

Photo Courtesy of Amanda Douridas

Ohio Climate Assessment

December 4, 2020



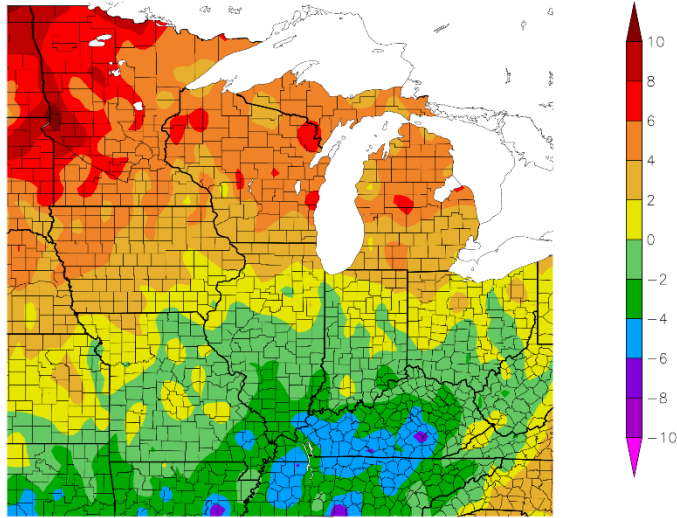
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Aaron B. Wilson

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

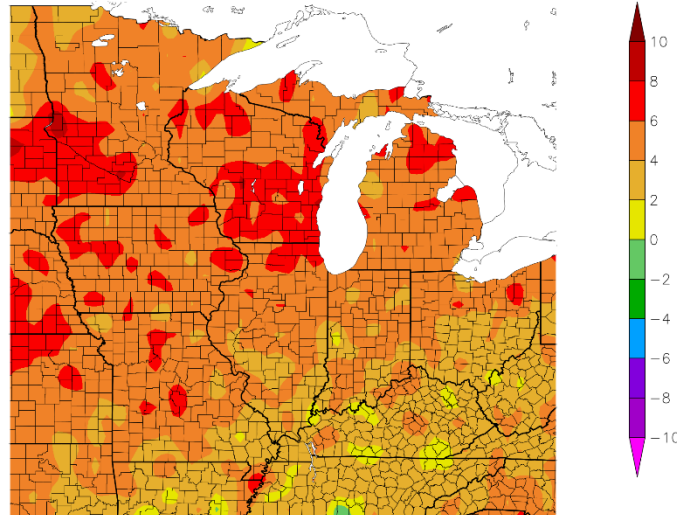
Temperature Differences Compared to Average (1981-2010)

Departure from Normal Temperature (F)
11/27/2020 – 12/3/2020



7-Day

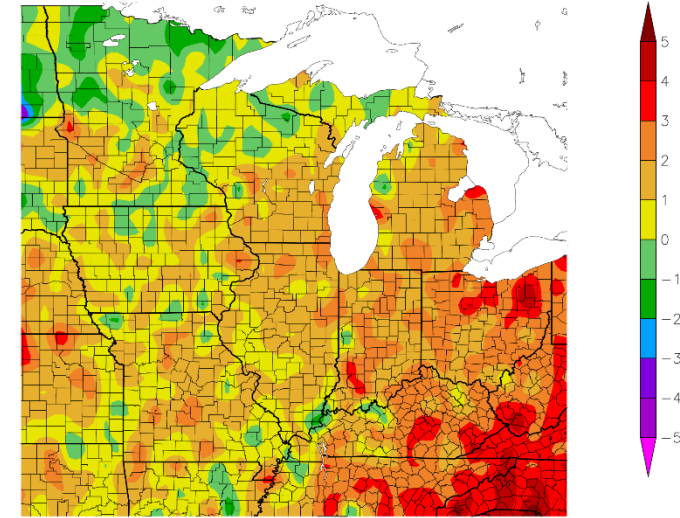
30-Day
Departure from Normal Temperature (F)
11/3/2020 – 12/2/2020



Generated 12/3/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
10/5/2020 – 12/3/2020



60-Day

Generated 12/4/2020 at HPRCC using provisional data.

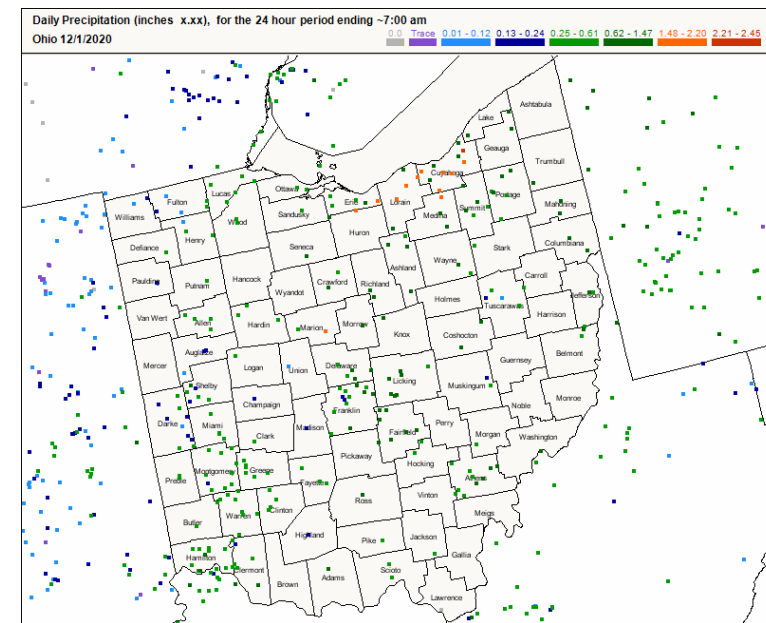
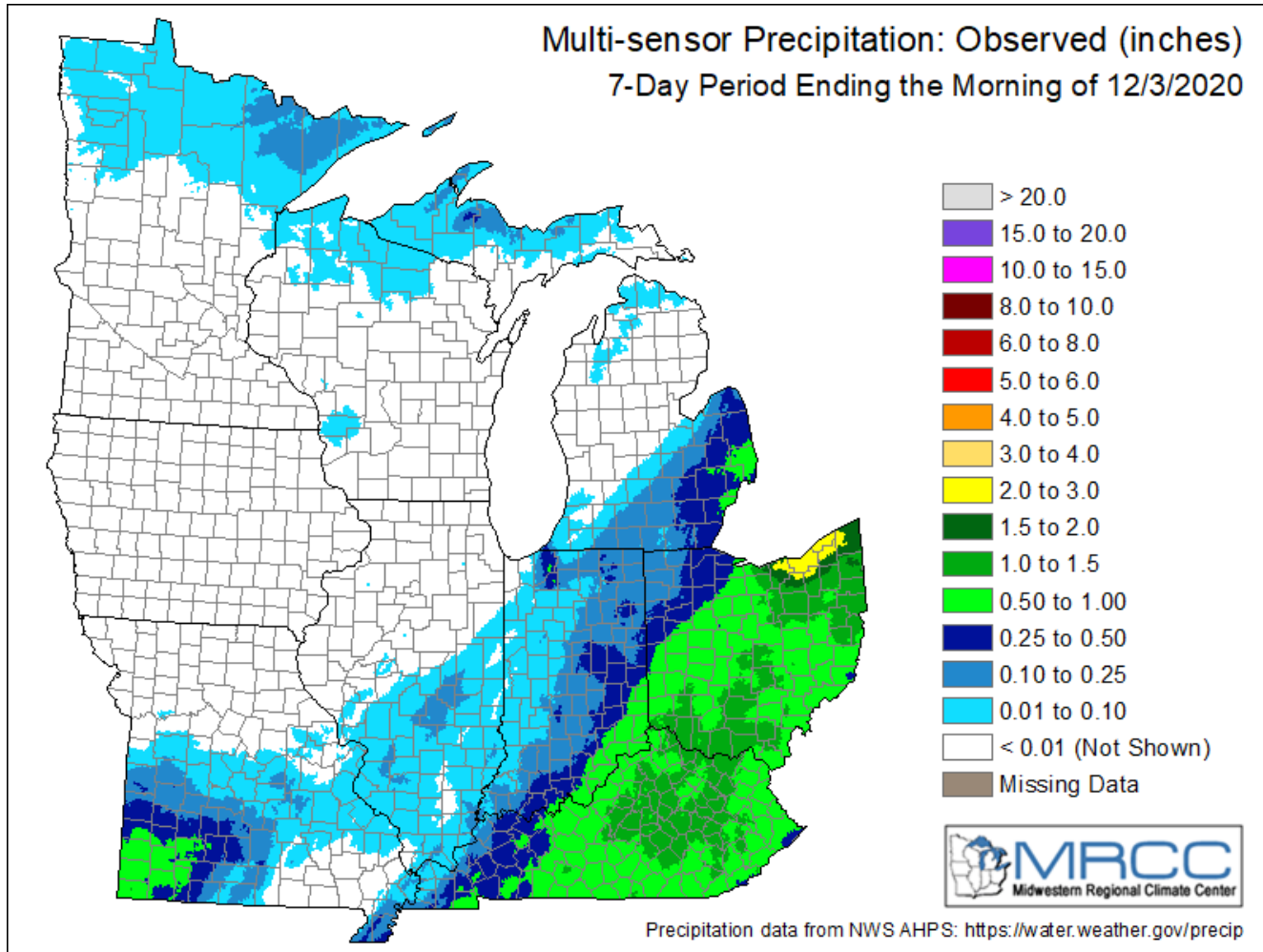
NOAA Regional Climate Centers



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



This Week's Precipitation



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

December 1-2, 2020 Winter Storm

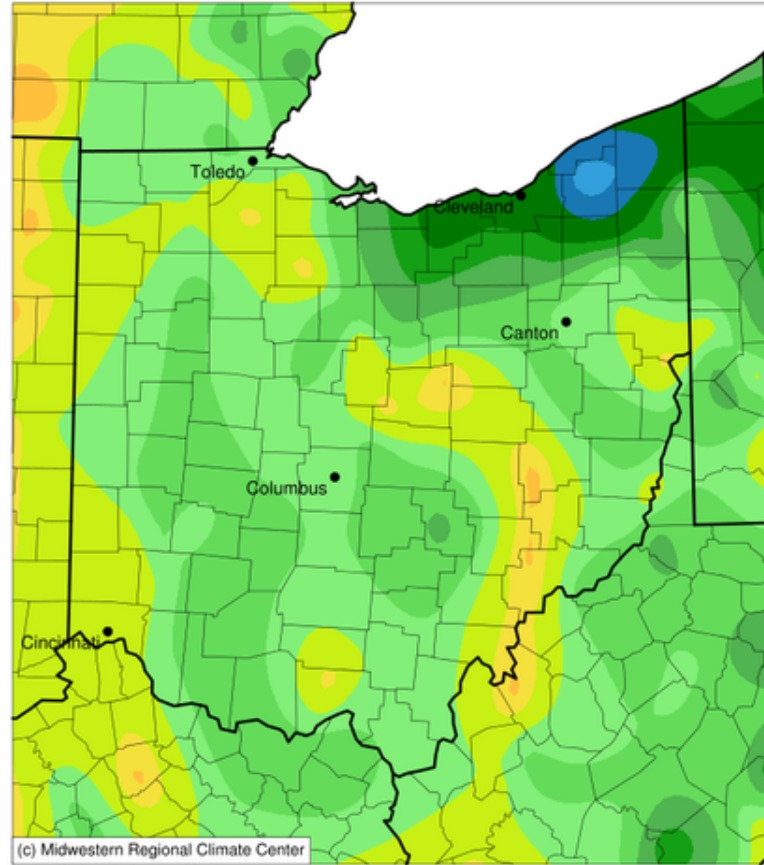
COUNTY	LOCATION	SNOW TOTALS (inches)
Ashtabula	3 ENE Trumbull	22.0
Cuyahoga	1 ENE Lyndhurst	22.0
Geauga	2 ESE South Thompson	25.5
Lake	1 NW Concord	25.4
Lorain	2 NW North Ridgeville	15.2
Medina	1 ENE Brunswick	13.6
Portage	1 NNE Matua	13.8
Summit	1 SE Sagamore Hills	15.2
Trumbull	2 NNW Southington	11.5



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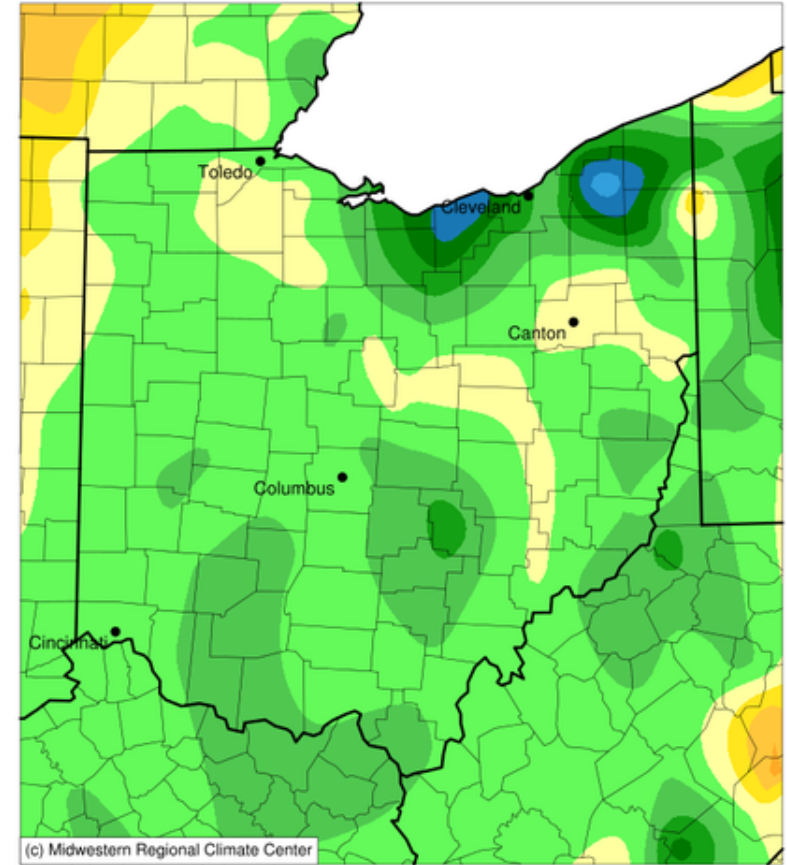
Seasonal Snowfall

Accumulated Snowfall (in)
October 01, 2020 to December 04, 2020



0.01 0.5 1 2 3 5 7.5 10 15 20 25 30 40
 Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
 Midwestern Regional Climate Center
 cli-MATE: MRCC Application Tools Environment
 Generated at: 12/4/2020 10:05:50 AM CST

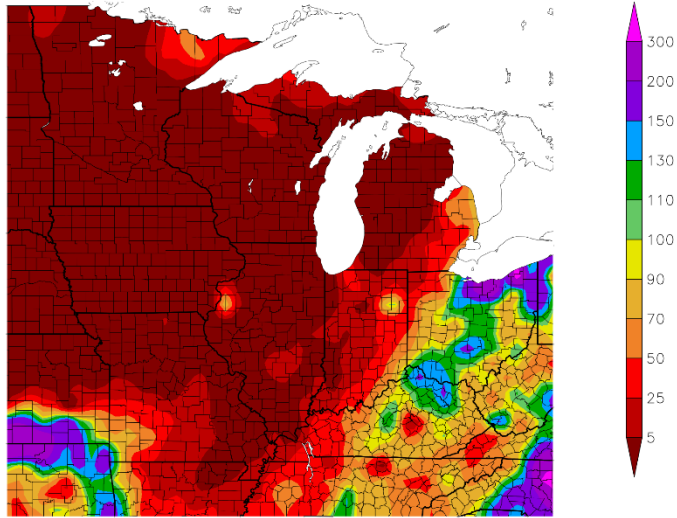
Accumulated Snowfall (in): Departure from 1981-2010 Normals
October 01, 2020 to December 04, 2020



-6 -4 -2 0 2 4 6 8 10
 Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCoRaHS, WMO, ICAO, NWSLI,
 Midwestern Regional Climate Center
 cli-MATE: MRCC Application Tools Environment
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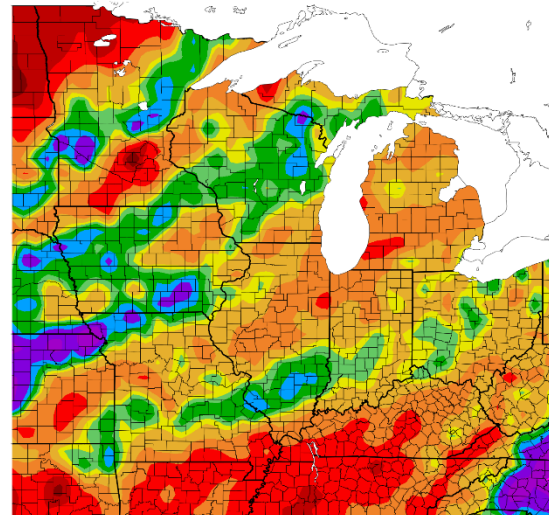
Precipitation Differences Compared to Average (1981-2010)

Percent of Normal Precipitation (%)
11/27/2020 – 12/3/2020



7-Day

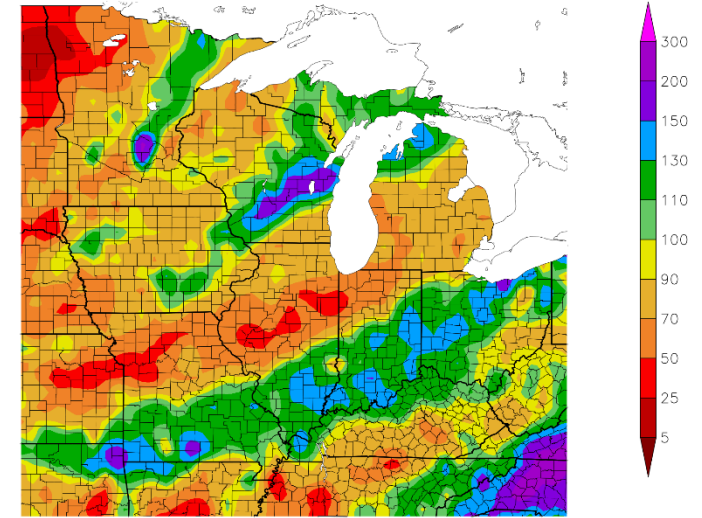
30-Day
Percent of Normal Precipitation (%)
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NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
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Generated 12/4/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

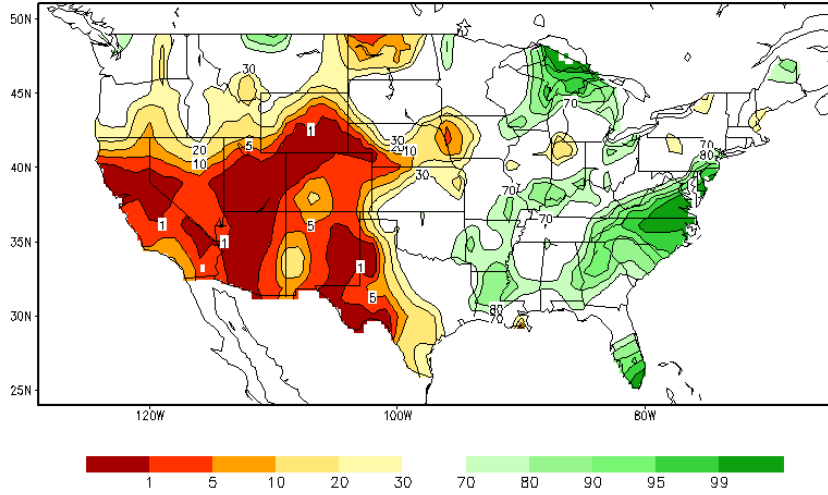
60-Day



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

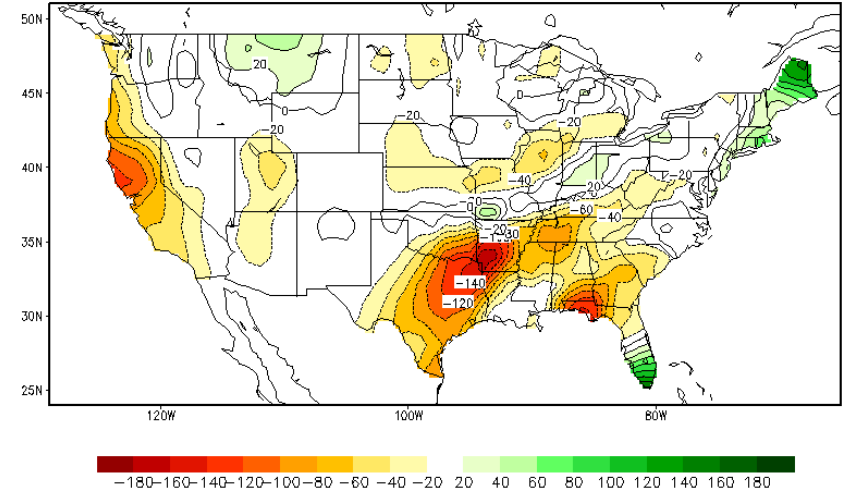


Calculated Soil Moisture Ranking Percentile
DEC 03, 2020

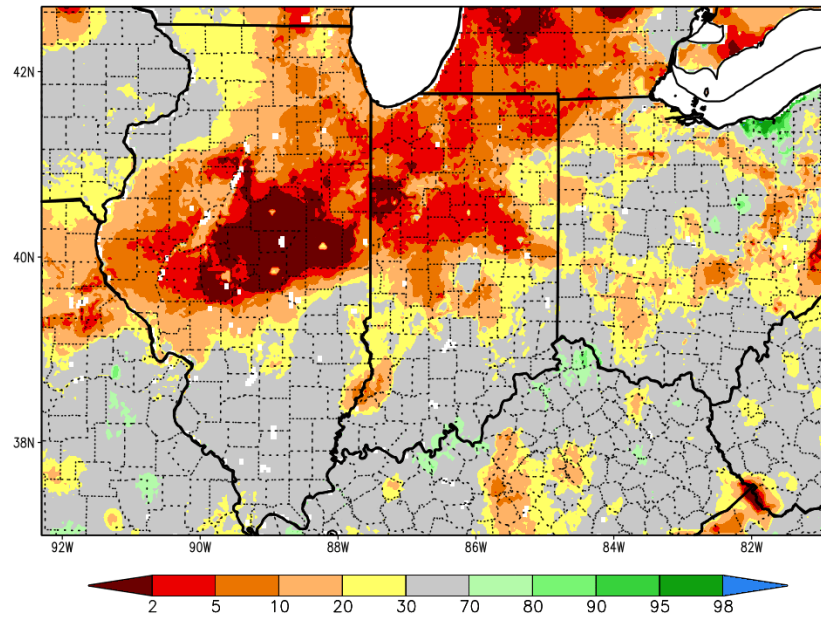


Soil Moisture

Calculated Soil Moisture Anomaly Change
DEC 03, 2020 from SEP.30



SPoRT-LIS 0-40 cm Soil Moisture percentile valid 04 Dec 2020

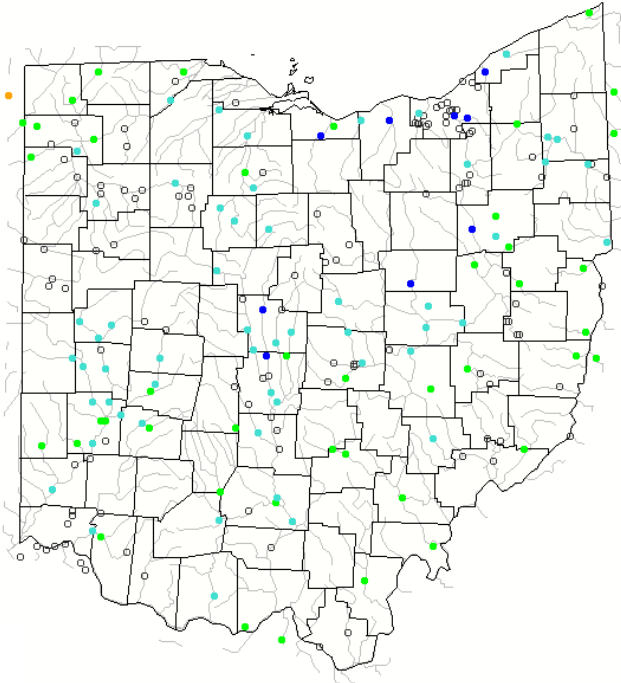


https://www.cpc.ncep.noaa.gov/products/Soilmst_Monitoring/US/Soilmst/Soilmst.shtml#

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

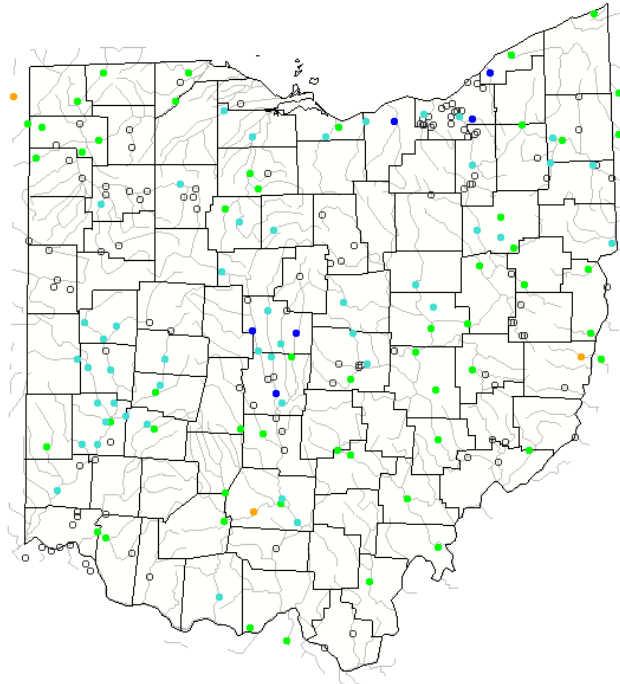


7-DAY

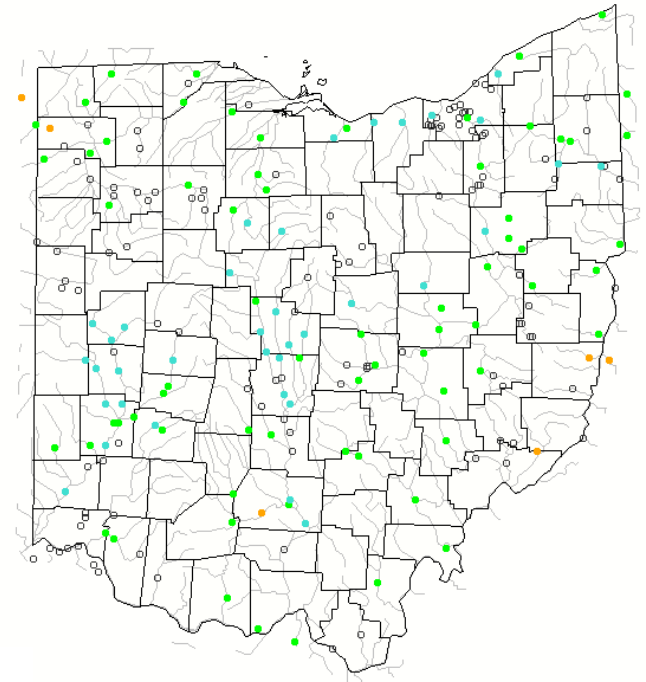


USGS Stream Flow

14-DAY



28-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

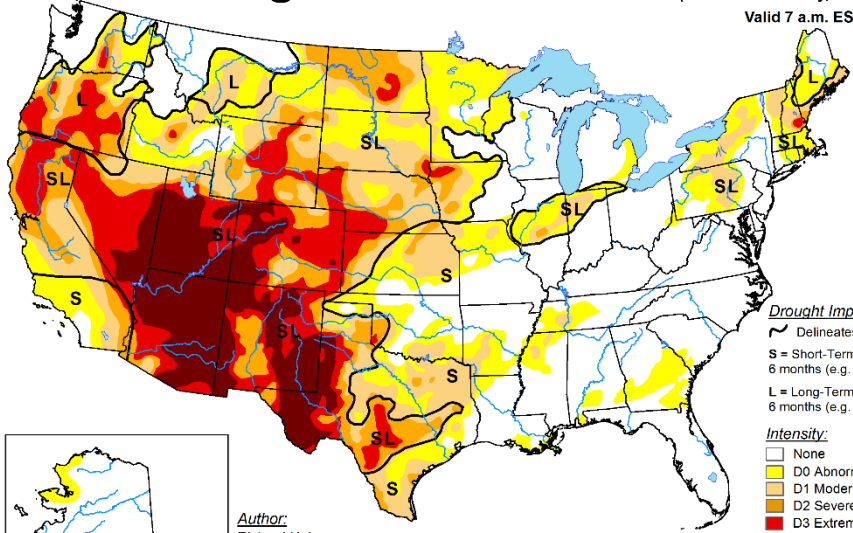


<https://waterwatch.usgs.gov/index.php>

Current U.S. Drought Monitor

U.S. Drought Monitor

December 1, 2020
 (Released Thursday, Dec. 3, 2020)
 Valid 7 a.m. EST



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)

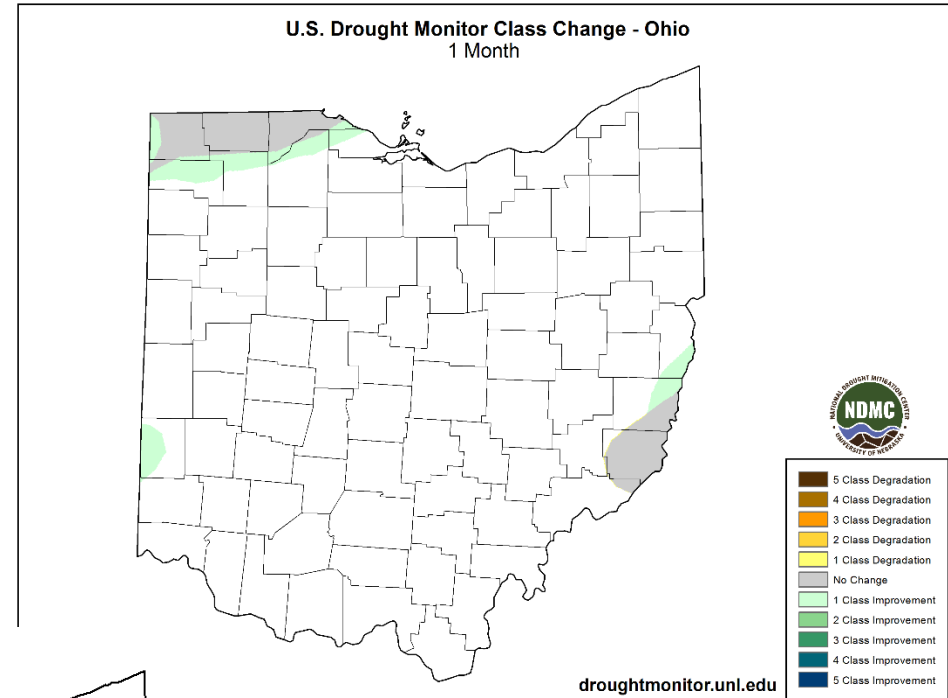
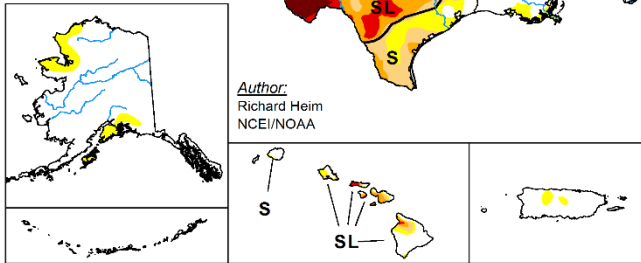
Intensity:
 □ None
 □ D0 Abnormally Dry
 □ D1 Moderate Drought
 □ D2 Severe Drought
 □ D3 Extreme Drought
 □ D4 Exceptional Drought

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>



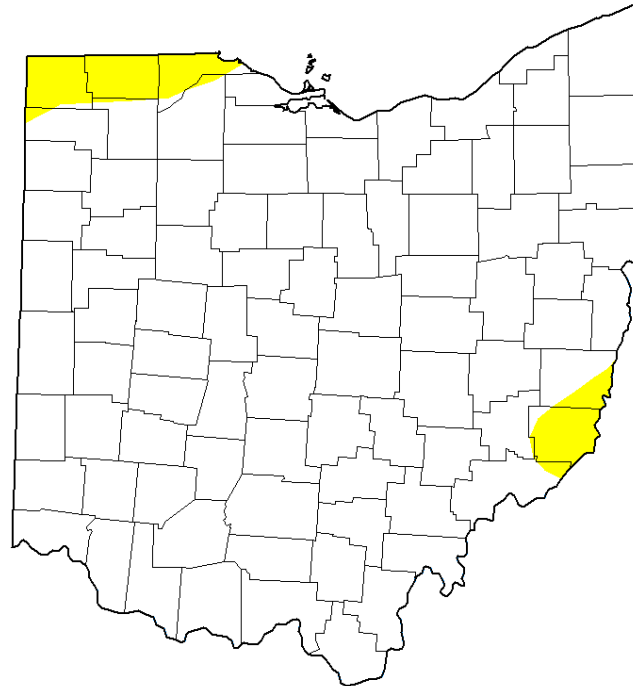
droughtmonitor.unl.edu

Author:
 Richard Heim
 NCEI/NOAA



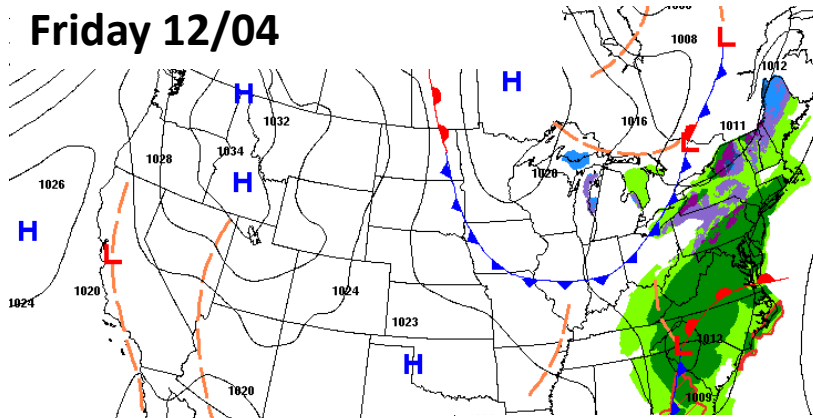
Dark Blue	5 Class Improvement
Blue	4 Class Improvement
Light Blue	3 Class Improvement
Green	2 Class Improvement
Light Green	1 Class Improvement
Grey	No Change
Yellow	1 Class Degradation
Orange	2 Class Degradation
Dark Orange	3 Class Degradation
Red-Orange	4 Class Degradation
Dark Red	5 Class Degradation

droughtmonitor.unl.edu



Weather for the Week Ahead

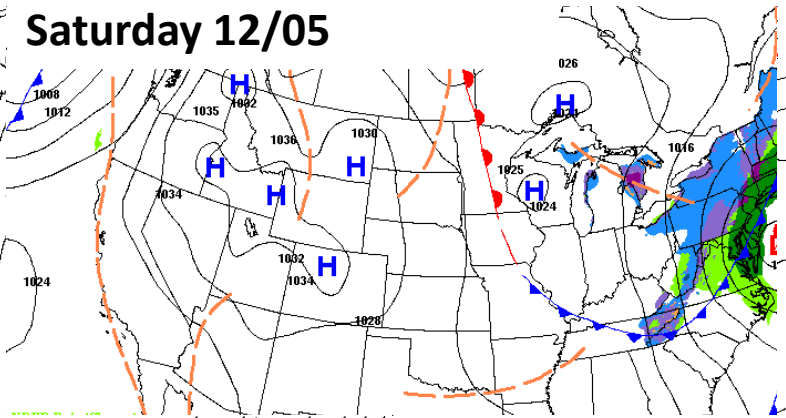
Friday 12/04



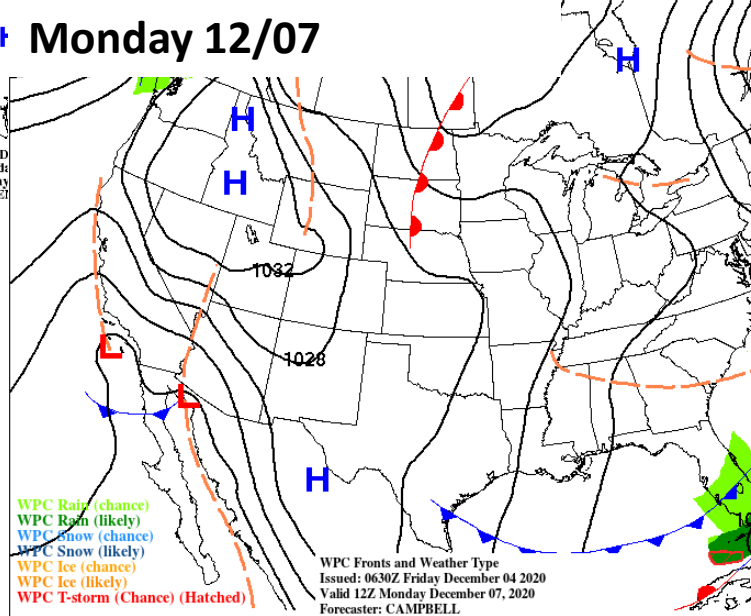
- NDFD Rain (Chance)
- NDFD Rain (Likely)
- NDFD Snow (Chance)
- NDFD Snow (Likely)
- NDFD Mix (Chance)
- NDFD Mix (Likely)
- NDFD Ice (Chance)
- NDFD Ice (Likely)
- NDFD T-Storm (Chance) (Hatched)
- NDFD T-Storm (Likely and/or Severe)

WPC Fronts/NDFD
Issued: 1546Z Friday
Valid 00Z Saturday
Forecaster: ZIEGLER

Saturday 12/05



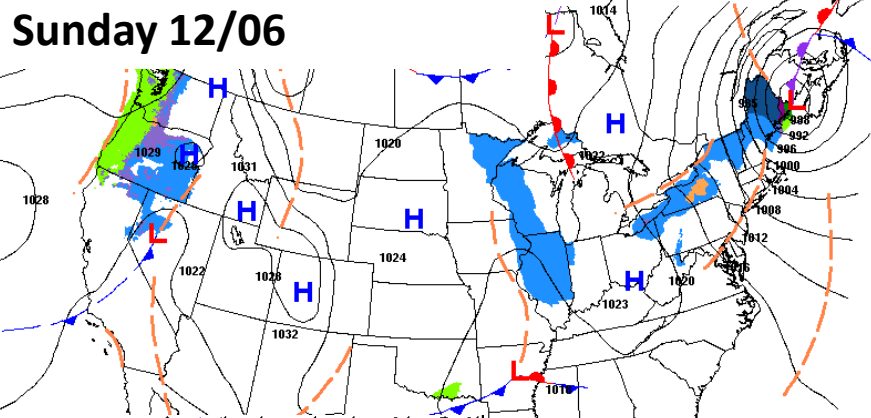
Monday 12/07



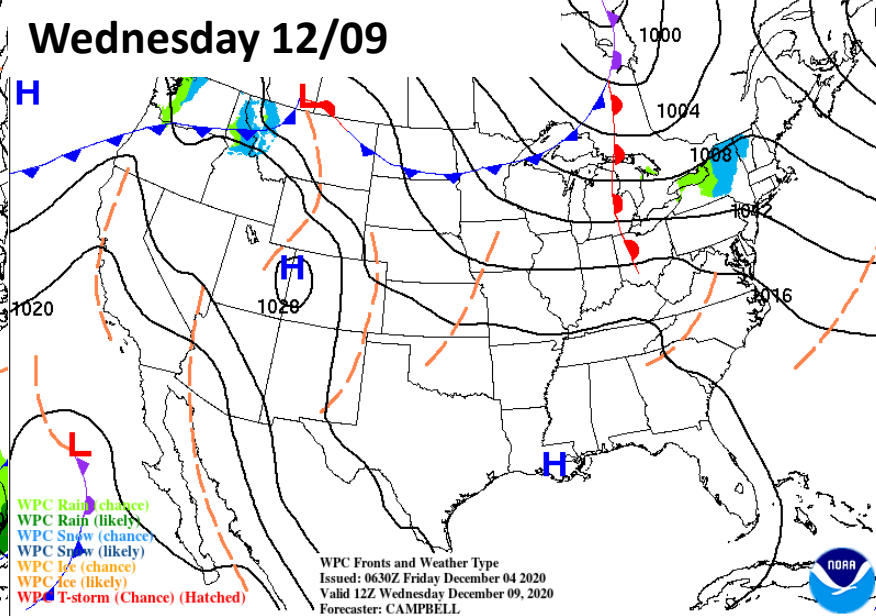
- WPC Rain (chance)
- WPC Rain (likely)
- WPC Snow (chance)
- WPC Snow (likely)
- WPC Ice (chance)
- WPC Ice (likely)
- WPC T-storm (Chance) (Hatched)

WPC Fronts and Weather Type
Issued: 0630Z Friday December 04 2020
Valid 12Z Monday December 07, 2020
Forecaster: CAMPBELL

Sunday 12/06



Wednesday 12/09



- WPC Rain (chance)
- WPC Rain (likely)
- WPC Snow (chance)
- WPC Snow (likely)
- WPC Ice (chance)
- WPC Ice (likely)
- WPC T-storm (Chance) (Hatched)

WPC Fronts and Weather Type
Issued: 0630Z Friday December 04 2020
Valid 12Z Wednesday December 09, 2020
Forecaster: CAMPBELL

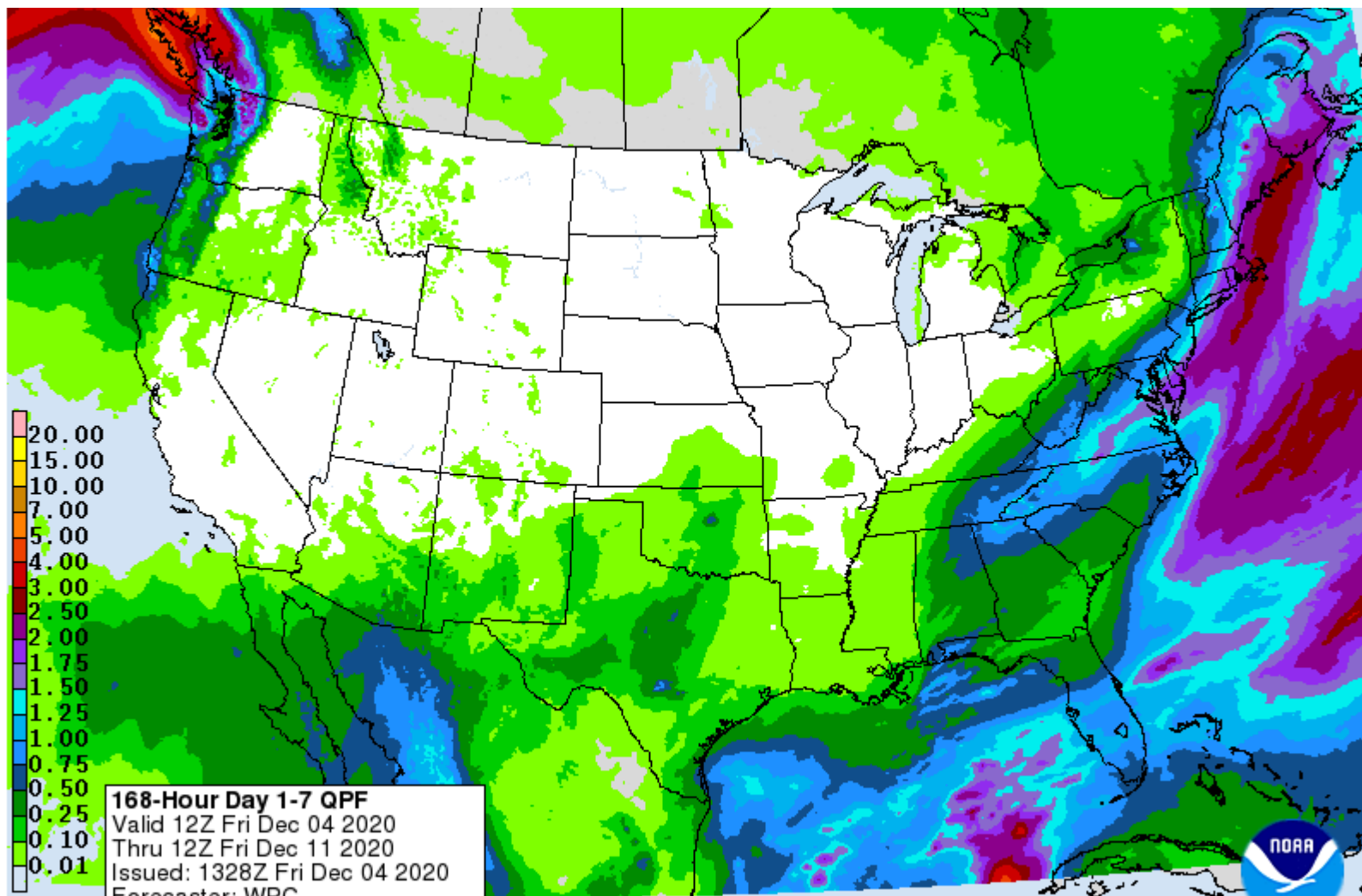
WPC Fronts and Weather Type
Issued: 0630Z Friday December 04 2020
Valid 12Z Wednesday December 09, 2020
Forecaster: CAMPBELL



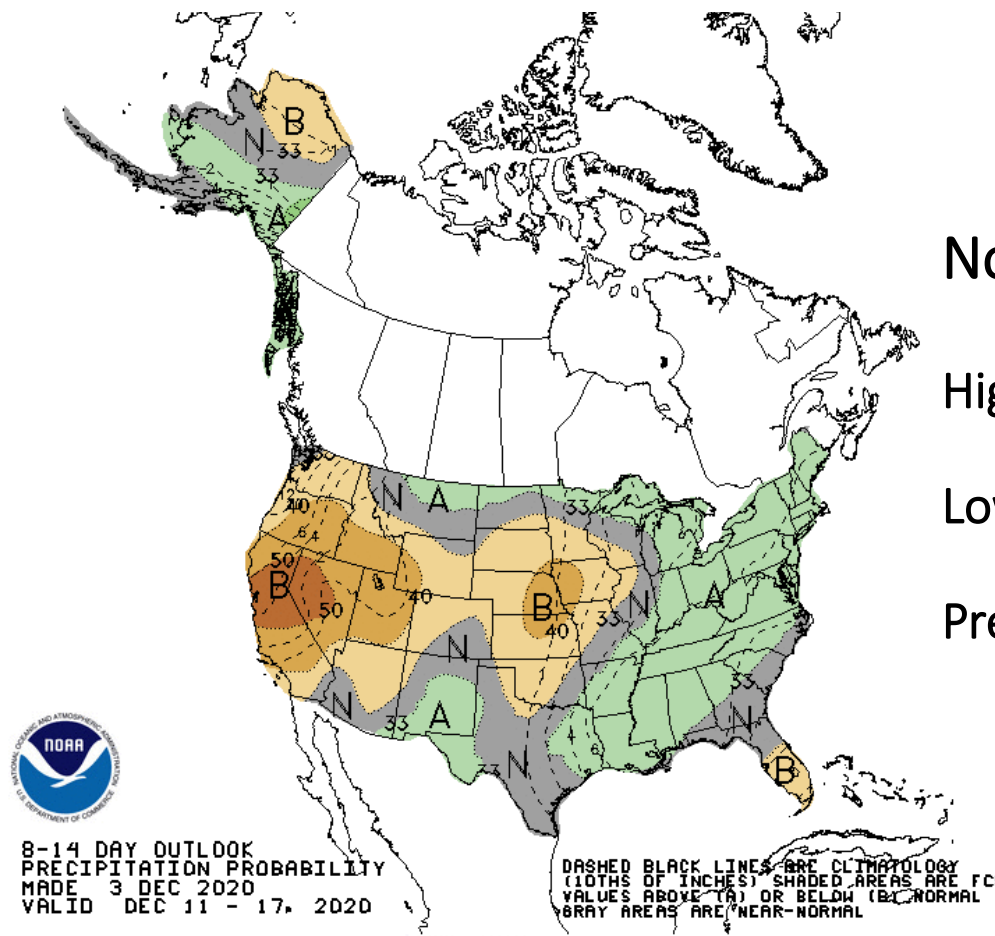
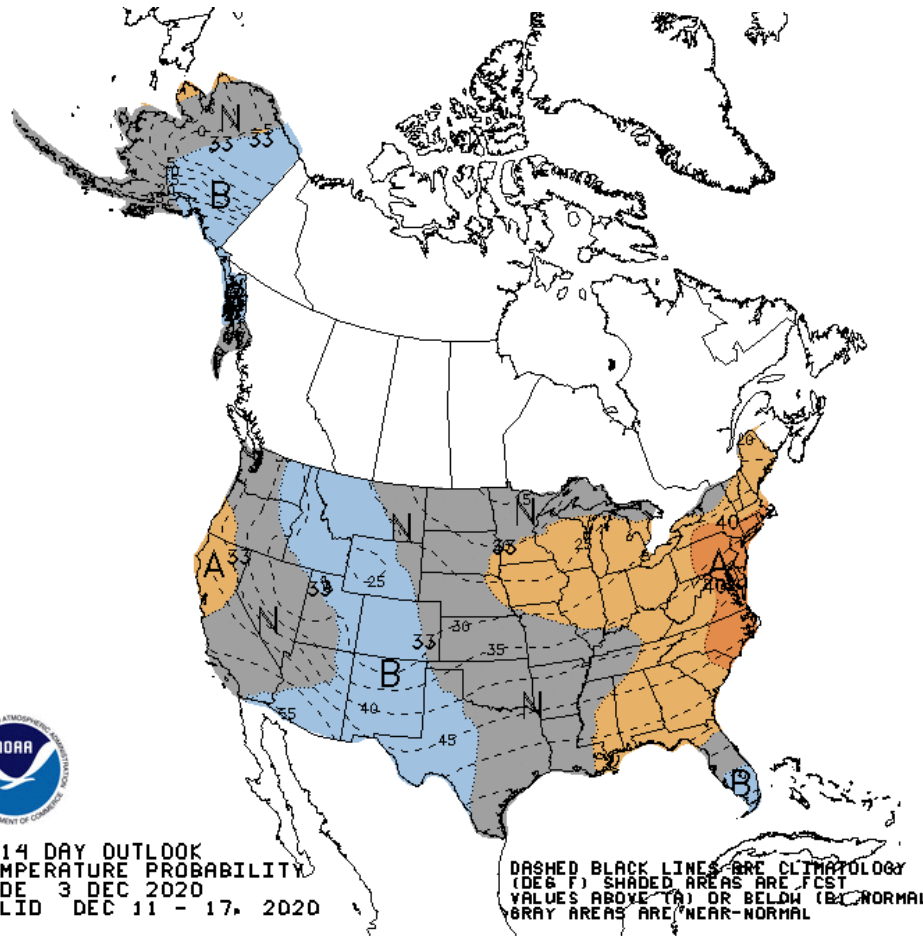
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<https://www.wpc.ncep.noaa.gov/#>

7-Day Precipitation



8-14 Day Outlook

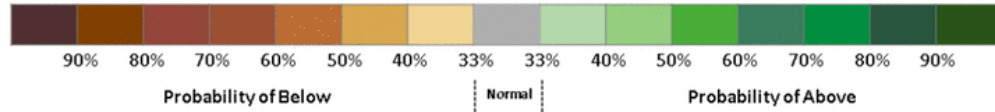
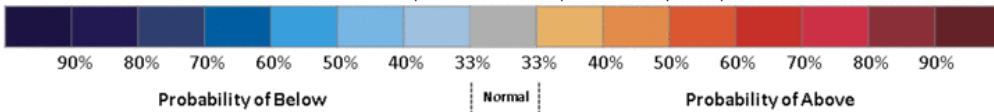


Normals (1981-2010)

Highs: 40-45°F

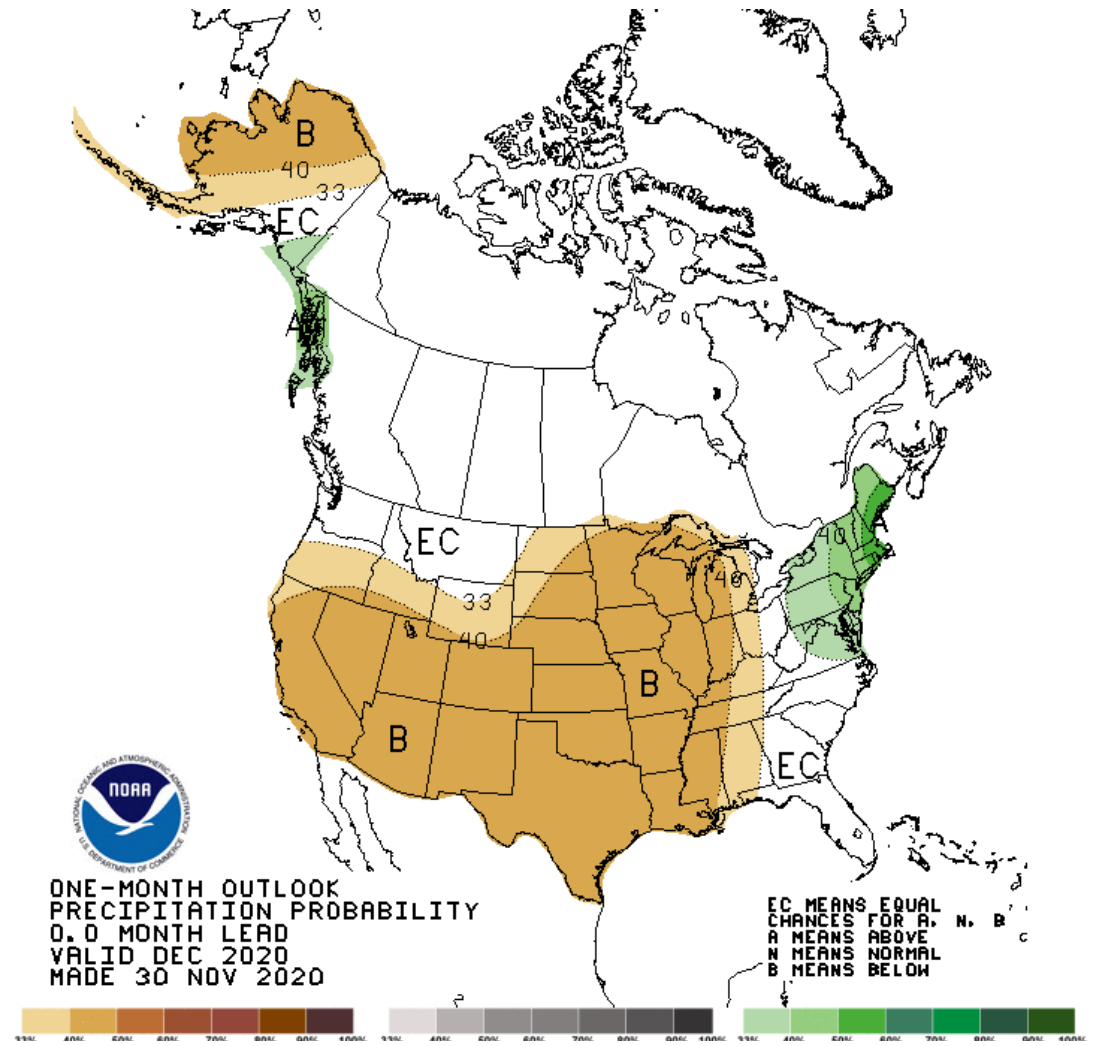
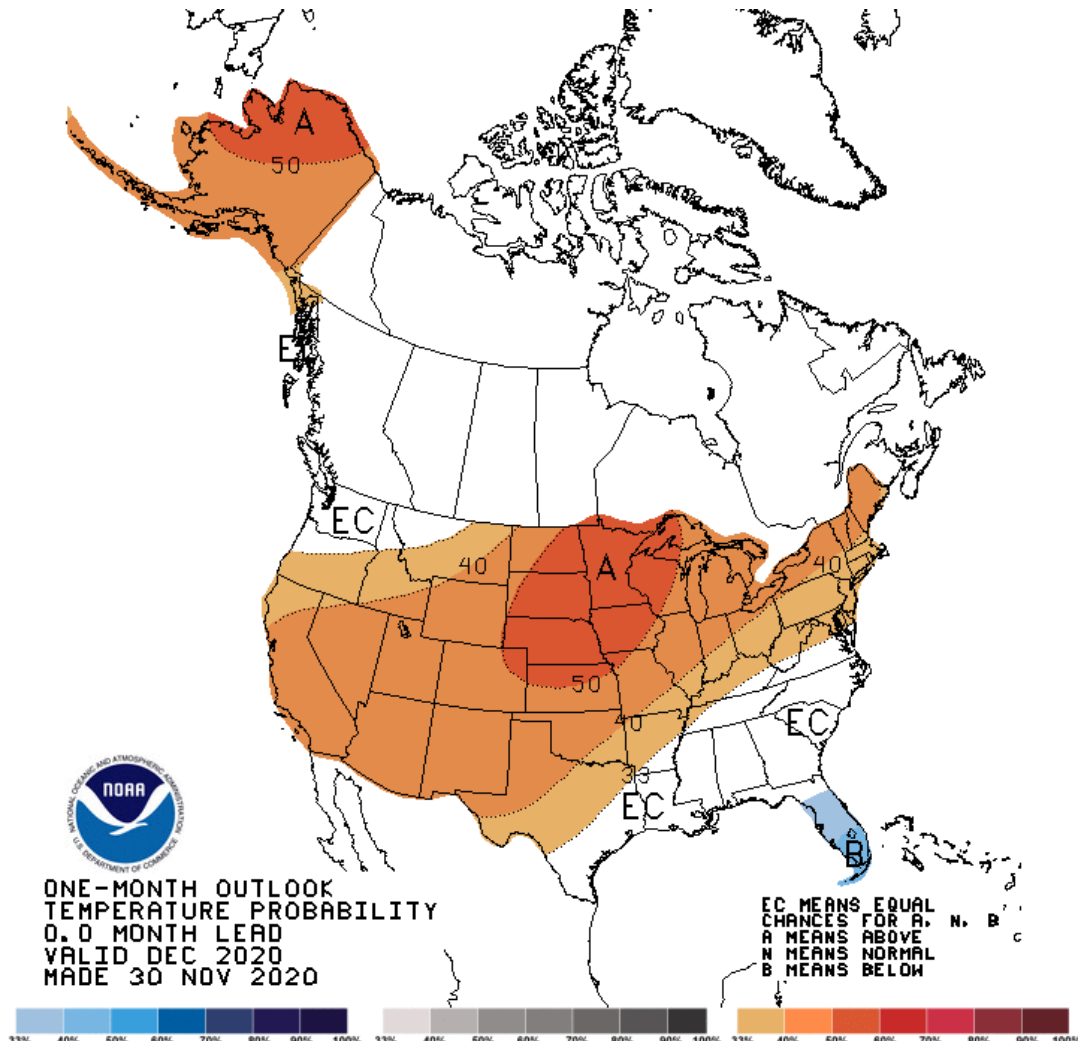
Lows: 25-30°F

Precip: 0.75-0.85"

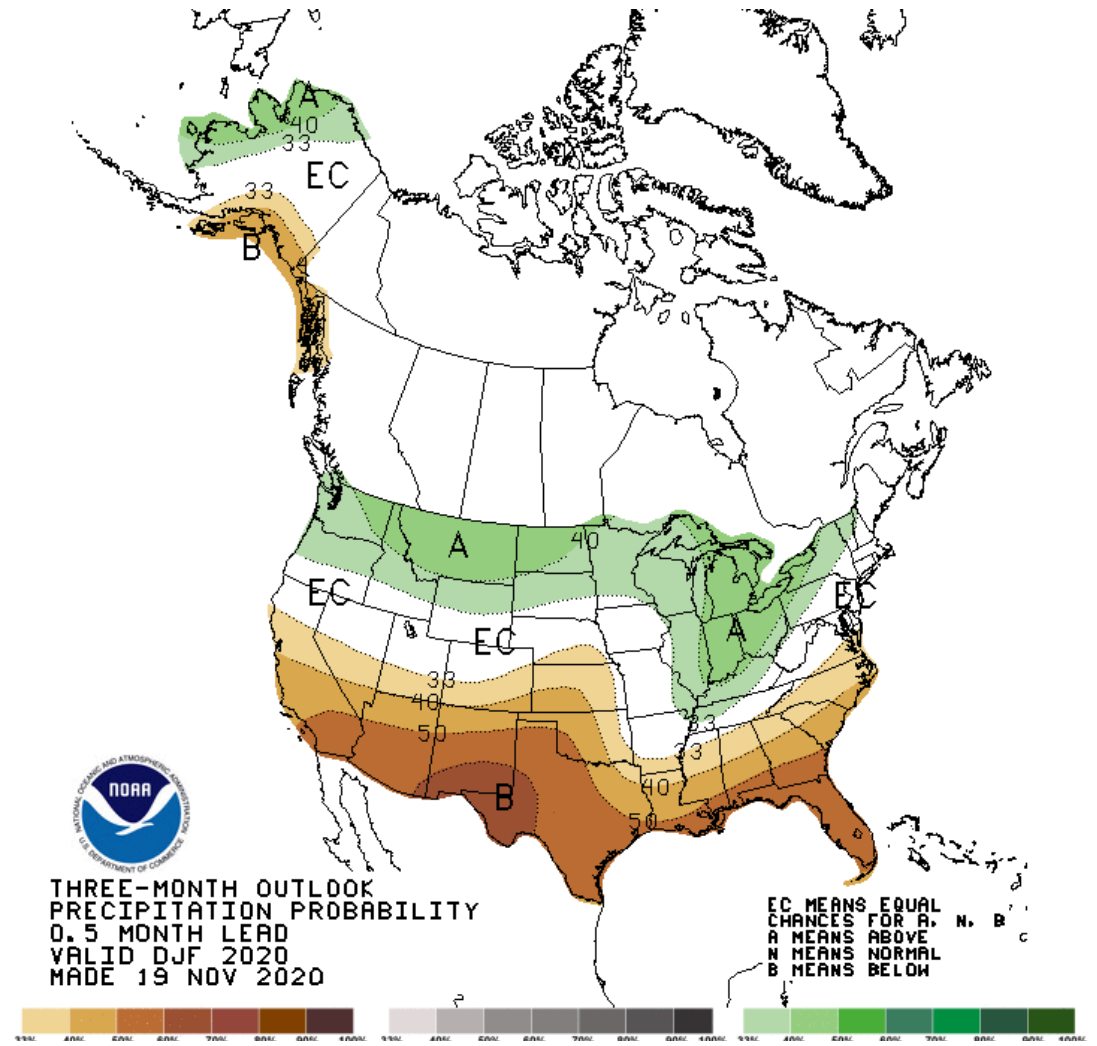
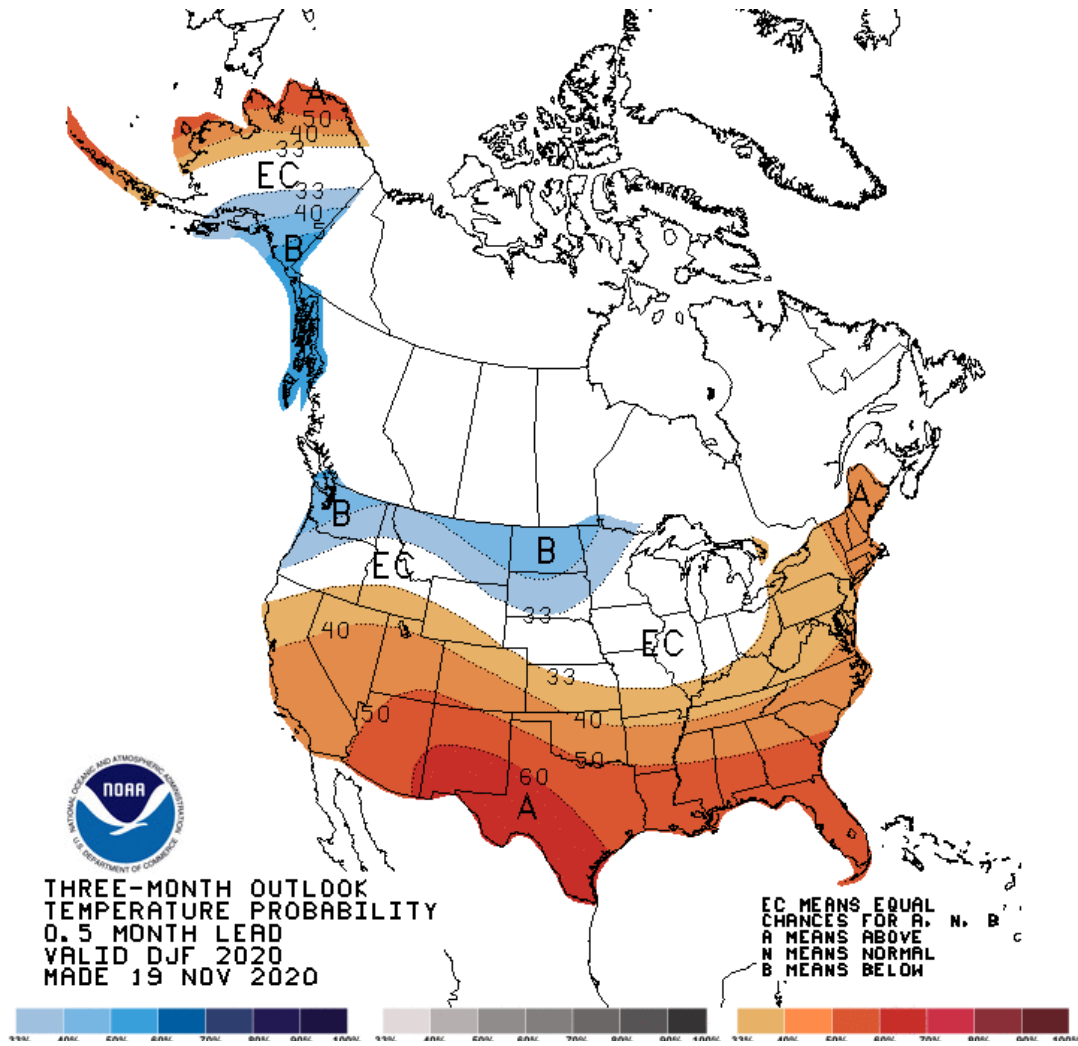


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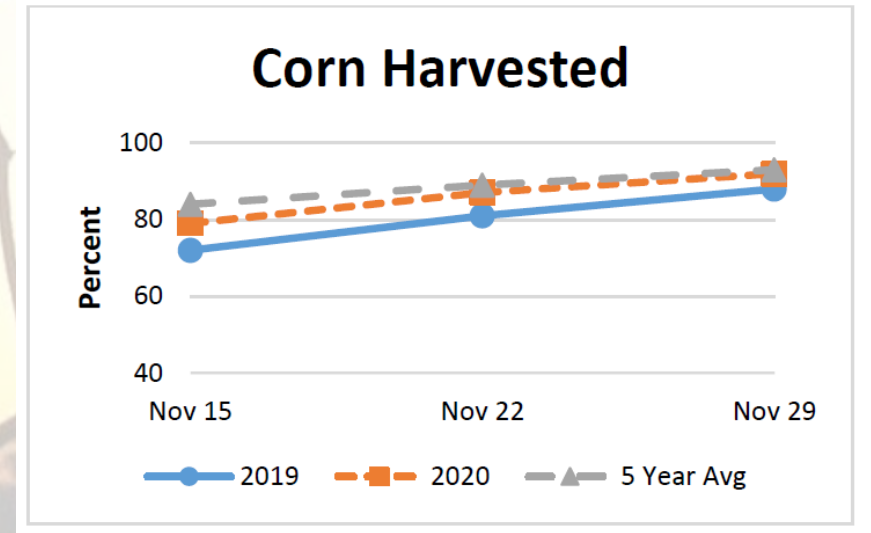
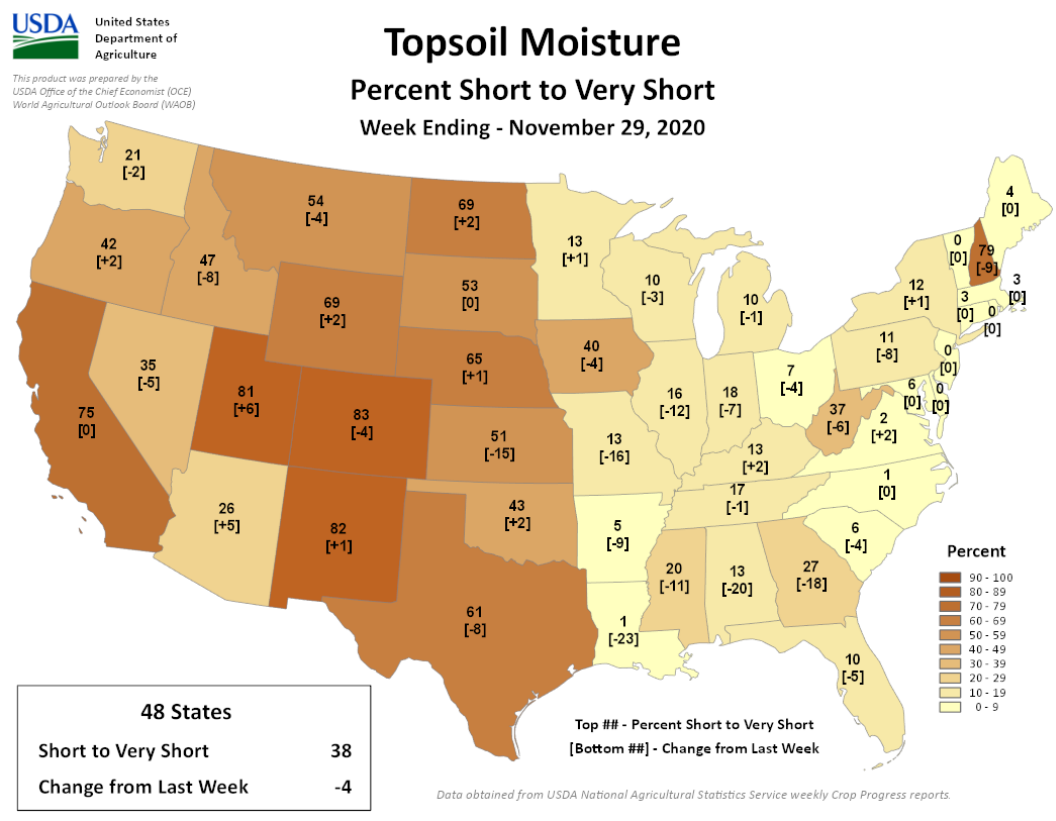
December Outlook



Winter (DJF) Outlook



Final 2020 Ag Highlights



- 3.3 suitable days for fieldwork ending Nov. 29
- Soybean harvest complete; corn was at 92% (1% behind 5-year average)
- 69% of wheat rated good to excellent (down from 72% last week)

NASS: Cheryl Turner –

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

Photo Credit: Ben Brown

Summary of Conditions

Drought Monitor: D0 conditions ~4% (NW/SE)

Climate Recap: Warm to cool week; first major winter storm dumped a lot of lake effect snow in the NE

Conditions Ahead: Dry and a bit below average until midweek with late week warming trend. Highly variable conditions likely this winter.



Photo Courtesy of Les Ober



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Partners and Additional Information

- SCOO's Website: <https://climate.osu.edu>
- North Central Climate Collaborative: <https://northcentralclimate.org/>
- 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://cocorahs.org>

- Song: "Blue Creek Trail" by Dan Lebowitz

