# State of Ohio Quarterly Climate Summary

THE OHIO STATE UNIVERSITY

*Autumn Review (Sept-Nov)*

*Released: 12/19/2025*

## Temperature and Precipitation

Autumn in Ohio featured generally near-normal temperatures but pronounced regional differences in precipitation. Average temperatures were near normal across most of Ohio, with a narrow band of slightly warmer anomalies (1–2°F above normal) extending from northwest Ohio into south-central Ohio (Fig. 1a). Precipitation exhibited a much sharper gradient, with northwestern Ohio receiving 3-7.5 inches of rainfall, while southern and northeastern Ohio recorded 7.5-15 inches (Fig. 1b). As a result, northwestern Ohio experienced 2-6 inches below normal precipitation, whereas southern Ohio saw 0-4 inches above normal, with the remainder of the state generally near normal (Fig. 1c). When expressed as percentages of normal, most of the state, particularly eastern Ohio, fell within 75–100% of normal. This contrasted with northwestern Ohio, which showed 25–75% of normal, and southern Ohio, which reached 100–150% of normal (Fig. 1d).

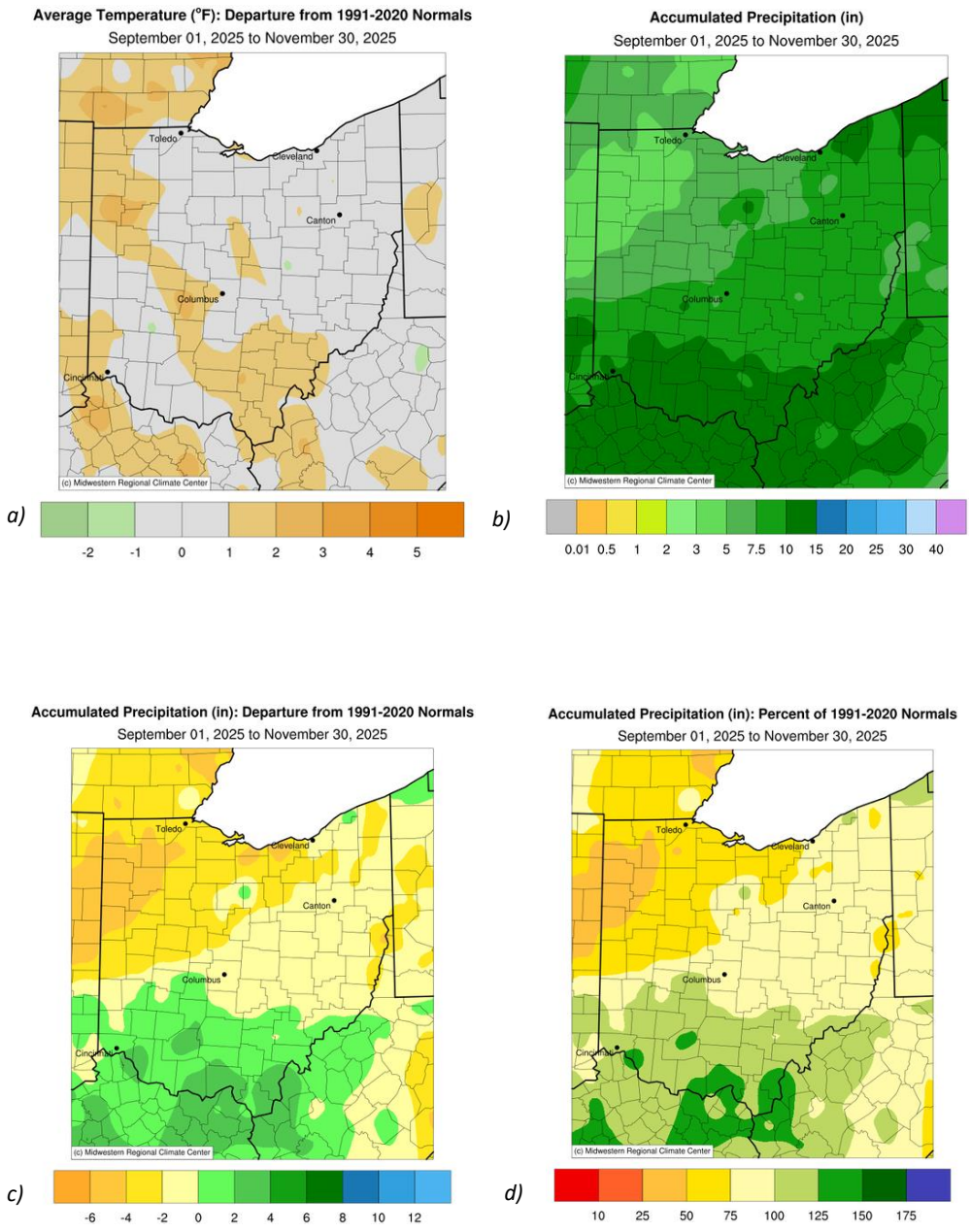



*Figure 1: Statewide departures from normal temperature (a) and accumulated precipitation (b) over the summer months at top, followed by statewide accumulated precipitation departures (c) and percent of normals for precipitation (d) at bottom. All data courtesy of the Midwestern Regional Climate Center (http://mrcc.purdue.edu).*

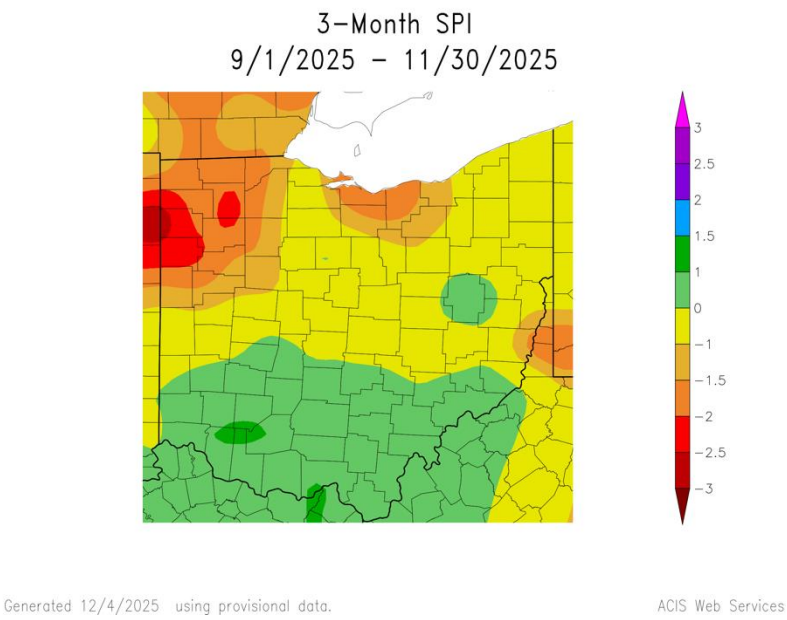



*Figure 2: Three-month Standardized Precipitation Index (SPI) across the state of Ohio from September 2025 through November 2025, used as a proxy for soil moisture conditions. Data courtesy of the High Plains Regional Climate Center (https://hprcc.unl.edu/)*

## Soil and Energy

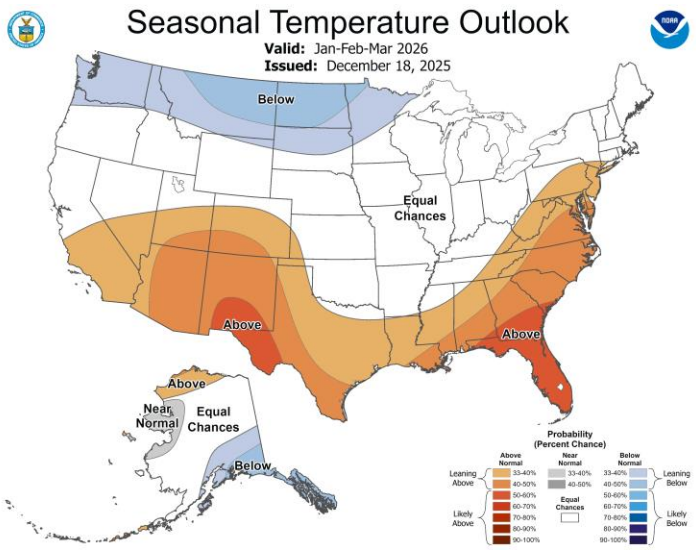
The 3-month Standardized Precipitation Index (SPI) shows that most of Ohio experienced near-normal moisture conditions during autumn, with the notable exception of persistent dryness in the northwest. The extreme northwestern counties recorded SPI values between –3 and -1.5, indicating severe to moderate dryness, while much of the remaining northern half of the state ranged from –1 to 0. In contrast, the southern half of Ohio showed slightly wetter conditions, with SPI values between 0 and +1 (Fig. 2).

Autumn temperatures resulted in a near-normal number of degree days overall. Heating Degree Days (HDDs) were slightly below normal across most climate divisions, with the exception of Divisions 3 and 7, which recorded slightly above-normal HDDs. Cooling Degree Days (CDDs) were understandably low for this time of year, though departures indicate a slightly above-normal number of CDDs (Fig. 3).

| Climate Division | Heating Degree Days | Normal | Departure | Cooling Degree Days | Normal | Departure |
|---|---|---|---|---|---|---|
| 1 | 1065 | 1160 | -95 | 123 | 88 | 35 |
| 2 | 1114 | 1149 | -35 | 99 | 84 | 15 |
| 3 | 1215 | 1195 | 20 | 64 | 60 | 4 |
| 4 | 1045 | 1139 | -94 | 124 | 94 | 30 |
| 5 | 1066 | 1110 | -44 | 123 | 95 | 28 |
| 6 | 1178 | 1206 | -28 | 87 | 67 | 20 |
| 7 | 1177 | 1175 | 2 | 81 | 69 | 12 |
| 8 | 983 | 1037 | -54 | 146 | 118 | 28 |
| 9 | 950 | 1002 | -52 | 143 | 122 | 21 |
| 10 | 1049 | 1084 | -35 | 115 | 93 | 22 |
| Statewide | 1093 | 1126 | -33 | 108 | 89 | 19 |


*Figure 3: (Left) Total September 2025 – November 2025 heating & cooling degree days. (Right) Corresponding Ohio Climate Divisions. Data courtesy of the Midwestern Regional Climate Center (http://mrcc.purdue.edu).*

*a)*




*b)*

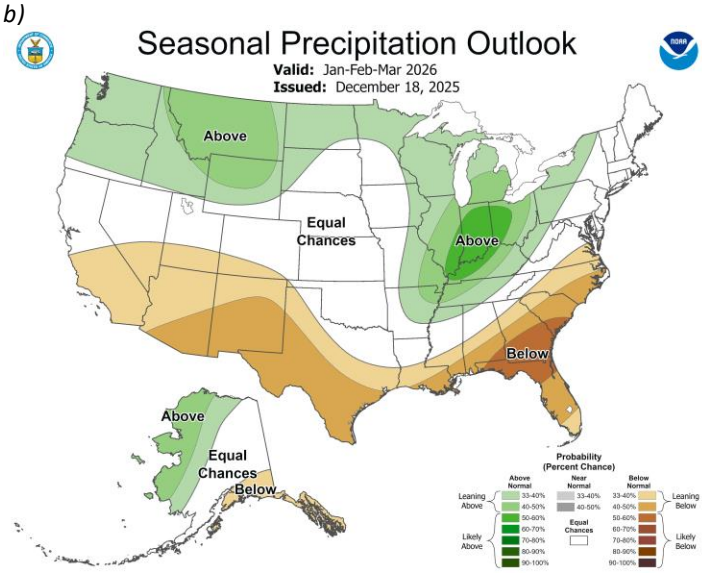



*Figure 4: a) Nationwide Seasonal Temperature and b) Precipitation Outlook for October – December 2025. Courtesy of the Climate Prediction Center (https://www.cpc.ncep.noaa.gov/).*

## Looking Ahead

The Climate Prediction Center's seasonal temperature outlook for Ohio does not strongly favor either above- or below-normal temperatures, indicating equal chances for both outcomes; however, the outlook for January and February remains uncertain (Fig. 4a). In contrast, the seasonal precipitation outlook shows a clearer signal, with most of Ohio having a 33–60% chance of above-normal precipitation. Probabilities decrease moving northeast and southern Ohio, where chances fall closer to 33–40% (Fig. 4b).

Given the ongoing drought conditions in northwest Ohio, the seasonal precipitation outlook offers some optimism for much-needed moisture over the coming months. Increased precipitation could help alleviate an almost six-month-long drought that has significantly impacted soils, agriculture, and water resources across the region. However, the form of this precipitation remains uncertain. Ohio has experienced this uncertainty with a colder start to December, and now temperatures are warming up towards the end. With no strong temperature signal in the seasonal outlook, it is still unclear whether the additional moisture will primarily fall as snow, rain, or a mix of winter precipitation types.

*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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