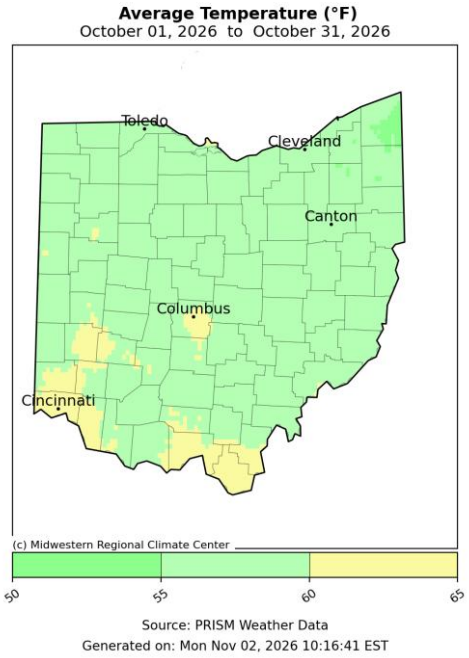
State of Ohio Monthly Climate Update

THE OHIO STATE UNIVERSITY

Review – October 2026

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b)

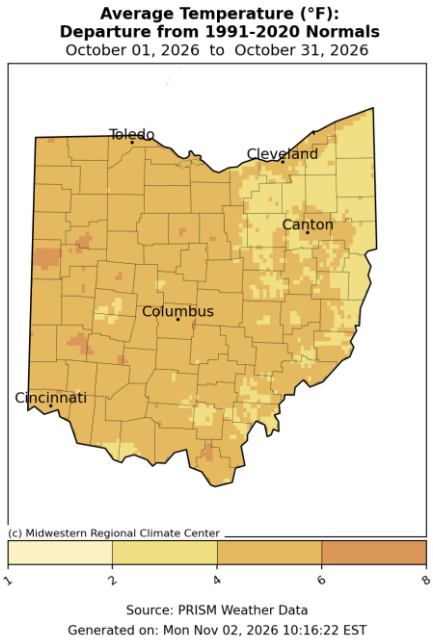


Figure 1a: Average temperature and 1b: Departures from Normal for the month of October. Data courtesy of the Midwestern Regional Climate Center (http://mrcc.purdue.edu).

Temperature

Average temperatures remained in the upper 50s across much of Ohio this month. The coolest conditions were observed in northeastern Ohio, where temperatures ranged from 50-55°F, while the warmest temperatures occurred in southern Ohio and a small area near Columbus, with averages between 60-65°F (Fig. 1a). Compared to historical averages, temperatures were above normal across the entire state. Western Ohio experienced the greatest departures from normal, with temperatures 6-8°F above average. Most of the state recorded temperatures 4-6°F above normal, while northeastern Ohio was closest to average, with departures of 2-4°F above normal (Fig. 1b).

Statewide, Ohio's temperature averaged out to 58°F this month, which is 5.2°F above normal. This puts Ohio's October as the 8th warmest in 132 years. Almost all but a couple of counties in northeastern Ohio were much above average (Fig. 2).

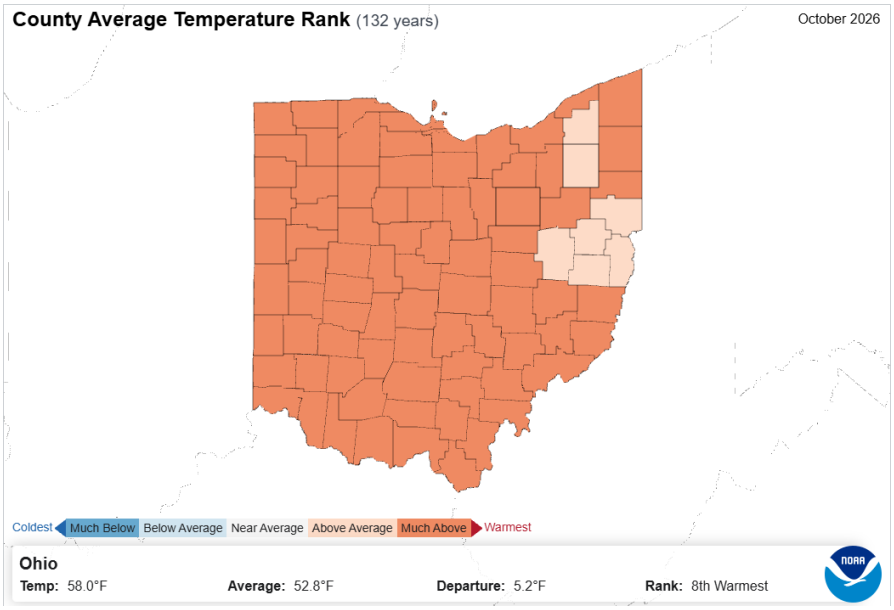
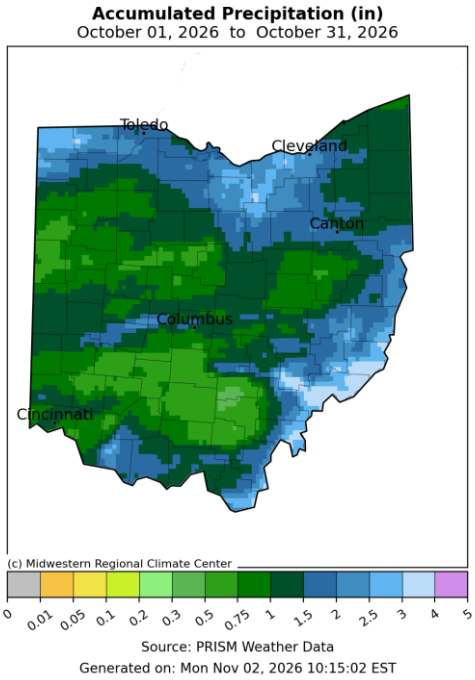


Figure 2: State of Ohio average temperature ranks by county for October. Courtesy of the National Centers for Environmental Information (https://www.ncdc.noaa.gov/sotc/).

Provided by the State Climate Office of Ohio, a collaboration of the Byrd Polar and Climate Research Center, Geography Department, and OSU Extension with support from Power A Clean Future Ohio

Power A Clean Future Ohio

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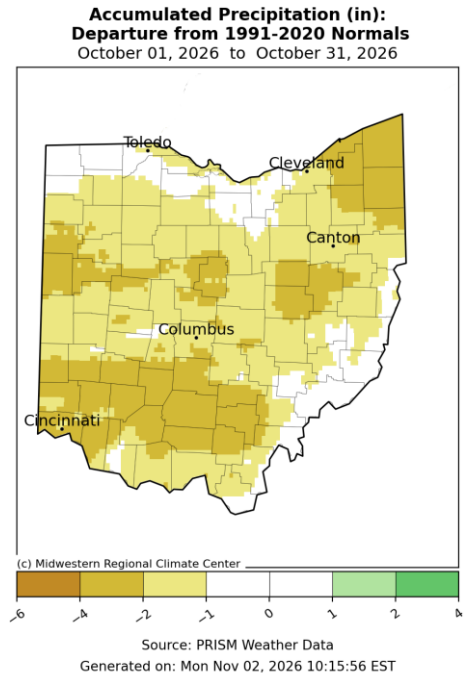


Figure 3a: Accumulated precipitation and 3b: Departures from Normal for the month of October. Data courtesy of the Midwestern Regional Climate Center (http://mrcc.purdue.edu).

Precipitation

October put the brakes on precipitation as average accumulated precipitation values reached a maximum of 4 inches. Central and western Ohio received the lowest amounts, generally ranging from 0.75-1.5 inches, while northern and southeastern Ohio recorded higher totals of 1.5-3 inches (Fig. 3a). Because these regions received comparatively more precipitation, they experienced conditions closer to normal. In contrast, much of the remainder of the state was 1-2 inches below average, with some areas with deficits as large as 2-4 inches below normal (Fig. 3b). The county precipitation rank tells the same story, as no counties were above normal for precipitation. This month was the 17th driest, with most counties below average. Near-normal conditions were experienced in northwestern Ohio and southeast Ohio. The driest conditions were in northeastern, southwestern, and parts of western Ohio, which were much below normal (Fig. 4).

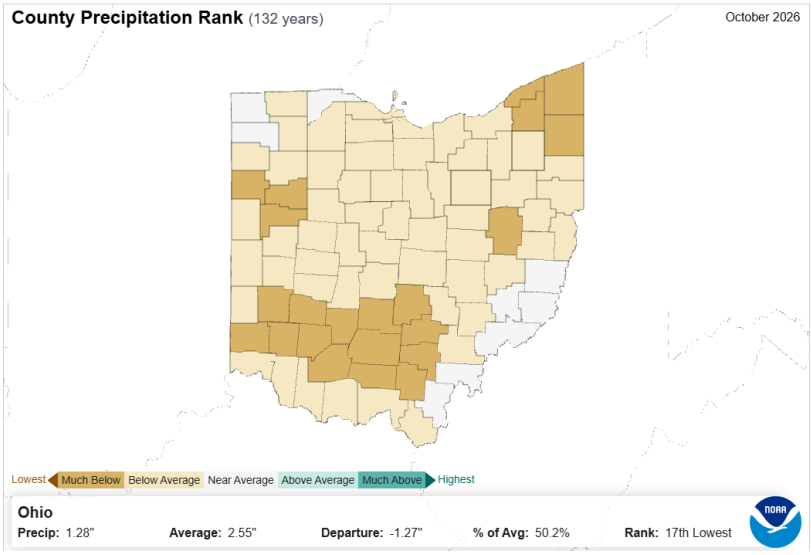


Figure 4: State of Ohio precipitation ranks by county for October. Courtesy of the National Centers for Environmental Information (https://www.ncdc.noaa.gov/sotc/).

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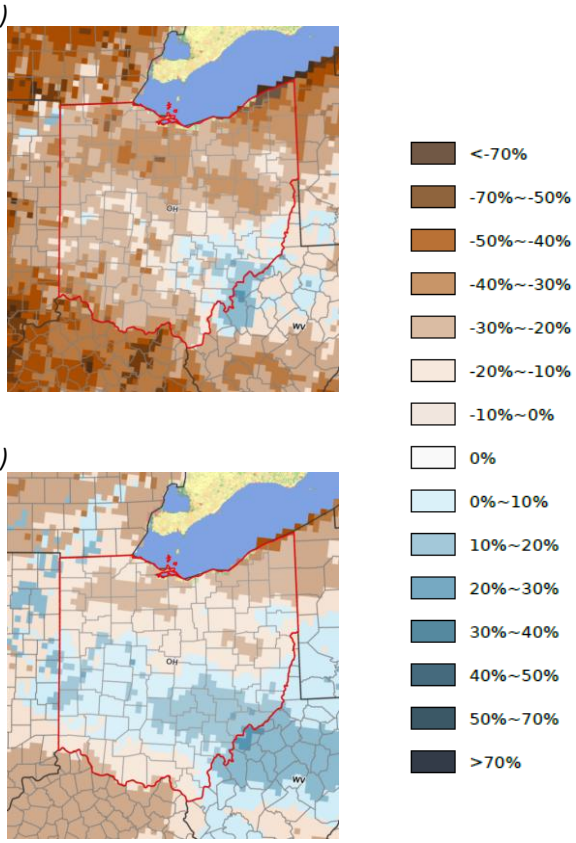


Figure 5a: Top (6 inches) and 5b: Sub (3 feet) soil moisture percentile on the last day of October 2026. Legend to the right uses the soil moisture anomalies from 2015 to present, with negative values indicating below-average conditions and positive values indicating above-average conditions. Courtesy of Crop-CASMA (https://nassgeo.csiss.gmu.edu/CropCASMA/).

Soil and Energy

With noticeably less precipitation in October, topsoils are experiencing drier conditions while subsoils continue to retain moisture from previous months. Topsoil moisture varies throughout the state, with the driest conditions in northeast Ohio, with over 70% below average. Conversely, southeastern Ohio is 10-20% above average. For most of the state, topsoils are 20-30% below normal, indicating dry conditions (Fig. 5a). Subsoil, however, hovers around 0-20% below and above average for the state. Wetter conditions span from western Ohio to southeast Ohio, while drier conditions are in northern Ohio (Fig. 5b). With recent precipitation at the beginning of November, topsoils will see some relief from drier conditions and hopefully fight off drought conditions.

Cooling Degree Days (CCDs) for this month remained near normal, while Heating Degree Days (HDDs) were at a deficit for the month. HDDs were 138 less than normal, indicating a lesser demand for heat as temperatures were above average for the month (Fig. 6). With temperate temperatures, CDDs still remained around normal as outside air could ventilate buildings.

Climate Division	Heating Degree Days	Normal	Departure	Cooling Degree Days	Normal	Departure
1	230	387	-157	26	12	14
2	233	378	-145	27	14	13
3	292	400	-108	19	10	9
4	219	372	-153	32	15	17
5	222	367	-145	31	14	17
6	269	404	-135	20	10	10
7	278	385	-107	18	11	7
8	193	333	-140	36	18	18
9	193	332	-139	34	16	18
10	227	364	-137	22	12	10
Statewide	232	370	-138	27	13	14



Figure 6: (Left) October heating & cooling degree days. (Right) Corresponding Ohio Climate Divisions. Data courtesy of the Midwestern Regional Climate Center (http://purdue.mrcc.edu).

Notable Events

October was hot and cold this month, with the first frost advisories sent out in mid-October following record-breaking high temperatures. On October 13, 2026, temperatures climbed into the upper 80s, setting daily record highs at several locations across the state. Eleven cities surpassed previous records, including Columbus, which reached 86°F and exceeded a record set in 1969; Cincinnati, which climbed to 89°F and broke a record from 1928; and Cleveland, which reached 88°F, surpassing its previous record established in 1969 (Fig. 7). Despite the unseasonably warm conditions, drought impacts remained minimal due to abundant rainfall during August and September. A significant shift in weather patterns occurred just days later, as frost advisories and freeze watches and warnings were issued beginning October 16 and remained in effect through October 18. Overnight temperatures fell to near or below freezing, marking one of three frost or freeze events during the month. Another frost advisory was issued on October 21 as overnight lows were forecast to dip into the mid-30s. Combined with clear skies and light winds, these conditions were favorable for widespread frost development (Fig. 8). The first widespread freeze of the season signaled the end of the growing season for much of Ohio and served as an important indicator for farmers to complete harvest activities before crops could be damaged by prolonged freezing temperatures.



Figure 7: High temperatures recorded in Ohio on October 13, 2026. 10 WNBS. Accessed at https://www.10tv.com/video/weather/record-highs-tuesday/530-caec0b83-d7a0-4ab5-b118-b11f4fb0e95f

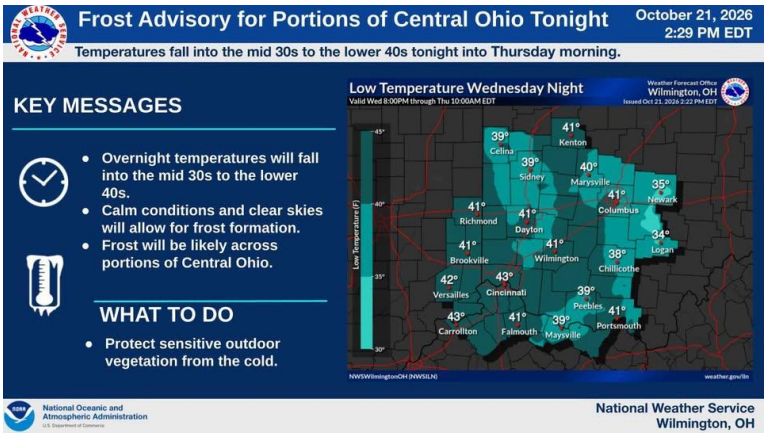
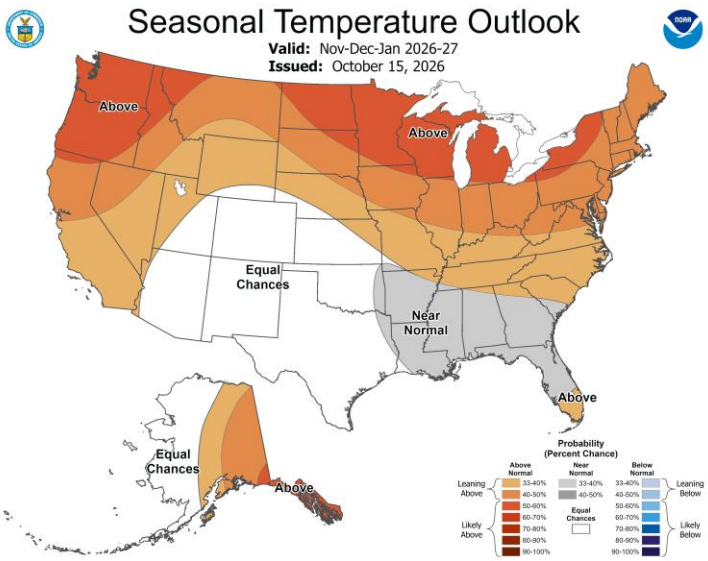


Figure 8: Frost advisories sent out on the night of October 21, 2026. NWS Wilmington. Accessed at https://www.facebook.com/NWSWilmingtonOH/posts/a-frost-advisory-is-in-effect-for-portions-of-central-ohio-tonight-temperatures/1536842111806186/

Forecast: Nov 2026 - Jan 2027

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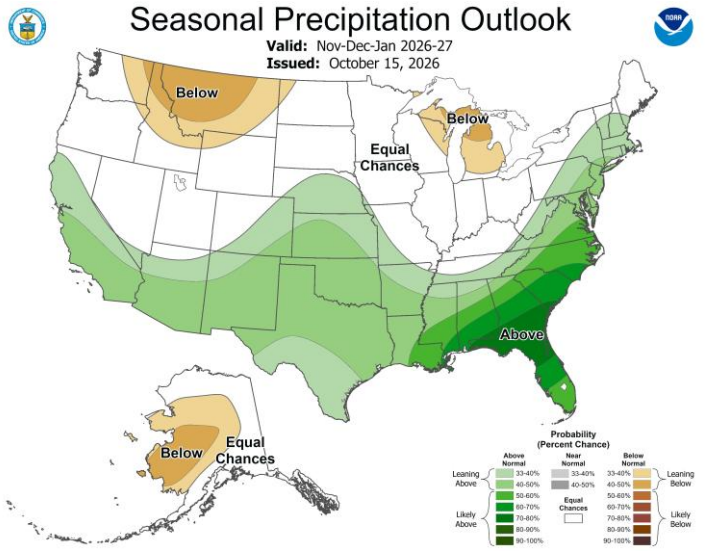


Figure 9a: Nationwide Seasonal 3 Month Temperature and 9b: Precipitation. Courtesy of the Climate Prediction Center (https://www.cpc.ncep.noaa.gov/).

Looking Ahead

The next three months could lead to above-normal temperatures, but precipitation patterns are yet to be determined. The seasonal temperature outlook seems promising for warmer temperatures, as most of the state is leaning above normal by 40-50%, and even northeast Ohio is likely above normal by 50-60% (Fig. 9a). On the other hand, precipitation is unknown, as there are equal chances for above- or below-normal precipitation (Fig. 9b).

Although this month was drier than usual, the abundant rainfall received during August and September provided enough soil moisture to support the remainder of the growing season while allowing fields to dry sufficiently for heavy machinery to return. October is peak harvest season, and with the first frost now occurring across much of Ohio, farmers will continue harvesting their remaining crops. Unlike last month, wet field conditions are no longer a major concern, as the drier topsoil allows equipment to operate more efficiently with less risk of rutting or soil damage. These favorable conditions should help producers wrap up harvest activities more easily and efficiently as the season comes to a close

Note: These outlooks do not provide the quantity of above- or below-normal conditions, just the likelihood of occurrence (i.e., the probability).

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Provided by the State Climate Office of Ohio, a collaboration of the Byrd Polar and Climate Research Center, Geography Department, and OSU Extension with support from Power A Clean Future Ohio

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