Extension
UNIVERSITY OF WISCONSIN-MADISON

Wisconsin State Climatology Office
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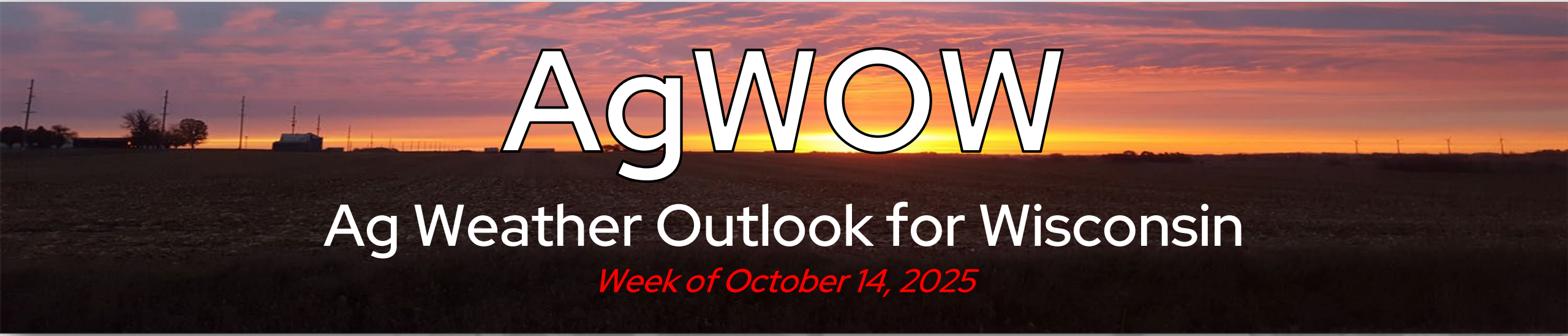
NRCS
Natural Resources Conservation Service



AgWOW

Ag Weather Outlook for Wisconsin

Week of October 14, 2025

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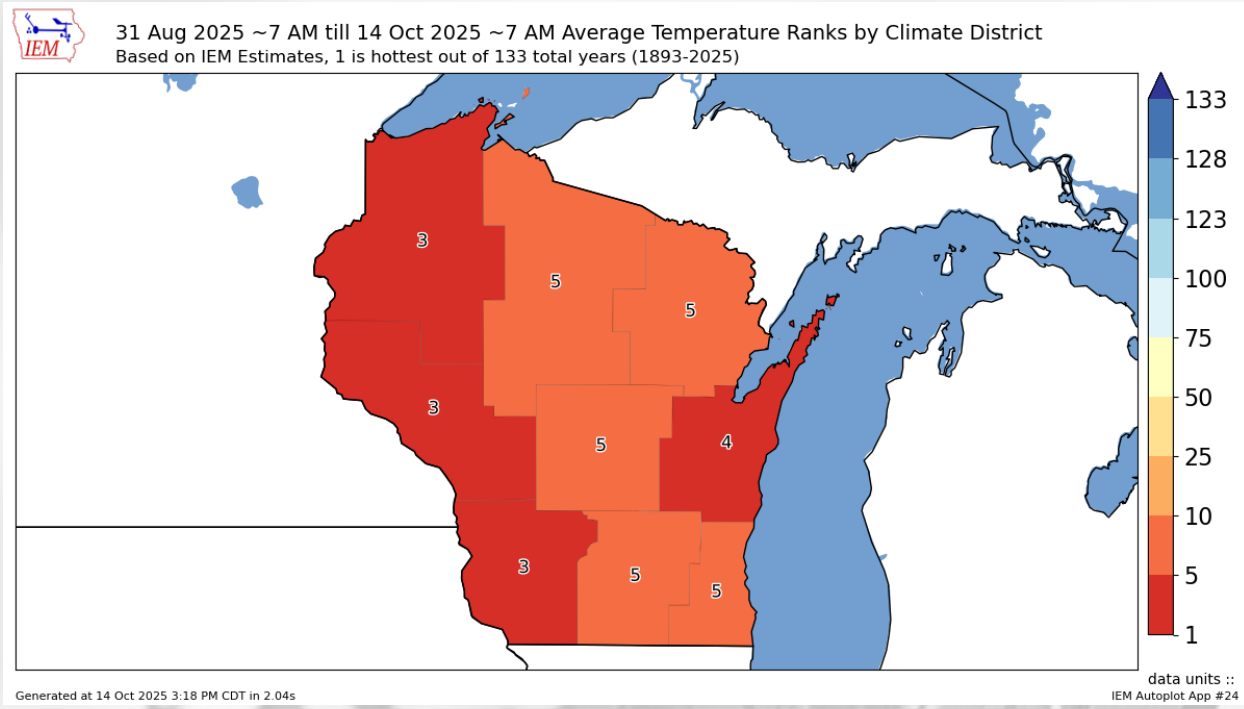
Key Points

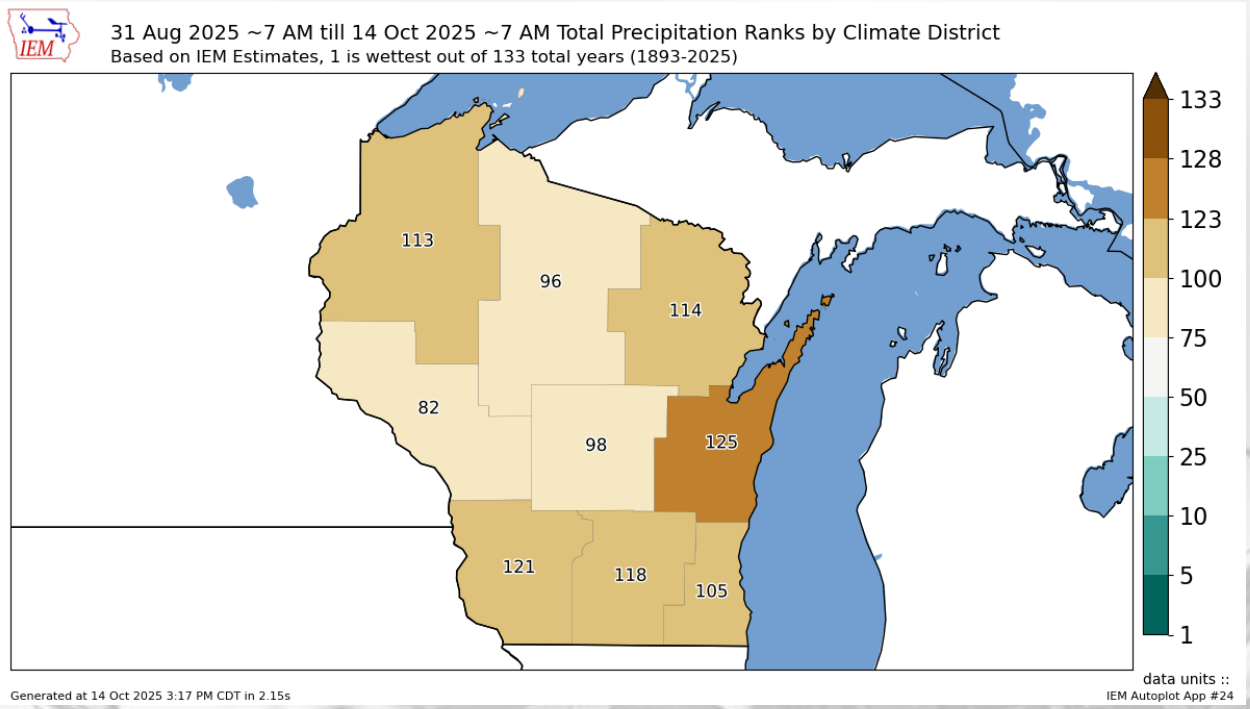
Navigate to select slides by clicking on the links below.

1) After yet another dry week, precip totals across WI over the last 30 days have been well below normal.
2) After a warm fall thus far, temps were only slightly above normal last week for most.
3) D1 drought has been added to east-central and southwest WI.
4) Outlooks for late October indicate a strong likelihood for above normal temps.

- *For this week's agronomic recommendations from UW Extension, click here.*
- *NOTE: There will be no USDA NASS update this week due to the federal government shutdown.*

Wx Highlight → Rankings





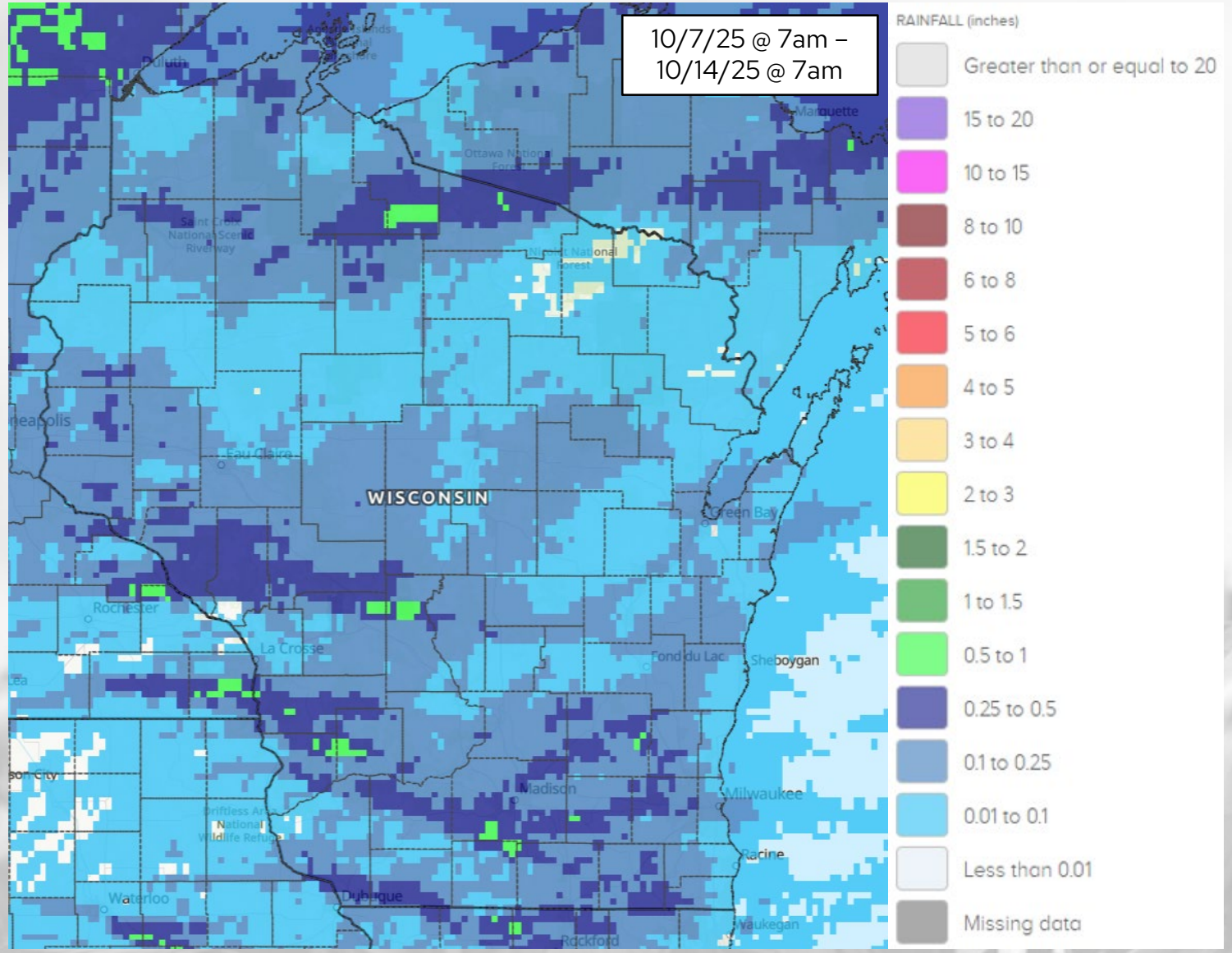
Climate division rankings for temperature & precipitation *(2025 compared to the entire 1893-2025 period)*

- Since August 31, temperatures across all climate divisions have ranked in the **top 5 all-time**.
- Precipitation has ranked in the **top 20 driest** for several divisions.

NOTE: These maps do not represent official NOAA climate rankings, as those are currently unavailable during the shutdown. Rather, these maps show estimates generated by the Iowa Environmental Mesonet.

https://mesonet.agron.iastate.edu/plotting/auto/

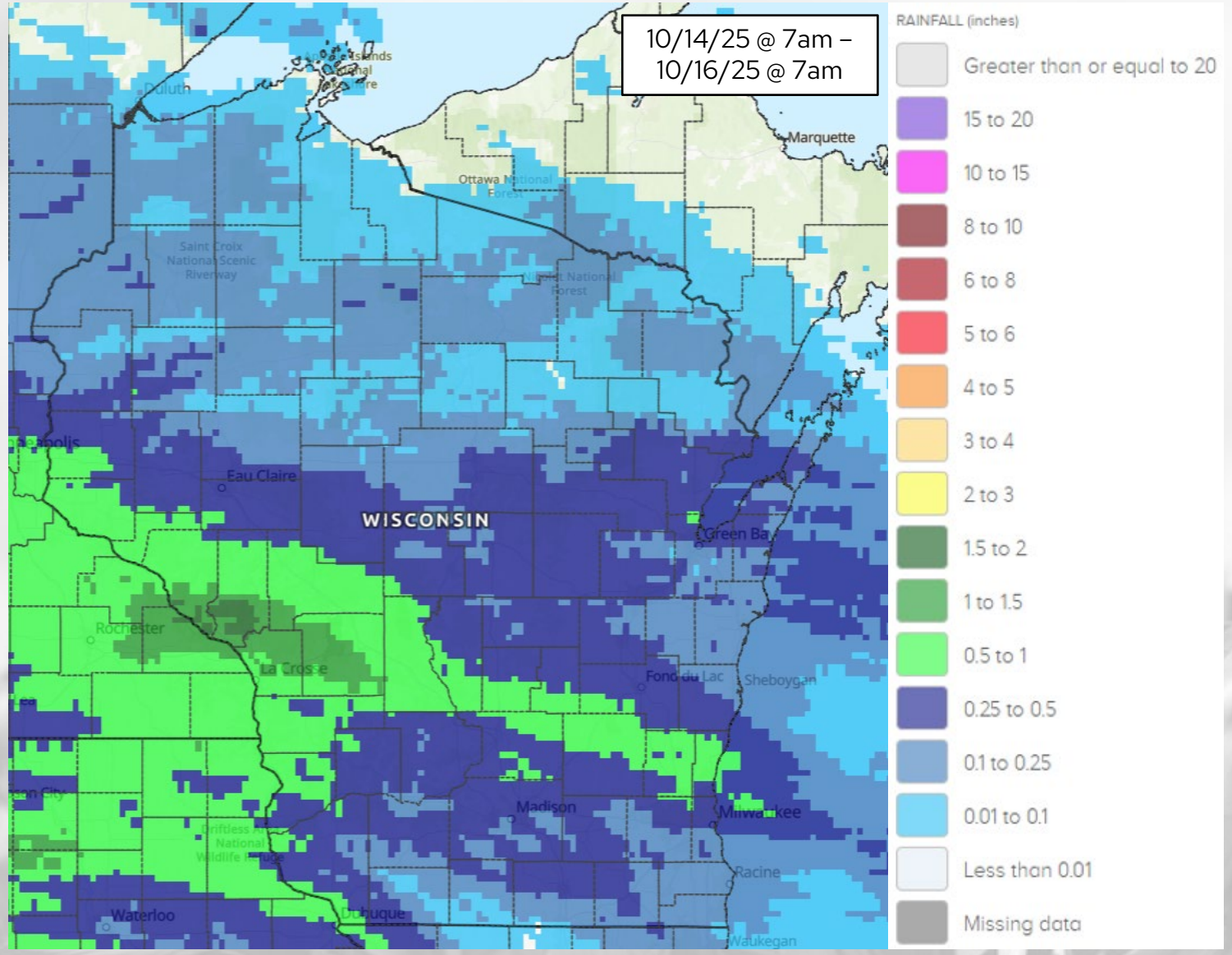
7 Day Precip (radar estimates)



- Another week of **minimal rainfall** in WI, with most receiving **0.25" or less**.
- Highest totals in scattered pockets in the N, W, and S **(0.5-1")**

https://water.noaa.gov/

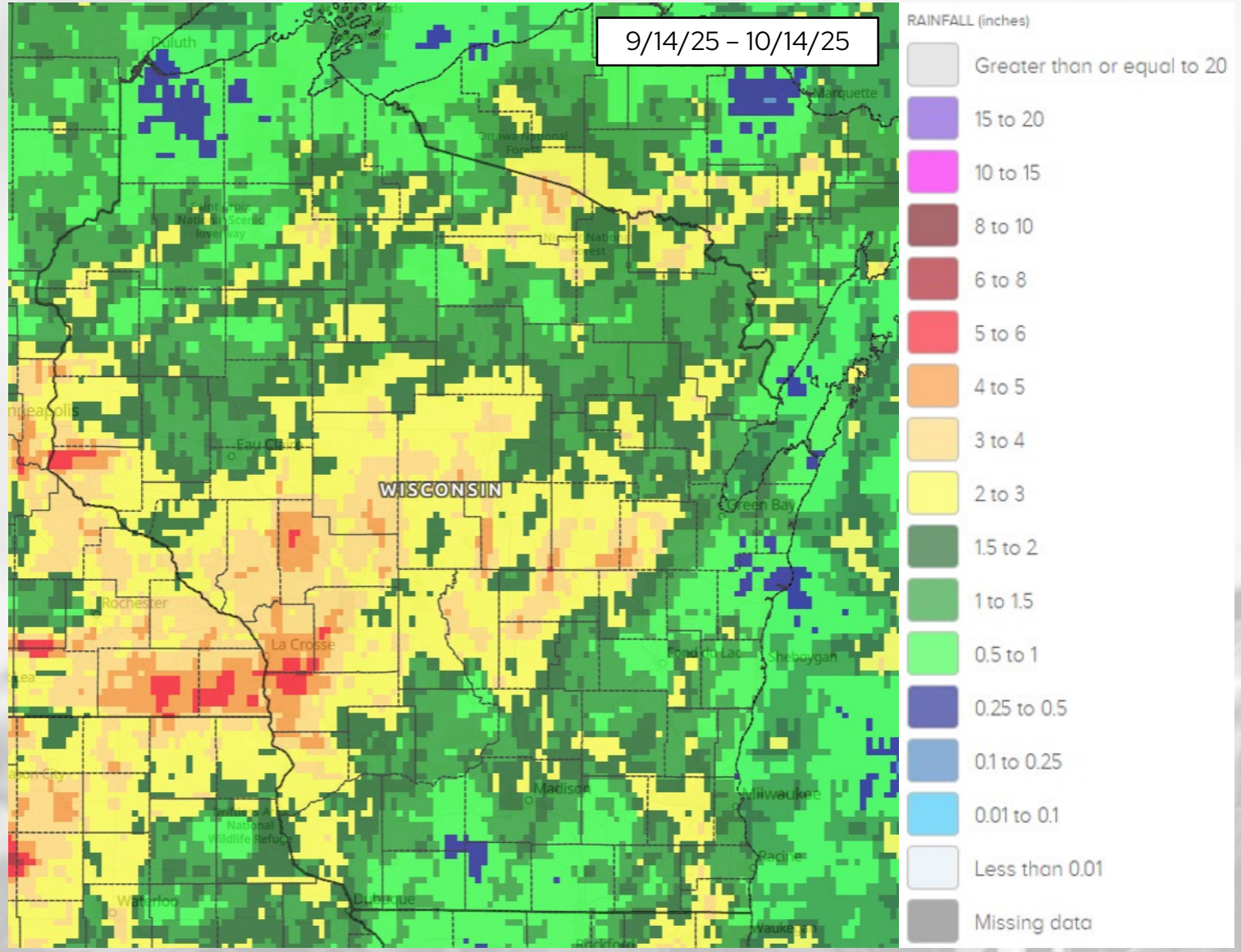
Precip since Tuesday (radar estimates)



- Widespread totals of **0.5" to 1"** in west central WI
- Estimated totals of **1-2"** just north of La Crosse.

https://water.noaa.gov/

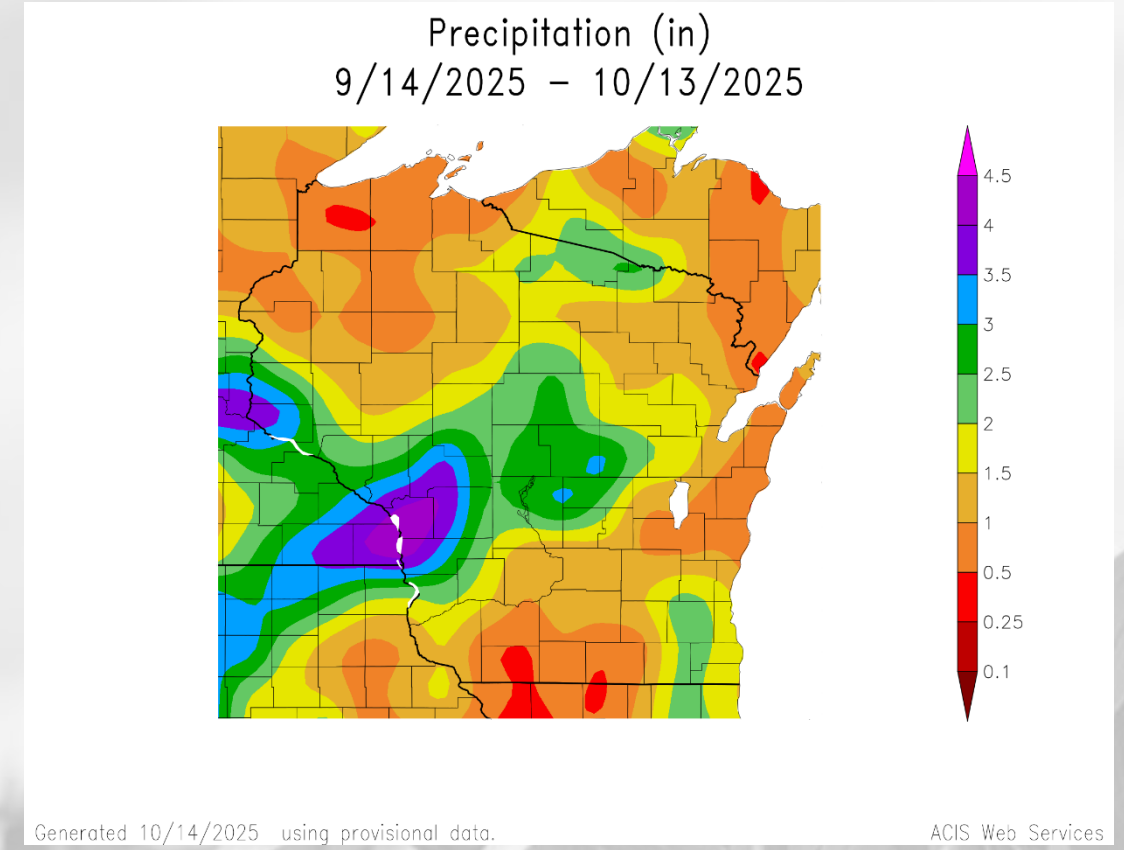
30 Day Precip (radar estimates)

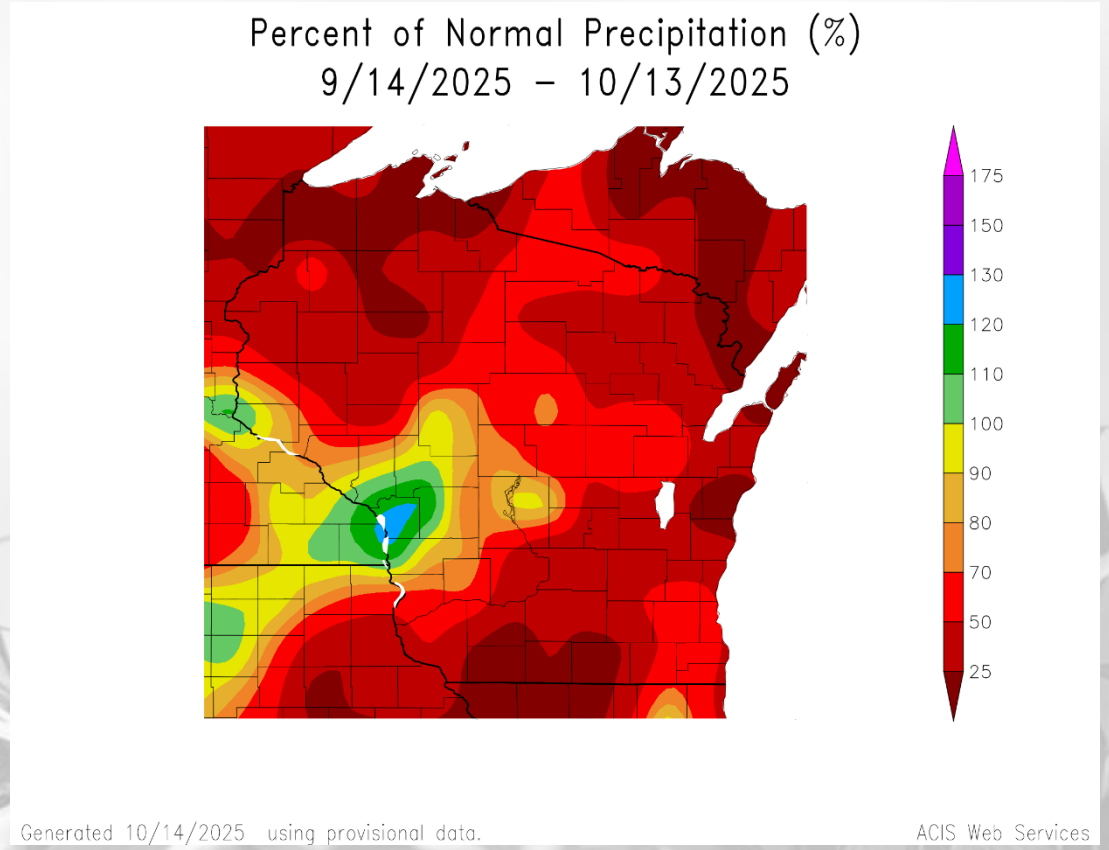


- Large area of **2-5”** across the west-central and central regions, with totals tapering to the north and south.
- Pockets of **5” or more** in the La Crosse area and east of the Twin Cities.
- Driest in the south, east-central, and far NW → **1” or less**

https://water.noaa.gov/

30 Day Precip Total/Percent Avg.

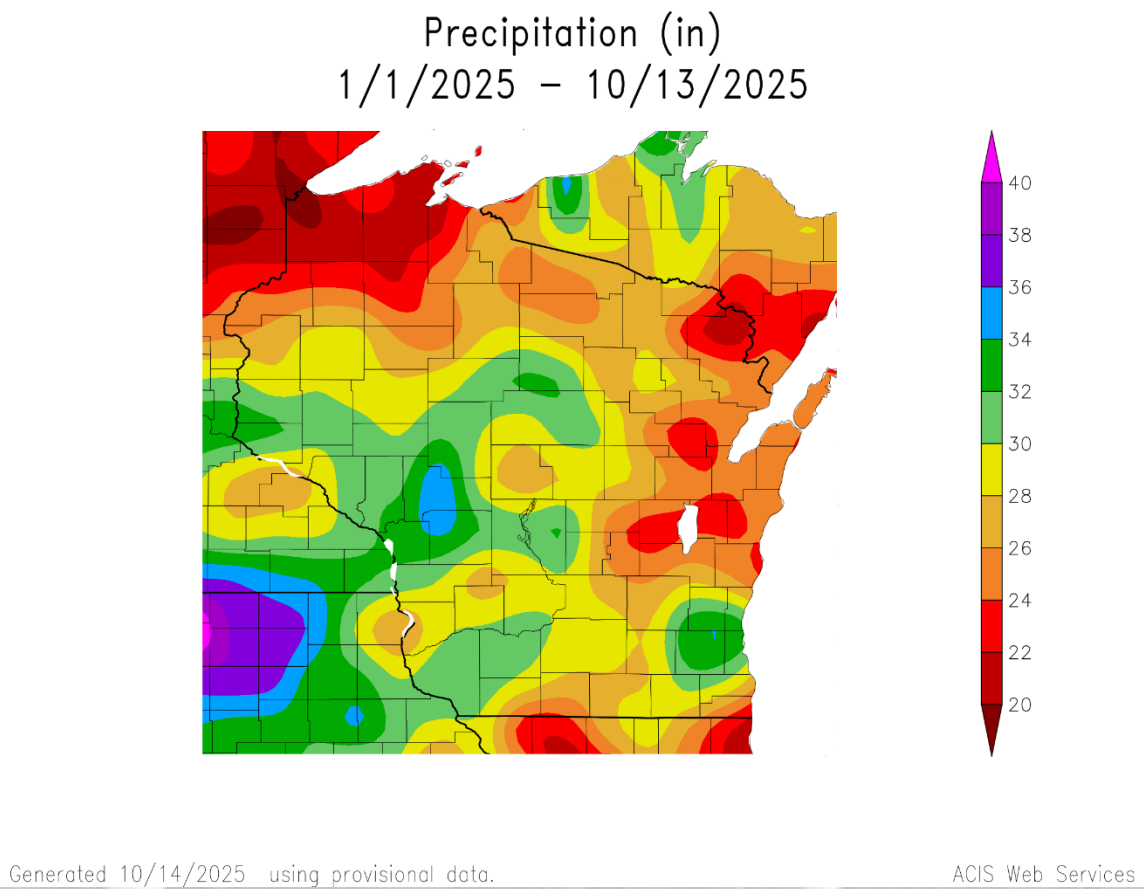


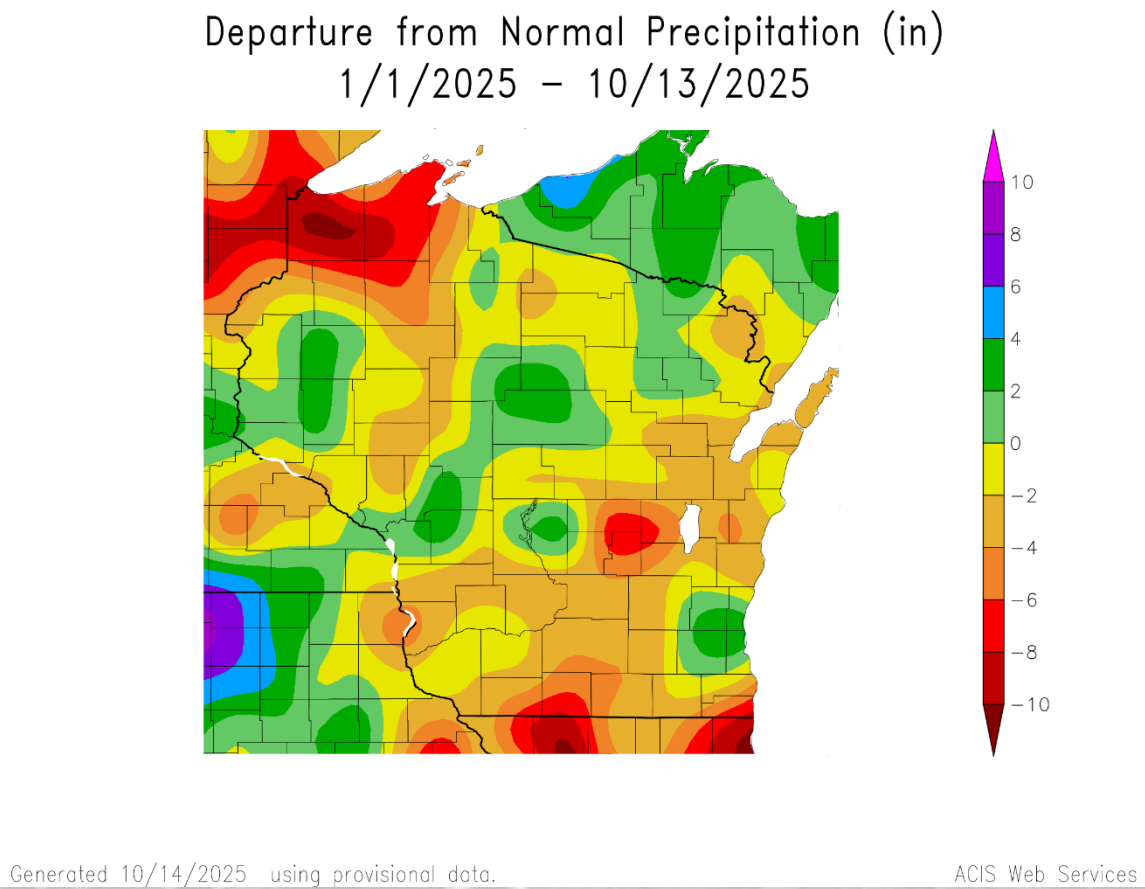


- **Below normal** for most of WI over the past 30 days → **25-70% common**, with regions of <25% the S, NE, & NW.
  - **1" or less** for some since Sept. 7.
- **Localized areas** of above normal precipitation in west-central WI, where totals were **3" or more**.

https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

2025 Precipitation (so far)





https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

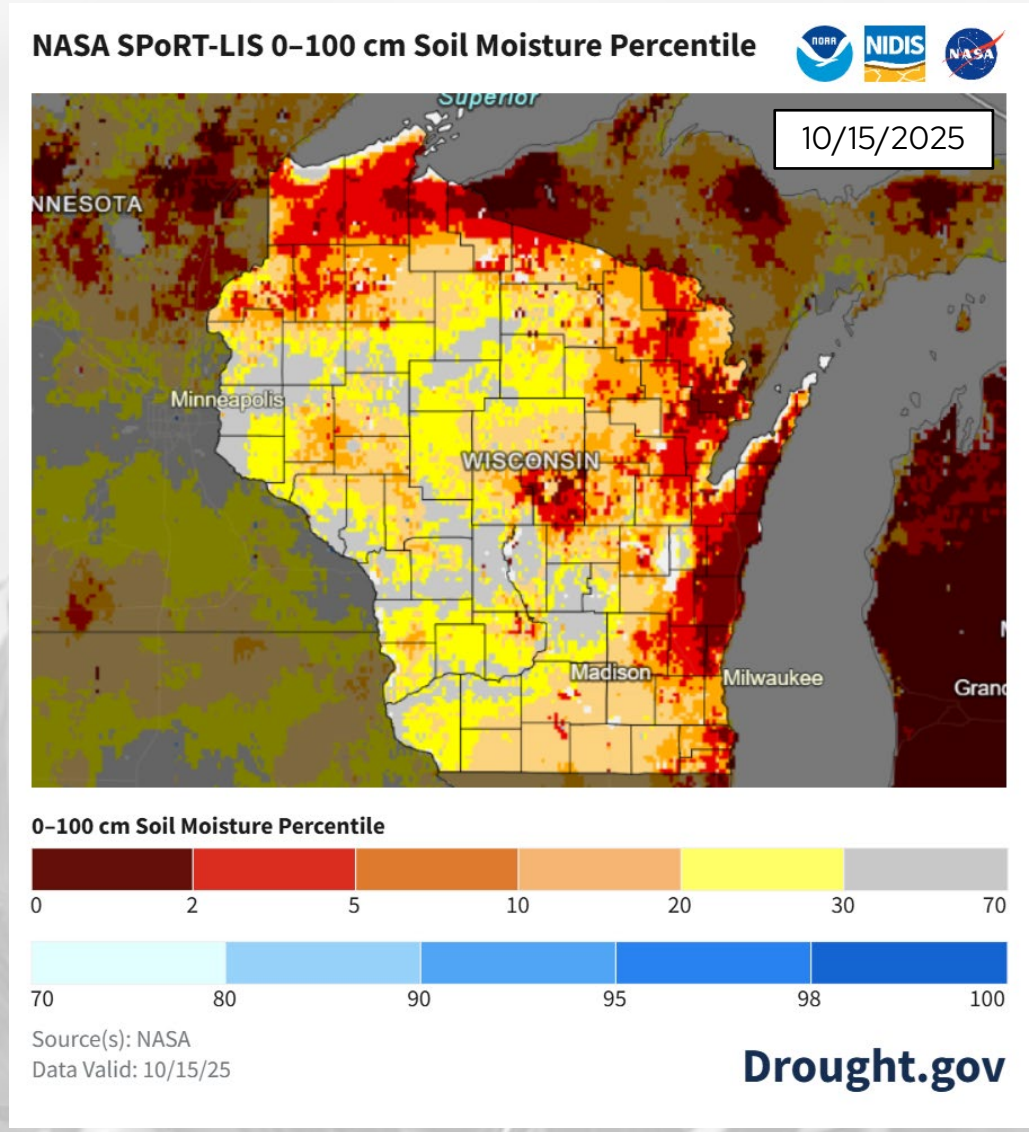
Soil Moisture Models

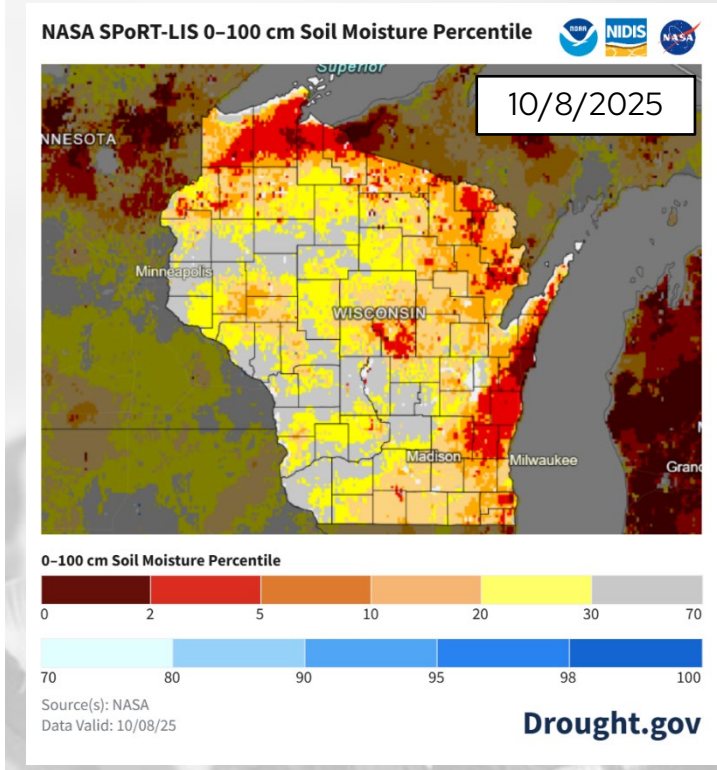
- **Similar conditions** compared to last week, with the driest soil moisture conditions in the **north and east**.

- **Below normal** conditions across most of WI, but closer to normal in the west.

Model Notes:
Red areas = top 5 driest in 100 years.
Dark red areas = top 2 driest in 100 years.
Blue areas = top 2 wettest in 100 years.

It's worth noting that each soil moisture model has their own characteristics and input variables, so there tends to be variation between models. Thus, it's worthwhile to look at multiple models opposed to just one.

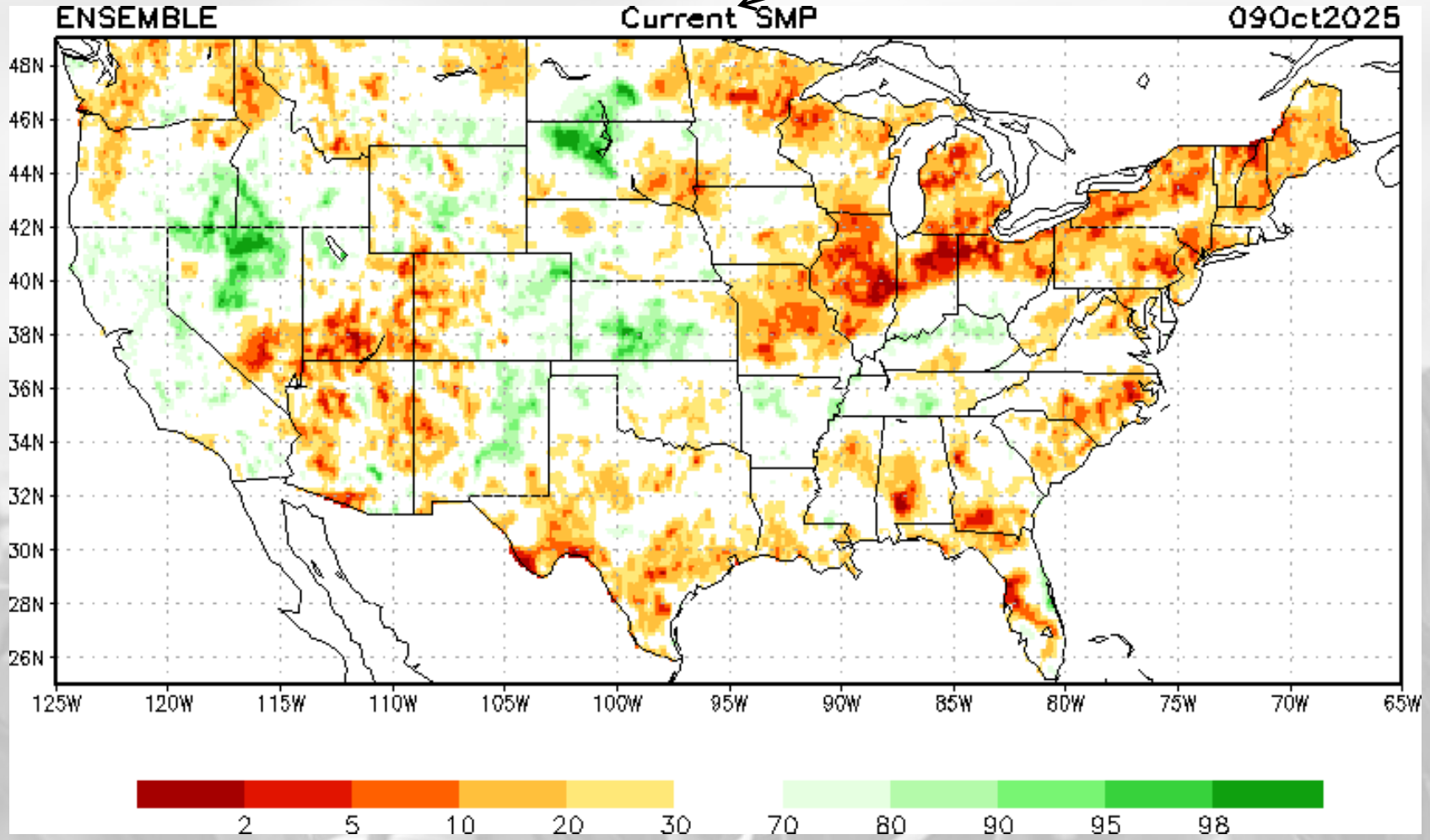




https://weather.ndc.nasa.gov/sport/case_studies/lis_CONUS.html
https://www.drought.gov/states/wisconsin

Soil Moisture Models

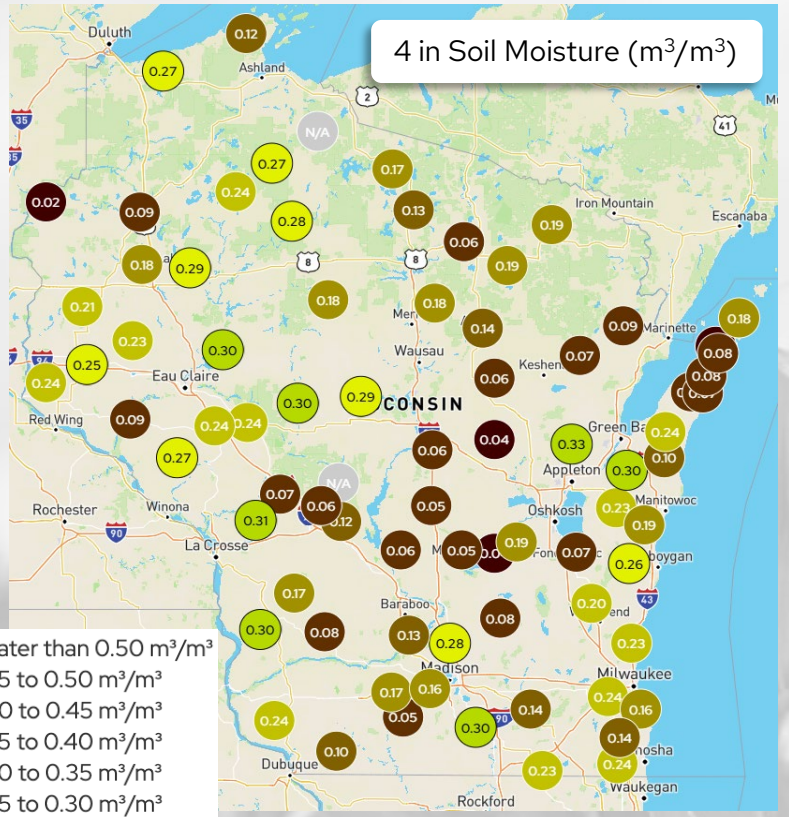
NOTE: this map displays the soil moisture percentile for Oct 9. It was the most recent update as of Oct 14.

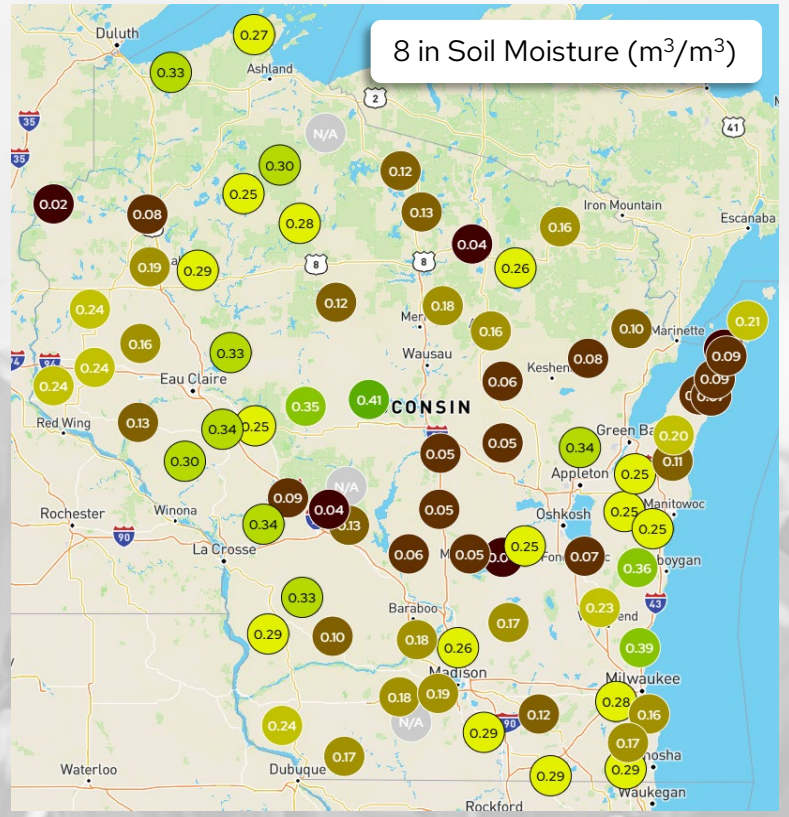


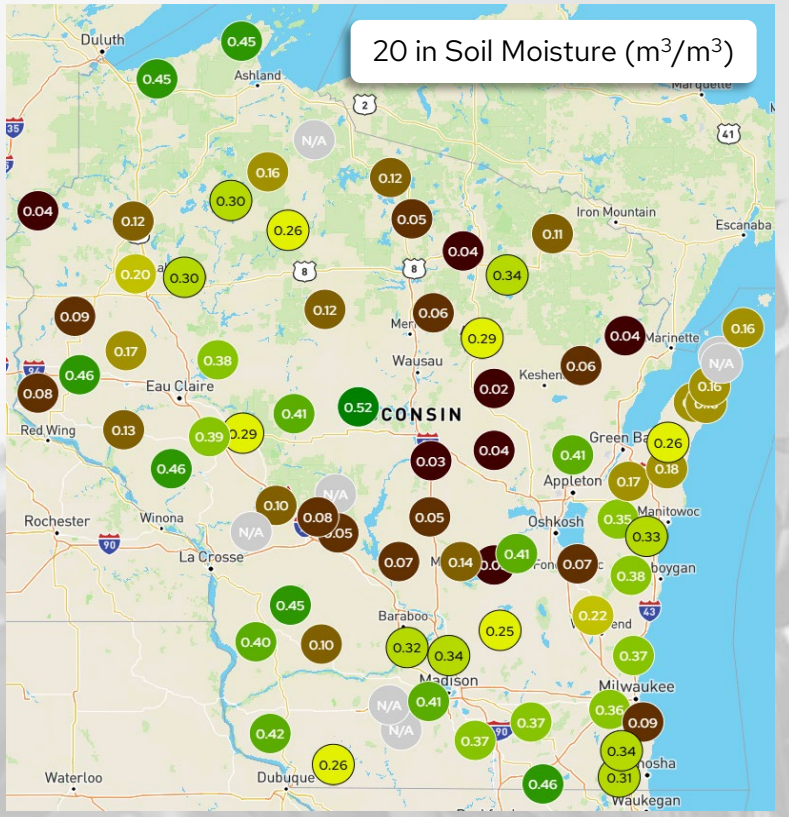
https://www.cpc.ncep.noaa.gov/products/Drought/Monitoring/smp_new.shtml

Wisconet Soil Moisture

Maps showing soil temperature conditions on October 14th @ 12:00 pm.
Units of map values are {Volume of water}/{Volume of soil}.







- greater than 0.50 m^3/m^3
- 0.45 to 0.50 m^3/m^3
- 0.40 to 0.45 m^3/m^3
- 0.35 to 0.40 m^3/m^3
- 0.30 to 0.35 m^3/m^3
- 0.25 to 0.30 m^3/m^3
- 0.20 to 0.25 m^3/m^3
- 0.15 to 0.20 m^3/m^3
- 0.10 to 0.15 m^3/m^3
- 0.05 to 0.10 m^3/m^3
- 0.00 to 0.05 m^3/m^3

https://wisconet.wisc.edu/

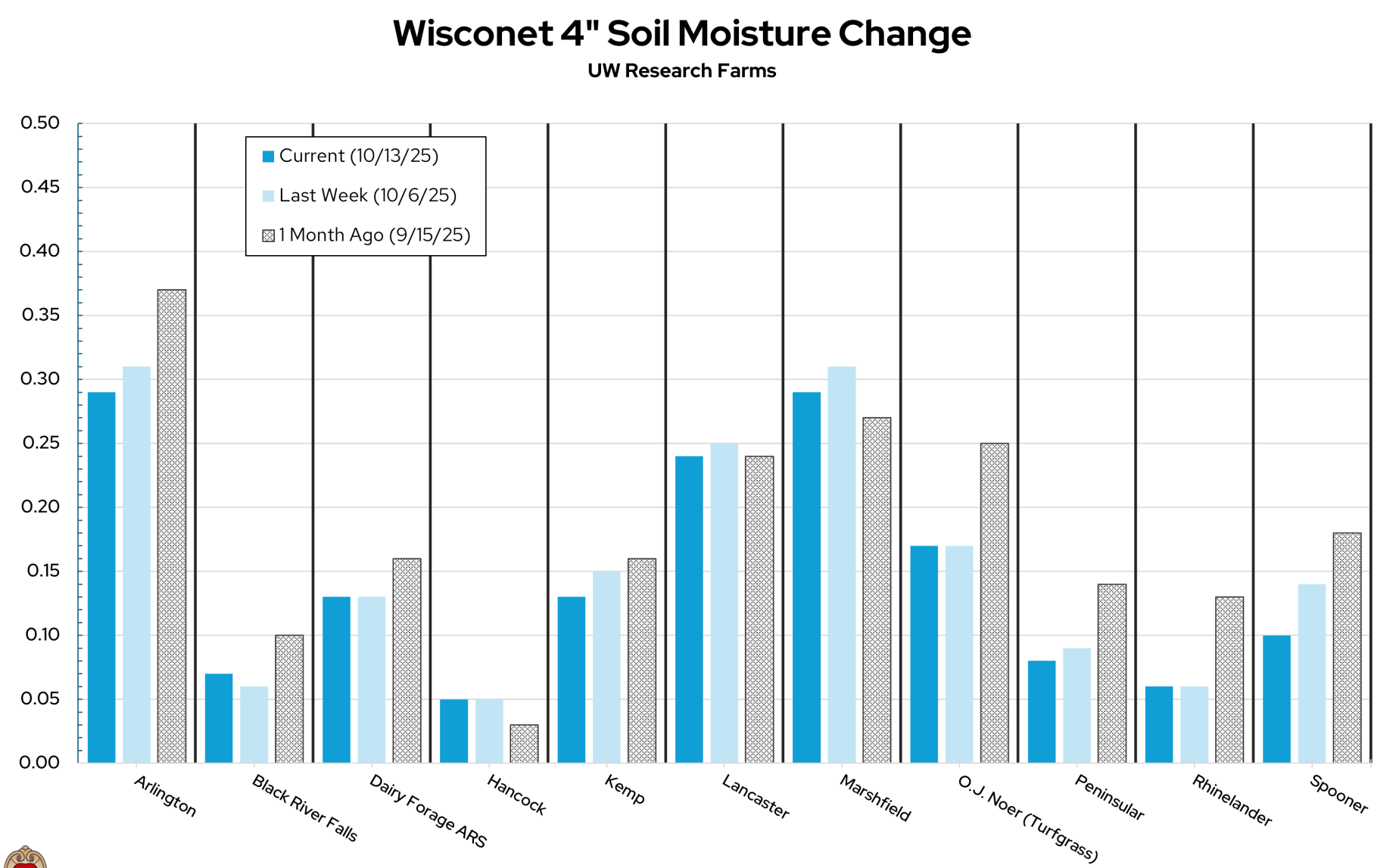
Wisconet Soil Moisture

Change in soil moisture from October 7th (Start) to October 13th (End).
Units of change values are {Volume of water}/{Volume of soil}.

Research Farm	County	Total Precip (in)	4" Change (Start)	4" Change (End)	8" Change (Start)	8" Change (End)	20" Change (Start)	20" Change (End)
Arlington	Columbia	0.06	0.31	0.29	0.28	0.26	0.32	0.34
Black River Falls	Jackson	0.20	0.06	0.07	0.09	0.09	0.11	0.11
Dairy Forage ARS	Sauk	0.09	0.13	0.13	0.19	0.19	0.33	0.33
Hancock	Waushara	0.14	0.06	0.05	0.06	0.05	0.05	0.05
Kemp	Oneida	0.08	0.15	0.13	0.14	0.13	0.06	0.05
Lancaster	Grant	0.06	0.26	0.24	0.25	0.25	0.43	0.43
Marshfield	Marathon	0.11	0.31	0.29	0.42	0.41	0.52	0.52
O.J. Noer *(Turfgrass)*	Dane	0.27	0.17	0.17	0.20	0.19	0.42	0.41
Peninsular	Door	0.05	0.09	0.08	0.10	0.09	0.17	0.16
Rhinelander	Oneida	0.03	0.06	0.06	0.05	0.04	0.04	0.04
Spooner	Washburn	0.03	0.14	0.10	0.10	0.09	0.13	0.13

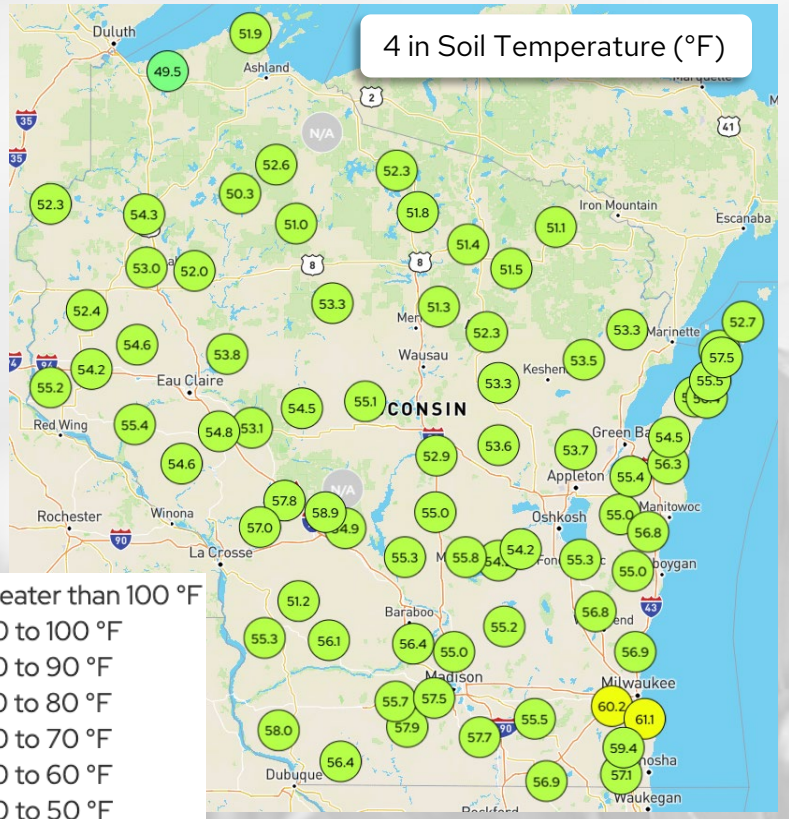
https://wisconet.wisc.edu/

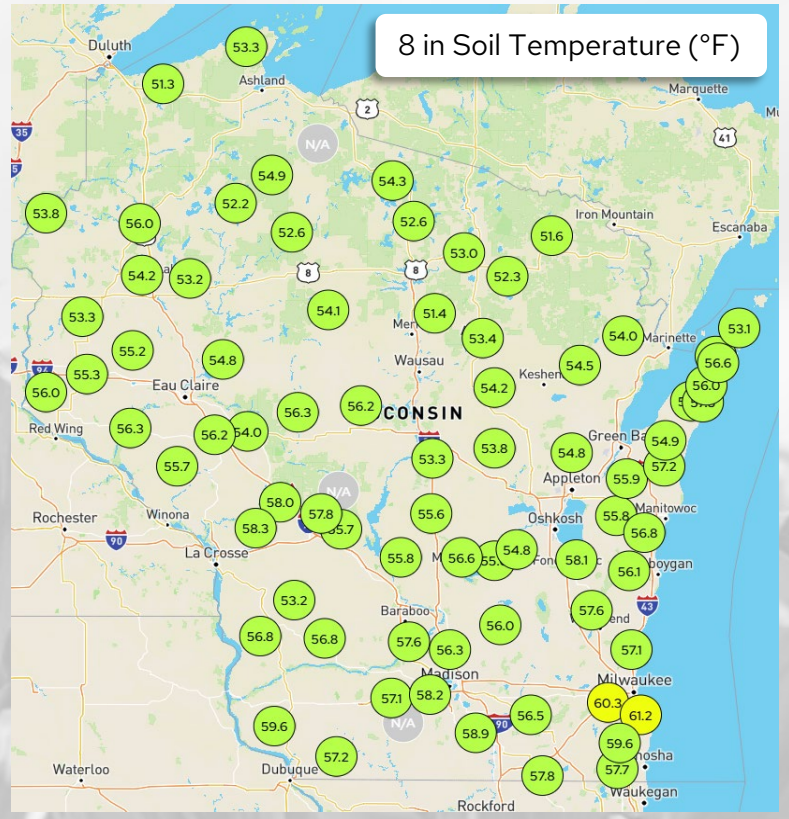
Wisconet Soil Moisture

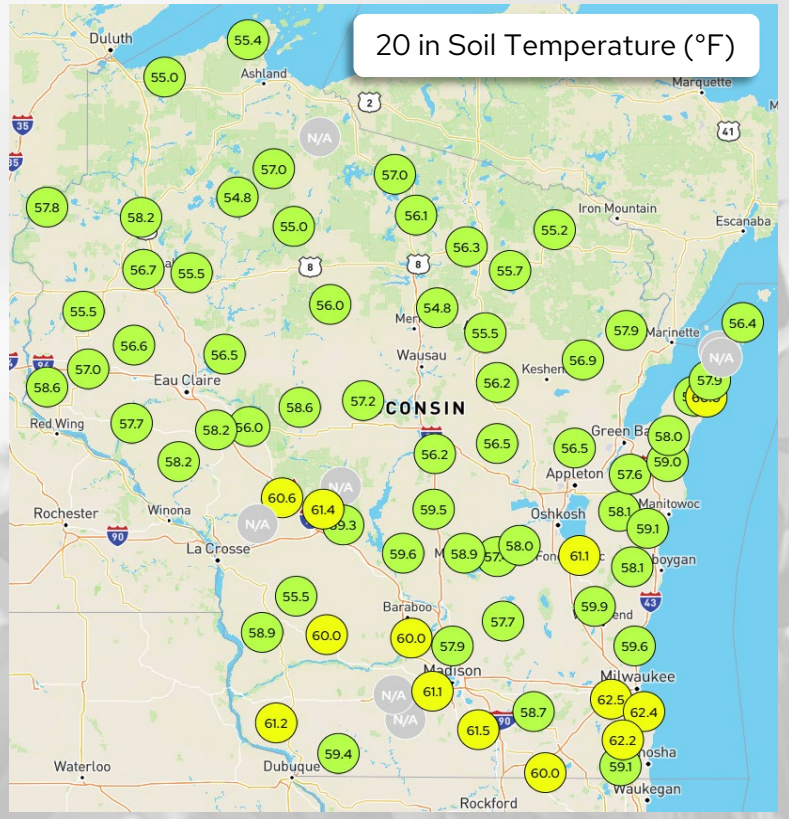


Wisconet Soil Temperature

Maps showing soil temperature conditions on
October 14th @ 12:00 pm.



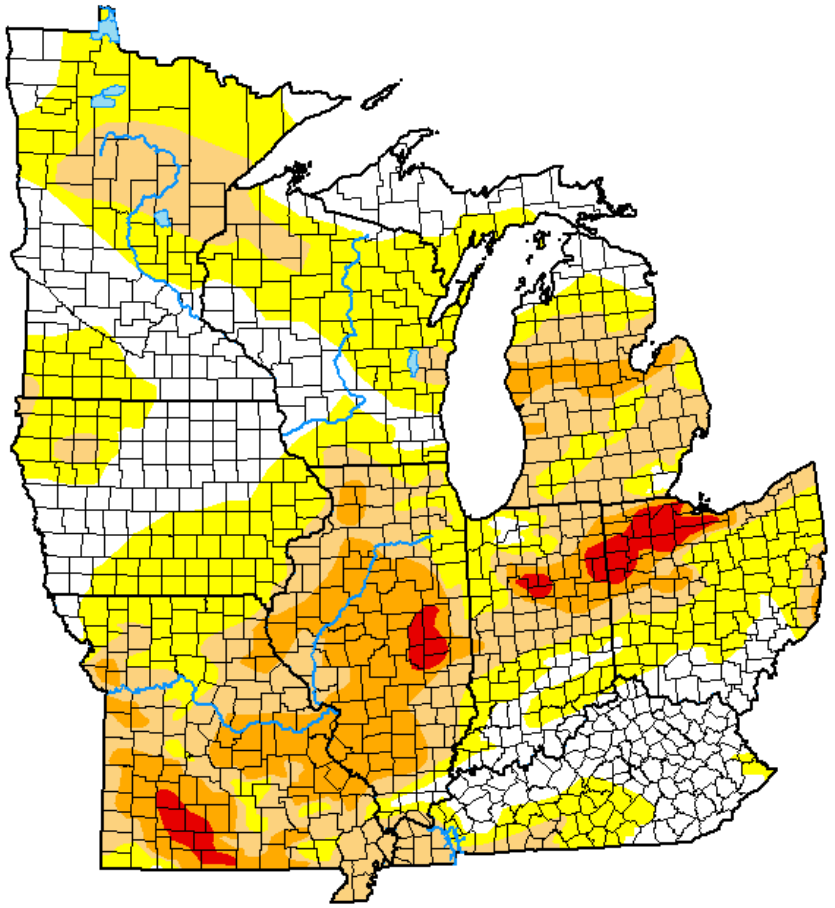




- greater than 100 °F
- 90 to 100 °F
- 80 to 90 °F
- 70 to 80 °F
- 60 to 70 °F
- 50 to 60 °F
- 40 to 50 °F
- 30 to 40 °F
- 20 to 30 °F
- 10 to 20 °F
- less than 10 °F

https://wisconet.wisc.edu/

US Drought Monitor



U.S. Drought Monitor

Midwest

October 14, 2025

(Released Thursday, Oct. 16, 2025)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	27.68	72.32	37.72	14.59	2.08	0.00
Last Week 10-07-2025	23.82	76.18	38.82	12.69	1.05	0.00
3 Months Ago 07-15-2025	80.66	19.34	4.34	0.38	0.00	0.00
Start of Calendar Year 01-07-2025	44.12	55.88	29.47	3.56	0.00	0.00
Start of Water Year 10-01-2024	21.78	78.22	28.15	6.40	1.46	0.66
One Year Ago 10-15-2024	17.18	82.82	52.79	17.96	2.27	0.66

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

Author:

Richard Tinker

CPC/NOAA/NWS/NCEP

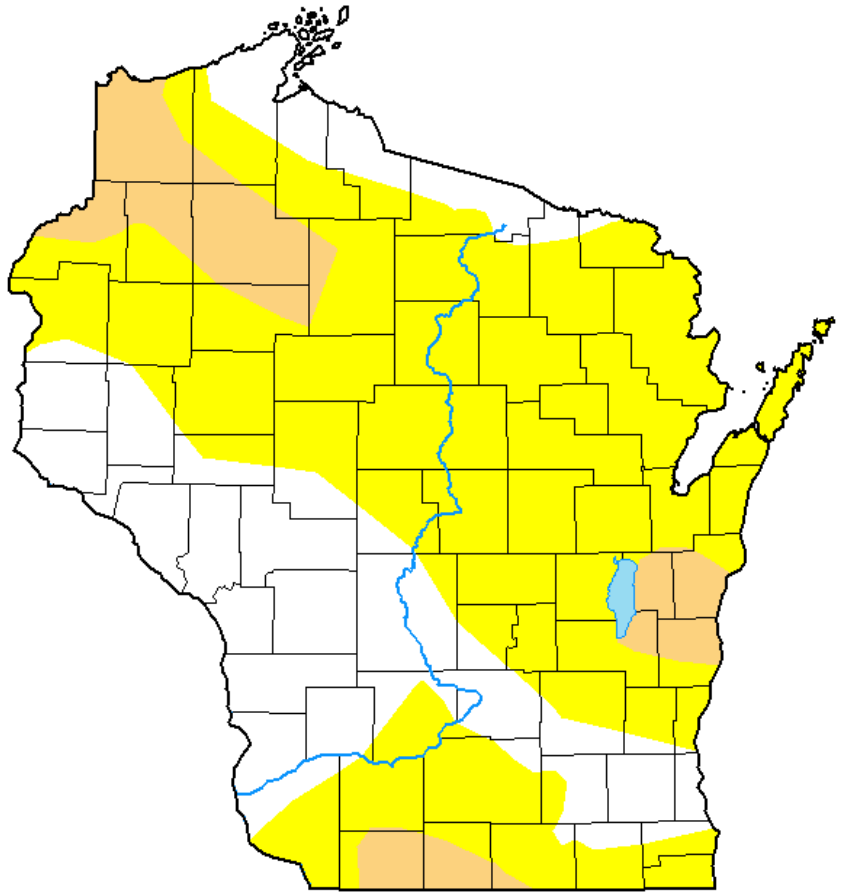
droughtmonitor.unl.edu

- Midwest: Compared to last week:
  - **Small decrease** in D0-D1 coverage.
  - **Small increase** in D2-D3 coverage.
- Midwest: **1 class improvements** in southern OH, southern IN, and northern KY. Localized **1 class degradation** elsewhere.
- Wisconsin: **D1 added** in some southwest and east-central counties.
- **62.3%** of the Midwest is drought free (~37.7% in D1-D3).

Note: D0 is not considered drought.

http://droughtmonitor.unl.edu/

US Drought Monitor



October 14, 2025
(Released Thursday, Oct. 16, 2025)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	30.71	69.29	10.86	0.00	0.00	0.00
Last Week 10-07-2025	30.84	69.16	6.12	0.00	0.00	0.00
3 Months Ago 07-15-2025	92.57	7.43	0.14	0.00	0.00	0.00
Start of Calendar Year 01-07-2025	36.12	63.88	39.54	0.00	0.00	0.00
Start of Water Year 10-01-2024	18.68	81.32	29.83	8.45	0.00	0.00
One Year Ago 10-15-2024	0.00	100.00	63.85	20.81	0.00	0.00

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

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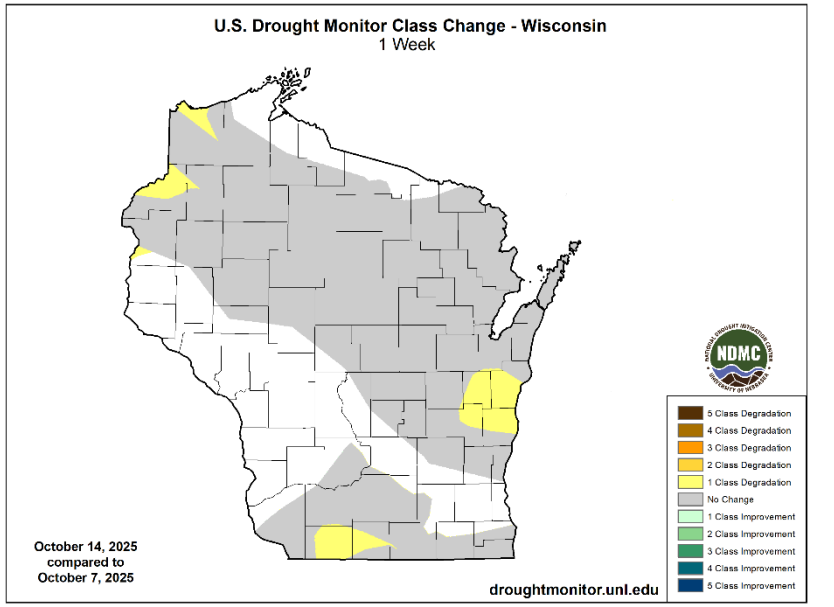
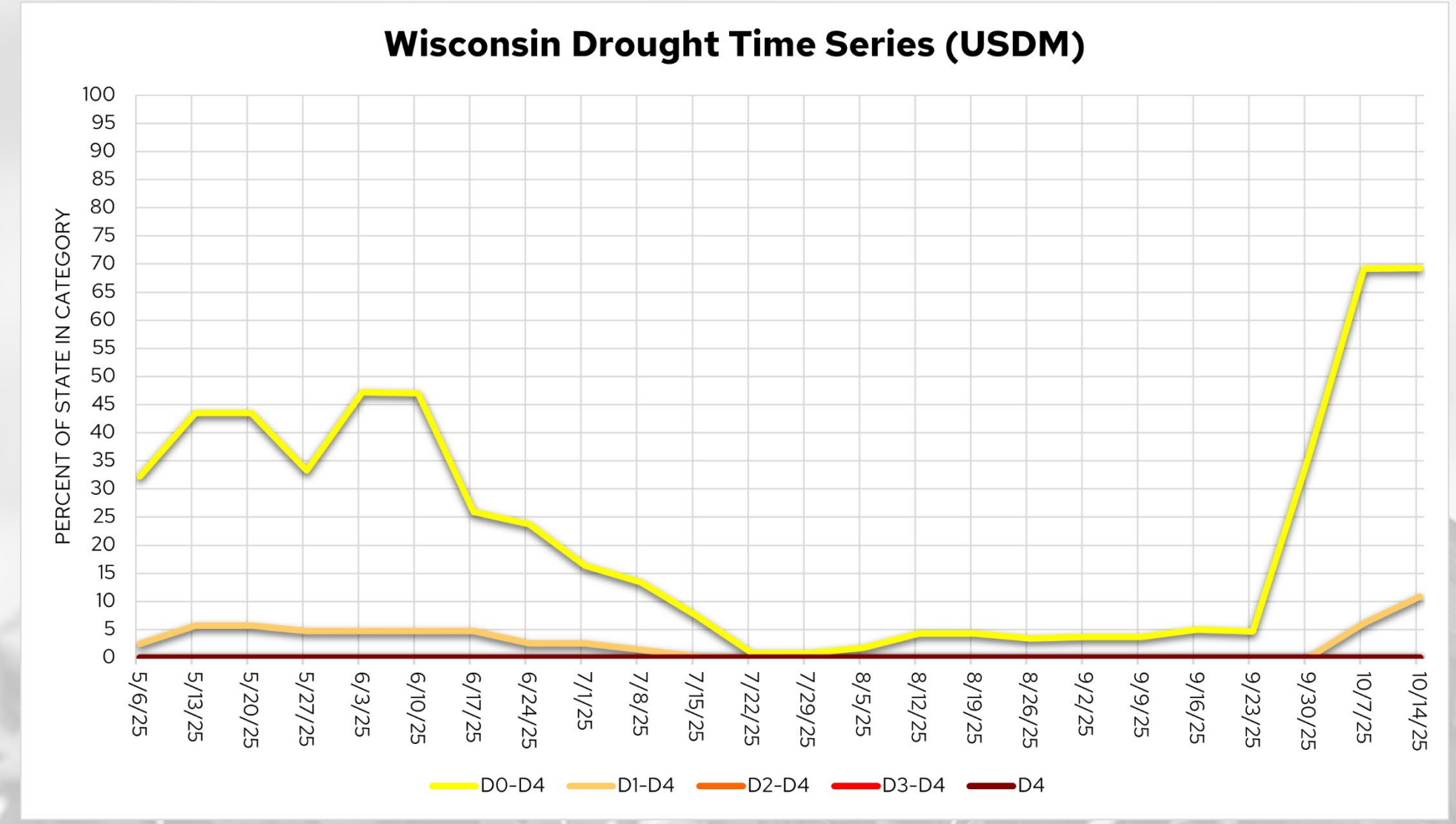
Amount of state in:

- D1-D4 – 10.9% ↑
- D2-D4 – 0.0% --
- D3-D4 – 0.0% --
- D4 – 0.0% --

Note: ↑↓ indicate change from last week. Red up arrows indicate increase in drought area; vice-versa for green arrows. -- indicates no change from last week.



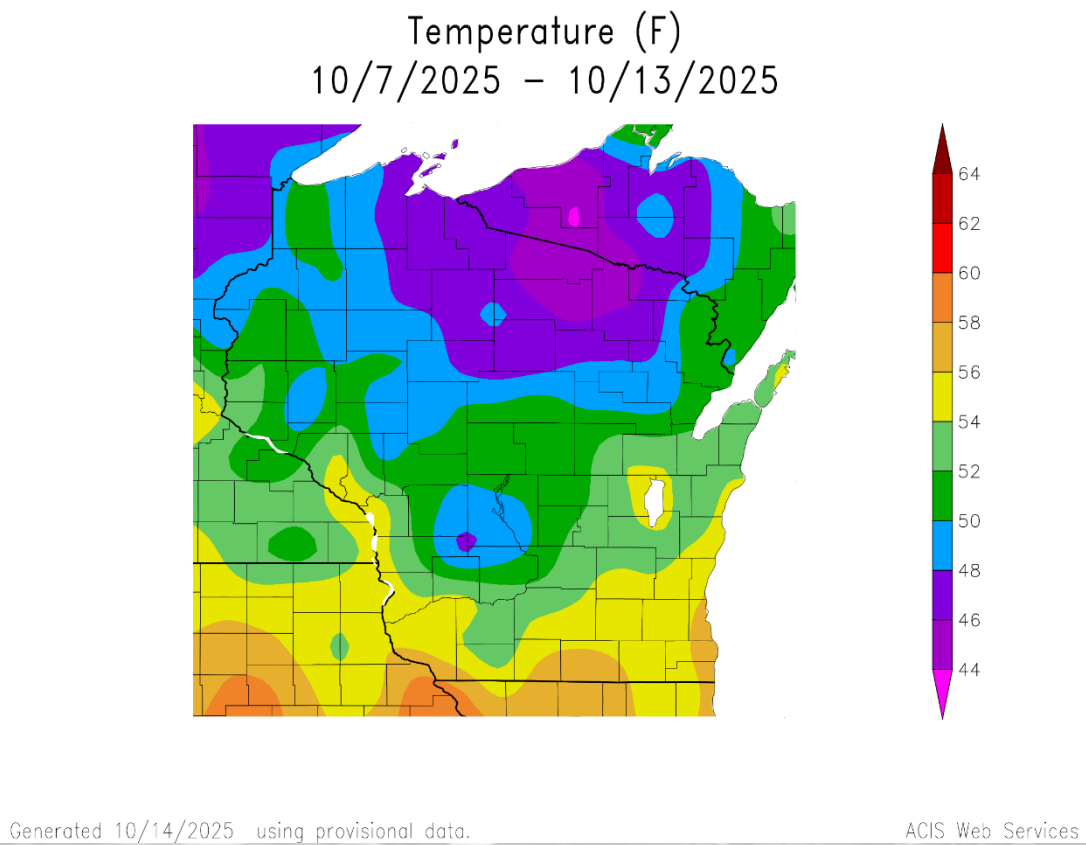
USDM Time Series

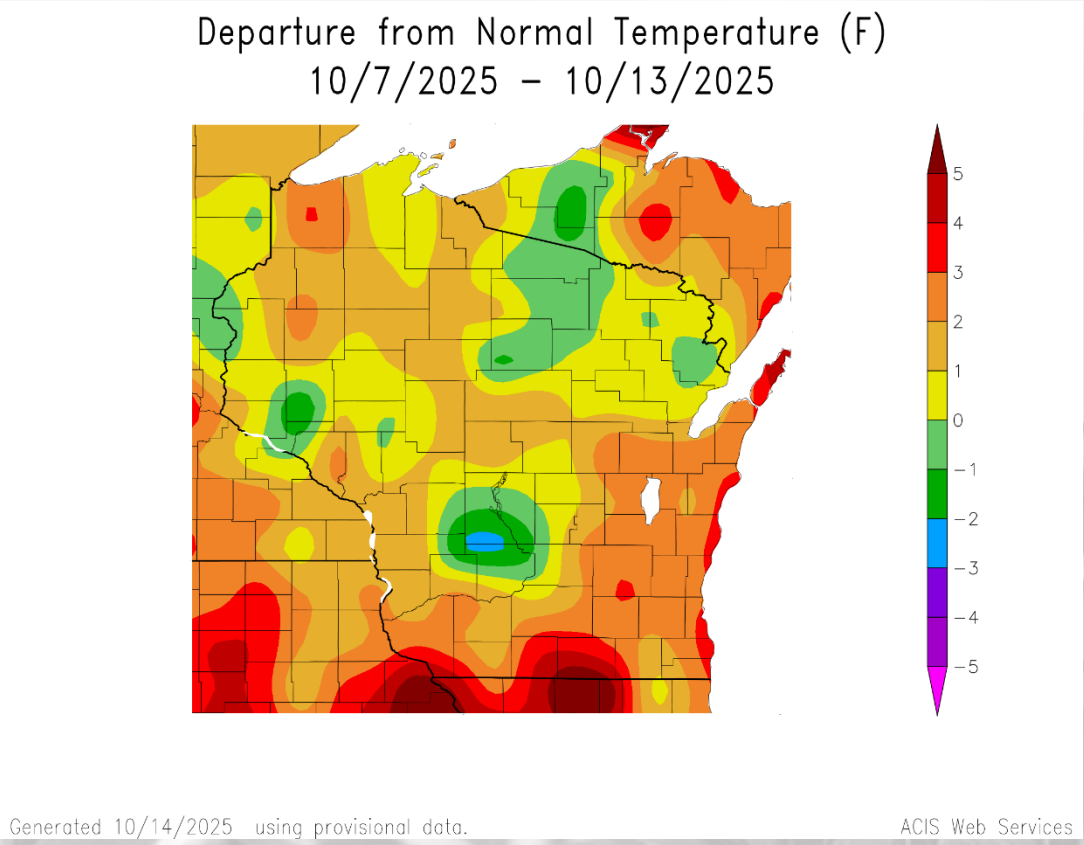


Small increase in D0 coverage since last week, along with the **addition of D1 drought** in the SW and EC.

http://droughtmonitor.unl.edu/

7 Day Temperatures

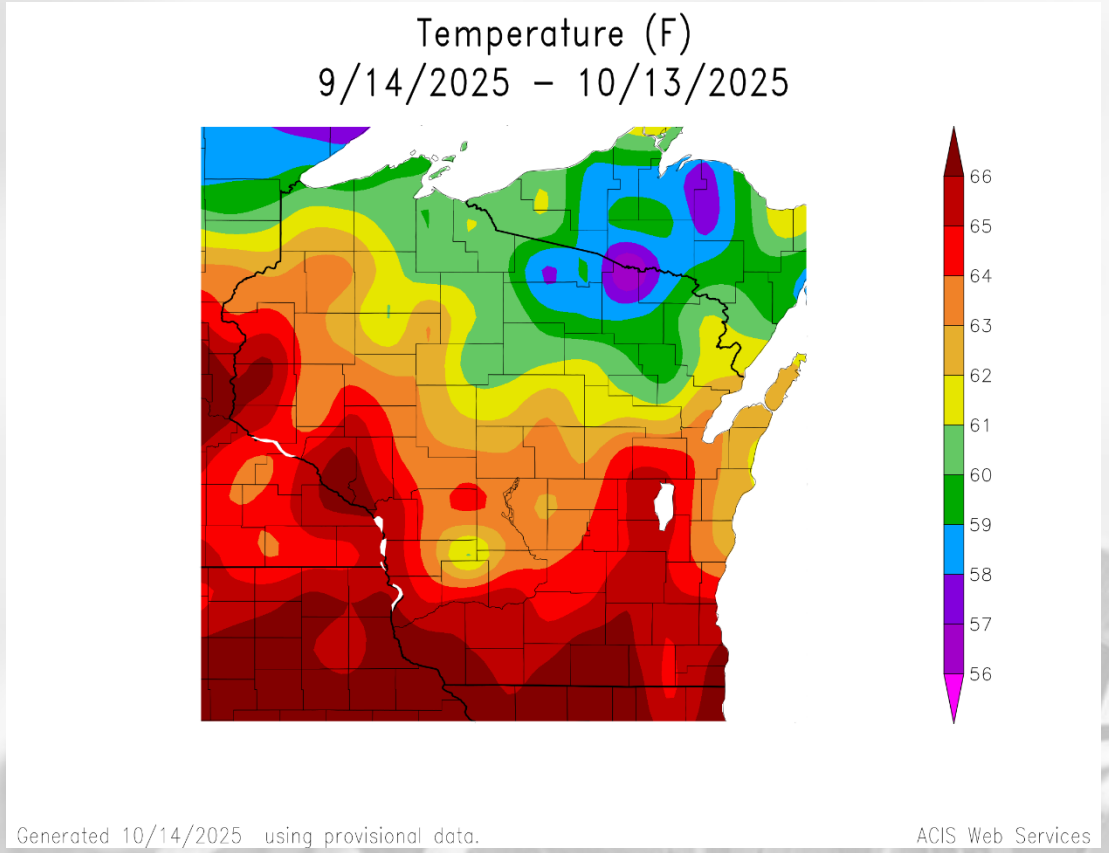


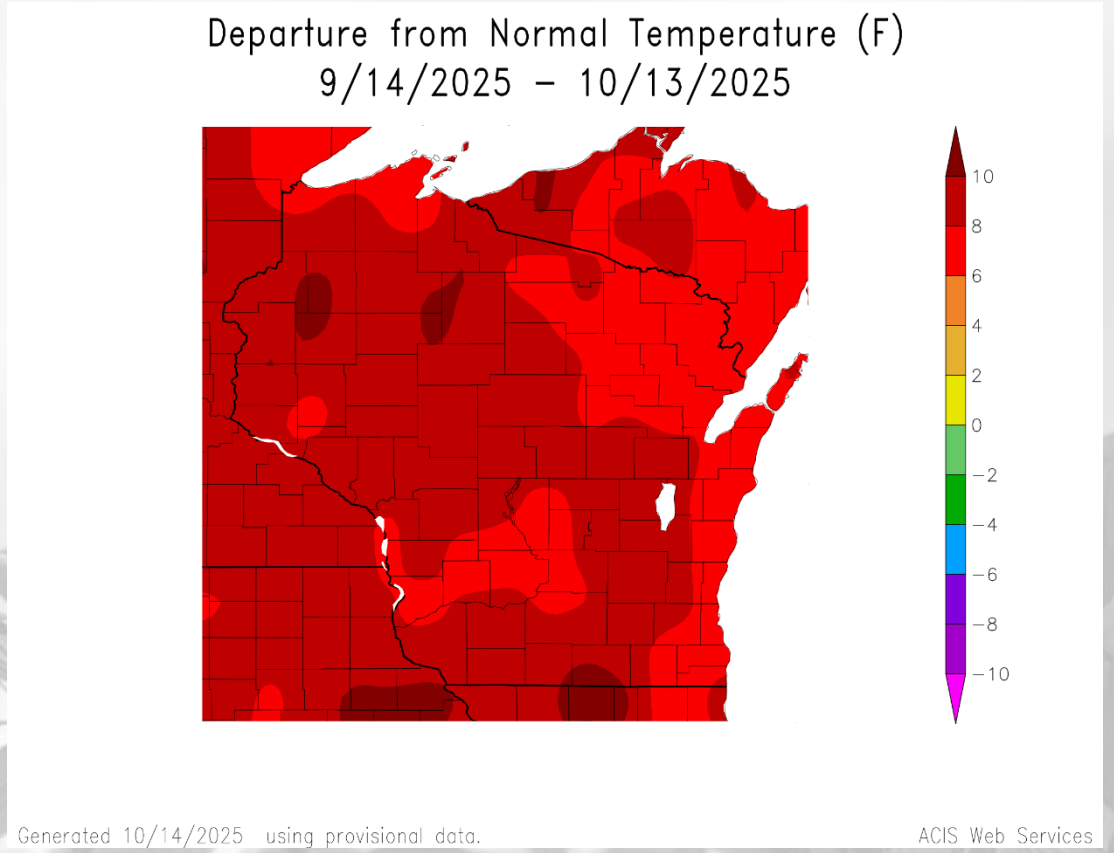


- Average temp. range of **54-58°F** in the south; **44-48°F** in the far north.
- **2-4°F above normal** from the SW to eastern shore.
- **Closer to normal** in the north-central and west-central regions.

https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

30 Day Temperatures

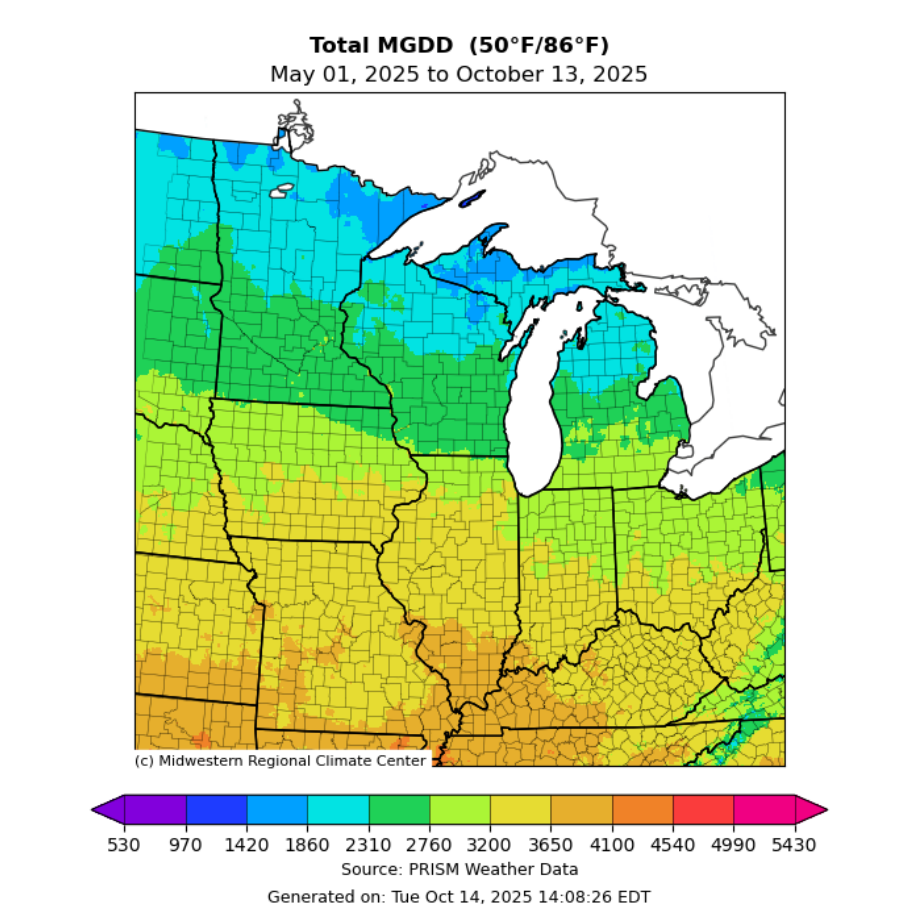


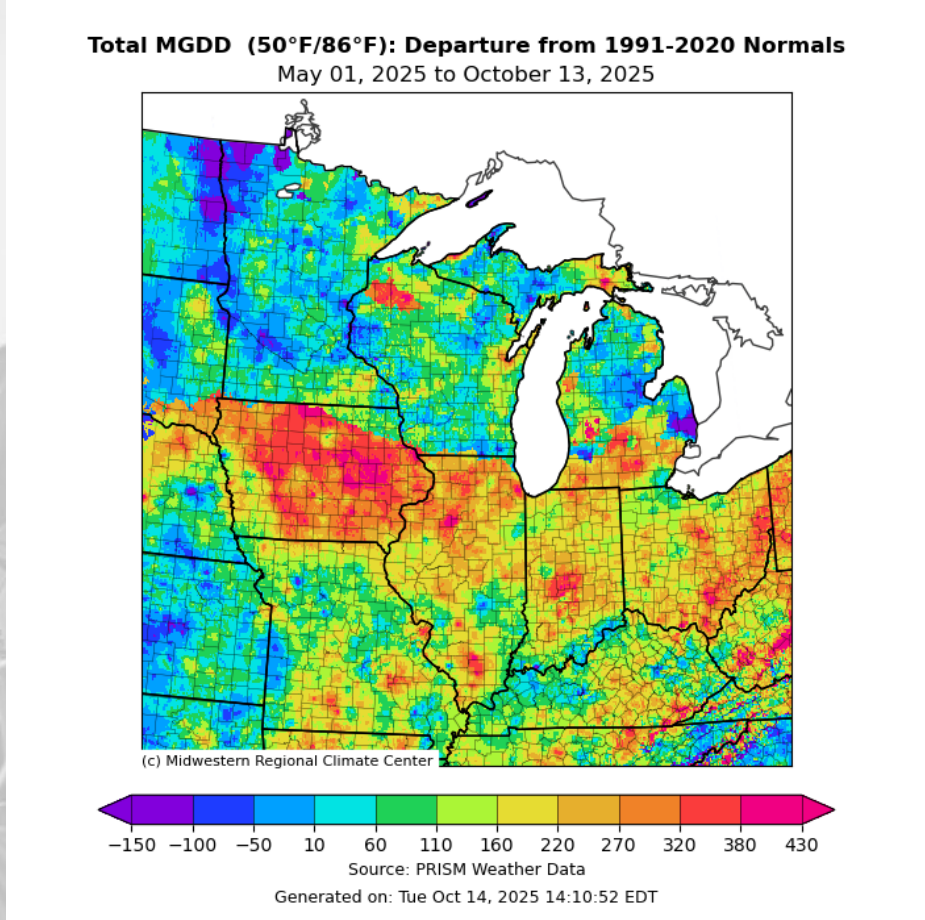


- Average temps. ranged from **64-66+°F** in the south and west; to **57-60°F** for the far north.
- **Above average** temperatures across the state.
  - **6-10°F** above normal statewide, with some pockets of **>10°F** above normal.

https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

Growing Degree Days (Base = 50°F; Since May 1)





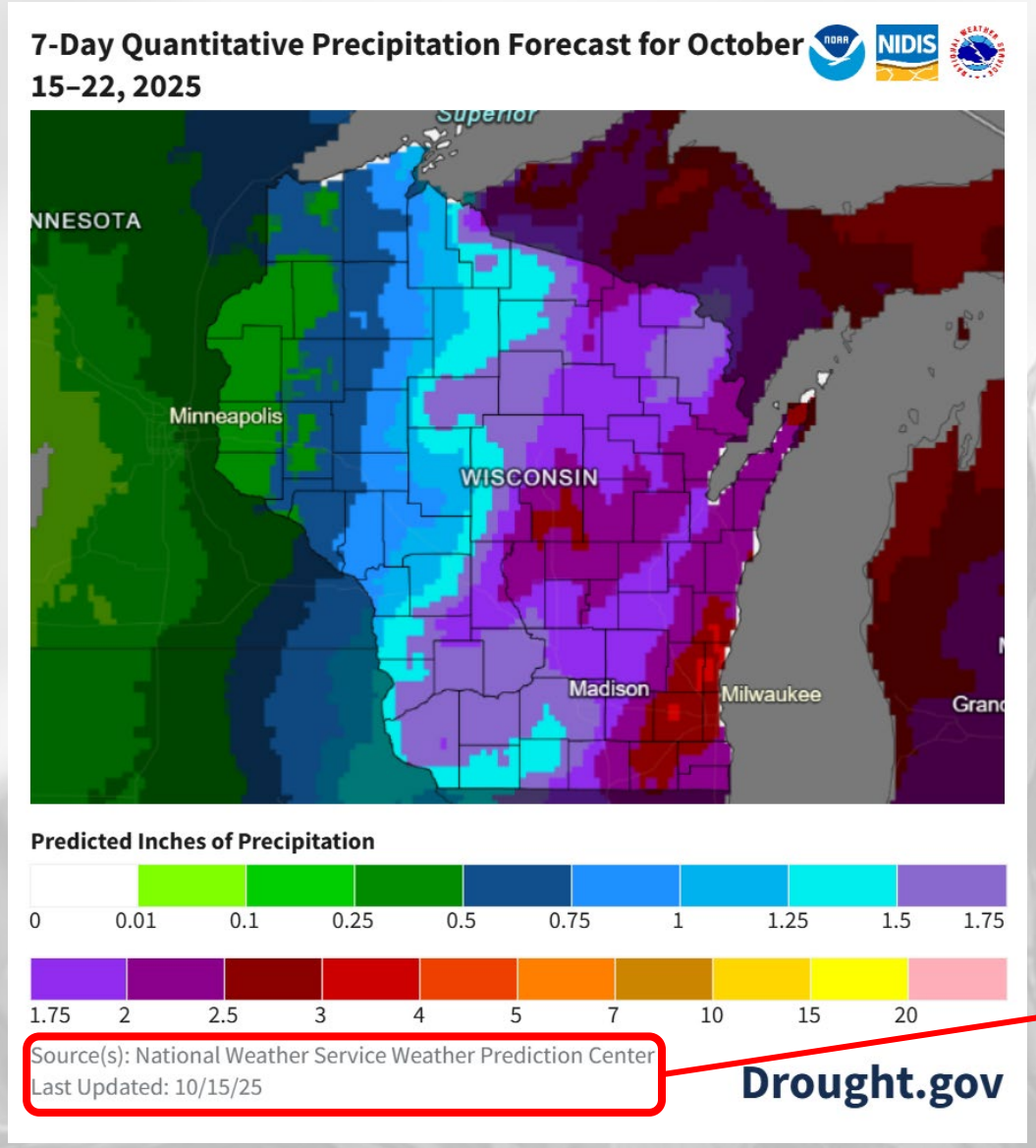
- Range from **2700-3100 GDD** in the SW to **1900-2300 GDD** in the N.
- GDD accumulation is running **60-160 GDD ahead of schedule** across most of WI. Some areas **closer to normal**.

To calculate GDD for your corn variety and planting date, use this tool.

To see specific degree models for pests in your location, use the Vegetable Disease & Insect Forecasting Network.

https://mrcc.purdue.edu/ag-climate-dashboard

7 Day Precip Forecast

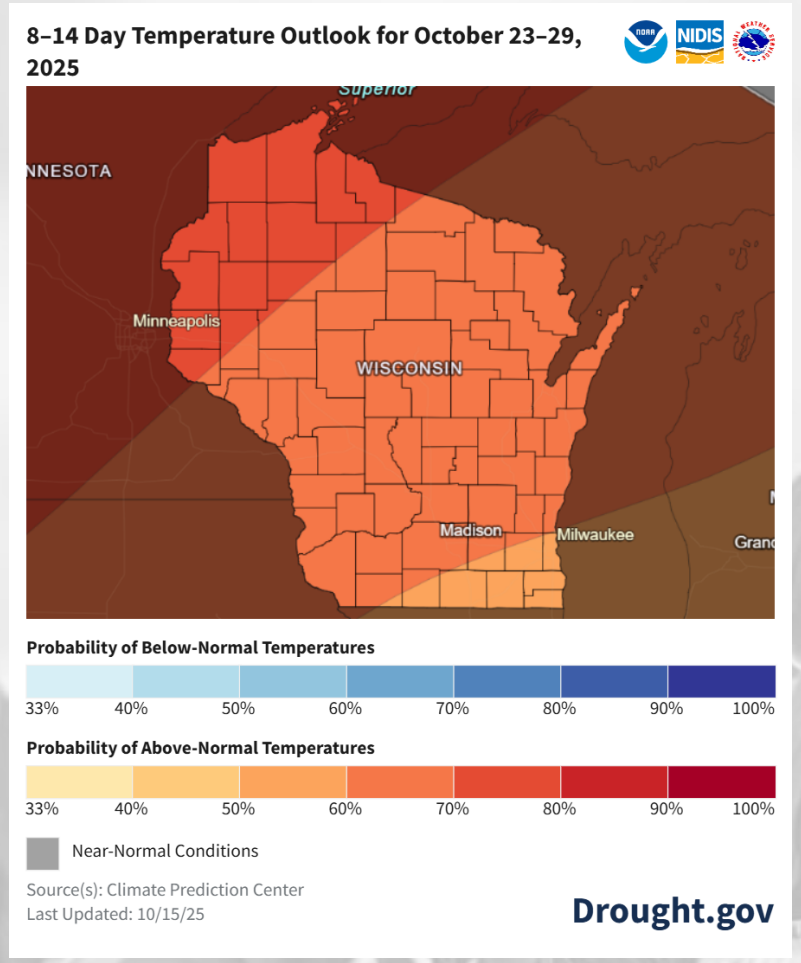


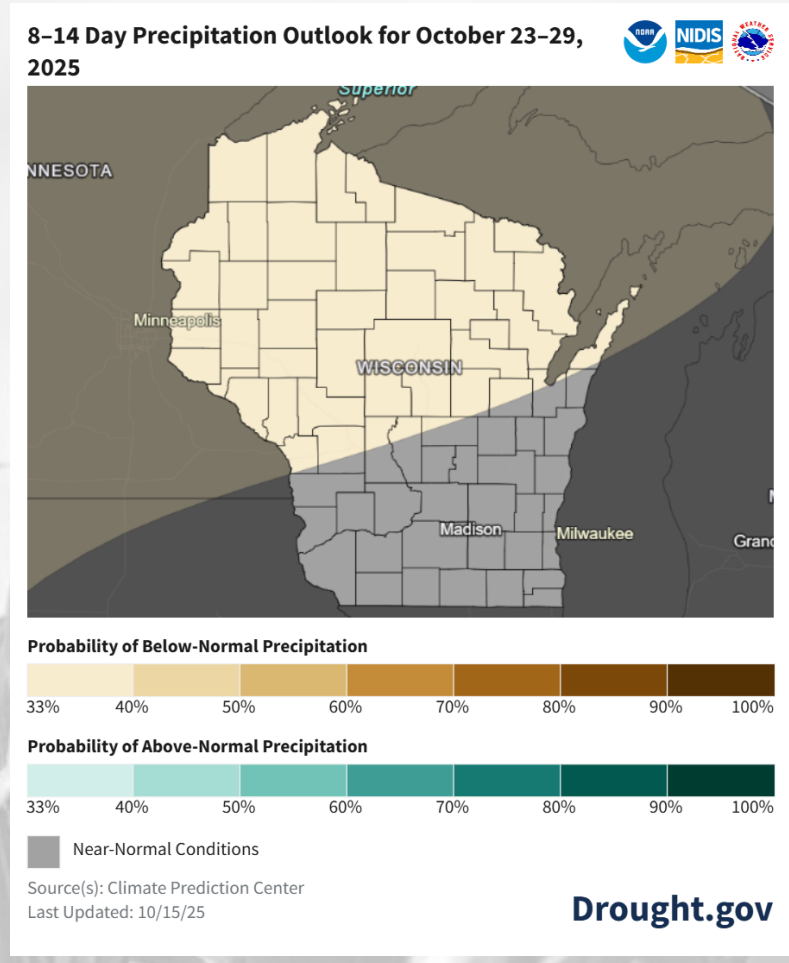
- **When?** → multiple rain chances through Sunday, and again on Tuesday into Wednesday of next week.
- **Where?** → higher chances in the **east/southeast**
- Check your local forecast for details on totals and timing.
- Average precip (1991-2020) for this week: **0.67”**

Forecast for 10/16/25 thru 10/23/25
(Begins at 7am CDT)

https://www.wpc.ncep.noaa.gov/qpf/p168i.gif
https://www.drought.gov/states/wisconsin

8-14 Day Temp & Precip Outlook



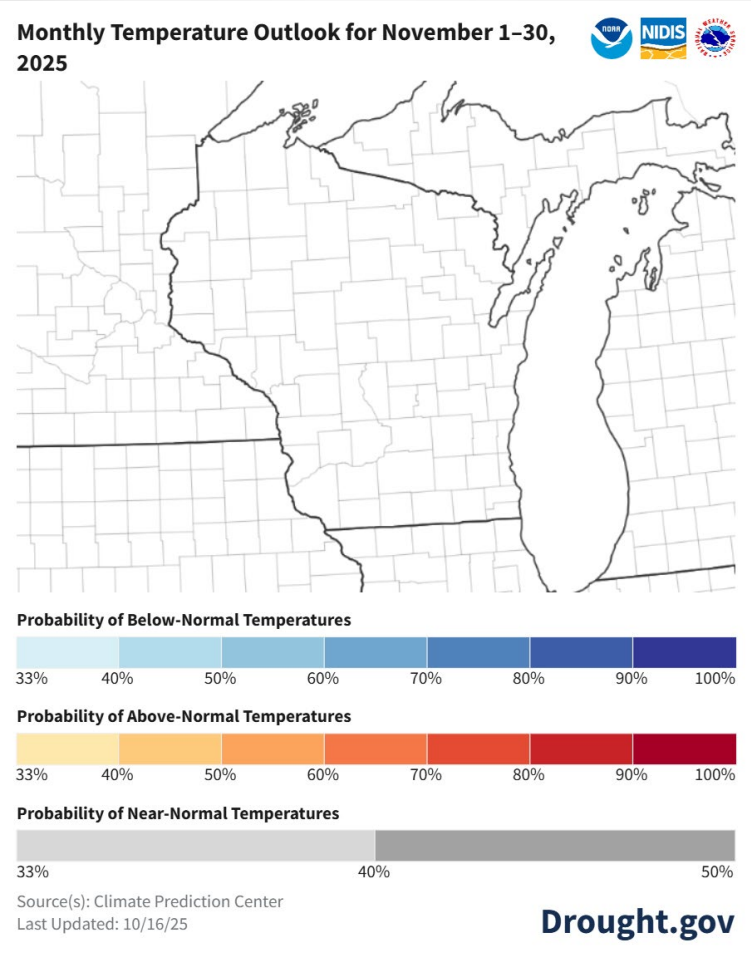


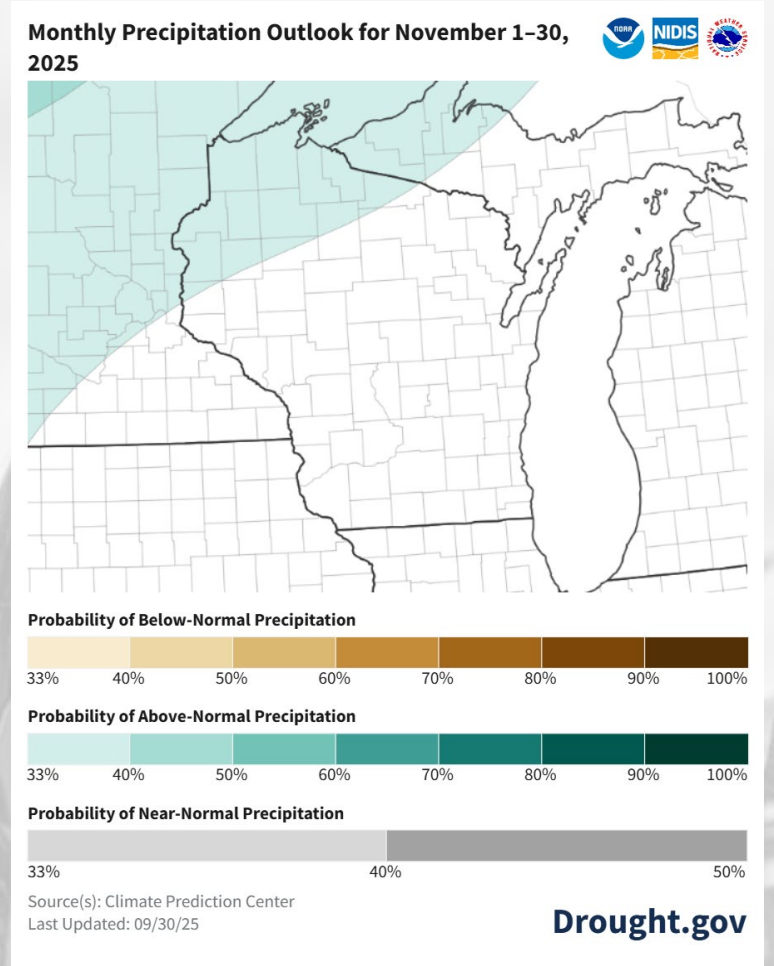
http://www.cpc.ncep.noaa.gov/
https://www.drought.gov/states/wisconsin

Late October: Higher likelihood for above normal temperatures (**60-70%** chance for most). Precip is leaning towards below normal in the N and near normal in the S.

- Statewide normals (1991-2020) for October 23-29 are **42.5°F** and **0.59”**.

30 Day Temp & Precip Outlook



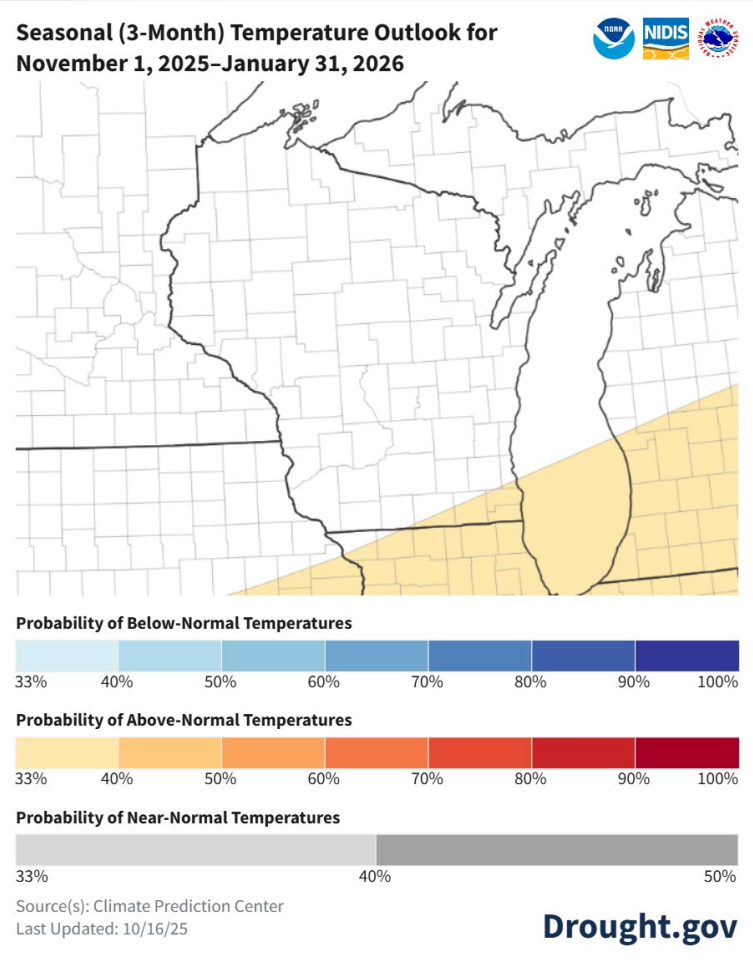


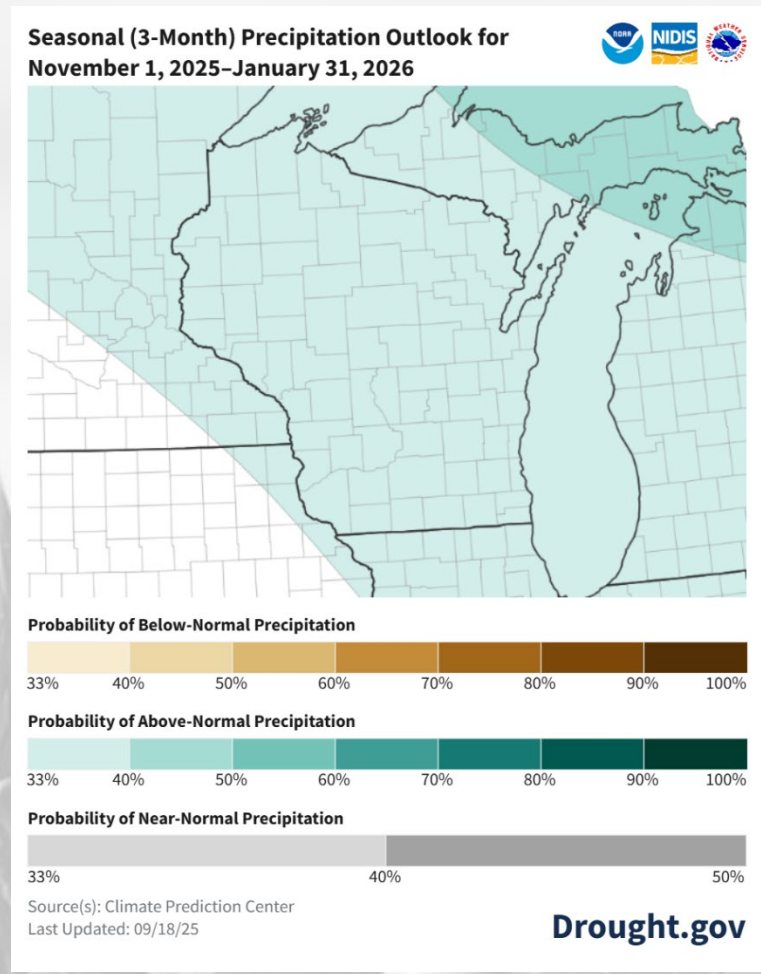
http://www.cpc.ncep.noaa.gov/
https://www.drought.gov/states/wisconsin

Month of November: Uncertainty for temperatures with equal chances statewide. Northern WI is showing a lean towards above normal precip, with uncertainty elsewhere.

- Statewide normals (1991-2020) for November are **33.4°F** and **1.99”**.

90 Day Temp & Precip Outlook





http://www.cpc.ncep.noaa.gov/
https://www.drought.gov/states/wisconsin

Late Fall into Winter '25/'26: Equal chances for temperatures statewide, with a slight lean towards above normal in the far SE. Slight lean towards above normal precip statewide.

- Statewide normals (1991-2020) for Nov-Jan are **23.2°F** and **4.72"**.

Take-Home Points

Current Conditions

- Temperatures were only **slightly above normal** for most of WI last week, a switch from what has been a **much warmer than normal fall** across the state so far.
- Rainfall totals were **relatively low** last week, with most receiving **less than a quarter of an inch**. Isolated pockets received 0.5" or more. This is yet another dry week in what has been a **very dry fall** for most in WI.

Impact

- Topsoil moisture at most Wisconet research farm stations were **near or below last week's levels** due to lower rainfall totals for most. Satellite-based soil moisture products indicate **soils much drier than normal in the east and north**, but closer to normal in the west.
- D1 drought was **added** to east-central and southwest WI, with D1 drought now covering almost **11% of the state**.
- NASS crop progress reports are unavailable this week due to the federal government shutdown.

Outlook

- The next 7 days are looking **more active** for precipitation, with the highest chances on the **eastern side of the state**.
- Climate probabilities for late October indicate a **strong lean towards above normal temperatures** (60-70% chance for most; higher odds in the NW).
- The outlooks for the month of November *(updated on 10/16)* indicate **uncertainty** for temperatures and precip for most of WI. There is a slight lean towards **above normal precip in the north**.

Agronomic Considerations

Field Work and Conditions

- The overall lack of rainfall has been challenging for cover crop establishment.
- After crop harvest is an ideal time to take soil samples and plan ahead for next year's crop nutrient needs.
- Use the WI Frost Freeze Decision Page as overnight temperatures are dropping.

Manure Applications

- Reminder of Wisconsin's NR 151 Runoff Rules with the timing of manure spreading and current runoff levels. Check DATCP Runoff Risk Advisory Forecast.
- Fall is a great time to have manure samples analyzed for nutrient content before spreading. Here is a list of Wisconsin certified labs.
- As you conduct fall spreading, keeping field records is important to estimate nutrient credits for next year's crop and avoid over-application. A2809 can provide guidance on these nutrient estimates.

Pest Management

- Southern Rust has been reported across the state. Heavy disease pressure can cause premature dry down, reduced kernel weight, and lower yield potential.
- In order to prevent weed seed spread from field to field, combine cleaning is essential for reducing seed travel between fields. There have also been many combine fires this year. Keeping combines clean will help minimize risk.

Forage Management

- Silo gas has been present around a variety of silage storage structures this year. Be aware of the dangers of silo gas and stay away from recently filled structures, particularly when the weather is calm with no wind.
- Consider planting a cover crop after silage. This will aid in reducing soil erosion going into winter.
- Avoid immediately grazing frost-damaged sorghum as the risk of prussic acid toxicity is high.
- After corn is harvested, you may consider grazing corn stalks or harvesting corn stover, based on livestock needs.

Fruit Considerations

General

- **Fall Sanitation:** Clean up weeds around trees and vines, mow aisles to allow for better light penetration to aid in decomposition of leaf/plant material.
- **Fall Sanitation:** After leaf drop, chop, compost, remove or burn (where permitted) fallen leaf and plant material to limit potential for disease inoculum and any overwintering pests.
- **Sanitation**: remove and destroy (chop/compost) fallen fruit ~weekly to prevent any internally developing larvae from reaching maturity, and to limit the spread of disease.
- Wisconsin fruit growers can reference the **Midwest Fruit Pest Management Guide** (MFPMG) for a list of registered products and recommended best practices. View the MFPMG Online or order a hard copy here: MFPMG Hard Copy.
- Brown marmorated stink bug has been observed at West Madison. Keep an eye out for large populations. Hosts include apple, cherry, peach, pear, raspberry, and cranberry.
- **Reminder:** Always read and follow directions on the label and keep in mind pre-harvest intervals (PHI) as we move through harvest!

Apples

- Apple and grape growers can reference the NEWA weather station network to monitor for disease infection periods in their area. Check out your nearest weather station: NEWA Weather Station Network (Cornell).

Grapes

- Table and wine grape harvest is completed at West Madison Ag. Research Station and the Peninsular Ag. Research Station. Check out the September 24 WI Fruit Crop Scouting Report for the most recent update on grape maturity testing.
- Grape growers dealing with uneven ripening may reference this 2024 WI Fruit News article: Understanding and Addressing Uneven Ripening in Grapes.

Vegetable Considerations

General

- As crops finish up for the season, there is still time to **establish a winter rye cover crop** across the state. Rye has many potential benefits including prevention of erosion and holding nutrients in the soil, but keep in mind that cover crop benefits are strongly related to biomass. Knowing the planting window for your county can help you predict the amount of biomass and thus the likely cover crop benefits. If you are planting towards the end of the window, it is recommended to increase seeding rate to achieve more biomass. More management suggestions can be found here.
- Pest management for next year's crops starts this fall as many insects and diseases overwinter on crop residue. **Residue management** (either removing or tilling in residue) **can help reduce next year's pest and disease pressure**. Pests include asparagus beetles, crucifer flea beetles, imported cabbage worms, squash bugs, onion maggots and more. Diseases include angular leaf spot, early blight, stemphylium leaf blight, brassica alternaria, and phytophthora blight of cucurbits. Additional info can be found here.

Pests

- If you are noticing distorted & stunted leaves or russeting on your high tunnel peppers, you might have **broad mites or cyclamen mites**. These mites also feed on a wide range of flowers including dahlias and snapdragons. They can be difficult to control as they hide in developing buds and the distorted leaves. Management options include releasing predatory mites if pest populations are not too high and chemical controls.
- **Aphids** are a common high tunnel pest on fall and winter greens. The common species in high tunnels- green peach aphid, potato aphid, and fox glove aphid- are able to survive temperatures as low as 5°F. Population control will only become more difficult as temperatures drop so make sure to monitor and, when necessary, manage aphids this fall. Management options include biological controls such as parasitoid wasps and lady beetles, insecticides, and weed management to reduce alternative hosts.
- Also be on the lookout for **cabbage aphids** and **green peach aphids** on fall brassicas. Sings on aphids include yellowing & wilting leaves, deformed heads, & drops of honeydew aka aphid poop which is a thick, sticky liquid. Their populations can explode quickly in the fall as reproduction rates actually increase in cool temps (50-68°F).
- The risk of damage from **western flower thrips** remains high across northern WI and along lake Michigan. Management options include promoting more beneficial insects such as minute pirate bugs, using reflective mulch, and chemical control. More details on control options can be found here.

Diseases

- Brassica **alternaria** was recently identified in Dane County. Leaf spots are grey or black in color and have concentric rings as they enlarge. Spores can be spread by rain, wind, and insects like flea beetles. Although due to their larger size, spores cannot travel as far on the wind as downy or powdery mildew spores. If your brassicas are infected, be sure to remove or till in the infected plant tissue to reduce overwintering sites in your field. Other management options include planting resistant varieties, removing alternative hosts such as shepherd's purse and field mustard, and fungicides.
- This year's moisture stress combined with high temperatures mean an increased the risk of potato tuber diseases during this time of year. Make sure you are carefully monitoring for disease in storage. Diseases to be monitoring for include **pink rot**, **late blight**, **pythium leak**, and **bacterial soft rot**. More information on symptoms and management options can be found here.

User Survey

Are you a regular user of the Ag Weather Outlook for Wisconsin (AgWOW)? Or maybe you are viewing these slides for the first time this week? Either way, we want to hear your feedback on this resource! Please take a few minutes and fill out this survey:

LINK TO SURVEY

Your feedback will help us better serve your ag-weather data needs through AgWOW.

If you have any trouble accessing or filling out the survey, please email Josh Bendorf at jbendorf@wisc.edu.

Thank you!!
-The AgWOW Team

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