

Hydrologic and Climate Assessment



2 May 2017



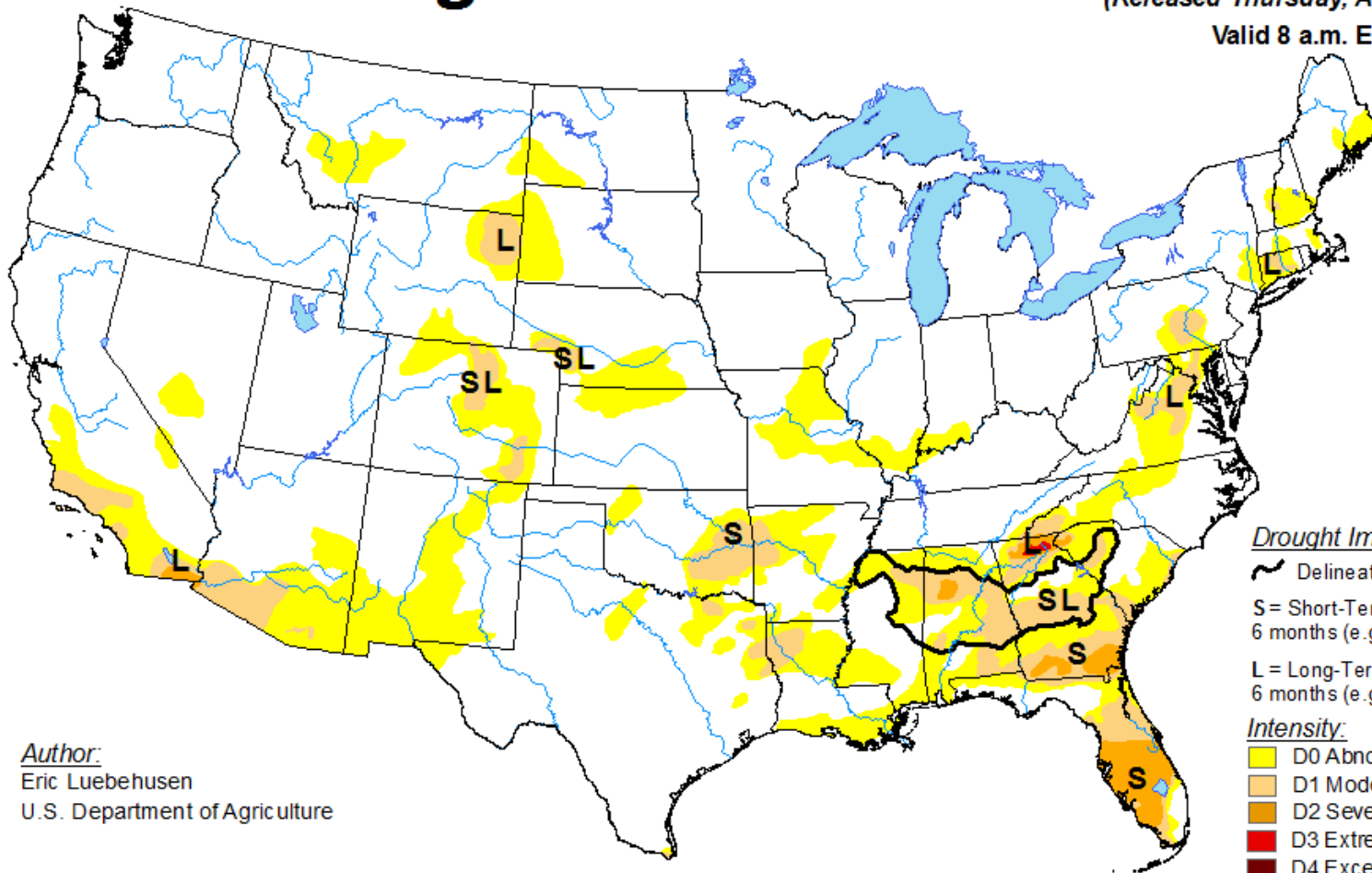
THE OHIO STATE
UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL
AND ENVIRONMENTAL SCIENCES



U.S. Drought Monitor

April 25, 2017
 (Released Thursday, Apr. 27, 2017)
 Valid 8 a.m. EDT



Drought Impact Types:

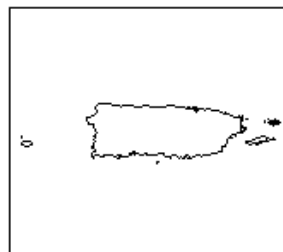
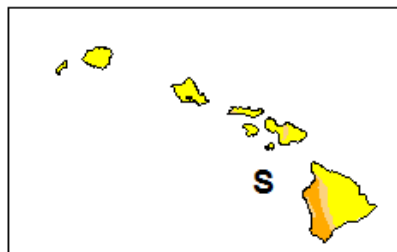
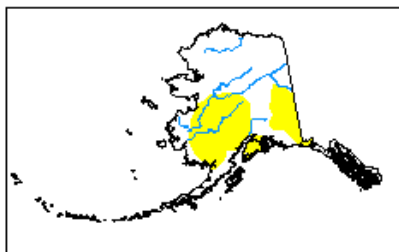
- ~ Delineates dominant impacts
- S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)
- L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

- Yellow: D0 Abnormally Dry
- Light Orange: D1 Moderate Drought
- Medium 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.

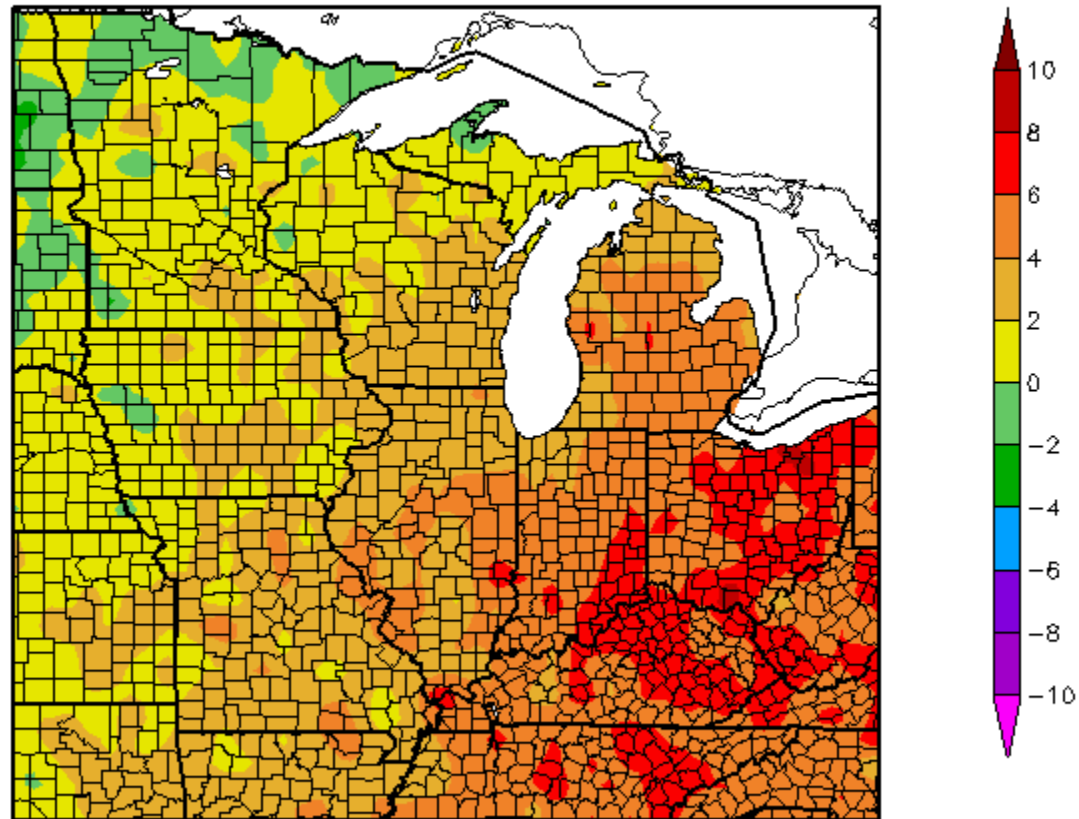
Author:
 Eric Luebehusen
 U.S. Department of Agriculture



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

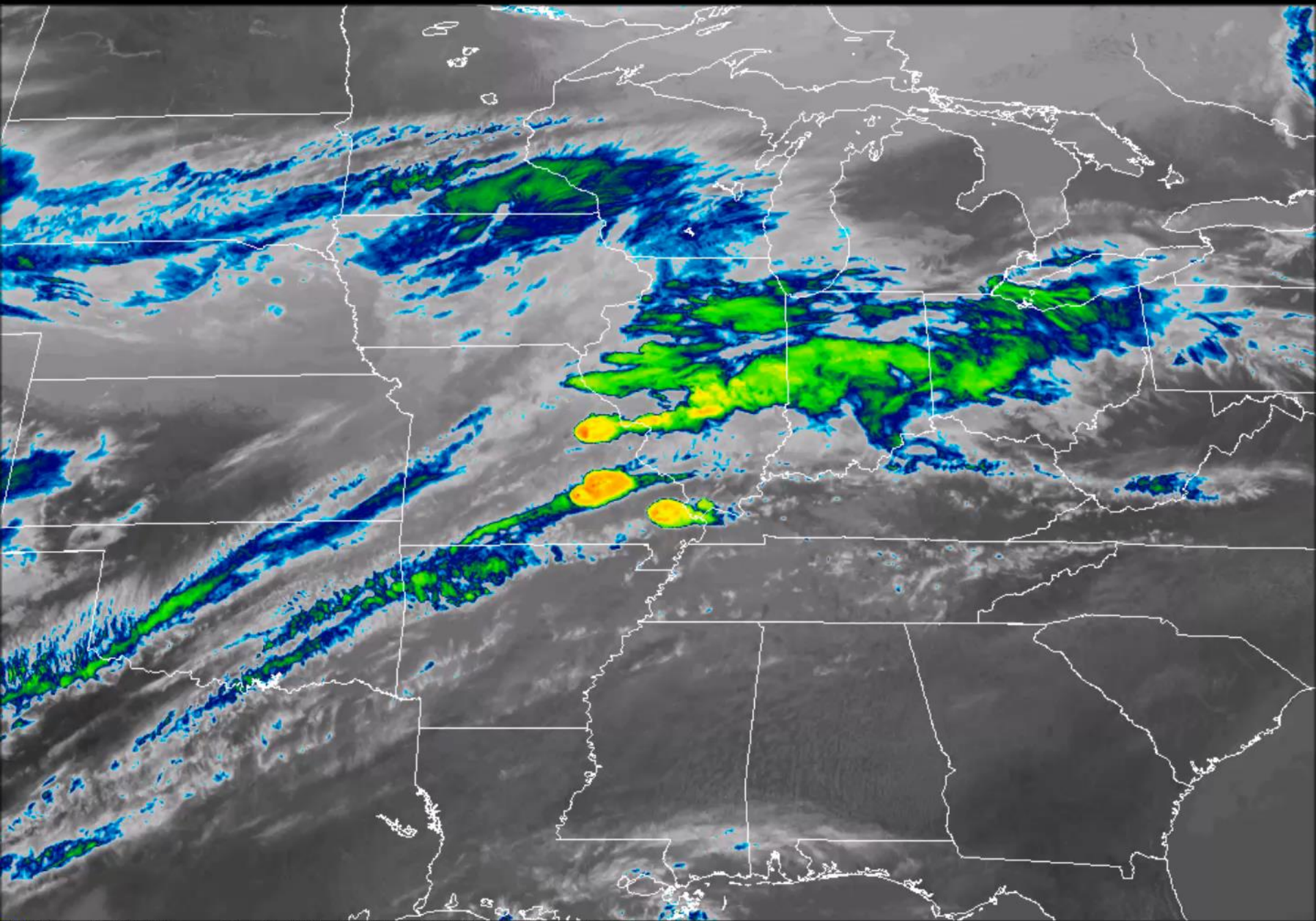
Previous 30-Day Temperature Departure

Departure from Normal Temperature (F)
4/2/2017 - 5/1/2017



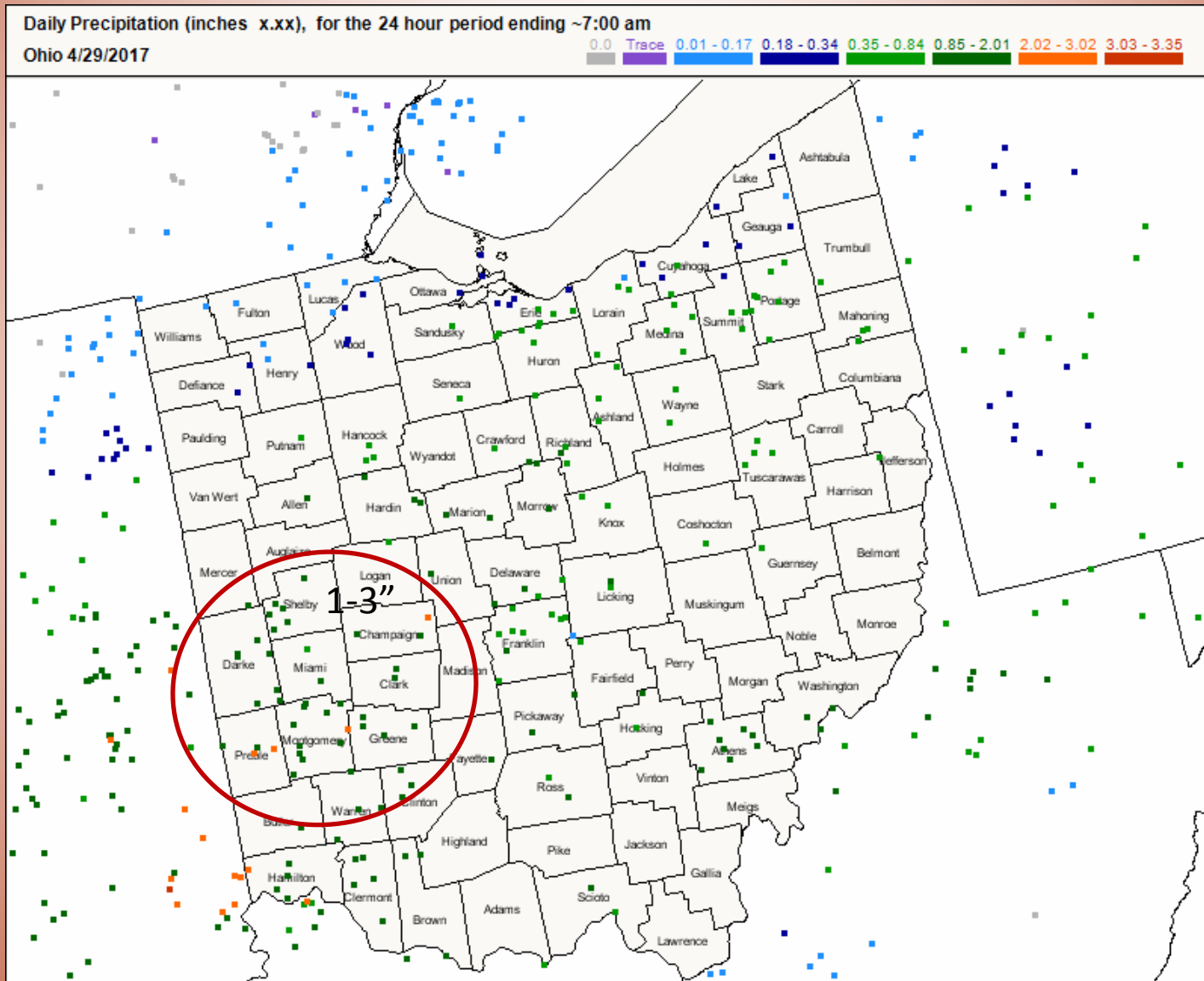
Generated 5/2/2017 at HPRCC using provisional data.

Regional Climate Centers

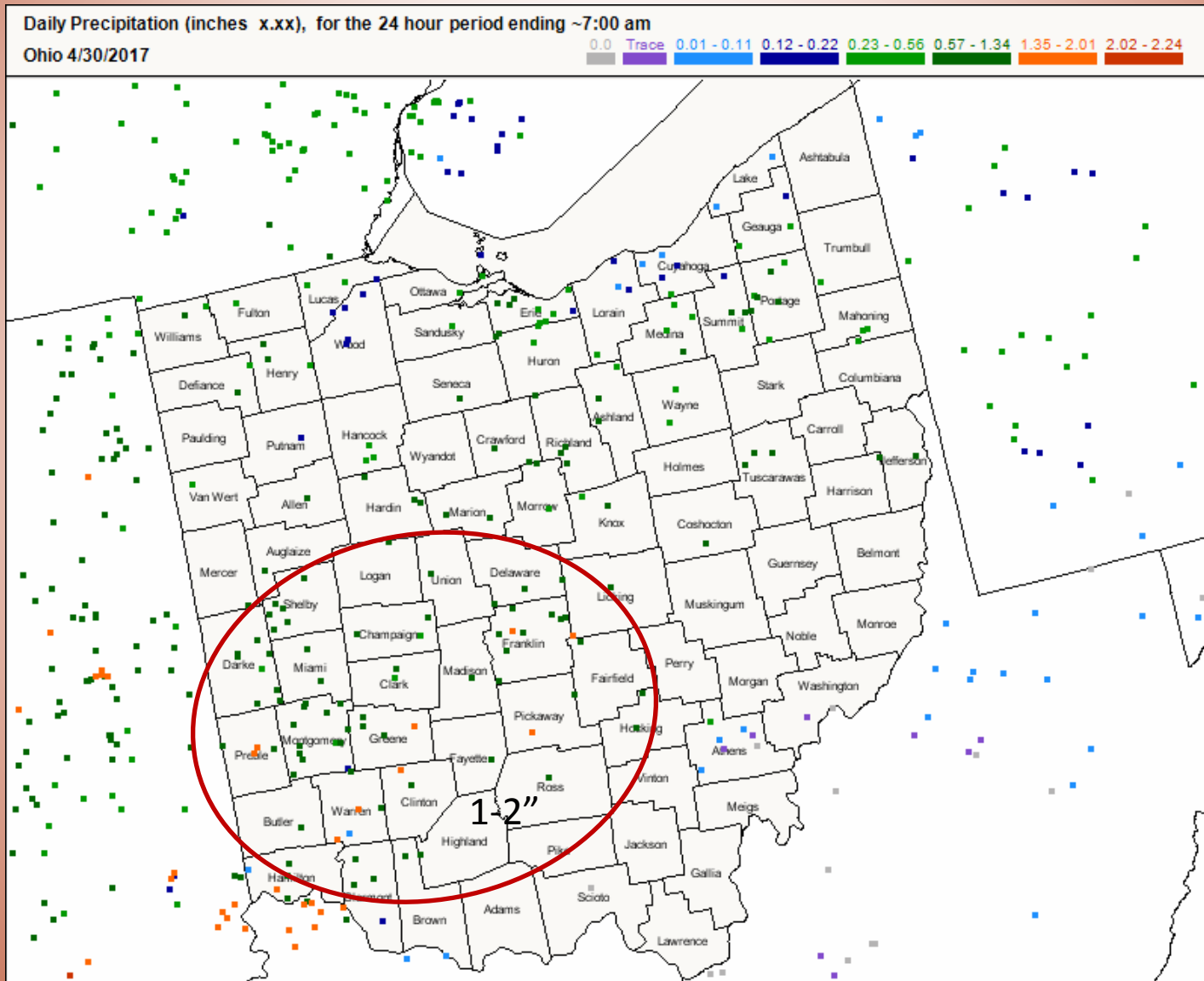


01 0101 G-16 IMG 13 28 APR 17118 180220 00113 03237 04.00

CoCoRaHS: 29 April



CoCoRaHS: 30 April

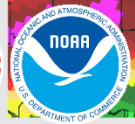
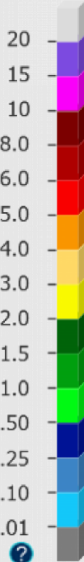
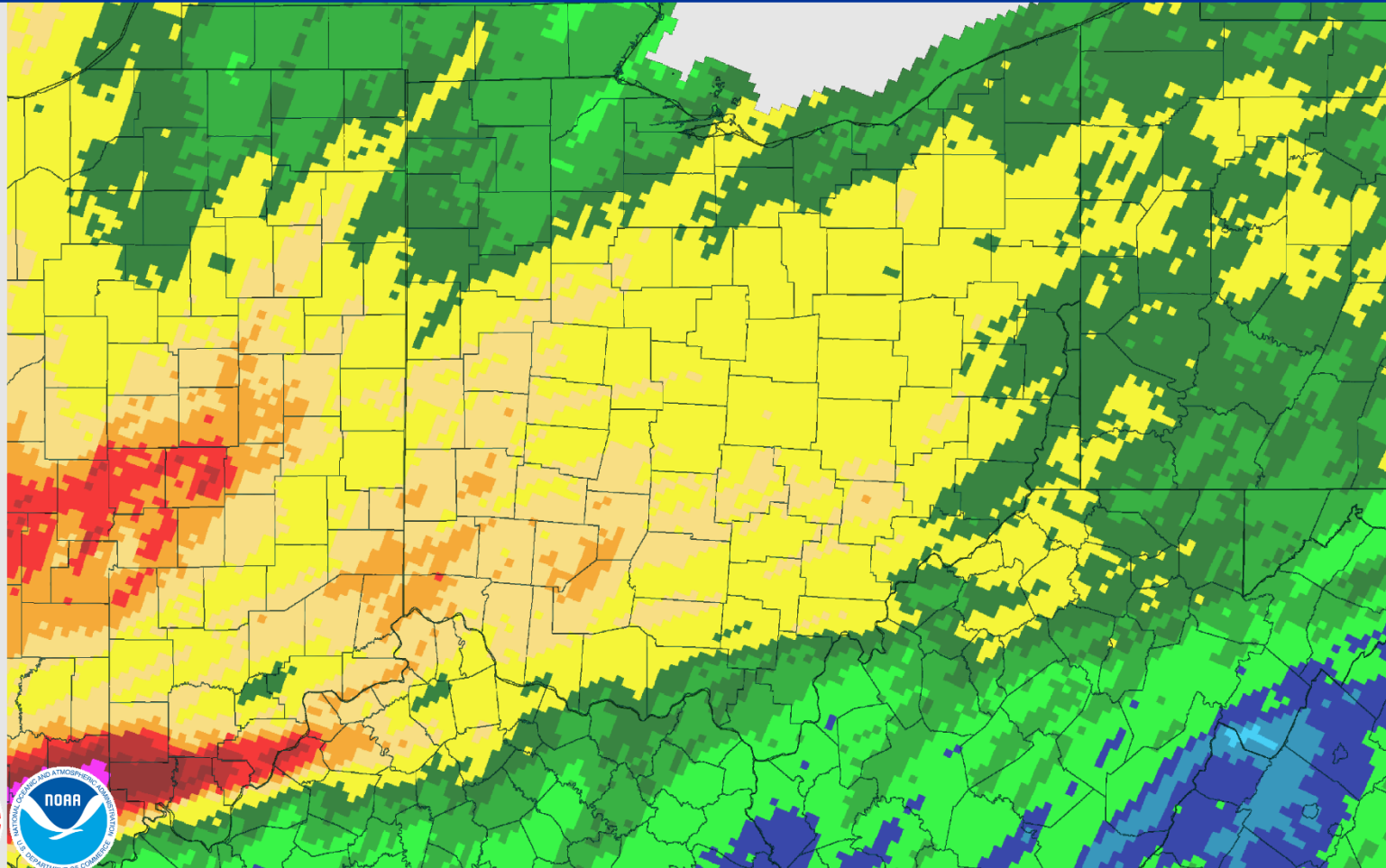


Previous 7-Day Precipitation Estimates

May 02, 2017 7-Day Observed Precipitation

Created on: May 02, 2017 - 14:01 UTC

Valid on: May 02, 2017 12:00 UTC

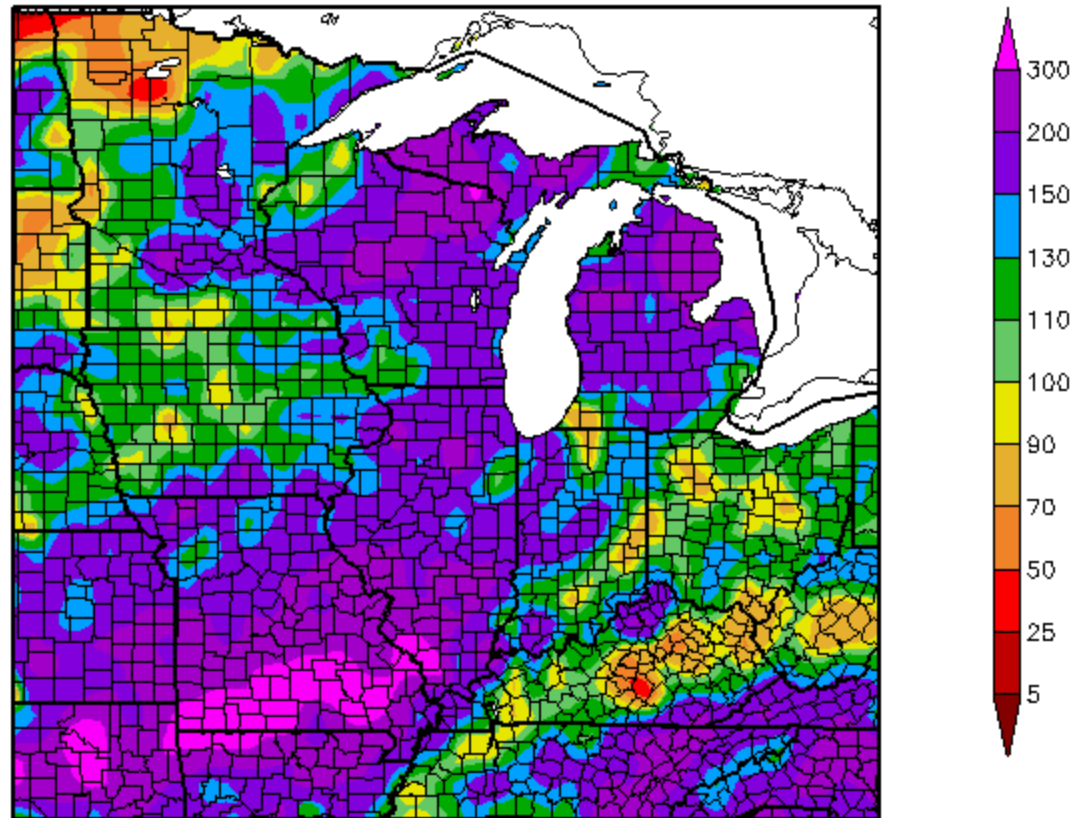


Total Observed



Previous 30-Day Precipitation Departure

Percent of Normal Precipitation (%)
4/2/2017 - 5/1/2017



Generated 5/2/2017 at HPRCC using provisional data.

Regional Climate Centers

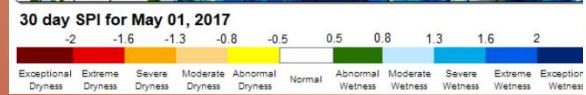
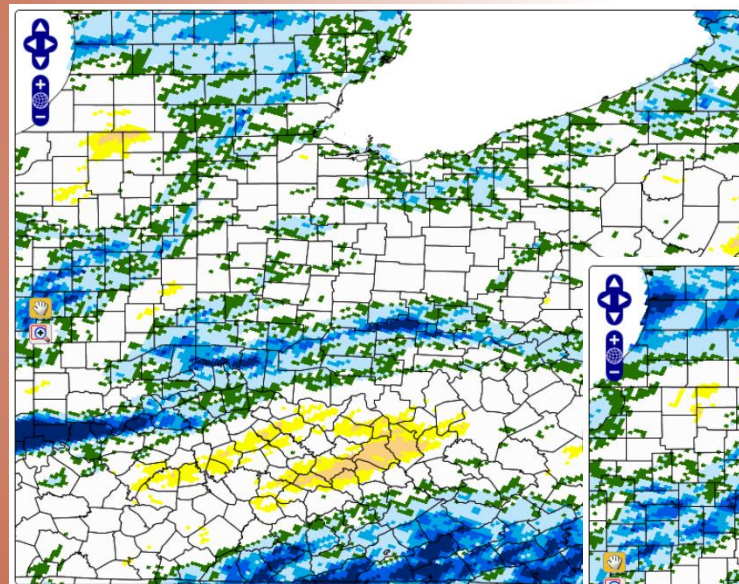
SPI: The Standardized Precipitation Index (SPI) indicates how unusual the amount of accumulated precipitation is, compared to the historical record over a given time scale.

 **State Climate Office of North Carolina** Email: sco@climate.ncsu.edu Phone: 919-515-3056

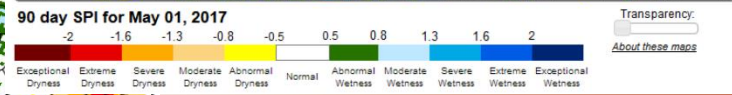
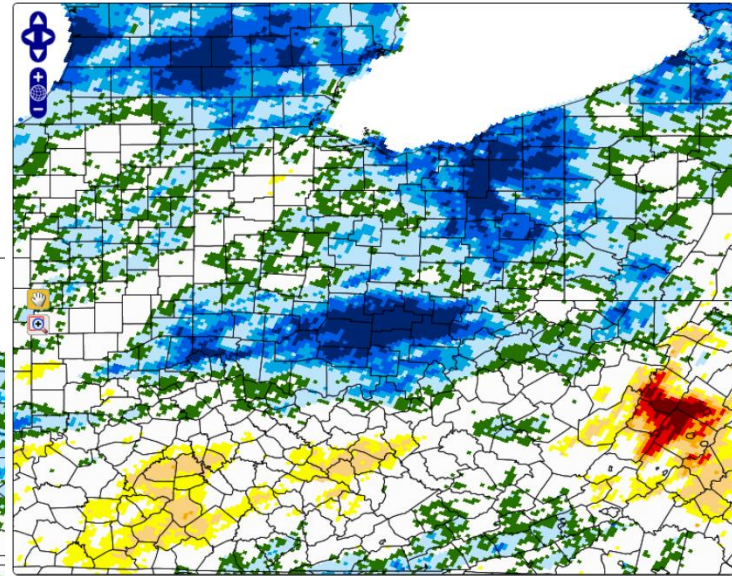
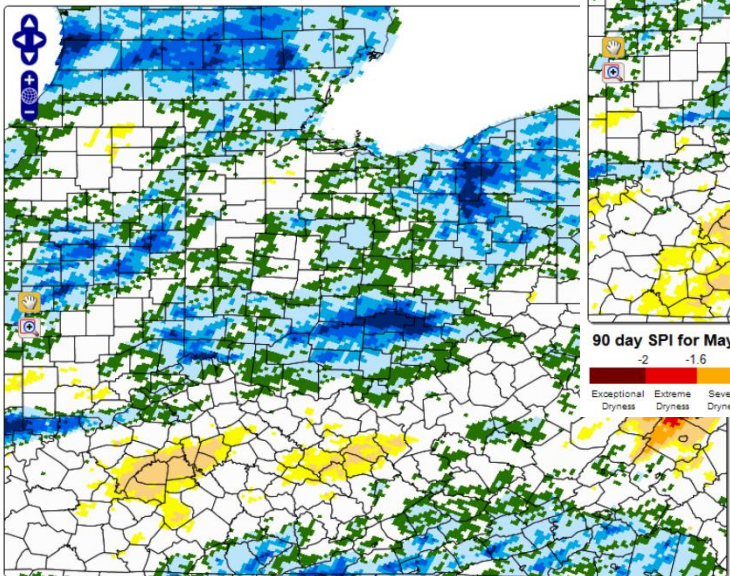
Data and Products Aspects of NC Climate Educational Outreach About Our Office Search

Experimental High Resolution Drought Trigger Tool

60-Day



30-Day



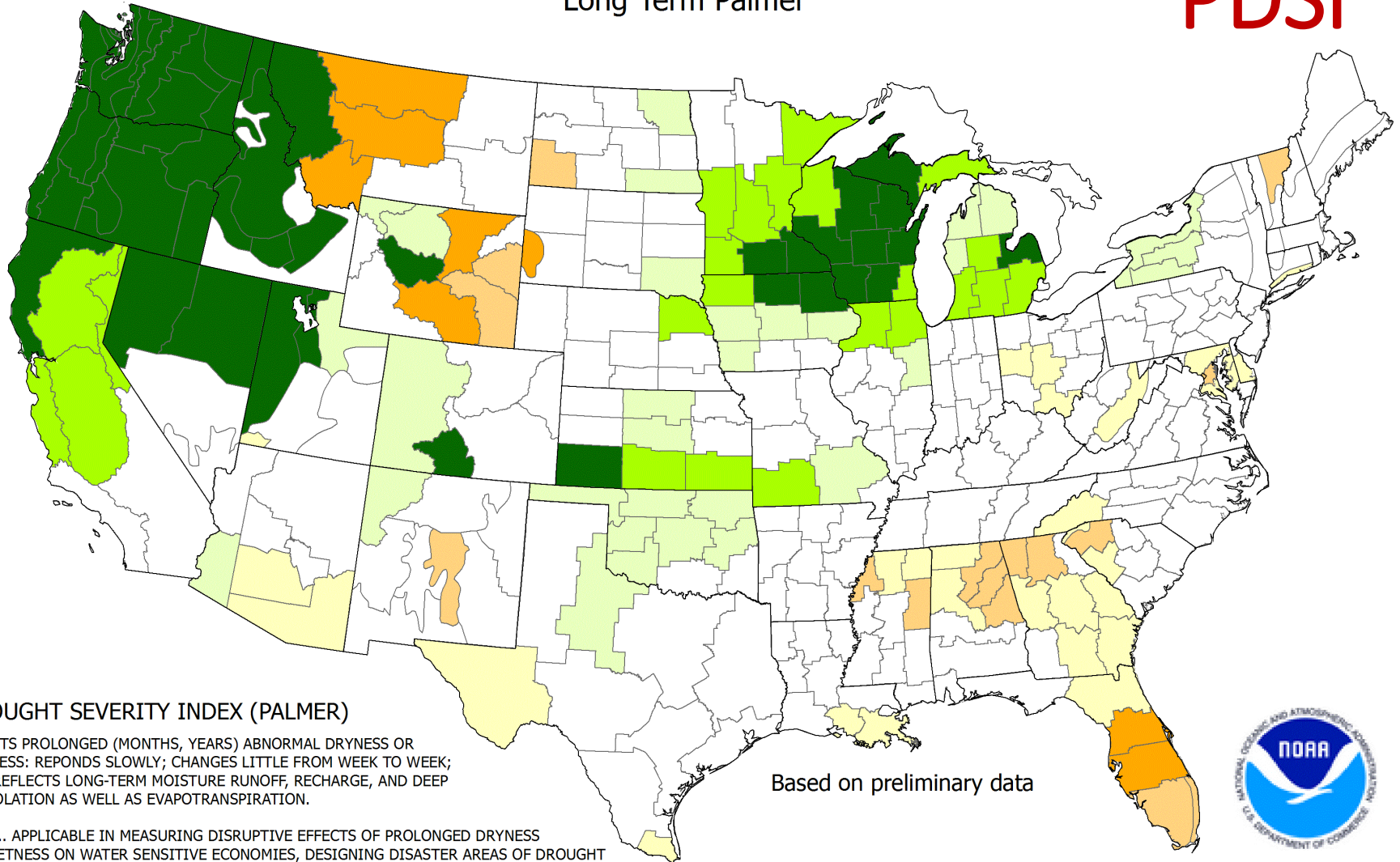
90-Day

Drought Severity Index by Division

Weekly Value for Period Ending Apr 29, 2017

Long Term Palmer

PDSI



DROUGHT SEVERITY INDEX (PALMER)

DEPICTS PROLONGED (MONTHS, YEARS) ABNORMAL DRYNESS OR WETNESS; REponds SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK; AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION AS WELL AS EVAPOTRANSPIRATION.

USES... APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES, DESIGNING DISASTER AREAS OF DROUGHT OR WETNESS; AND REFLECTING THE GENERAL LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS, RESERVOIRS AND STREAMS.

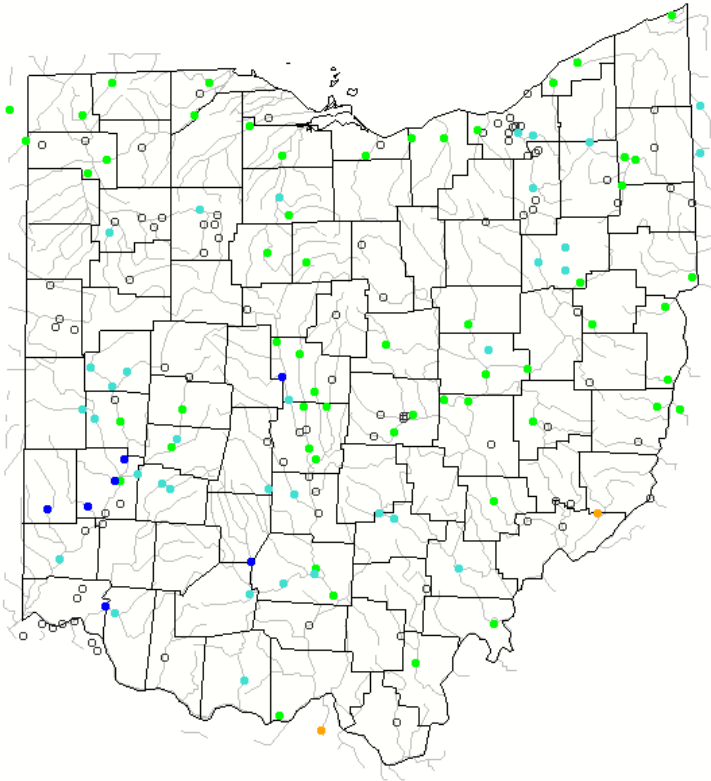
LIMITATIONS... IS NOT GENERALLY INDICATIVE OFFSHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).

Based on preliminary data



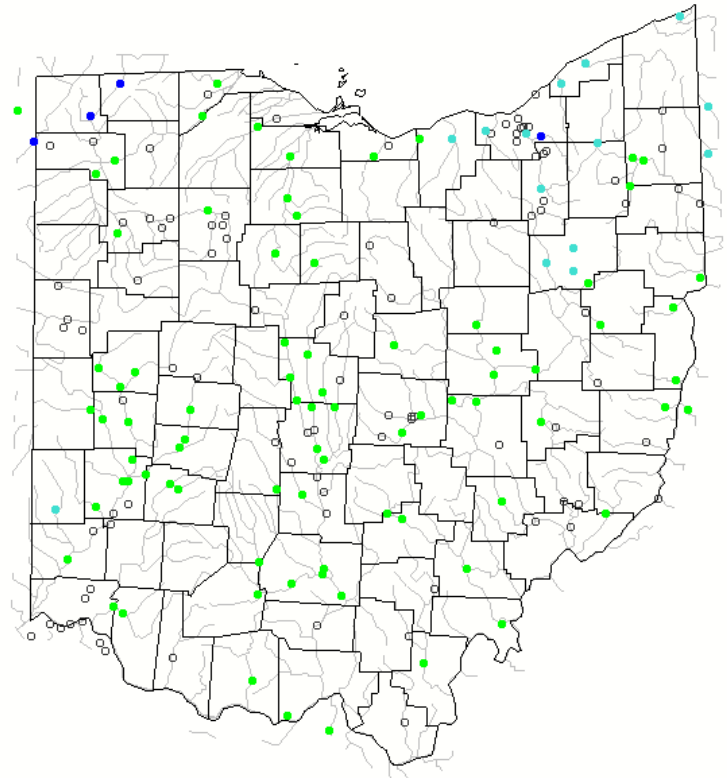
- 4.0 or less (Extreme Drought)
- +2.0 to +2.9 (Unusual Moist Spell)
- 3.0 to -3.9 (Severe Drought)
- +3.0 to +3.9 (Very Moist Spell)
- 2.0 to -2.9 (Moderate Drought)
- +4.0 and above (Extremely Moist)
- 1.9 to +1.9 (Near Normal)

7-DAY



USGS Streamflow

28-DAY

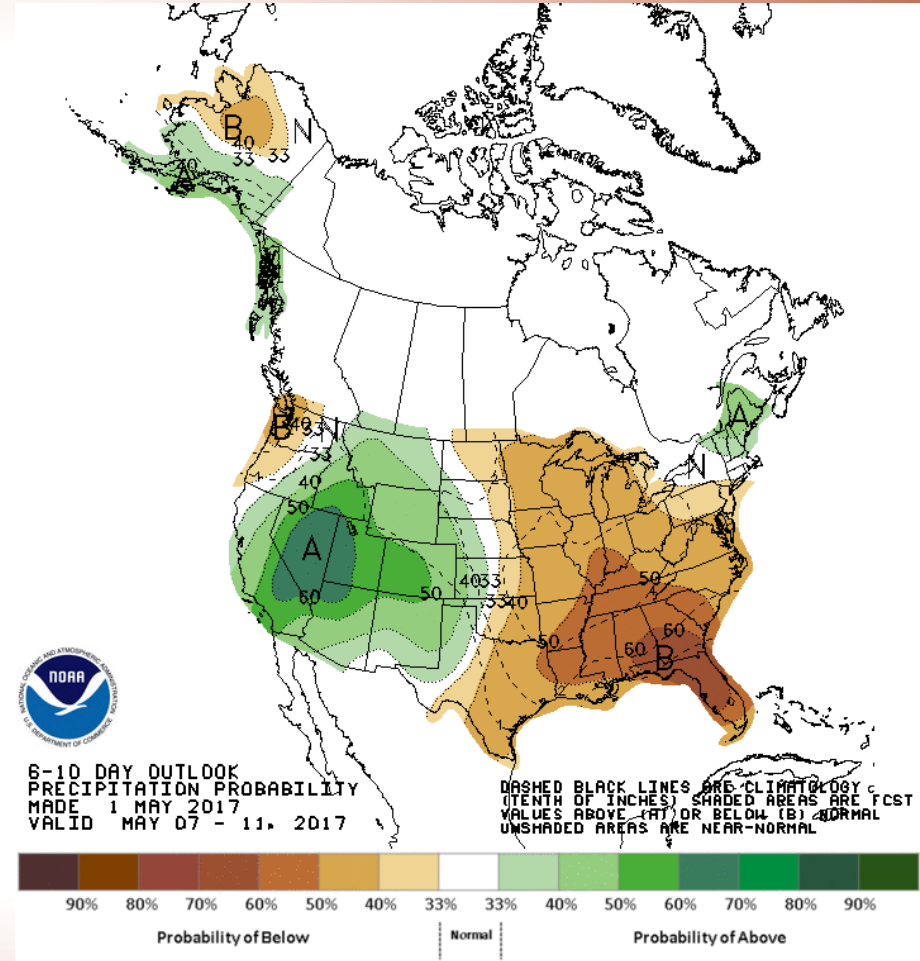
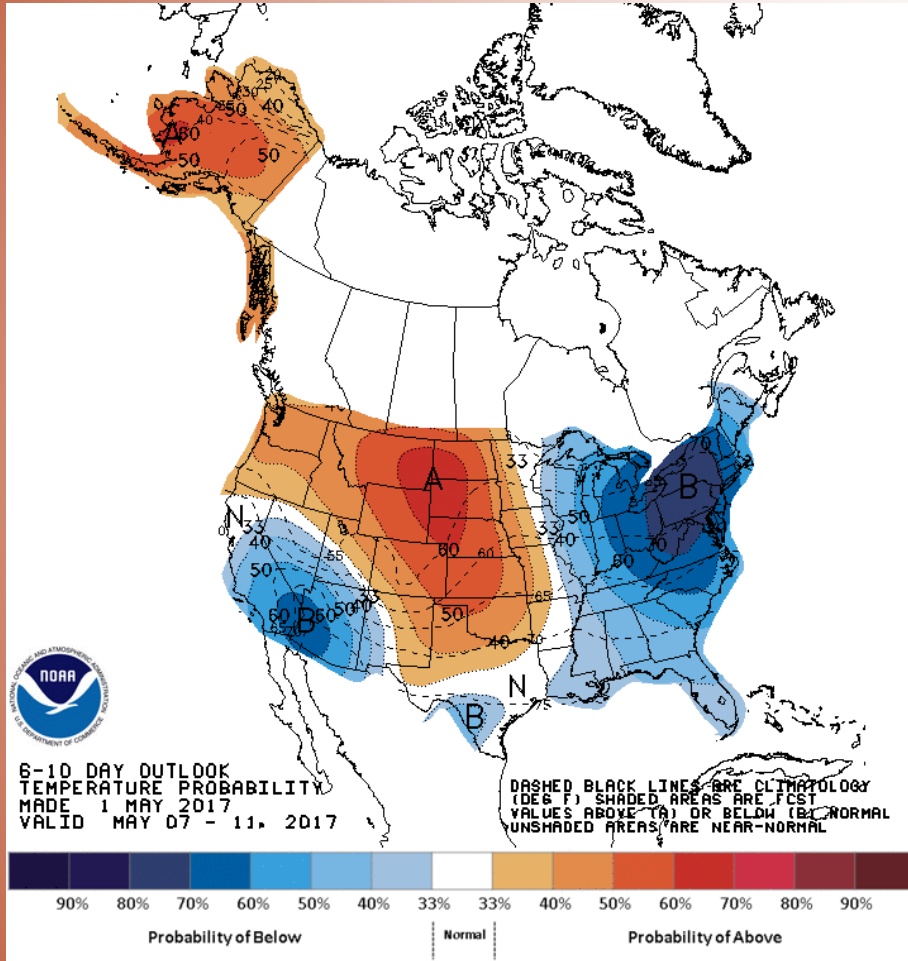


Explanation - Percentile classes

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

6-10 Day Outlook



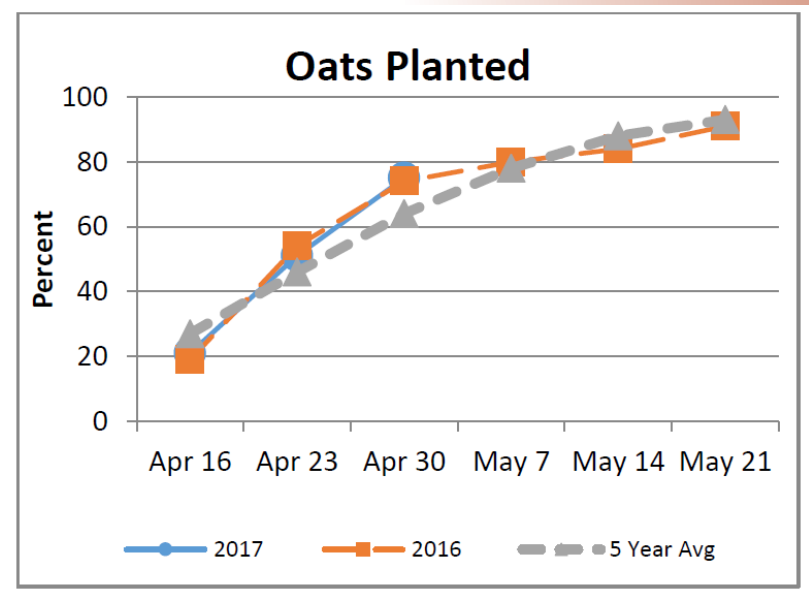
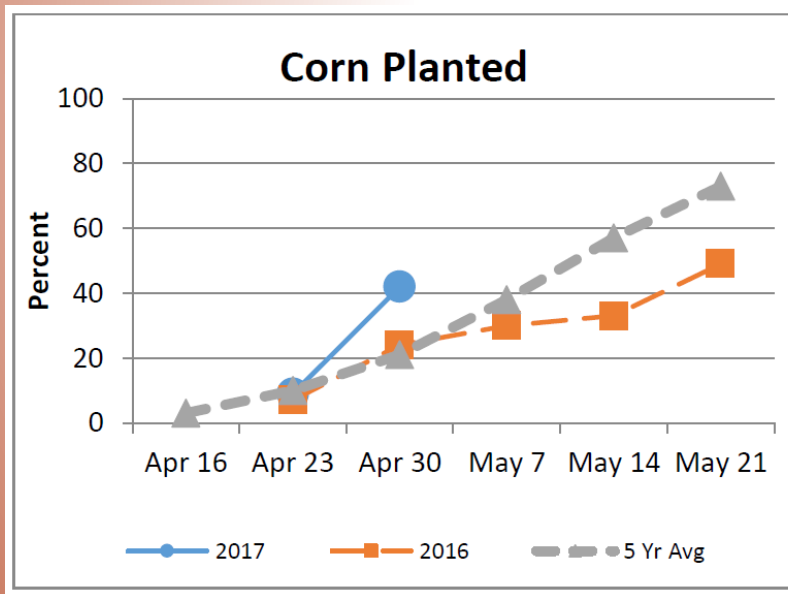
Normal:

Highs: Upper 60s to Low 70s

Lows: Mid 40s

Ag Highlights

- 4.8 days suitable for fieldwork; 42% (5%) of corn planted (emerged)
- Surplus Moisture; ponding especially prevalent in SW – some drowning of recently planted corn



Summary of Conditions



- **Drought Monitor:** No classification in Ohio
- **30-Day and 60-Day:** Normal to wet across the state; Exceptionally so in SW
- **30-Day temperatures:** Still running warmer than average (4-8 F) – big cool down expected
- **Precipitation:** Another 1-2” of rain this weekly likely