

# Hydrologic and Climate Assessment

December 1, 2017



**Aaron B. Wilson**

**STATE CLIMATE OFFICE OF OHIO (SCOO)**

DEPARTMENT OF EXTENSION - CFAES

BYRD POLAR & CLIMATE RESEARCH CENTER

DEPARTMENT OF GEOGRAPHY

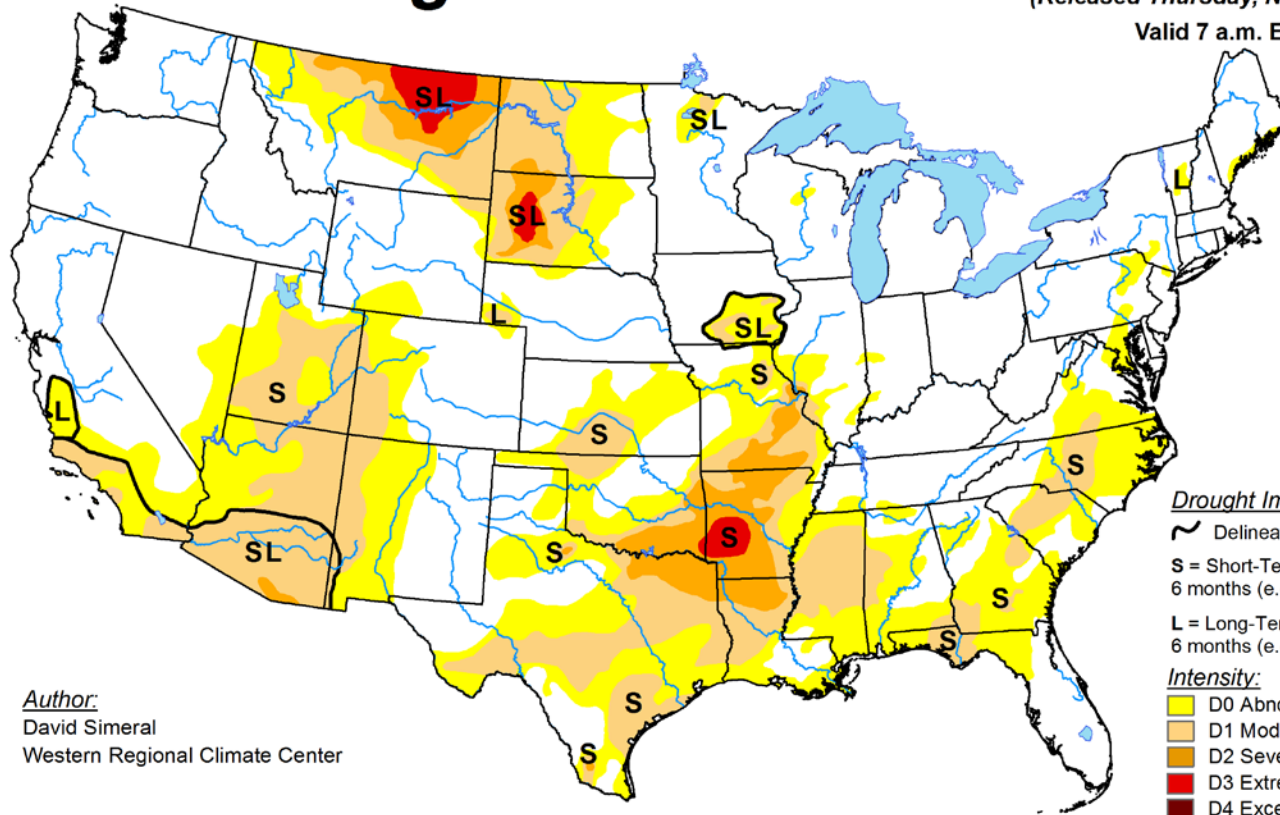


**THE OHIO STATE UNIVERSITY**

# U.S. Drought Monitor

November 28, 2017  
(Released Thursday, Nov. 30, 2017)

Valid 7 a.m. EST



Author:  
David Simeral  
Western Regional Climate Center

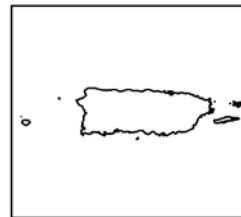
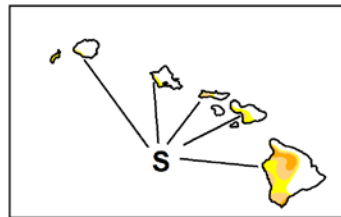
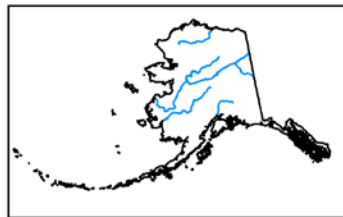
Drought Impact Types:

- ~ 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/>

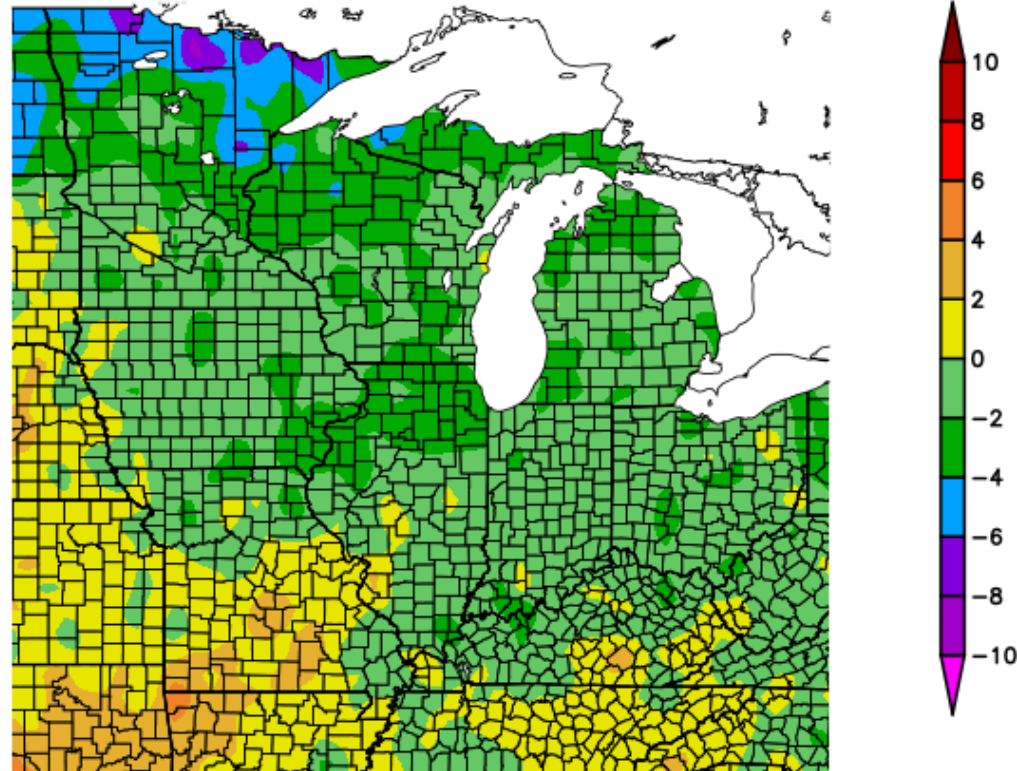


THE OHIO STATE UNIVERSITY

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

Departure from Normal Temperature (F)  
10/31/2017 - 11/29/2017



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

Generated 11/30/2017 at HPRCC using provisional data.

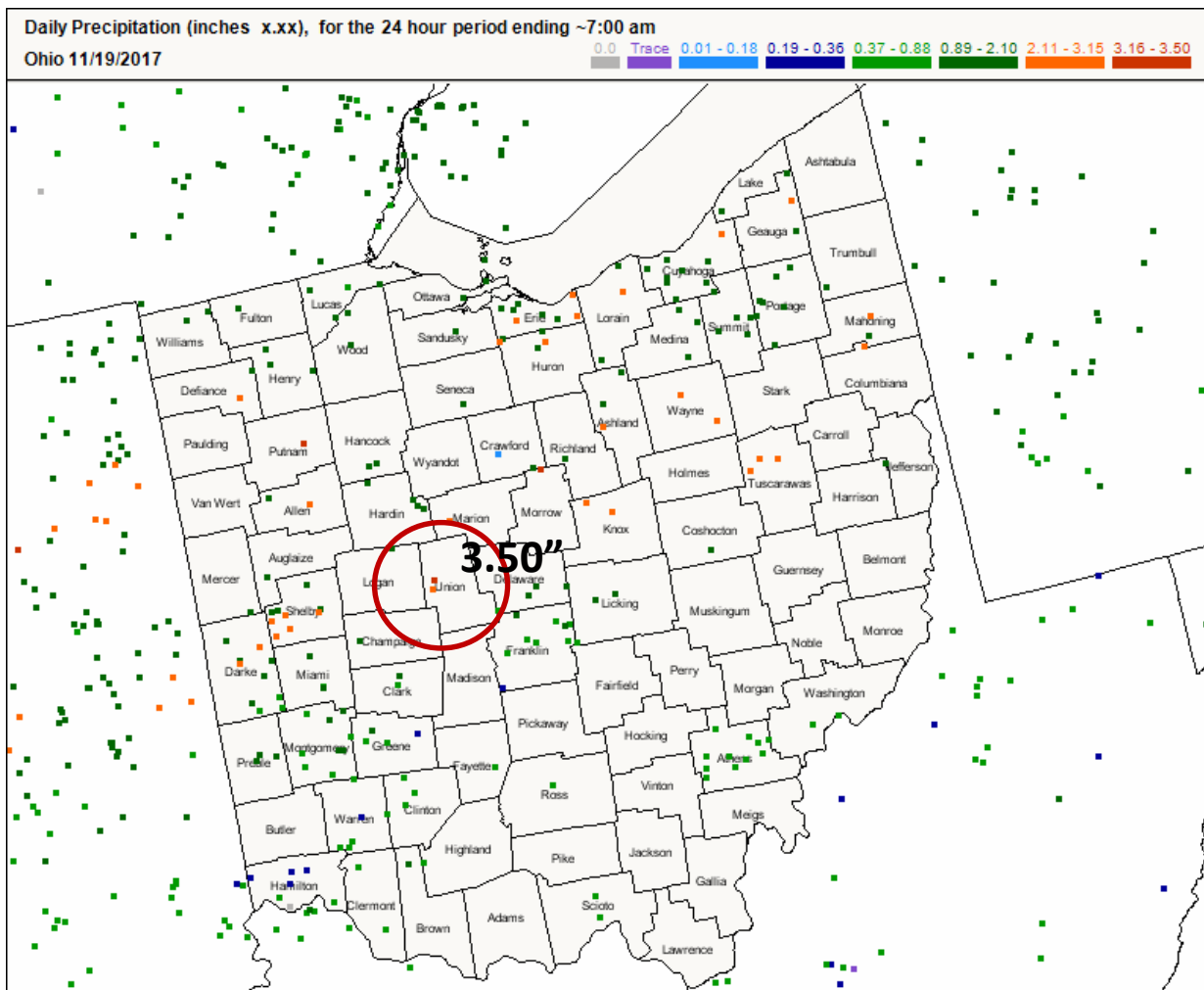
NOAA Regional Climate Centers



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

# CoCoRaHS Observed Precipitation: November 19

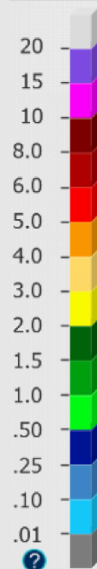
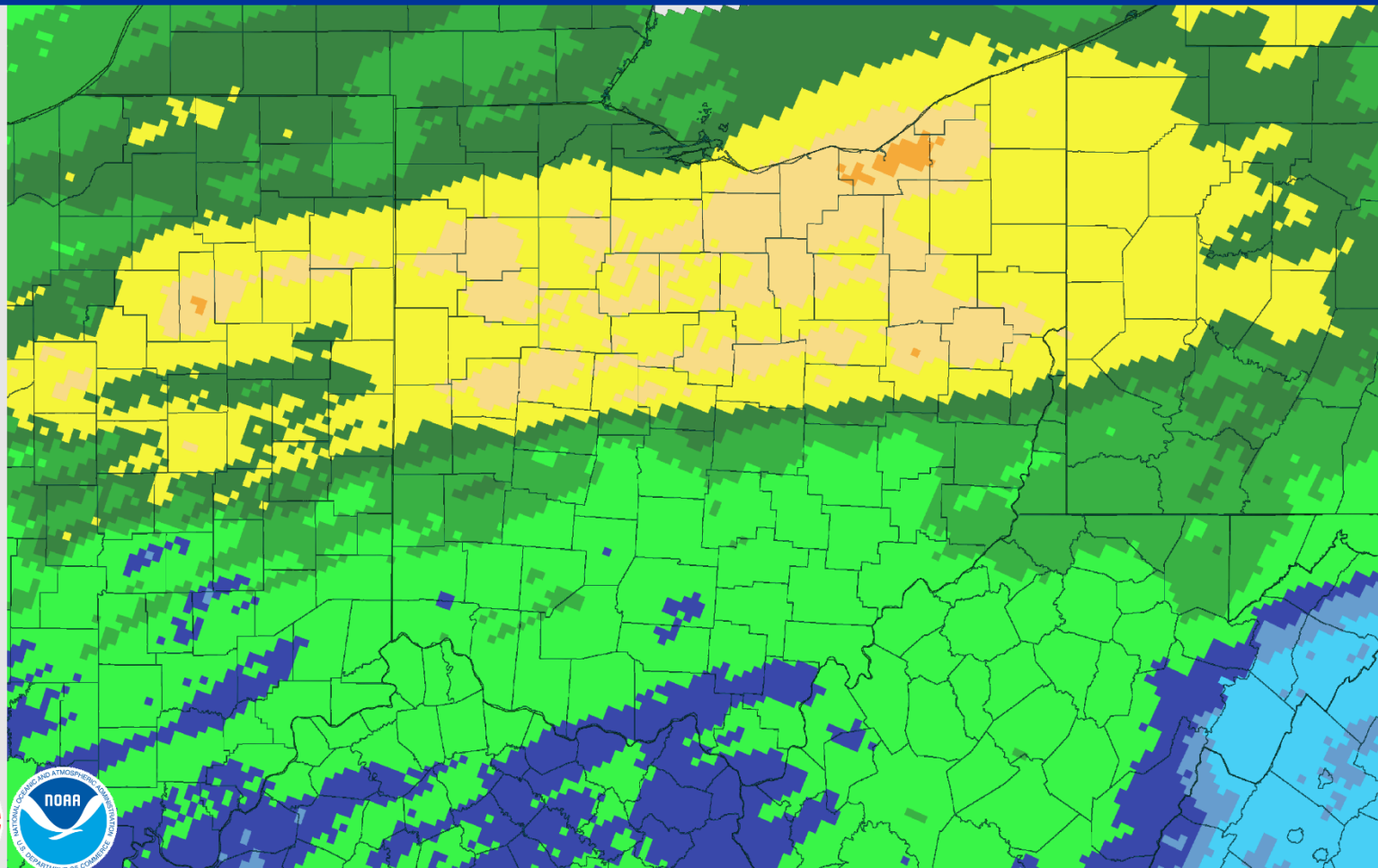


# Previous 14-Day Precipitation: Total

December 01, 2017 14-Day Observed Precipitation

Created on: December 01, 2017 - 19:07 UTC

Valid on: December 01, 2017 12:00 UTC



THE OHIO STATE UNIVERSITY

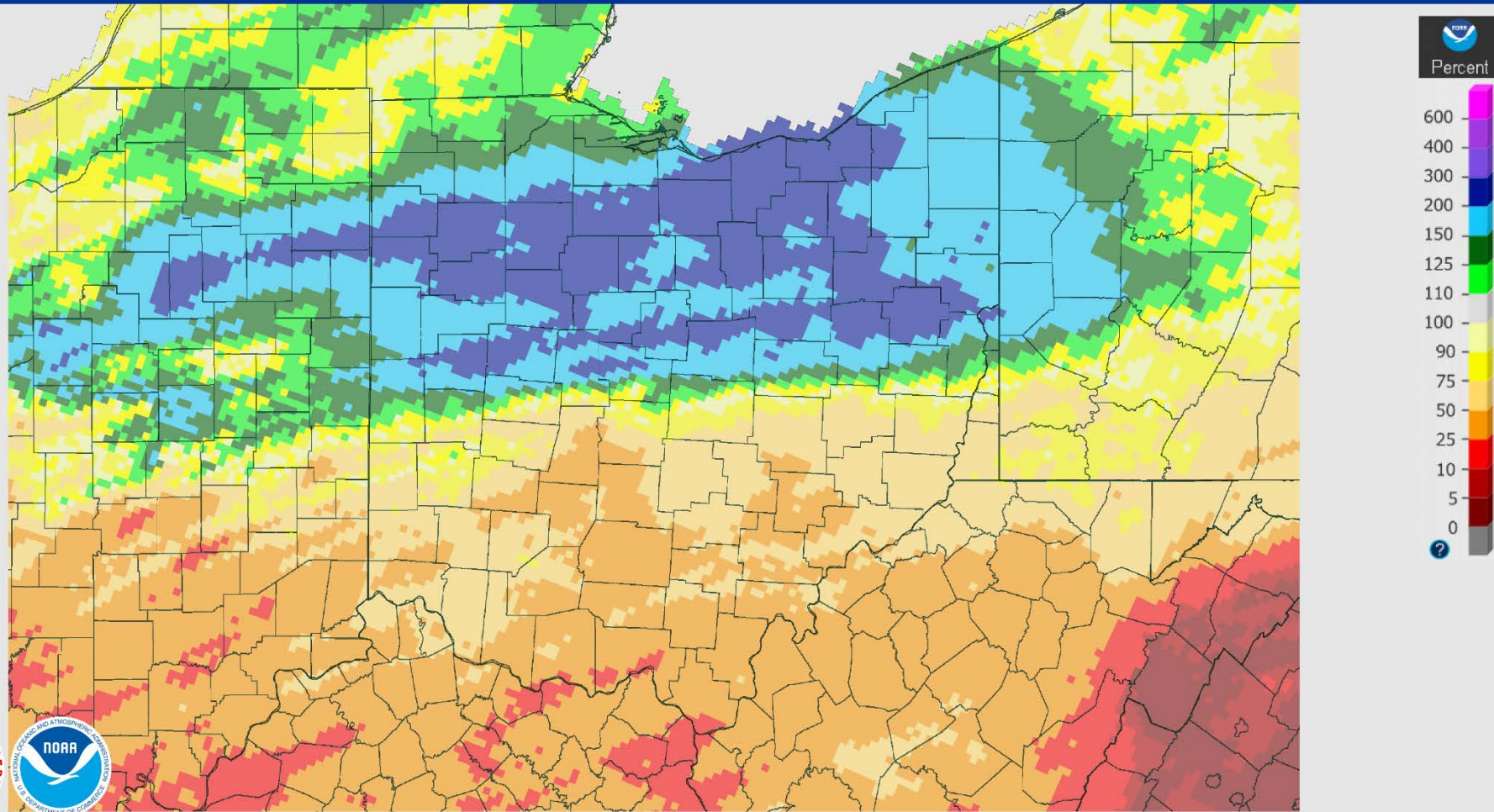
**STATE CLIMATE OFFICE OF OHIO (SCOO)**  
COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES  
DEPARTMENT OF EXTENSION  
BYRD POLAR & CLIMATE RESEARCH CENTER  
DEPARTMENT OF GEOGRAPHY

# Previous 14-Day Precipitation: Percent of Normal

December 01, 2017 14-Day Percent Precipitation

Created on: December 01, 2017 - 19:07 UTC

Valid on: December 01, 2017 12:00 UTC

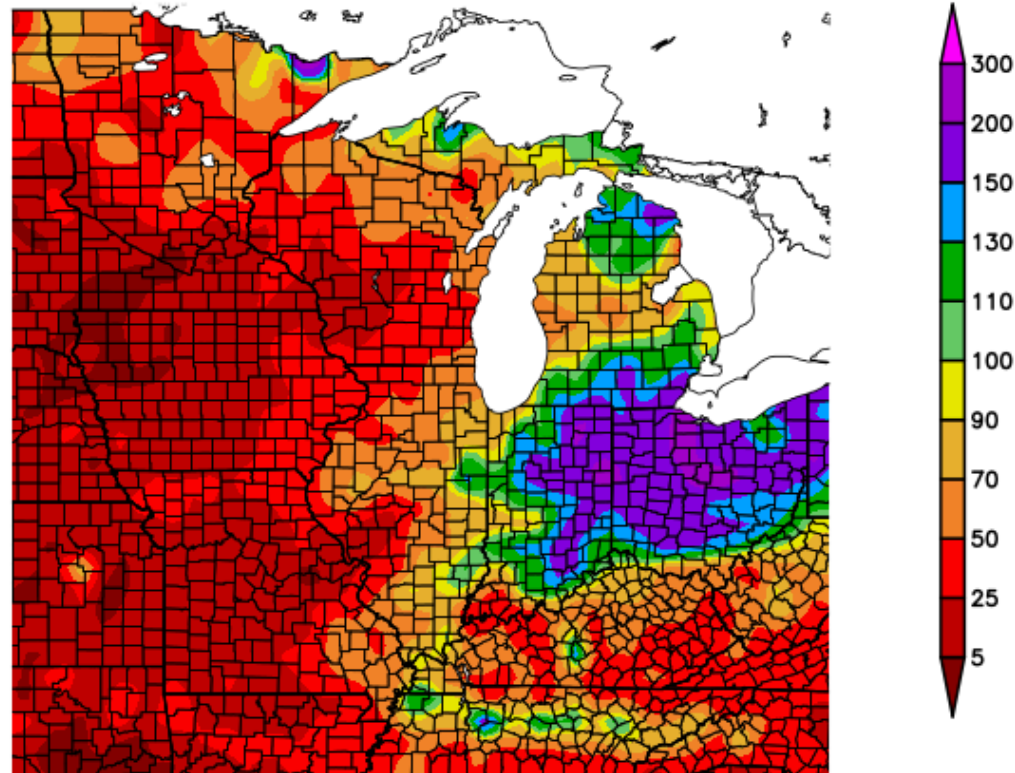


THE OHIO STATE UNIVERSITY

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

Percent of Normal Precipitation (%)  
10/31/2017 - 11/29/2017



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

Generated 11/30/2017 at HPRCC using provisional data.

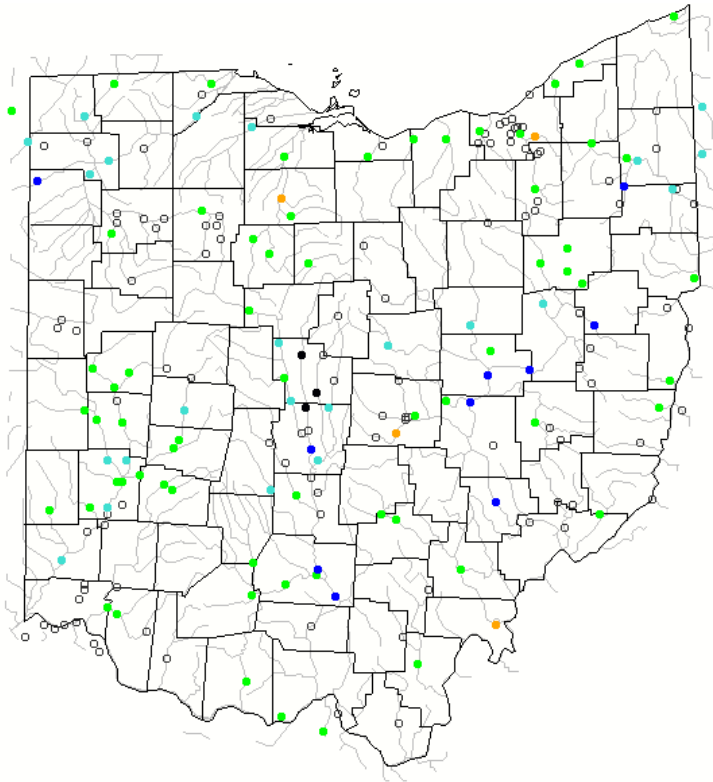
NOAA Regional Climate Centers



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

7-DAY



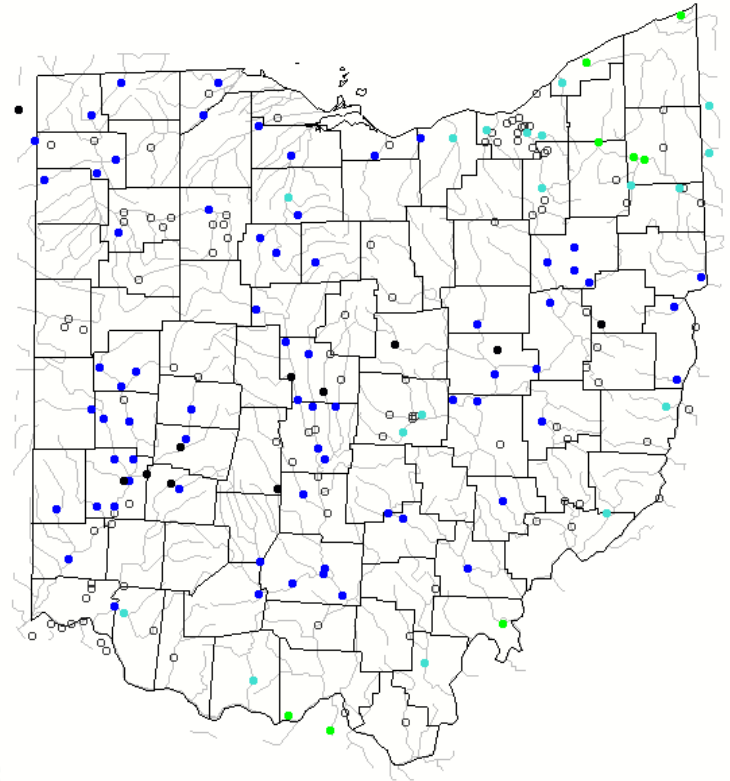
Explanation - Percentile classes

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

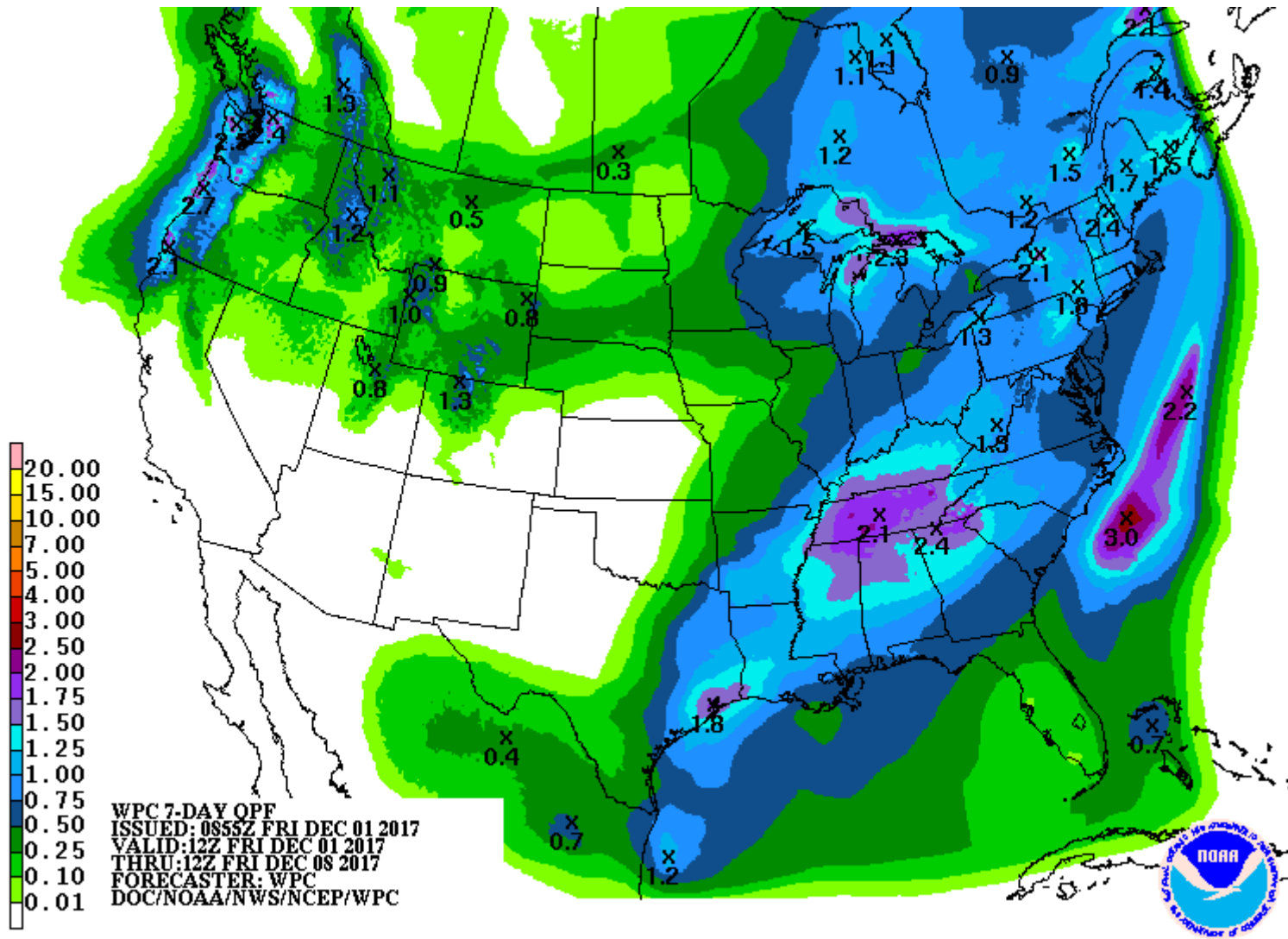
BYRD POLAR & CLIMATE RESEARCH CENTER

DEPARTMENT OF GEOGRAPHY



THE OHIO STATE UNIVERSITY

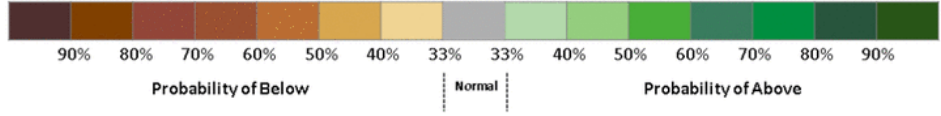
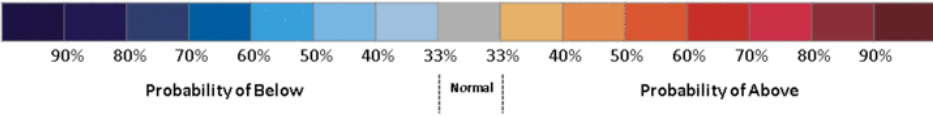
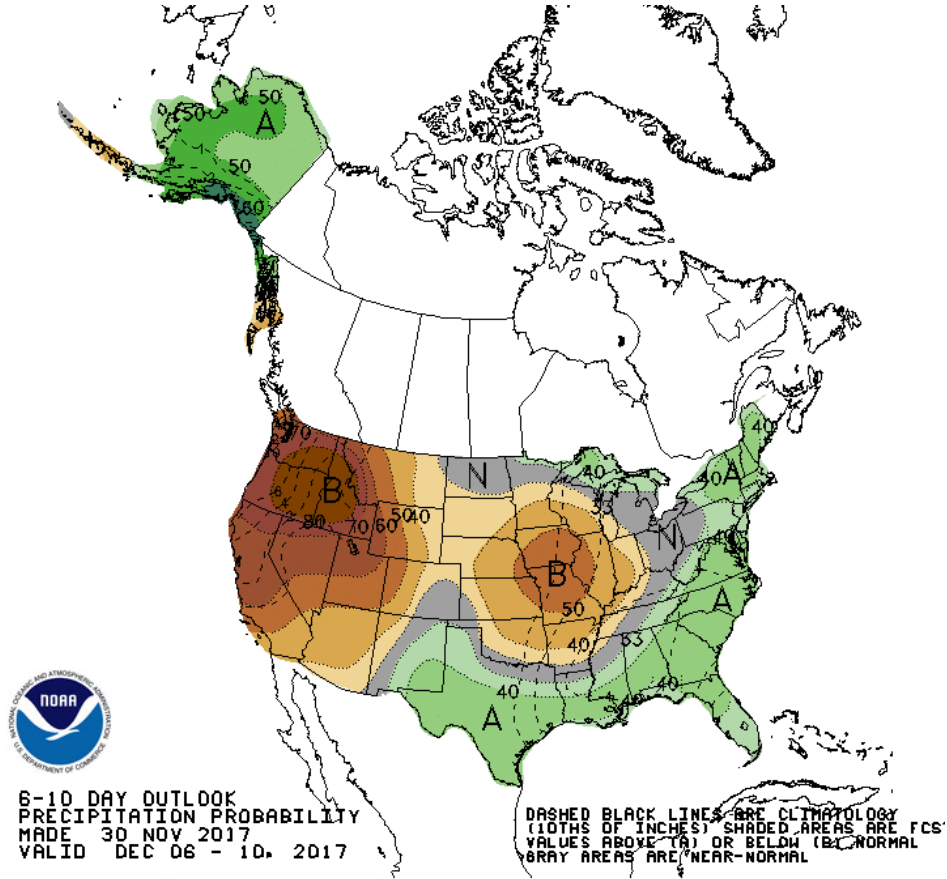
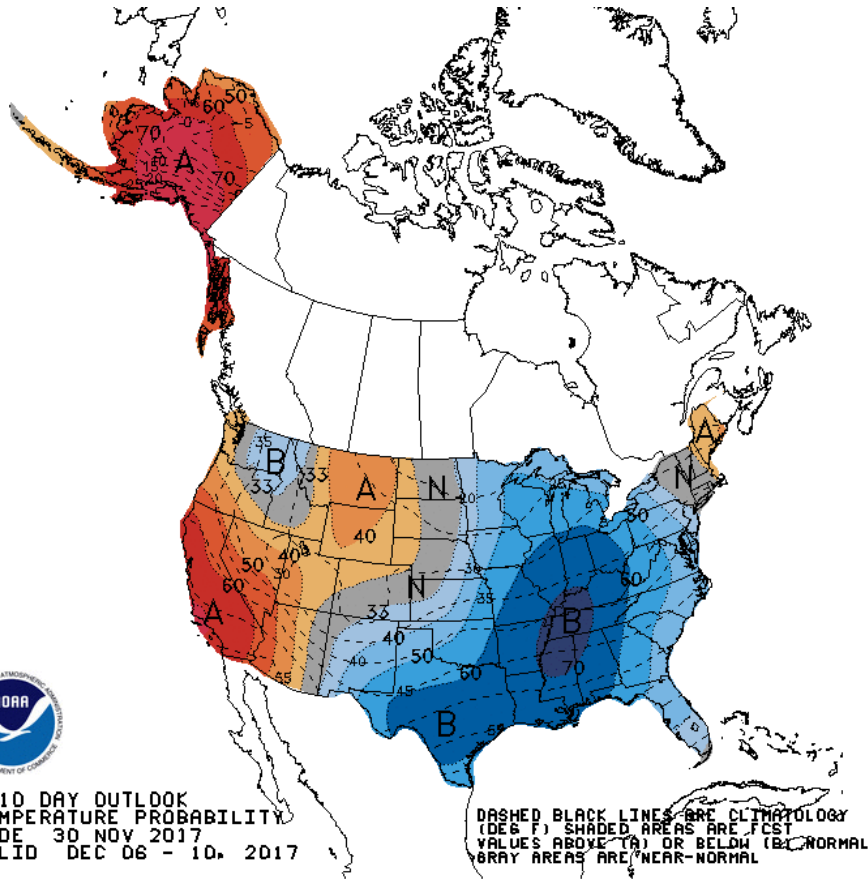
# Weather for the Week Ahead



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: 42-48    Lows: 28-32

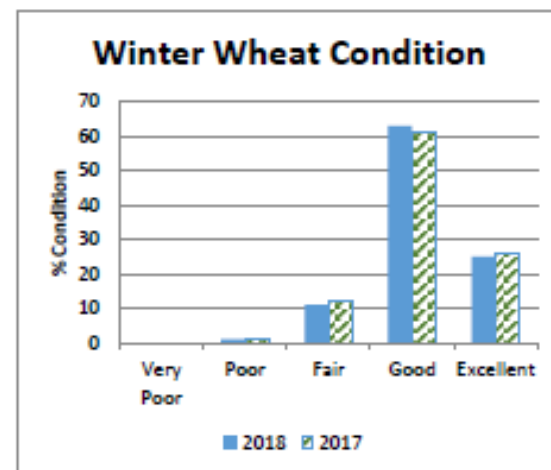
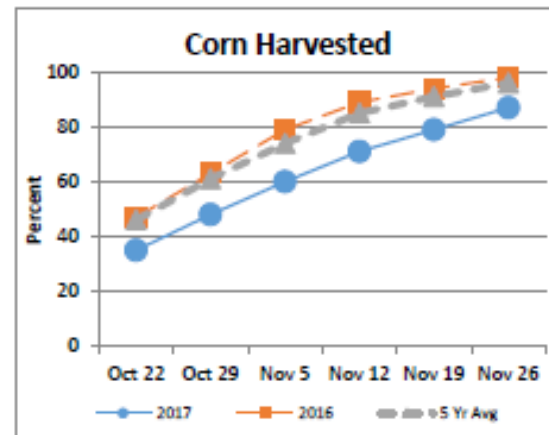


THE OHIO STATE UNIVERSITY

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

# Ag Highlights

- Dry, cool weather helped corn harvest and field work continue at a slow pace
- 3.8 days available for field work for the week ending November 26, 2017
- Winter wheat seedings are almost fully emerged and the condition remains 88 percent good to excellent.



NASS: Cheryl Turner –

[https://www.nass.usda.gov/Statistics\\_by\\_State/Ohio/Publications/Crop\\_Progress\\_&\\_Condition/2017/cw3017oh.pdf](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:** All drought status removed

**30-Day and 60-Day:** Very wet in the short-term; Dry this past week

**The week ahead:** Seasonable through the weekend; Cold blast 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