

Hydrologic and Climate Assessment

August 3, 2017

“Dog days bright and clear
Indicate a good year;
But when accompanied by rain,
We hope for better times in vain.”

Photo Credit: Jason Cervenec – Education
and Outreach Director, BPCRC

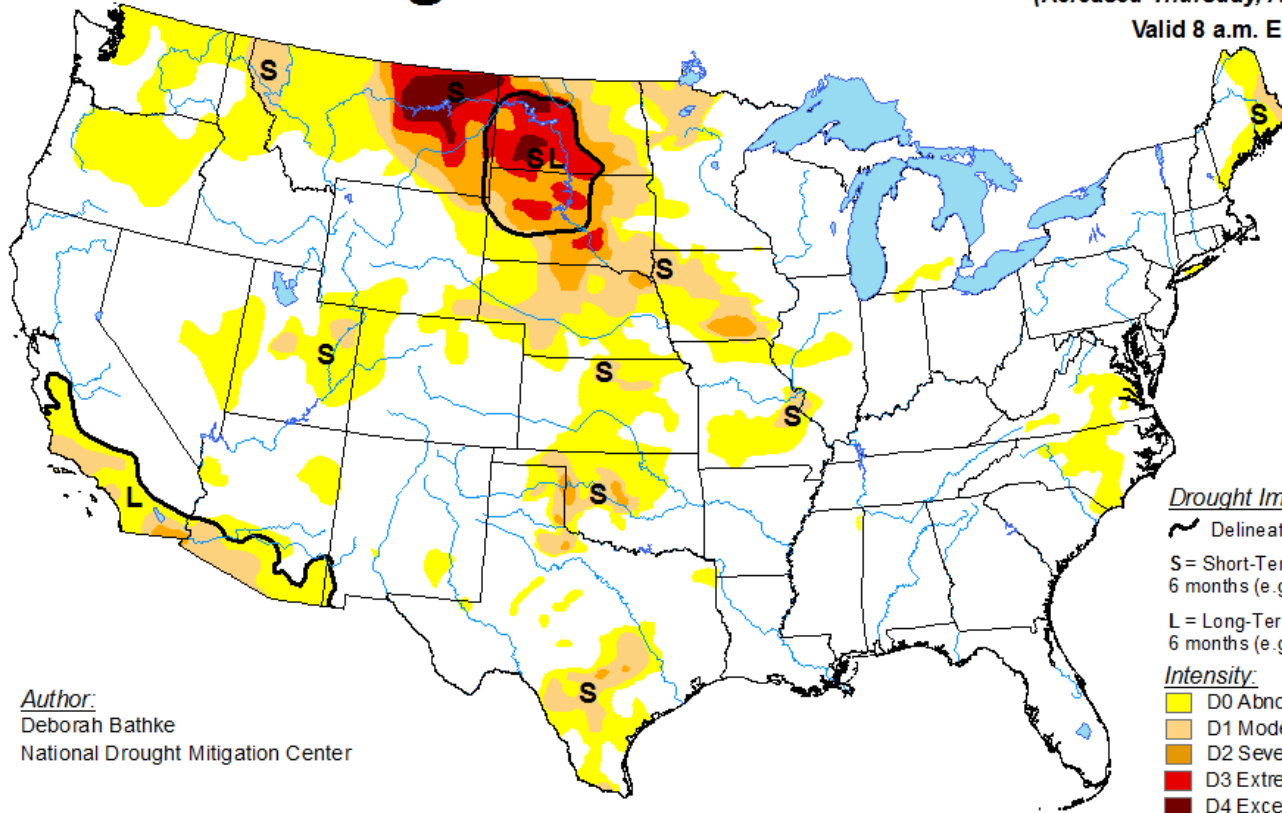


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DEPARTMENT OF GEOGRAPHY

U.S. Drought Monitor

August 1, 2017
 (Released Thursday, Aug. 3, 2017)
 Valid 8 a.m. EDT



Author:
 Deborah Bathke
 National Drought Mitigation Center

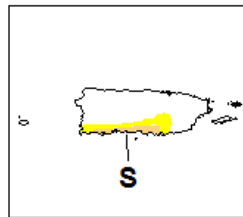
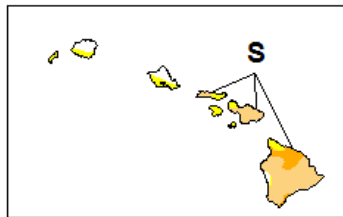
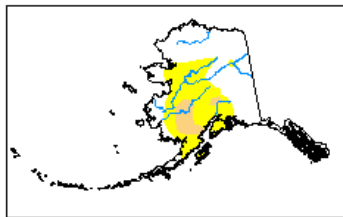
Drought Impact Types:

- ~ 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:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- 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/>

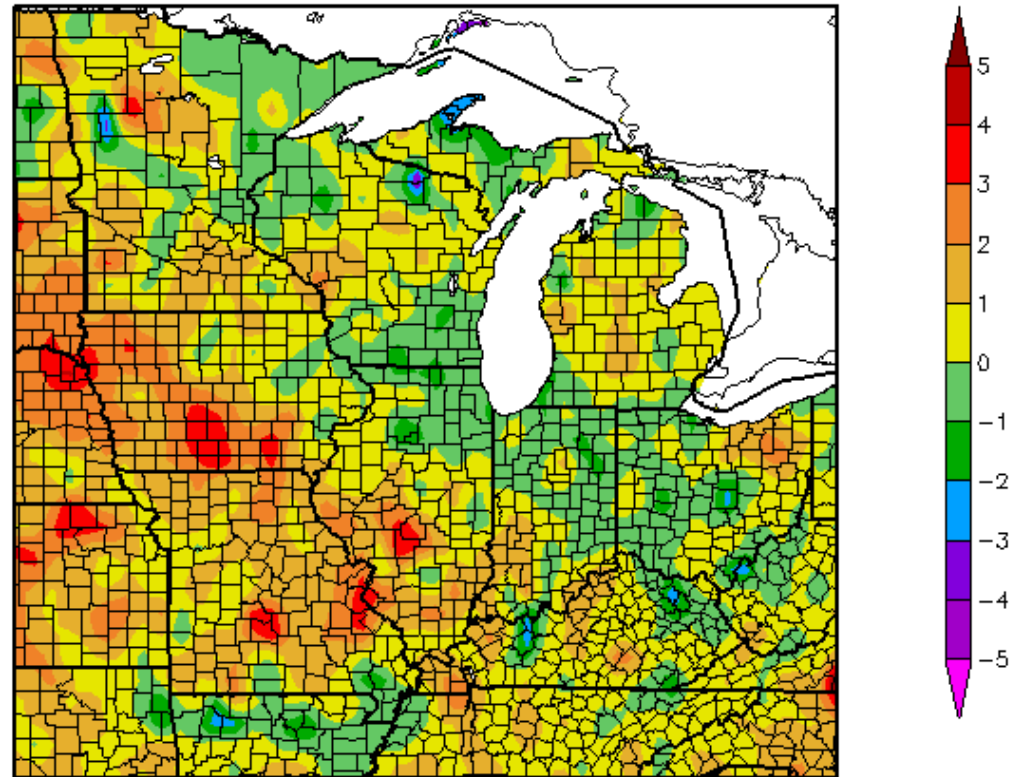


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Previous 30-Day Temperature Difference Compared to Average (1981-2010)

Departure from Normal Temperature (F)
7/4/2017 - 8/2/2017



NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM
NIDIS Drought.gov
U.S. Drought Portal

Generated 8/3/2017 at HPRCC using provisional data.

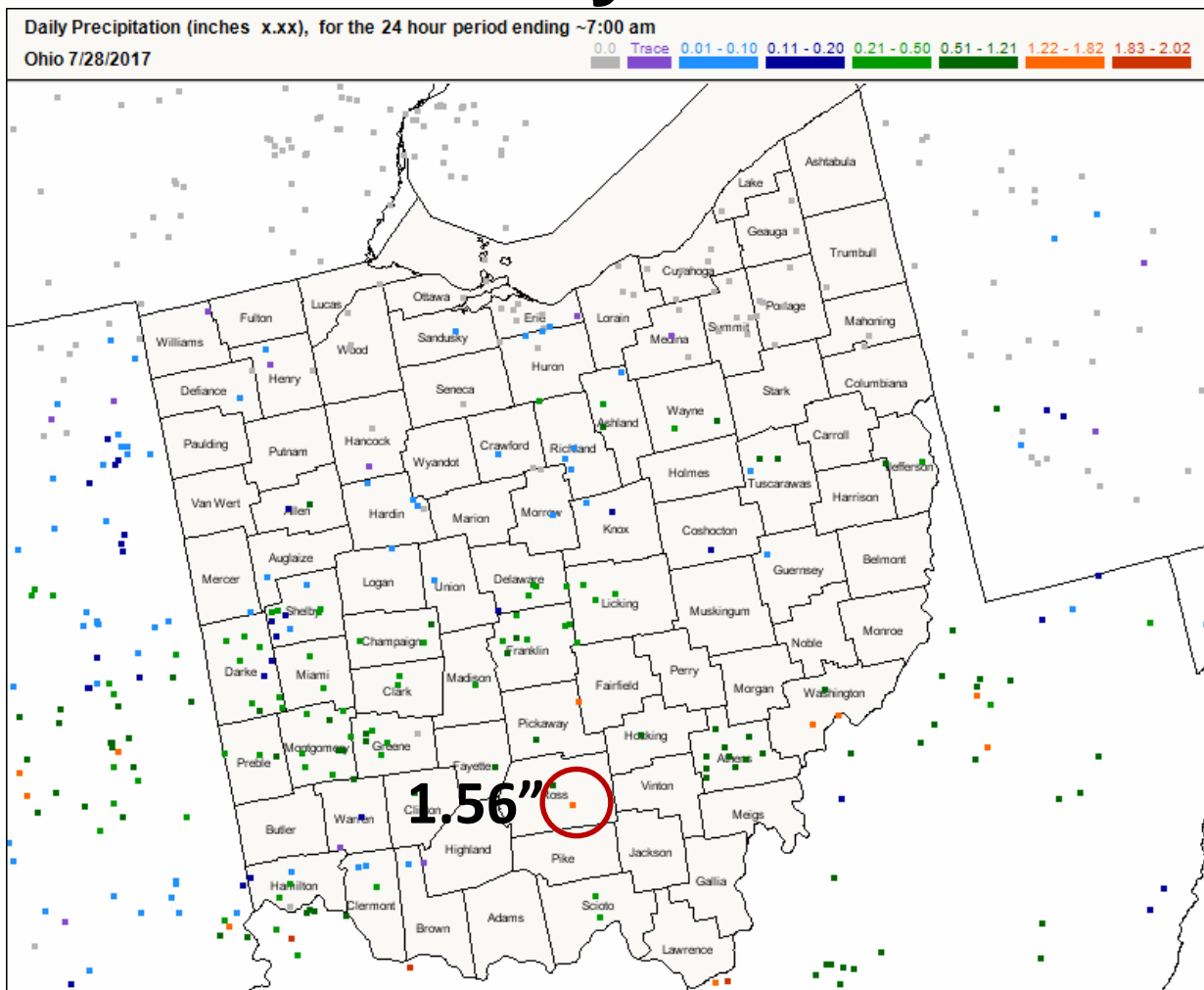
Regional Climate Centers



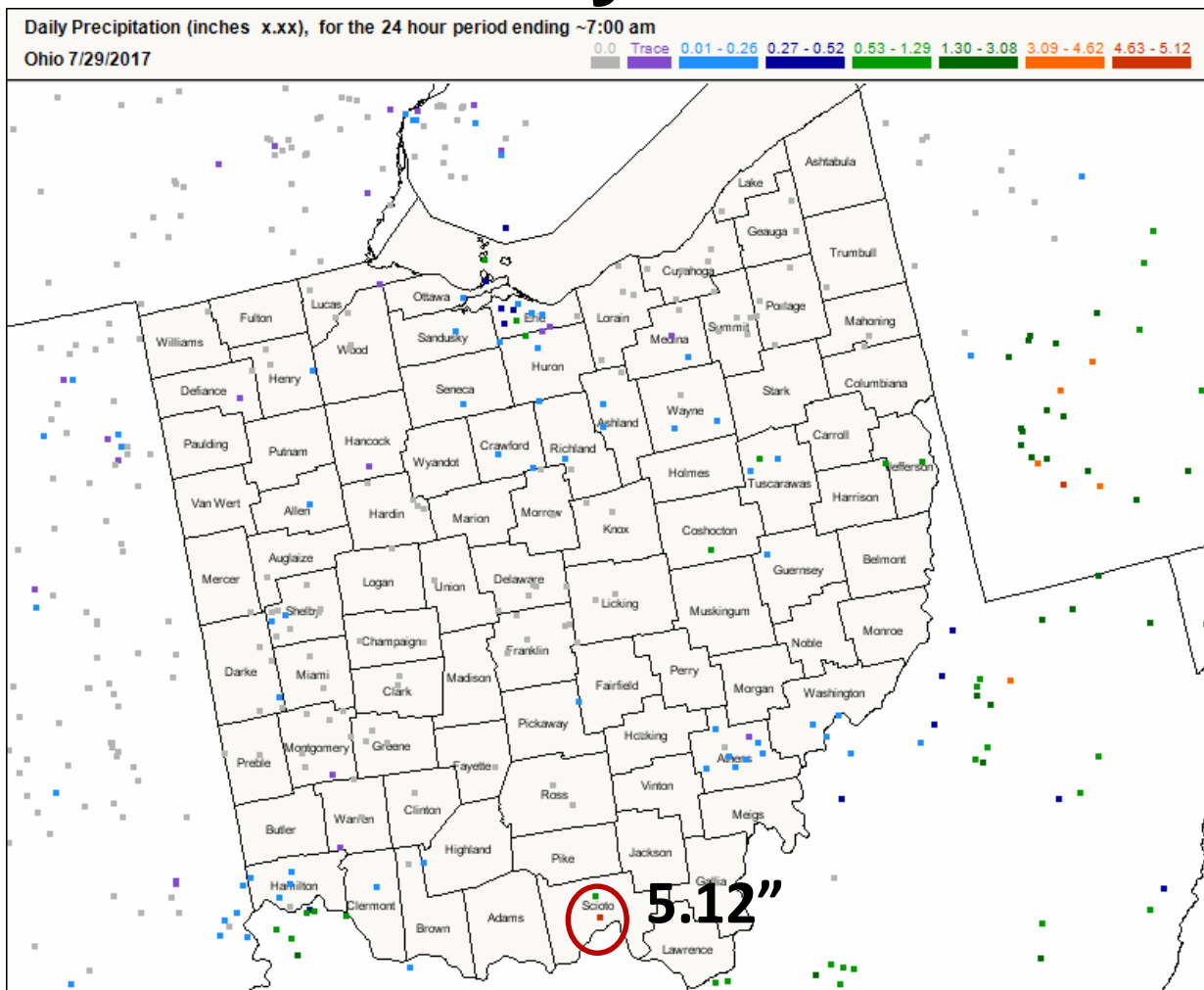
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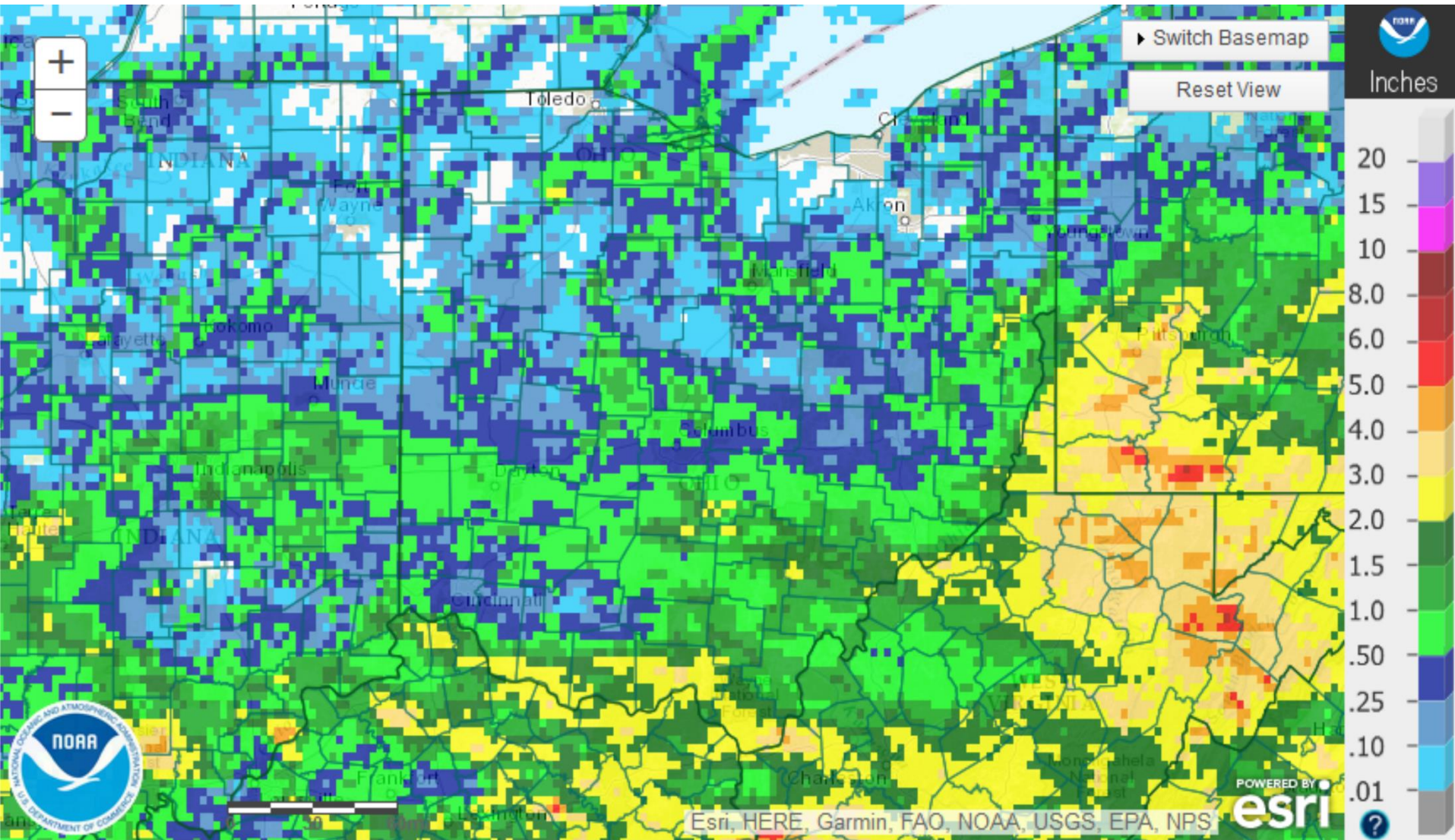
CoCoRaHS Observed Precipitation: July 28



CoCoRaHS Observed Precipitation: July 29



Previous 7-Day Precipitation: Total



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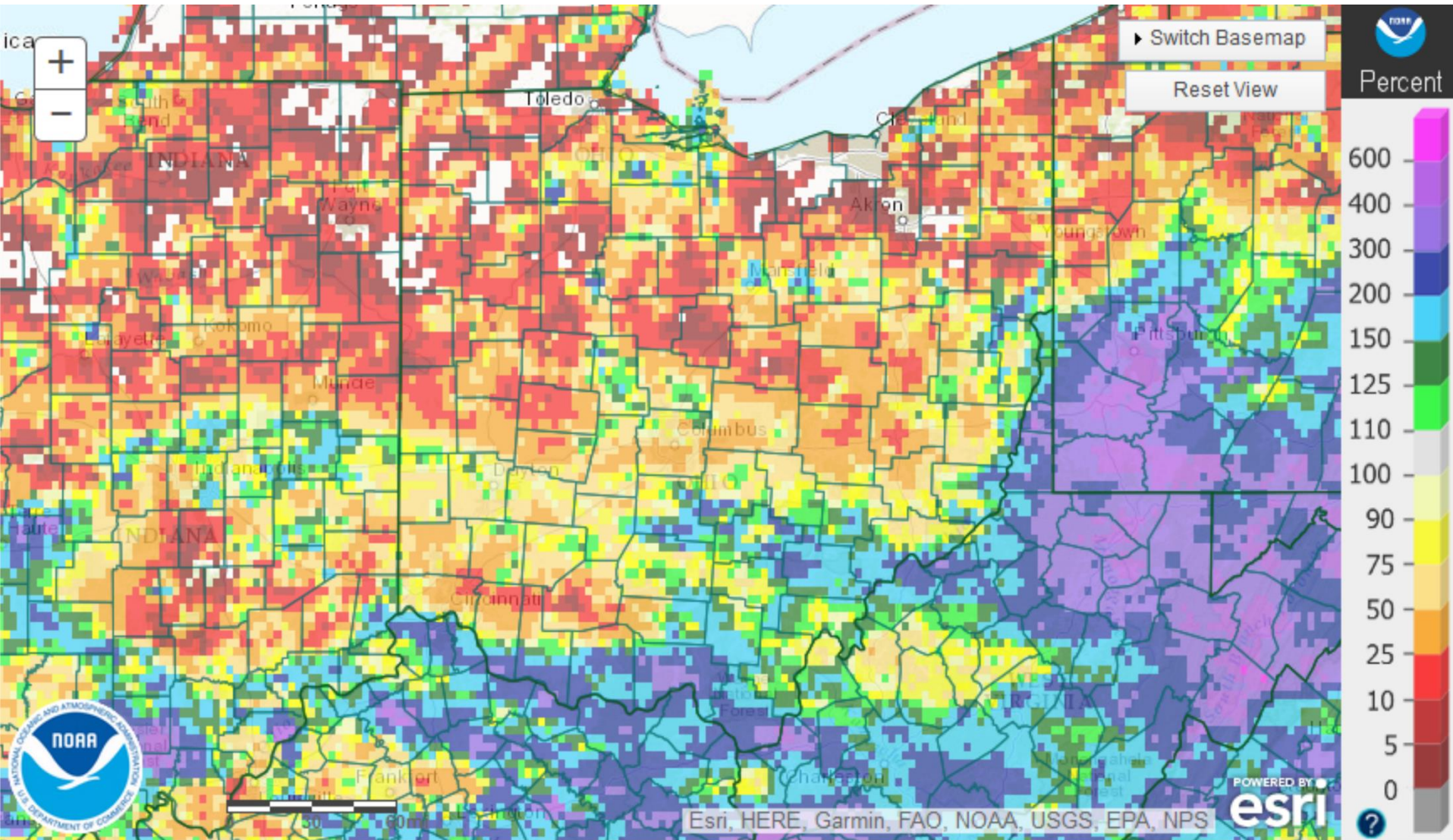
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Previous 7-Day Precipitation: Percent of Normal

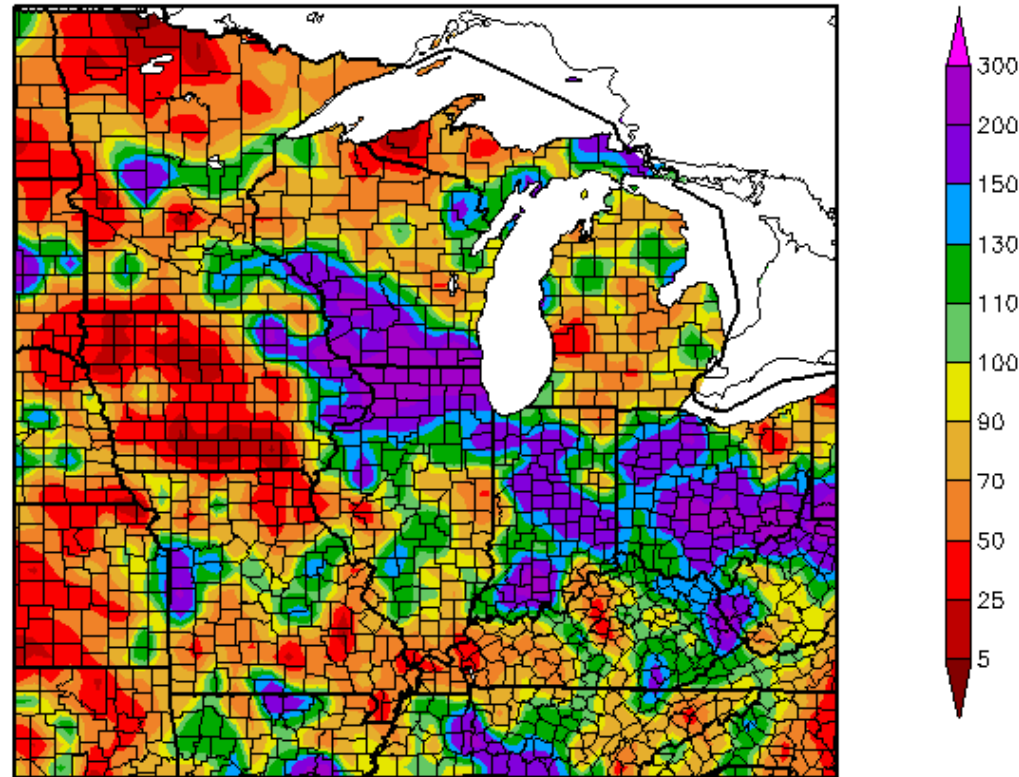


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Previous 30-Day Precipitation Difference Compared to Average (1981-2010)

Percent of Normal Precipitation (%)
7/4/2017 - 8/2/2017



NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM
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Regional Climate Centers



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May-July 2017 Precipitation Ranks

Station Name	County	Climate Division	Total Precipitation	Departure from Normal	1-day Max	Date
Lima	Allen	1	23.01	10.85	3.66	07-11
Fremont	Sandusky	2	17.10	5.53	2.50	07-11
Cleveland-Hopkins International Airport	Cuyahoga	3	14.41	3.86	2.60	06-30
Versailles	Darke	4	19.80	7.18	1.90	06-23
London Fish Hatchery	Madison	5	21.15	8.25	3.86	07-11
Mansfield Lahm Regional Airport	Richland	6	18.14	4.47	3.33	06-13
Dennison Water Works	Tuscarawas	7	17.54	5.11	1.48	06-19
Dayton International Airport	Montgomery	8	18.73	5.79	2.86	06-23
South Point	Lawrence	9	17.01	2.45	2.25	06-24
New Lexington (2NW)	Perry	10	20.43	7.23	3.07	07-22

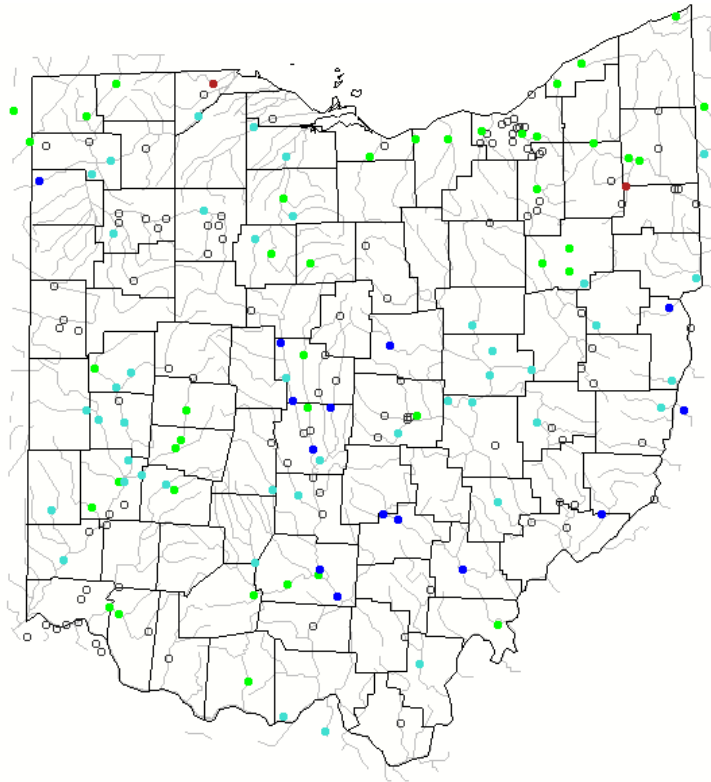
Data for this analysis originates from NOAA's National Centers for Environmental Information (NCEI) Climate Division dataset (<https://www.ncdc.noaa.gov/monitoring-references/maps/us-climate-divisions.php>) and was obtained from the Midwest Regional Climate Center (<http://mrcc.isws.illinois.edu/>).



May-July 2017 Precipitation Ranks
1895-2017



7-DAY



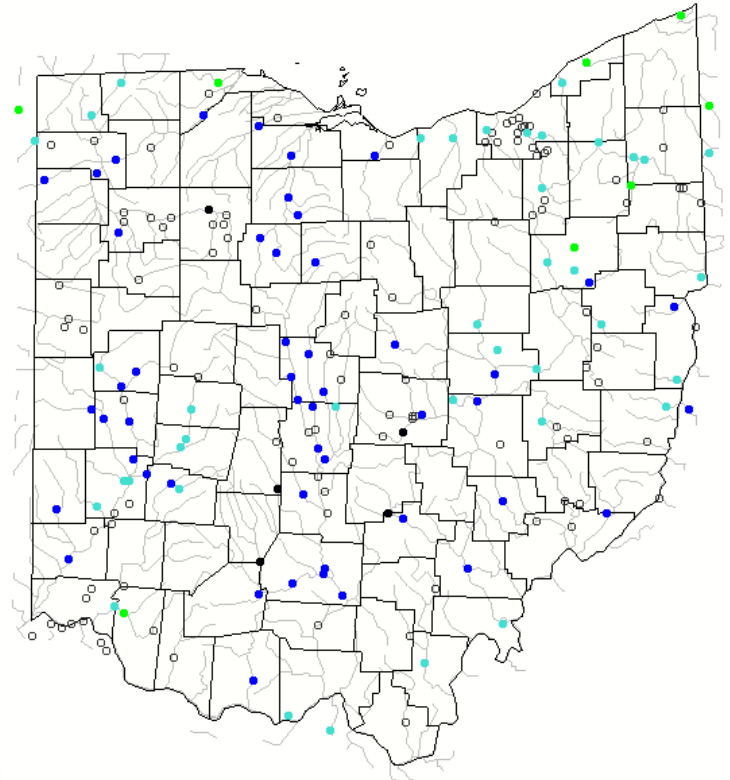
Explanation - Percentile classes

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

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

USGS Streamflow

28-DAY



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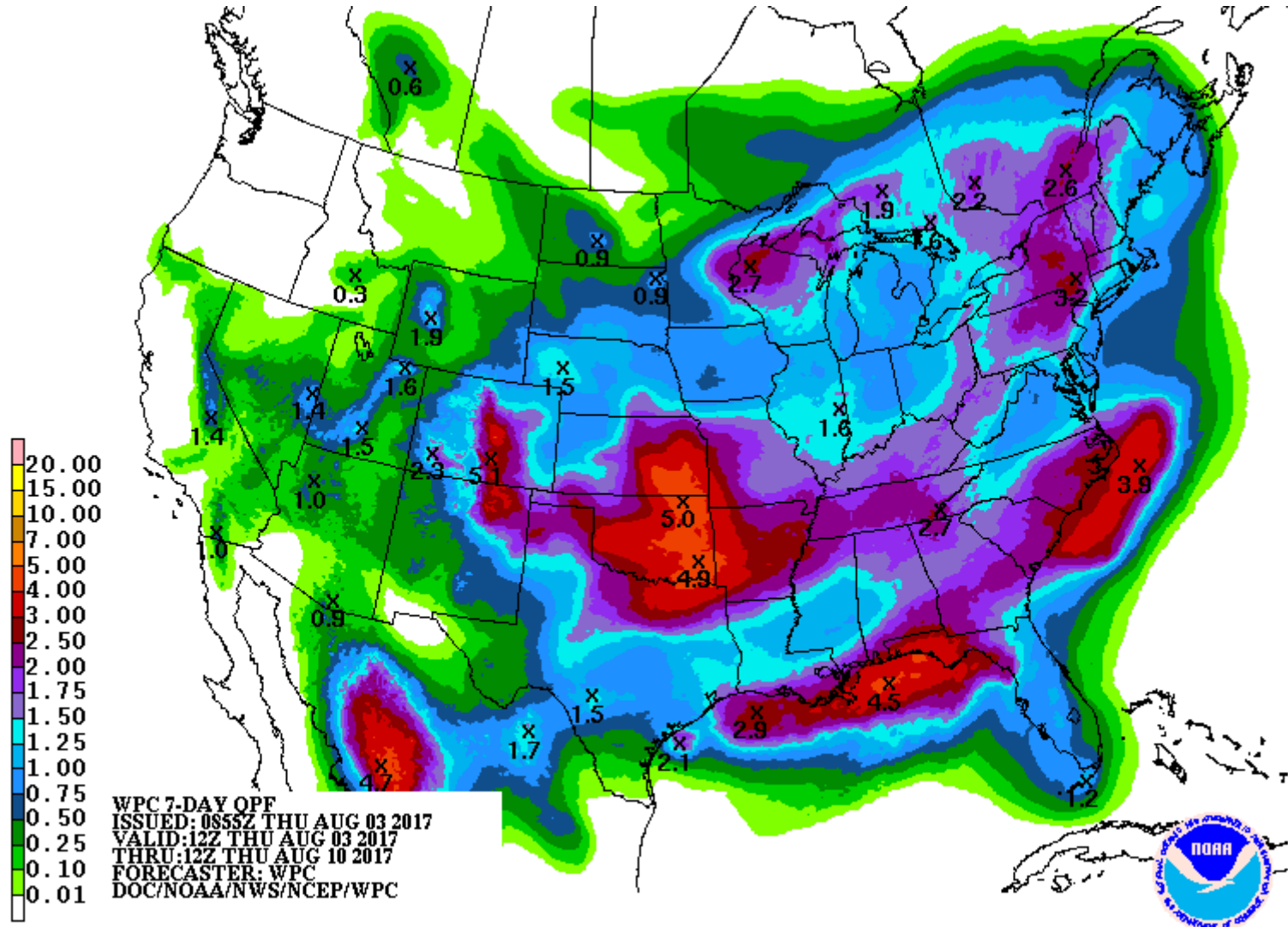
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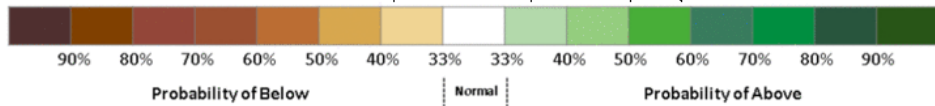
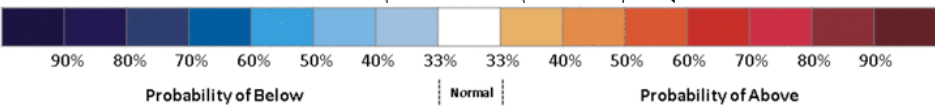
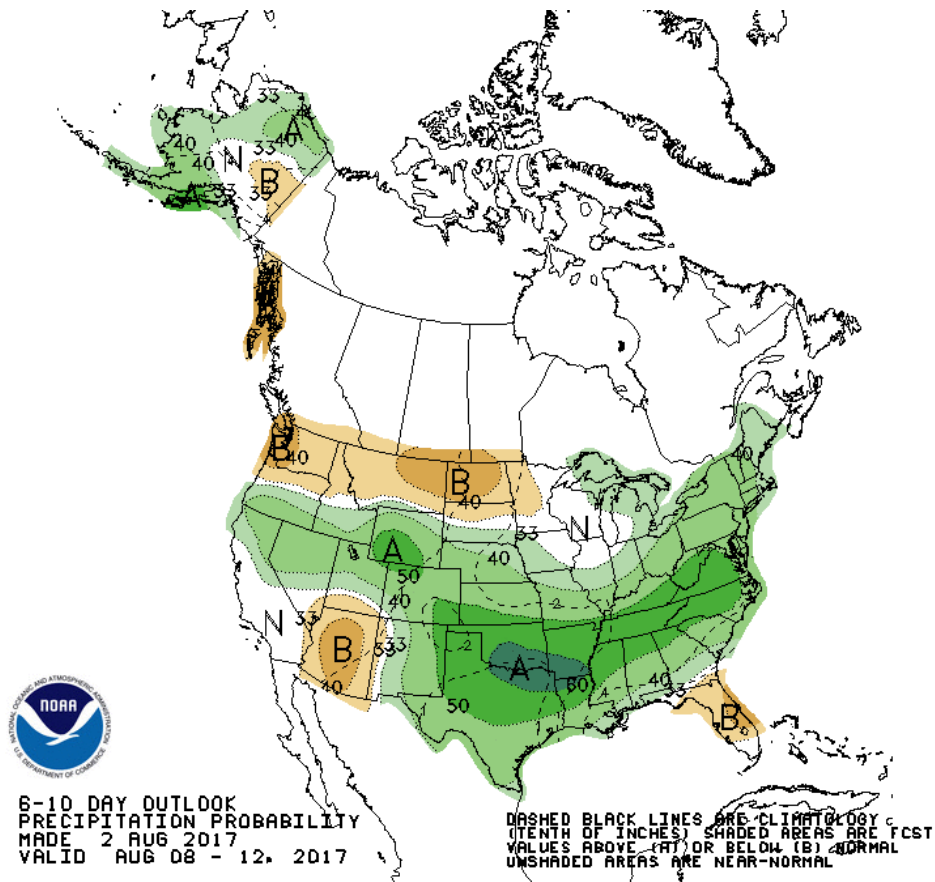
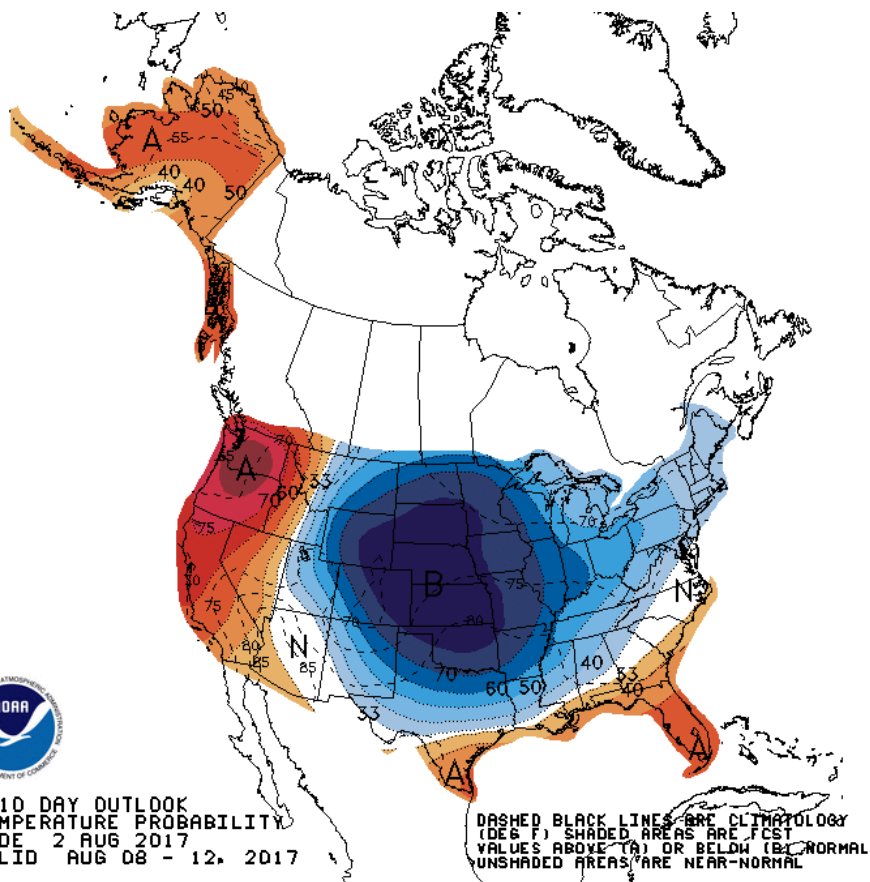
Weather for the Week Ahead



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6-10 Day Outlook



Highs: Low to mid 80s

Lows: Mid 60s

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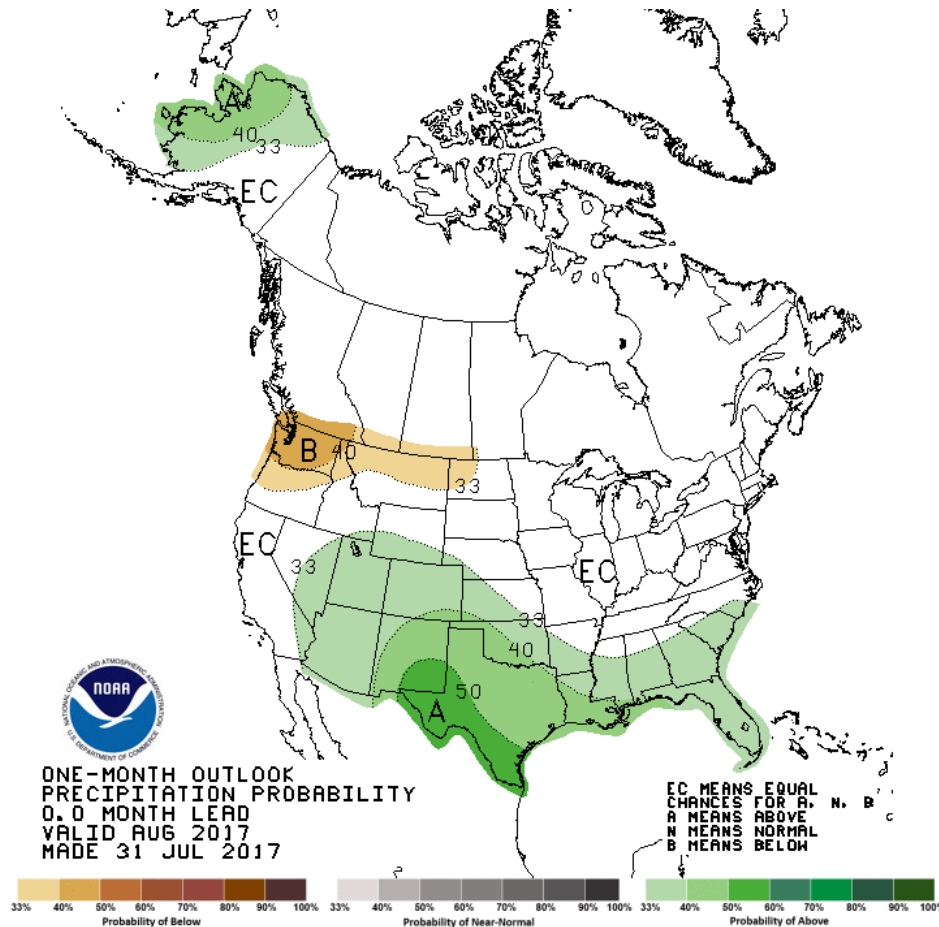
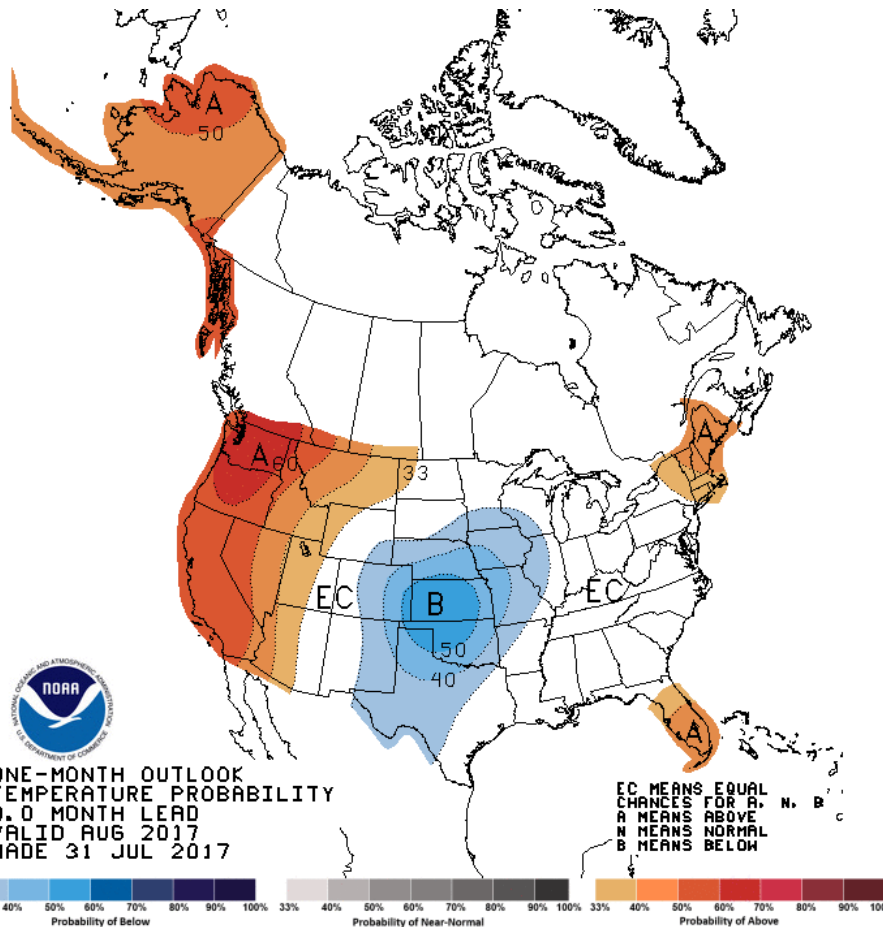
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Revised August Outlook

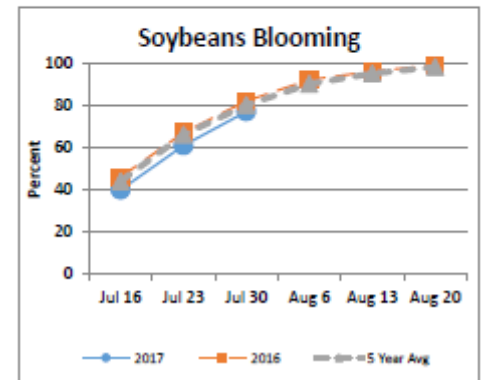
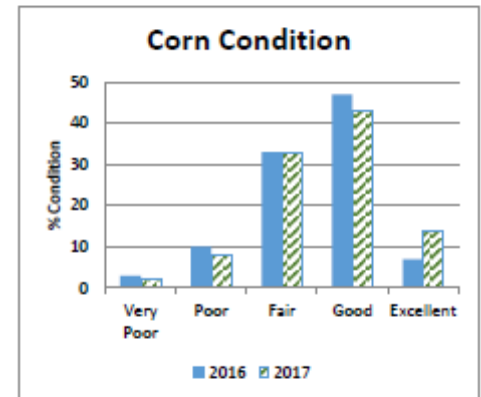
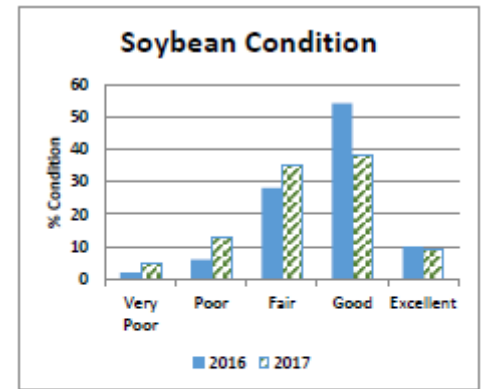


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Ag Highlights

- 4.4 days suitable for fieldwork for the week ending July 30th
- Some fields (soybean) are still showing effects of standing water
- Cutting hay, harvesting wheat, spraying fields, and spreading manure picked up with drier weather



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



Photo Credit: Sam Custer – Extension Educator (Darke County)

Drought Monitor: No Drought

30-Day and 60-Day: Some standing water remains but conditions improved

Precipitation: Scattered thunderstorms possible throughout most of the upcoming week; Temperatures will remain mild for this time of the year



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