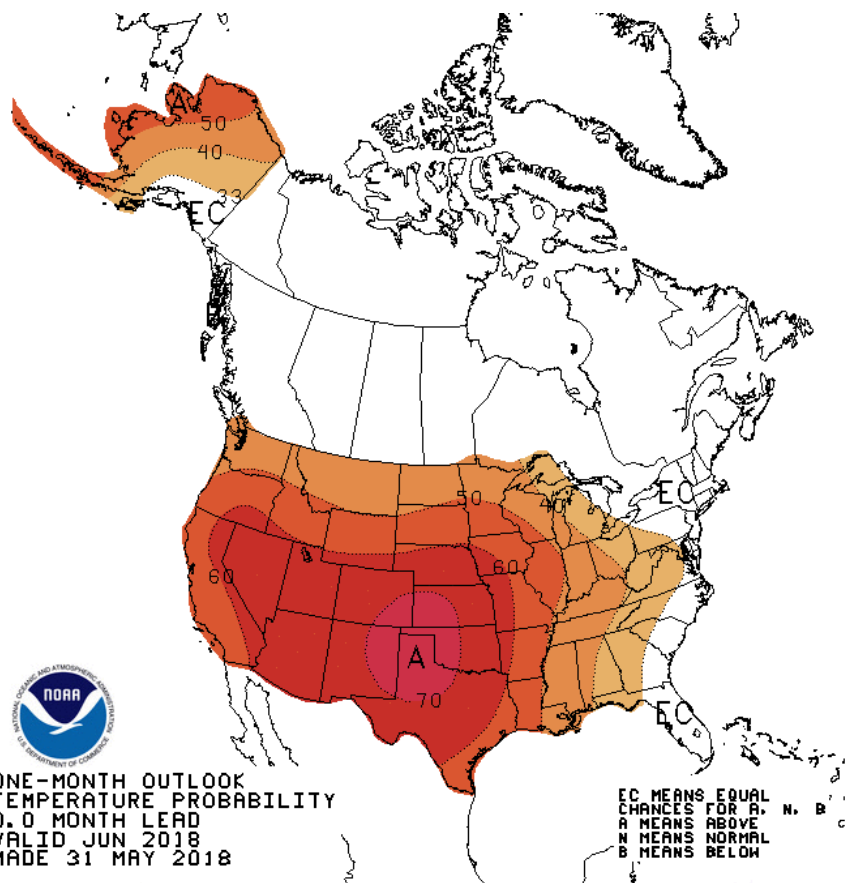
Highs: Mid to upper 70s Lows: Low to mid 50s



THE OHIO STATE UNIVERSITY

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

June Outlook



STATE CLIMATE OFFICE OF OHIO (SCOO)

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

DEPARTMENT OF EXTENSION

BYRD POLAR & CLIMATE RESEARCH CENTER

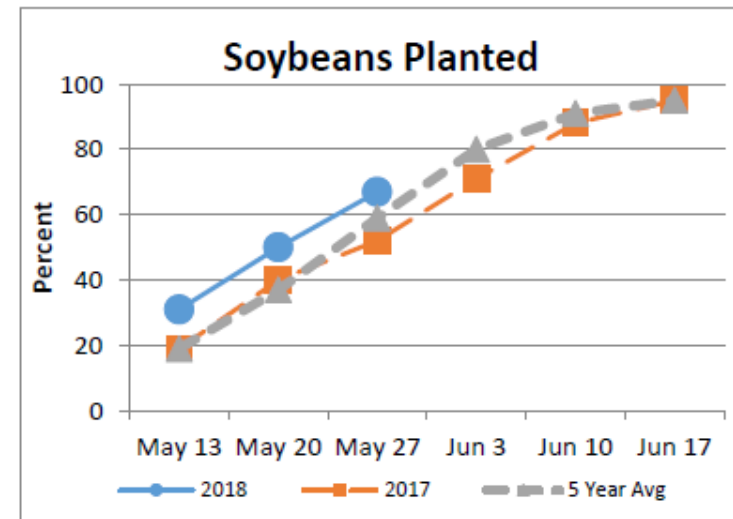
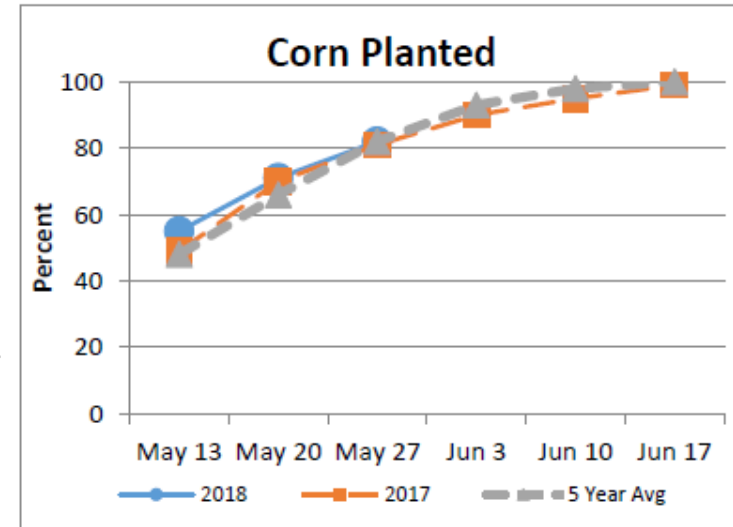
DEPARTMENT OF GEOGRAPHY



THE OHIO STATE UNIVERSITY

Ag Highlights

- 4.0 days suitable for work
- Strong corn and soybean planting
- Winter wheat maturing rapidly
- Hay first cutting is picking up.
- Crop conditions are good to excellent.



NASS: Cheryl Turner –

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



THE OHIO STATE UNIVERSITY

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Summary of Conditions



Drought Monitor: No Formal drought in Ohio

30-Day and 60-Day: Drier conditions in west, but scattered storms are keeping things in check

The week ahead: Scattered showers and storms through weekend – comfortable temperatures through next week



THE OHIO STATE UNIVERSITY

STATE CLIMATE OFFICE OF OHIO (SCOO)
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES
DEPARTMENT OF EXTENSION
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY