

Ohio's Climate Assessment

September 11, 2020



Photo Credit: David Marrison



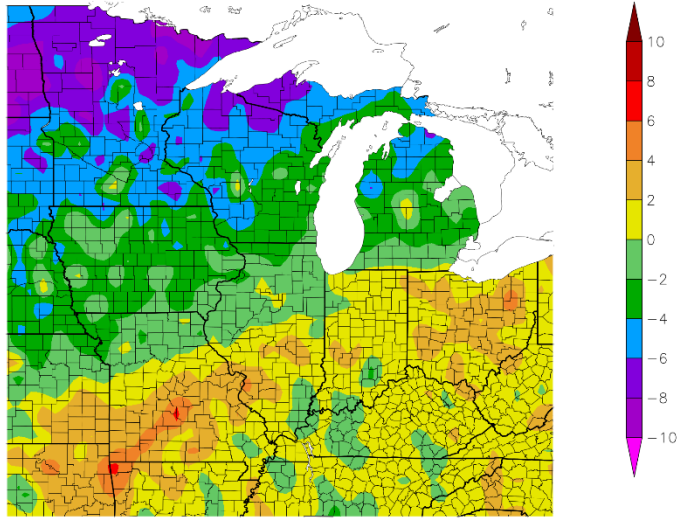
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Aaron B. Wilson

STATE CLIMATE OFFICE OF OHIO (SCOO)
DEPARTMENT OF EXTENSION - CFAES
BYRD POLAR & CLIMATE RESEARCH CENTER
DEPARTMENT OF GEOGRAPHY

Temperature Differences Compared to Average (1981-2010)

Departure from Normal Temperature (F)
9/3/2020 – 9/9/2020

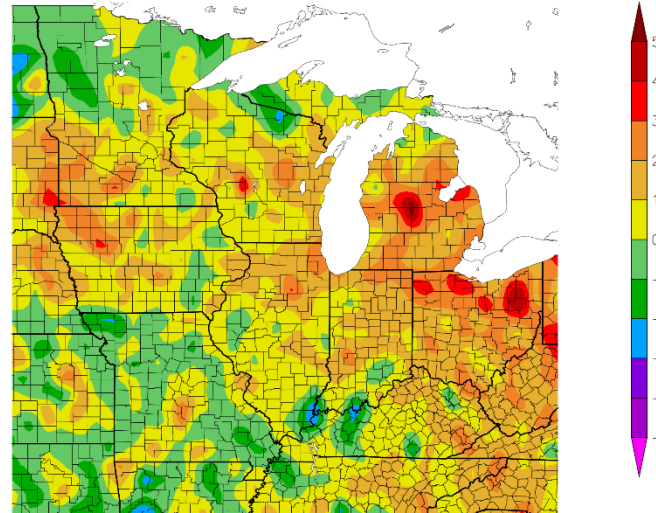


Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

7-Day

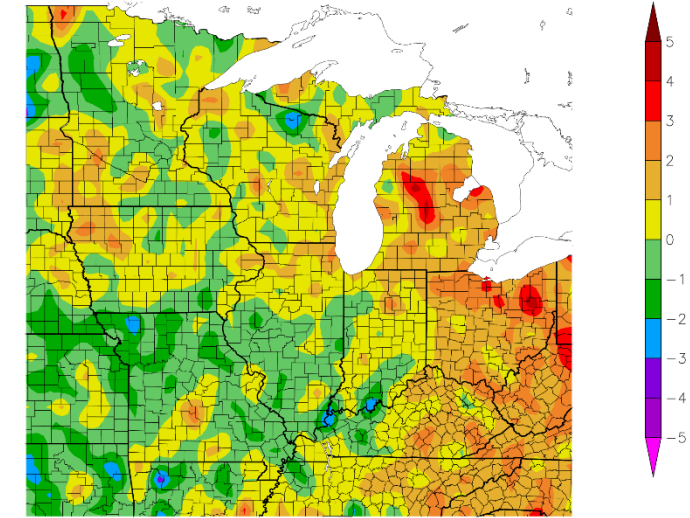
30-Day
Departure from Normal Temperature (F)
8/11/2020 – 9/9/2020



Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
7/12/2020 – 9/9/2020



Generated 9/10/2020 at HPRCC using provisional data.

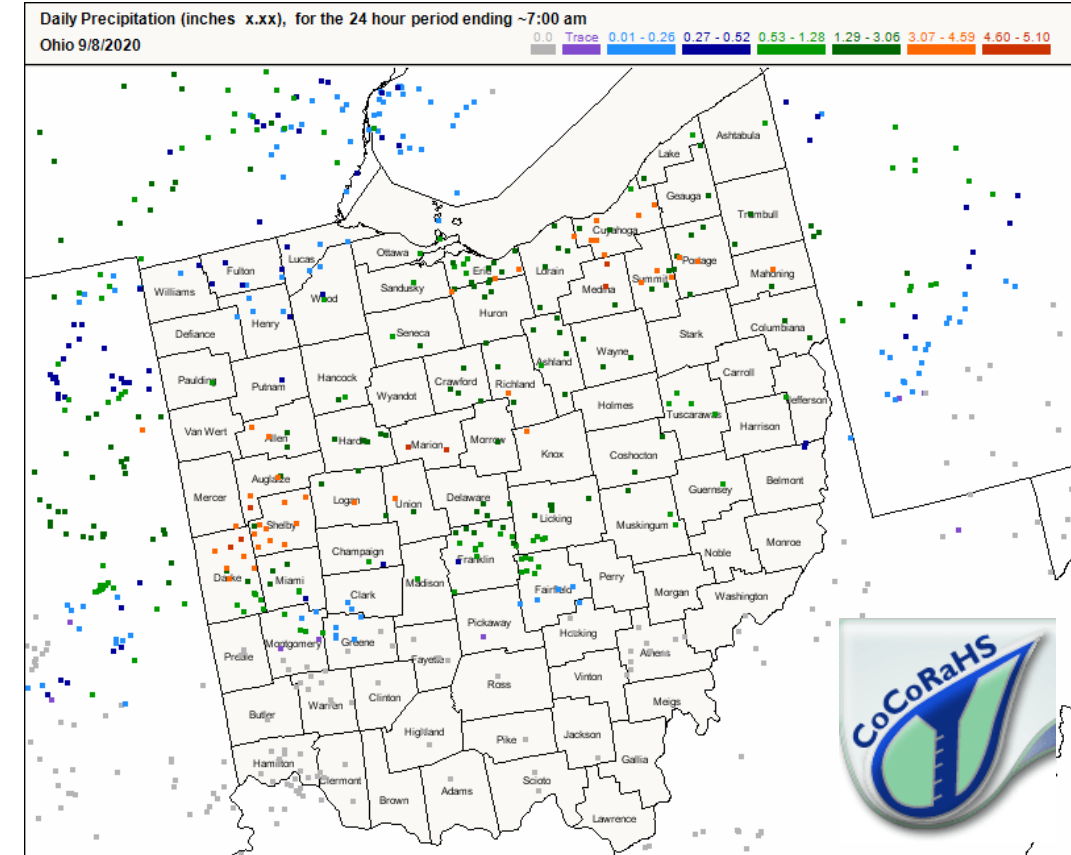
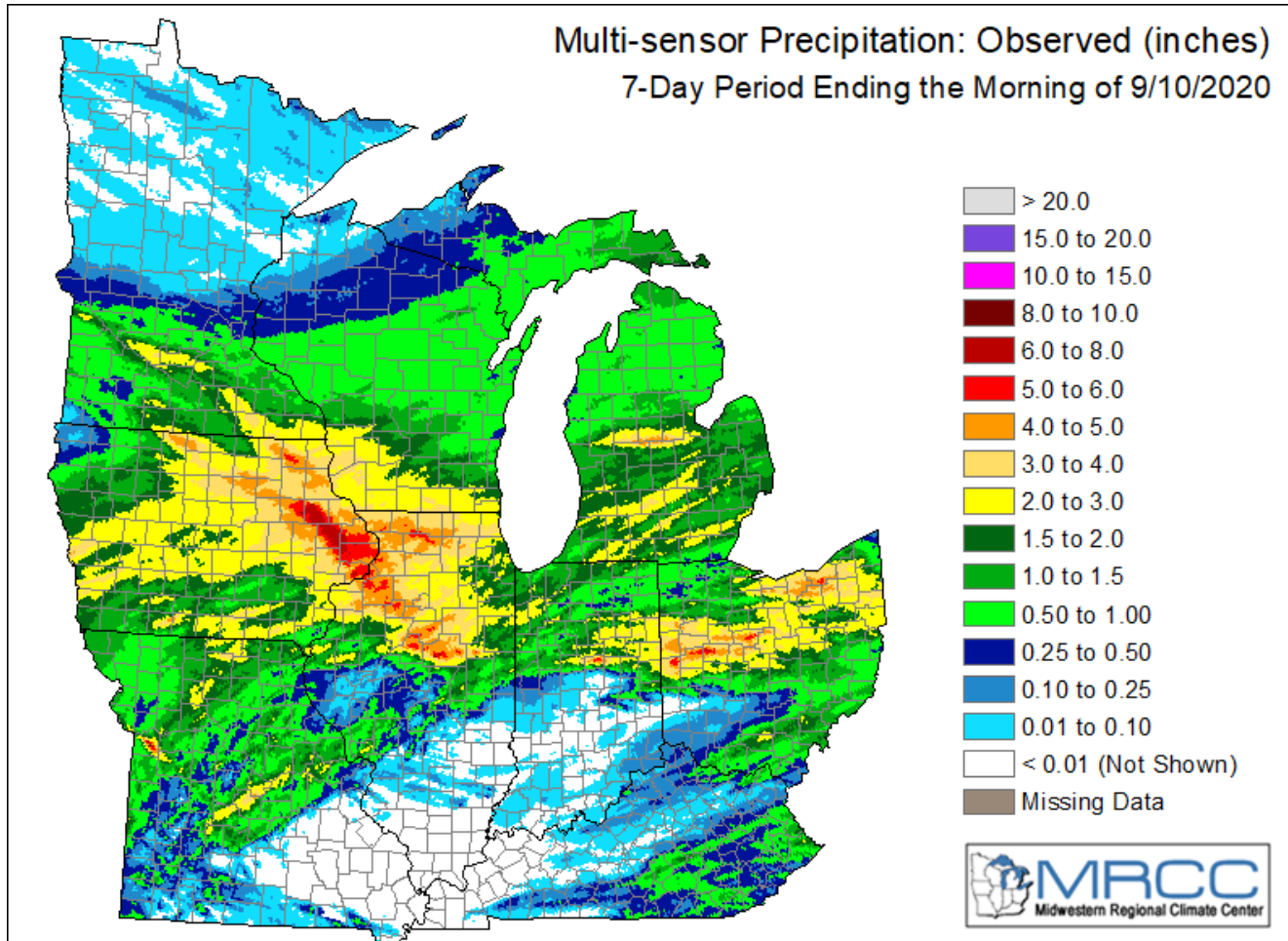
NOAA Regional Climate Centers

60-Day



<https://www.drought.gov/drought/dews/midwest/current-conditions>

This Week's Precipitation



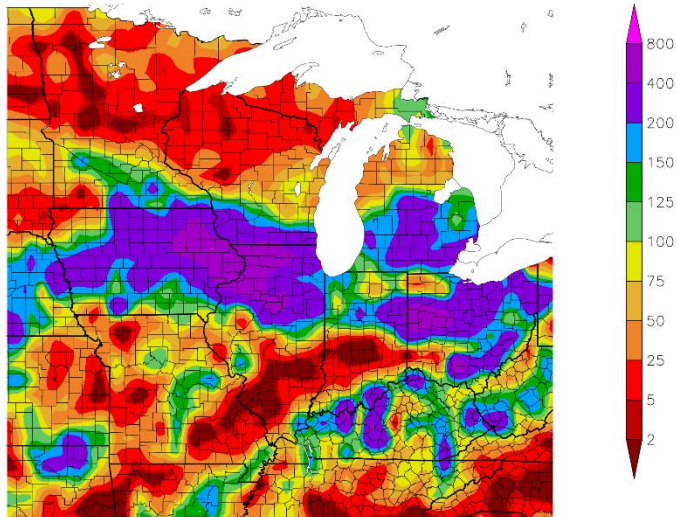
<https://www.cocorahs.org/>



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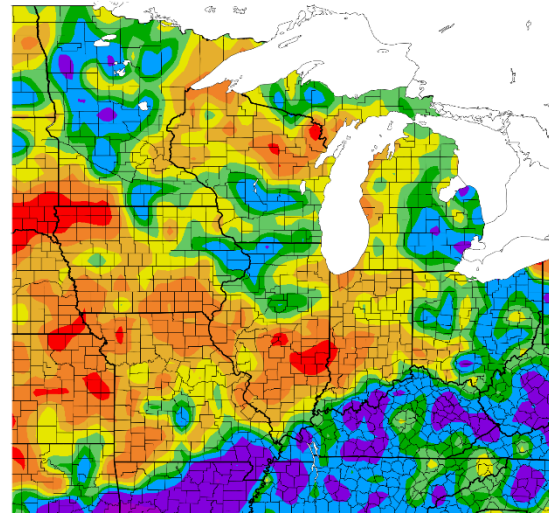
Precipitation Differences Compared to Average (1981-2010)

Percent of Normal Precipitation (%)
9/3/2020 – 9/9/2020



7-Day

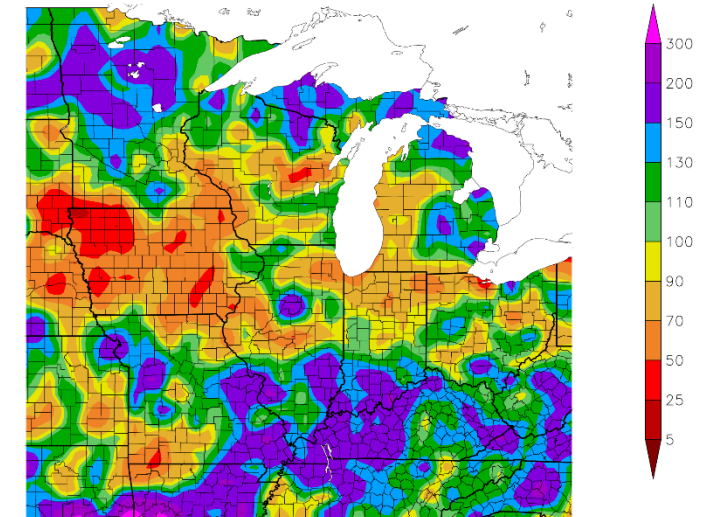
30-Day
Percent of Normal Precipitation (%)
8/11/2020 – 9/9/2020



Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
7/12/2020 – 9/9/2020

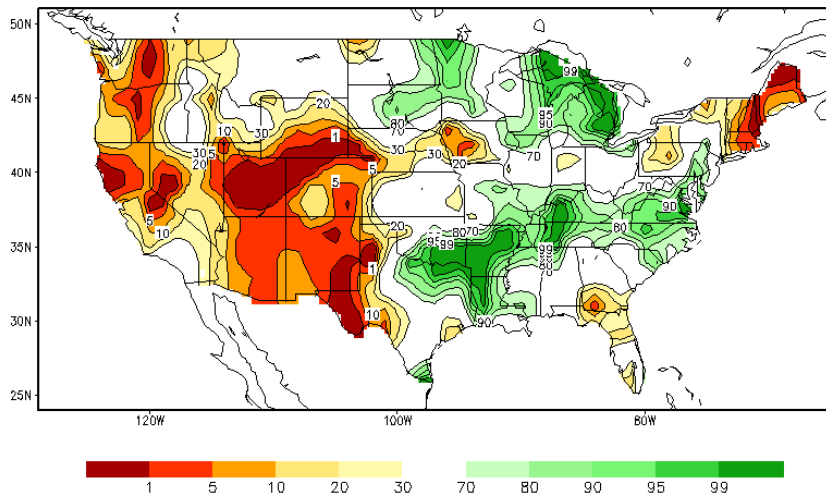


Generated 9/10/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

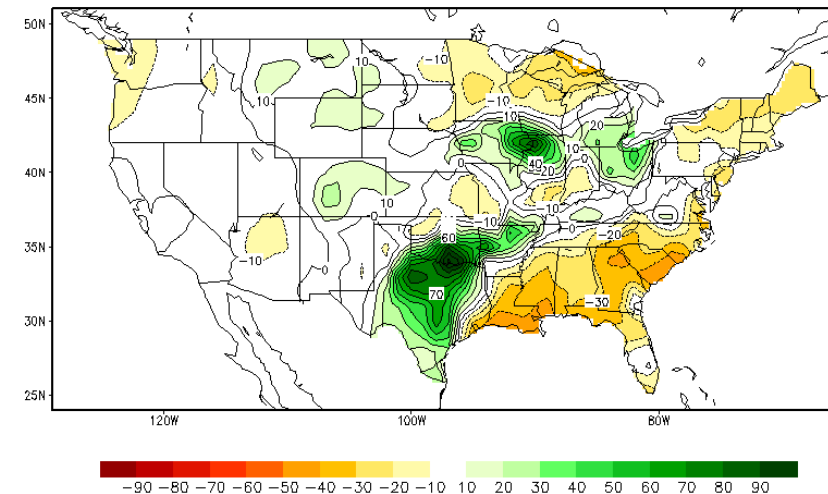
60-Day

Calculated Soil Moisture Ranking Percentile
SEP 10, 2020

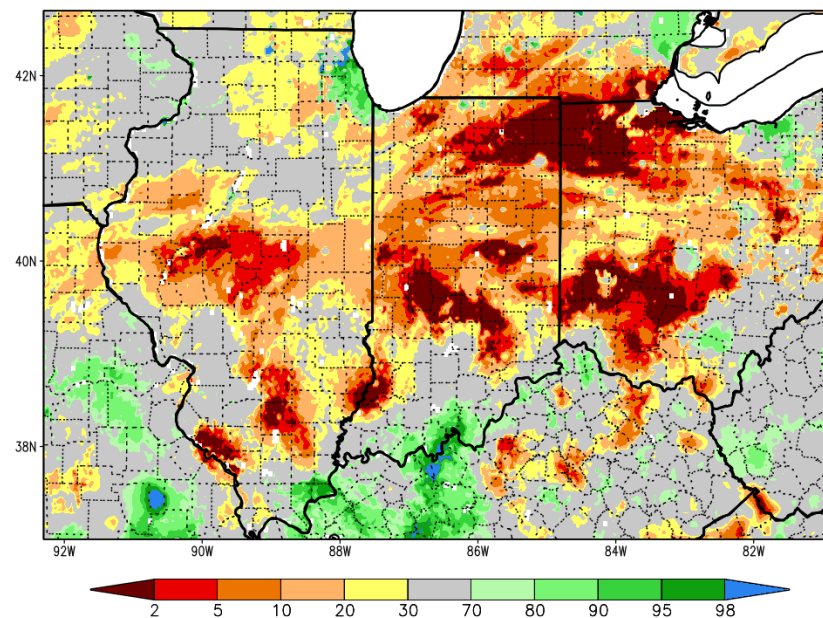


Soil Moisture

Calculated Soil Moisture Anomaly Change
SEP 10, 2020 from AUG.31



SPoRT-LIS 0-100 cm Soil Moisture percentile valid 11 Sep 2020



https://weather.msfc.nasa.gov/sport/case_studies/lis_IN.html

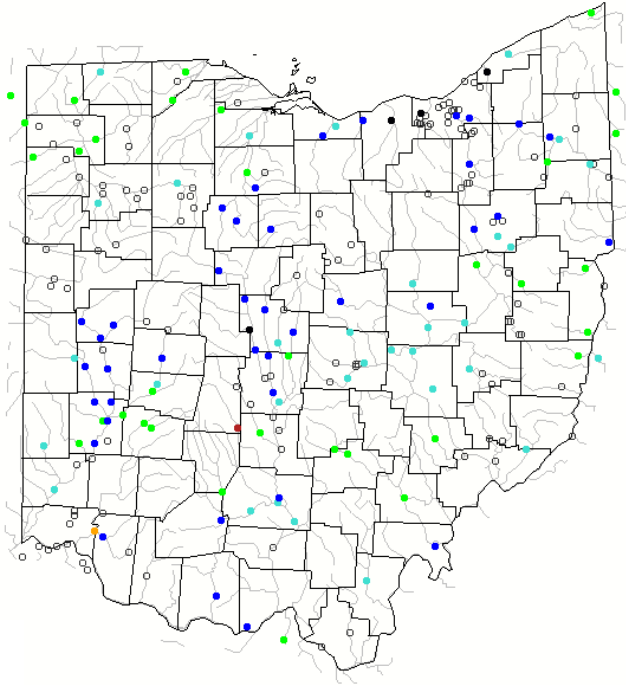


https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#

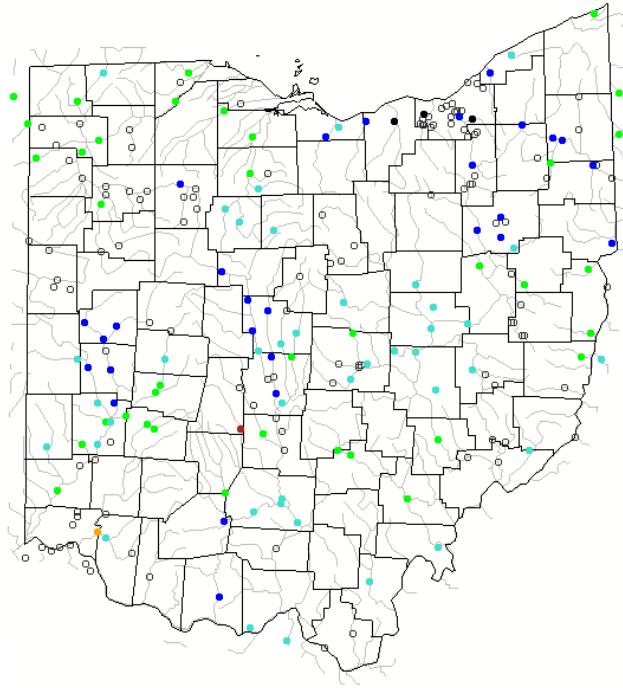


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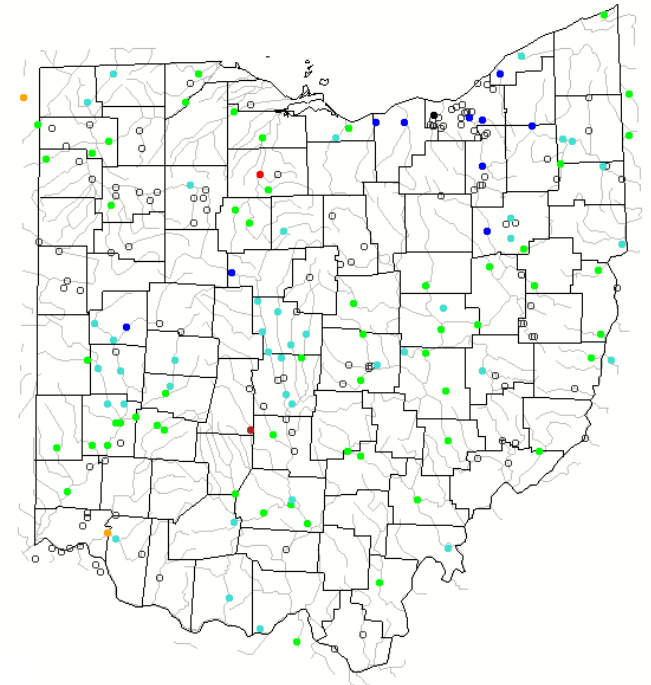
7-DAY



14-DAY



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



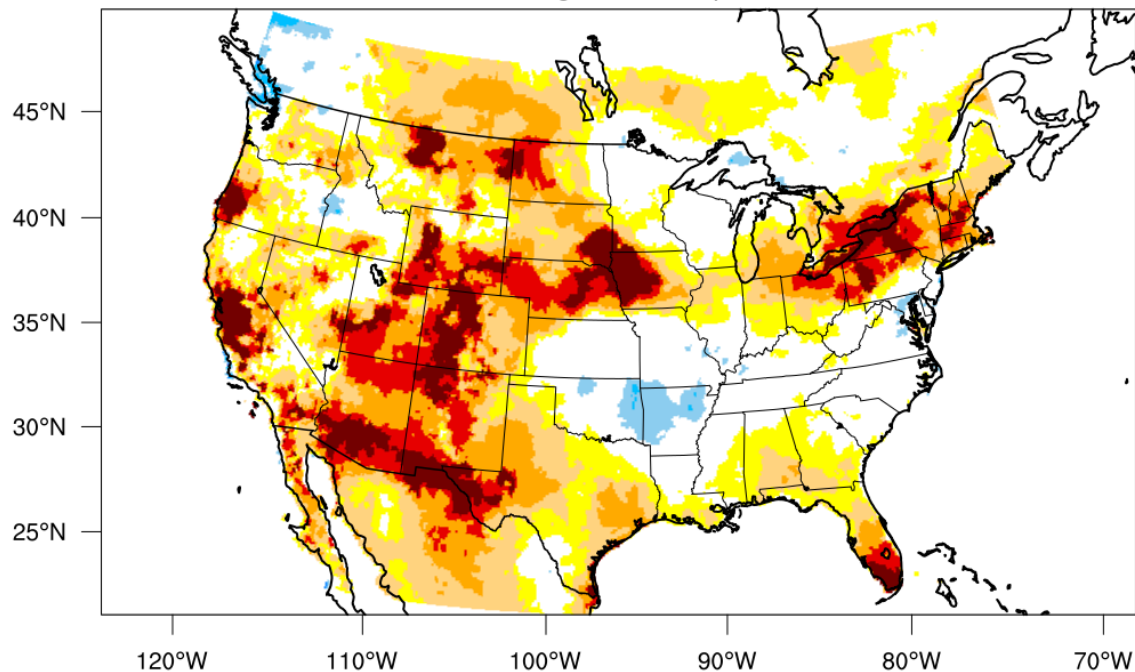
<https://waterwatch.usgs.gov/index.php>



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Moisture Demand

1-month EDDI categories for September 5, 2020



Drought categories



100% 98% 95% 90% 80% 70% 30% 20% 10% 5% 2% 0%

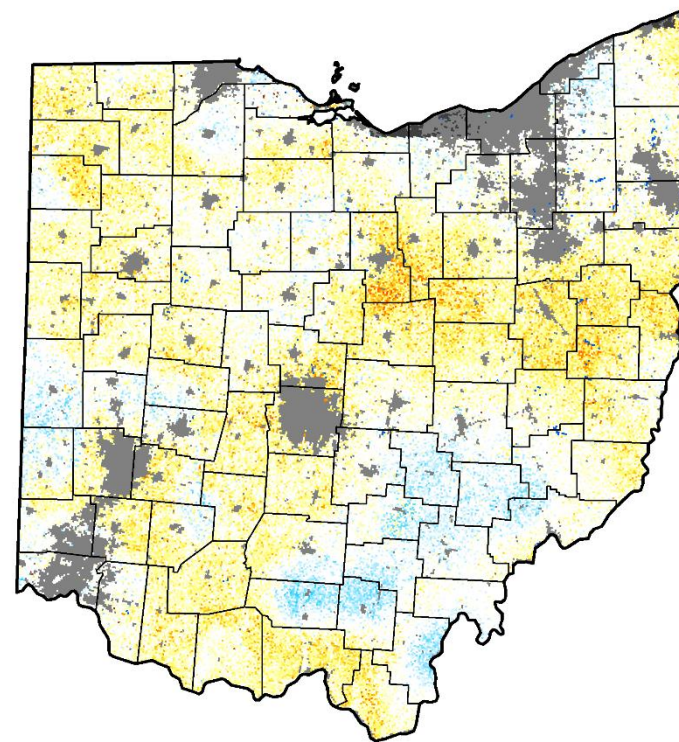
(EDDI-percentile category breaks: 100% = driest; 0% = wettest)

Generated by NOAA/ESRL/Physical Sciences Laboratory



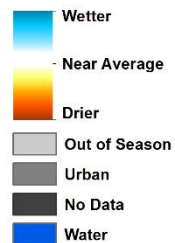
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Quick Drought Response Index
Ohio



September 6, 2020
(Week 36)

Conditions Relative to
4-Week Historical Average

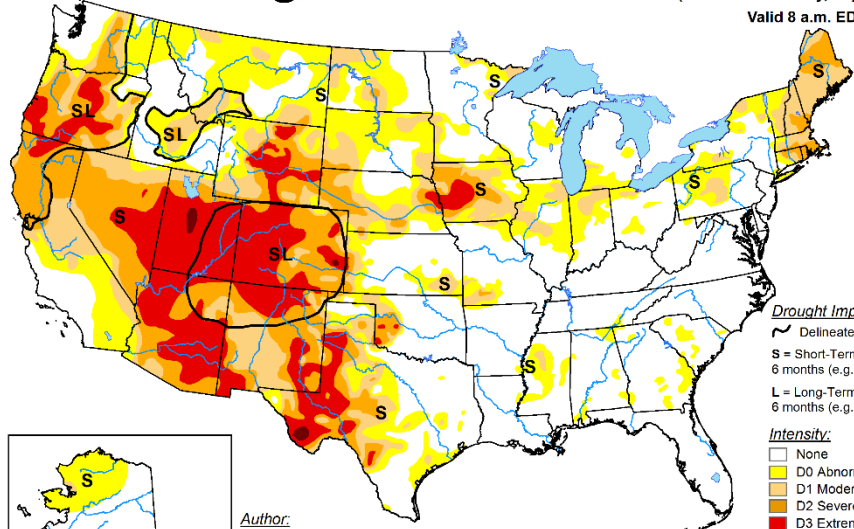


<https://quickdri.unl.edu/Home/StateQuickDRI.aspx?OH>

Current U.S. Drought Monitor

U.S. Drought Monitor

September 8, 2020
(Released Thursday, Sep. 10, 2020)
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:

None
D0 Abnormally Dry
D1 Moderate Drought
D2 Severe Drought
D3 Extreme Drought
D4 Exceptional Drought

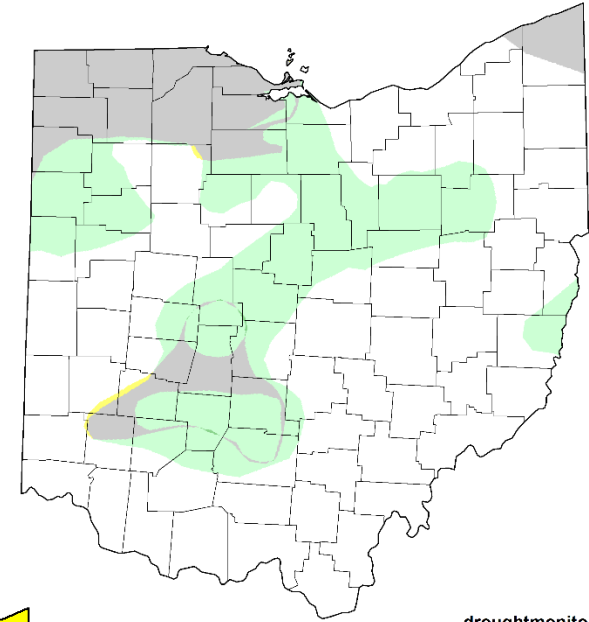
Author:
Richard Tinker
CPC/NOAA/NWS/NCEP

The Drought Monitor focuses on broad-scale conditions.
Local conditions may vary. For more information on the
Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>



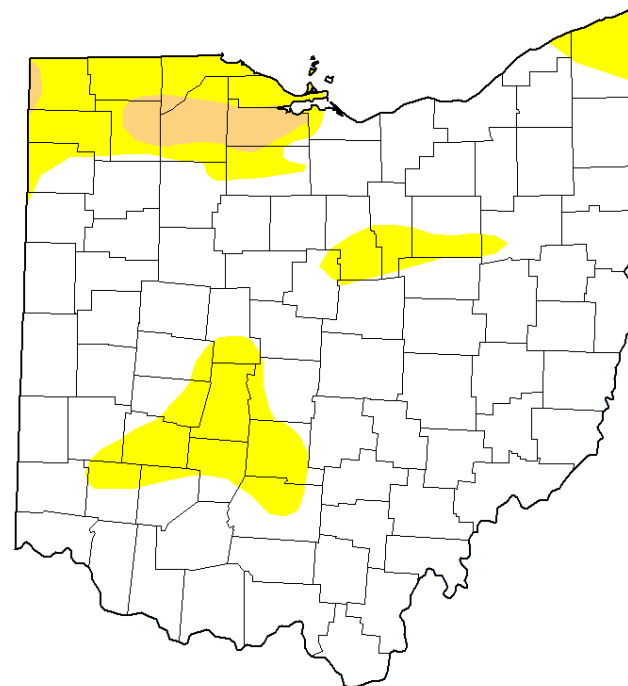
droughtmonitor.unl.edu

U.S. Drought Monitor Class Change - Ohio 1 Week



5 Class Degradation
4 Class Degradation
3 Class Degradation
2 Class Degradation
1 Class Degradation
No Change
1 Class Improvement
2 Class Improvement
3 Class Improvement
4 Class Improvement
5 Class Improvement

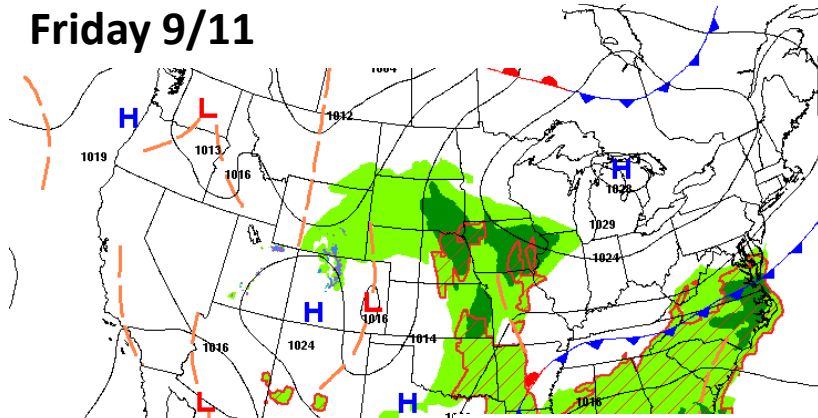
droughtmonitor.unl.edu



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Weather for the Week Ahead

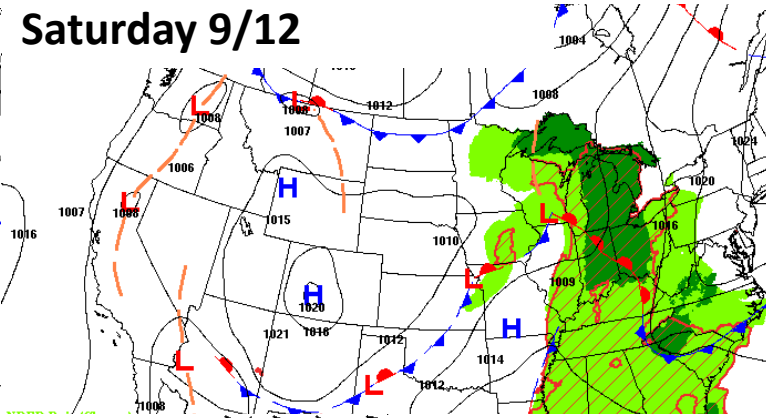
Friday 9/11



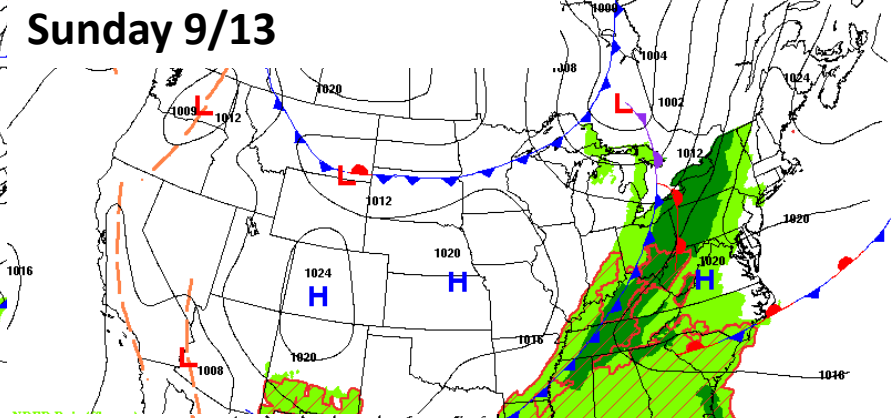
NDFD Rain (Chance)
NDFD Rain (Likely)
NDFD Snow (Chance)
NDFD Snow (Likely)
NDFD Mix (Chance)
NDFD Mix (Likely)
NDFD Ice (Chance)
NDFD Ice (Likely)
NDFD T-Storm (Chance) (Hatched)
NDFD T-Storm (Likely and/or Severe)

WPC Fronts/NDFD
Issued: 1242Z Friday
Valid 18Z Friday
Forecaster: ZIEGLER

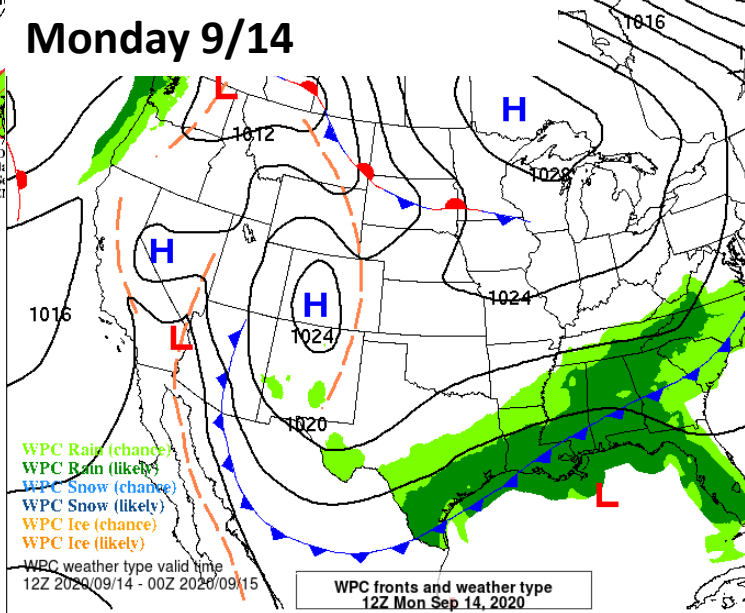
Saturday 9/12



Sunday 9/13



Monday 9/14

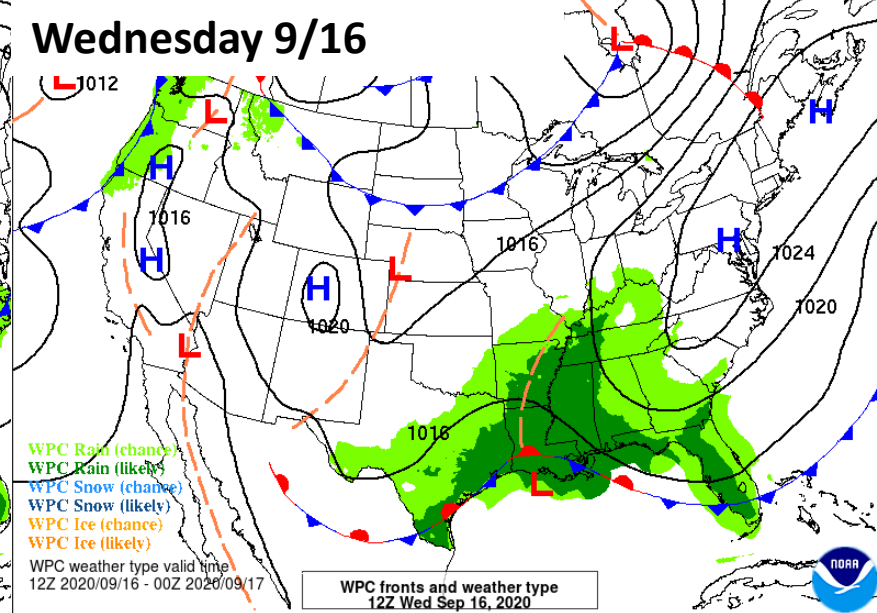


WPC Rain (chance)
WPC Rain (likely)
WPC Snow (chance)
WPC Snow (likely)
WPC Ice (chance)
WPC Ice (likely)

WPC weather type valid time
12Z 2020/09/14 - 00Z 2020/09/15

WPC fronts and weather type
12Z Mon Sep 14, 2020

Wednesday 9/16



WPC Rain (chance)
WPC Rain (likely)
WPC Snow (chance)
WPC Snow (likely)
WPC Ice (chance)
WPC Ice (likely)

WPC weather type valid time
12Z 2020/09/16 - 00Z 2020/09/17

WPC fronts and weather type
12Z Wed Sep 16, 2020

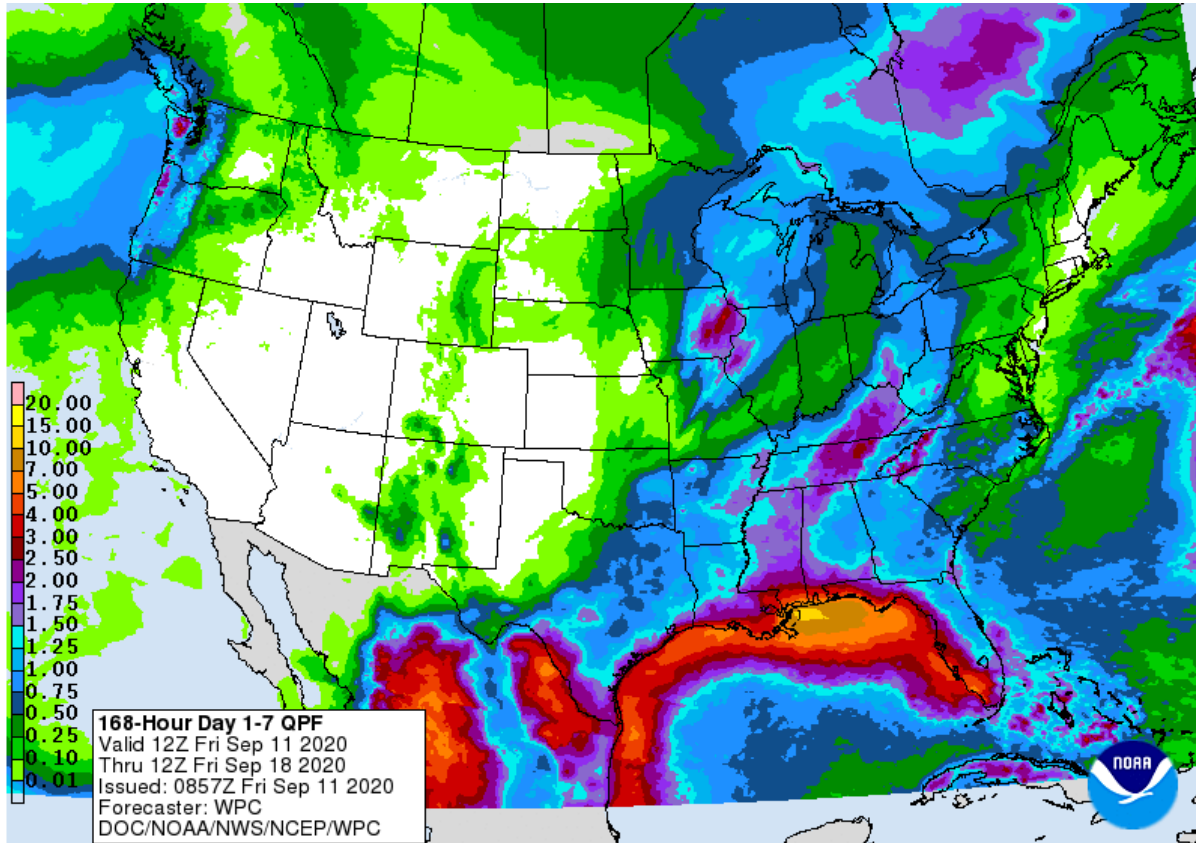
WPC weather type
Valid 11 2020
Valid 13, 2020
Valid 15



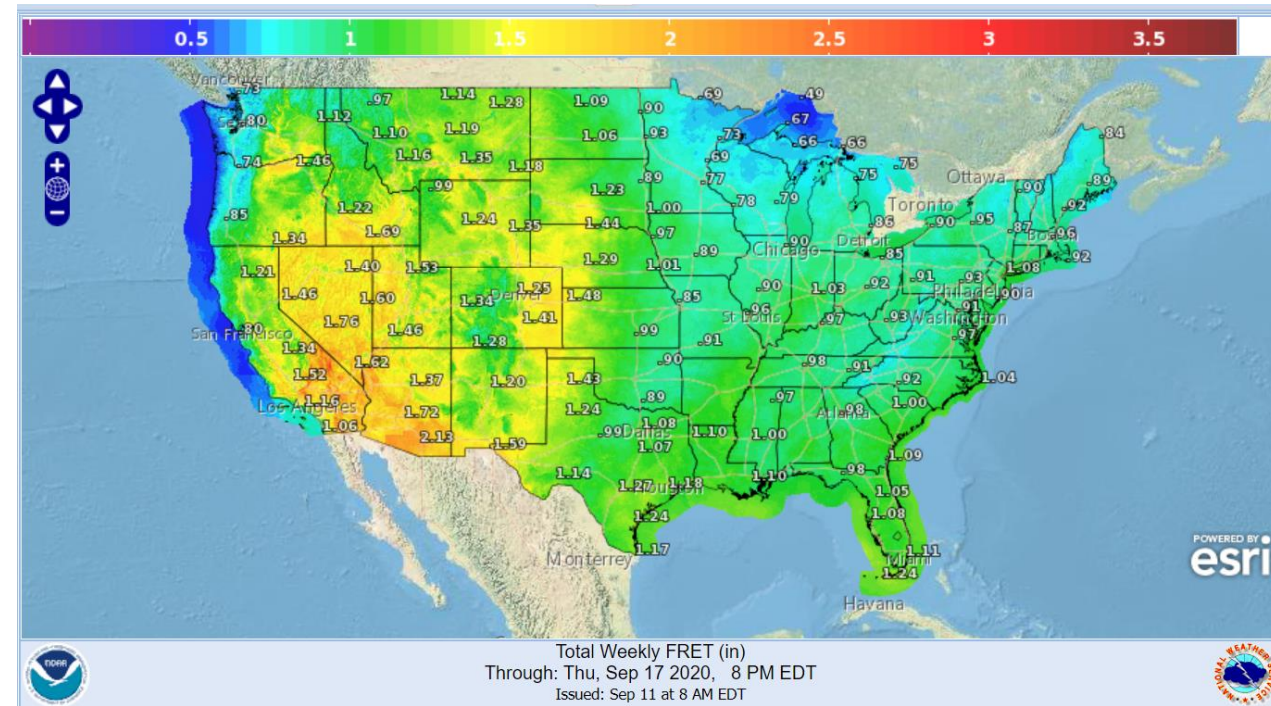
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<https://www.wpc.ncep.noaa.gov/#>

7-Day Precipitation/Evaporation Forecast



<https://www.wpc.ncep.noaa.gov/#>

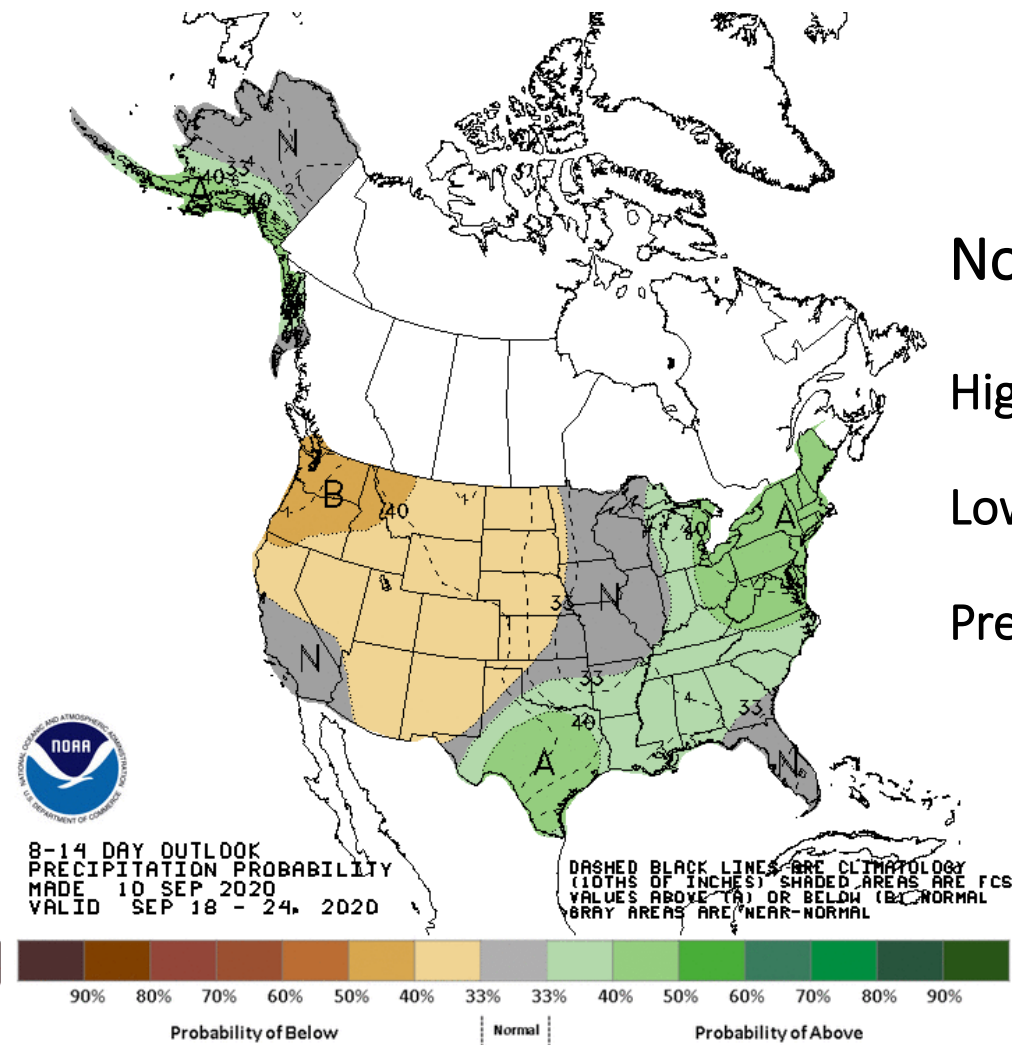
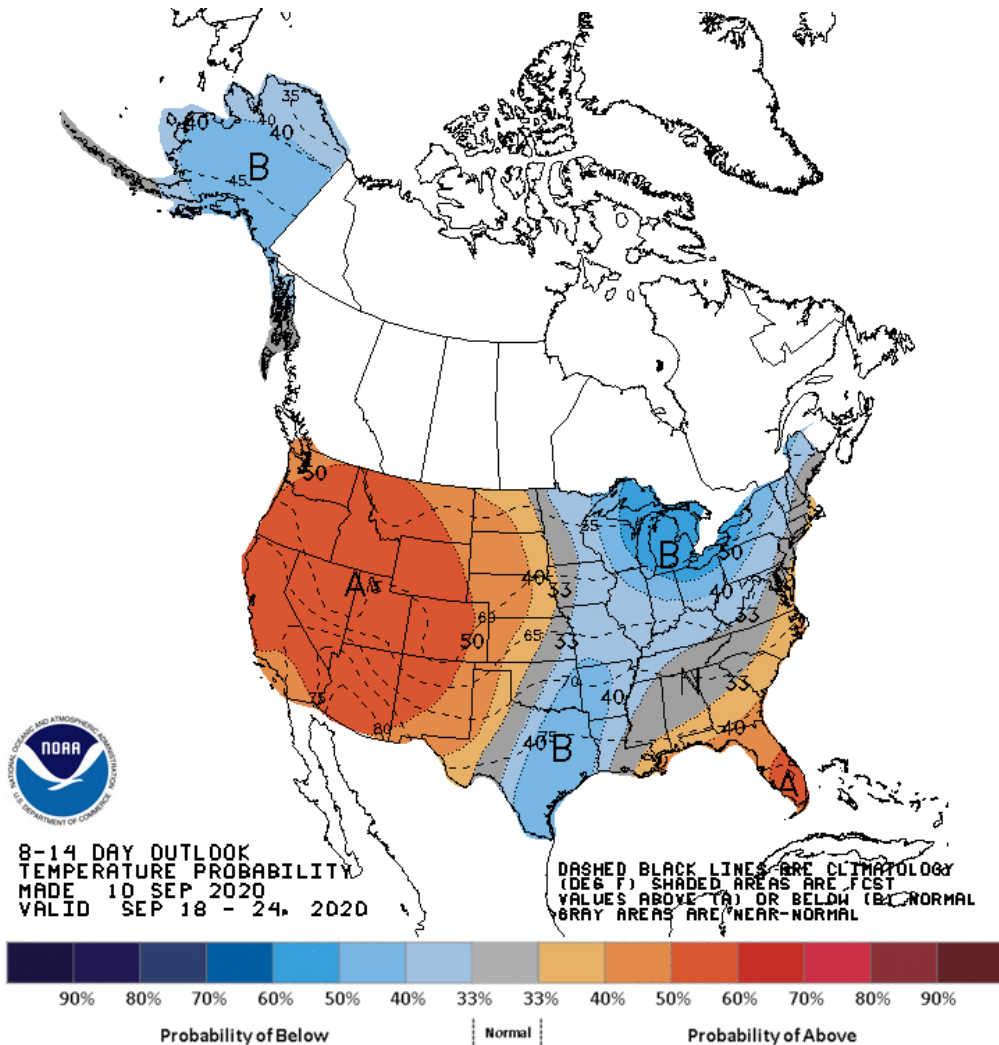


<https://www.weather.gov/abr/etforecasts>



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8-14 Day Outlook



Normals (1981-2010)

Highs: 75-80°F

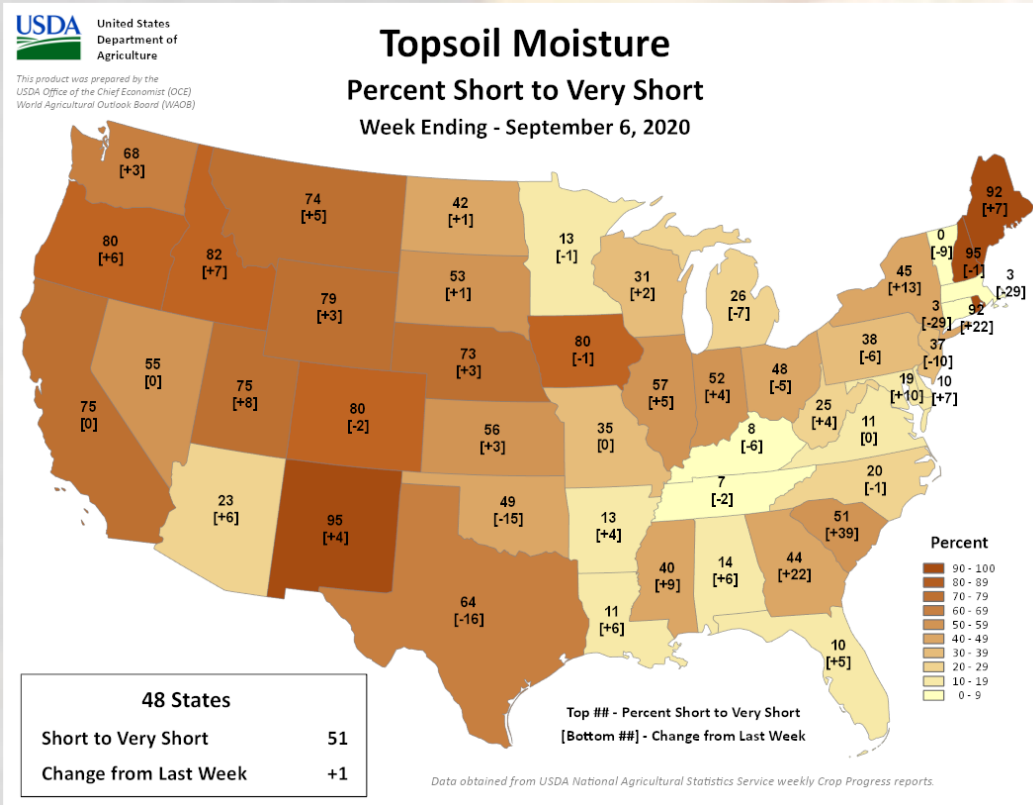
Lows: 55-60°F

Precip: 0.75"



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Ag Highlights



- 5.7 suitable days for fieldwork ending Sept. 6
- Crop stress from August dry weather still present
- Most crop conditions still fair to good and ahead of 5yr averages

NASS: Cheryl Turner –

https://www.nass.usda.gov/Statistics_by_State/Ohio/Publications/Crop_Progress_&_Condition/2020/cw3220oh.pdf

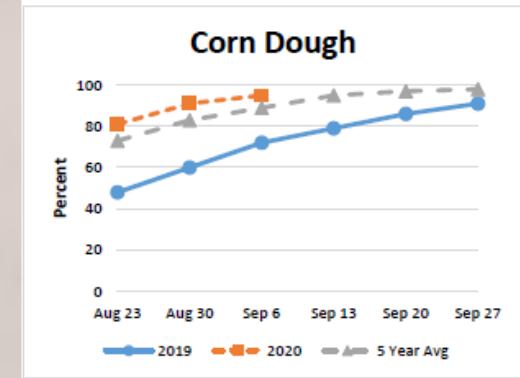
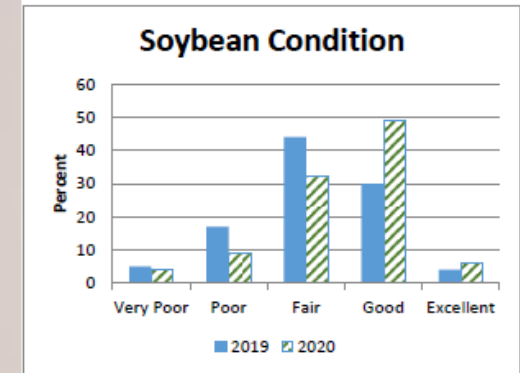
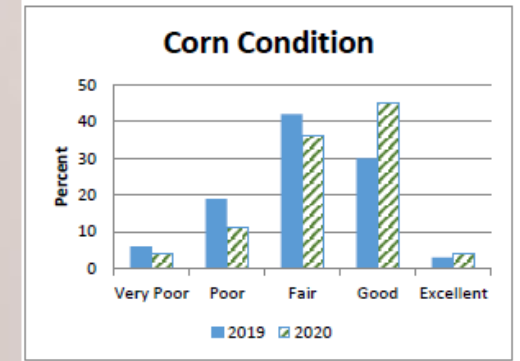


Photo Credit: Elizabeth Hawkins



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Summary of Conditions

Drought Monitor: D0-D1 coverage shrinks to about 19% of the state

Climate Recap: Warmer than average; Labor Day event

Week Ahead: Warm with scattered storms this weekend; Drier and less humid to start next week

Photo Credit: David Marrison



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Partners and Additional Information

- SCOO's Website: <https://climate.osu.edu>
- NOAA's National Climatic Data Center: www.ncdc.noaa.gov
 - Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov
- USDA Midwest Climate Hub: <https://www.climatehubs.oce.usda.gov/hubs/midwest>
- Climate Portal: www.climate.gov
- U.S. Drought Portal: www.drought.gov
- National Drought Mitigation Center: <https://drought.unl.edu/>
- Midwest Regional Climate Center: <https://mrcc.isws.illinois.edu>
- Community Collaborative Rain Snow Hail Network (CoCoRaHS): <https://cocoahs.org>
- Song: "Wishful Thinking" by Dan Lebowitz



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