

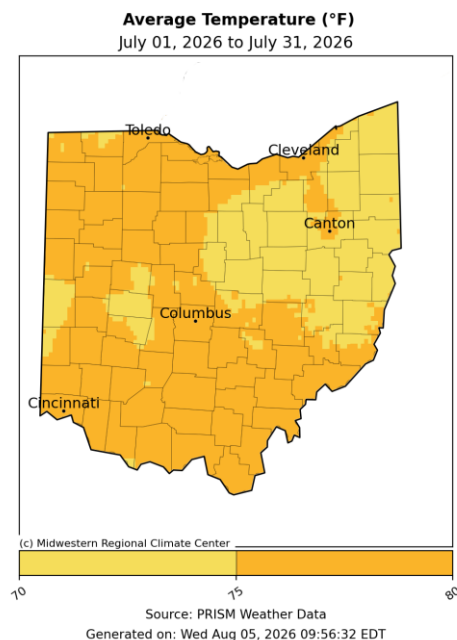
Review – July 2026

Temperature

Temperatures in July stayed within a tight 70–80°F range across Ohio. The warmest conditions stretched from the northwest through central and into southern Ohio, while cooler pockets of 70–75°F averages were mainly in the northeast and small areas of west-central Ohio (Fig. 1a). No region was below normal; a few spots west of Columbus were near average, but most of the state ran 1–2°F above normal, with up to 4°F warmer conditions in southeastern Ohio (Fig. 1b).

The county average temperature rank stayed consistent throughout the state with an average temperature for the month at 73°F. This average temperature is 1.9°F above average leaving this month at the 25th warmest in the 132-year climate record (Fig. 2).

a)



b)

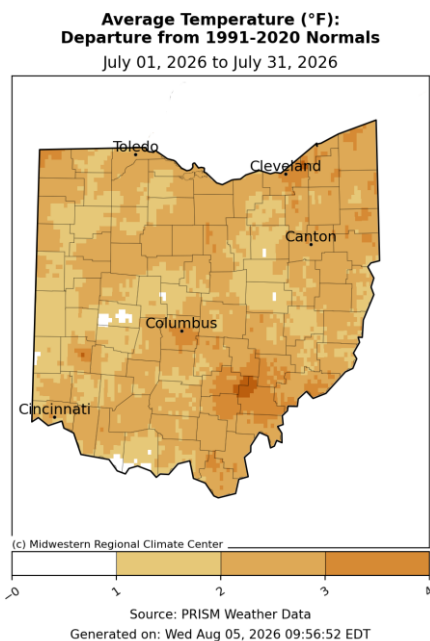


Figure 1a: Average temperature and 1b: Departures from Normal for the month of July. Data courtesy of the Midwestern Regional Climate Center (<http://mrcc.purdue.edu>).

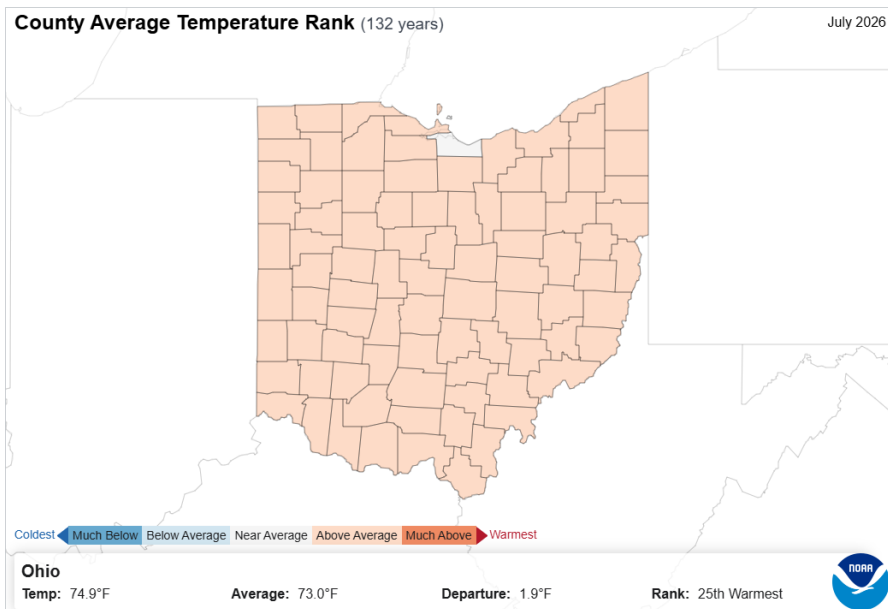
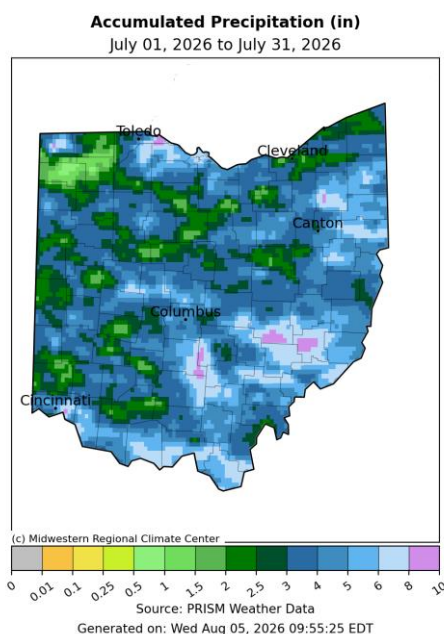


Figure 2: State of Ohio average temperature ranks by county for July. Courtesy of the National Centers for Environmental Information (<https://www.ncdc.noaa.gov/sotc/>).

Review – July 2026

a)



b)

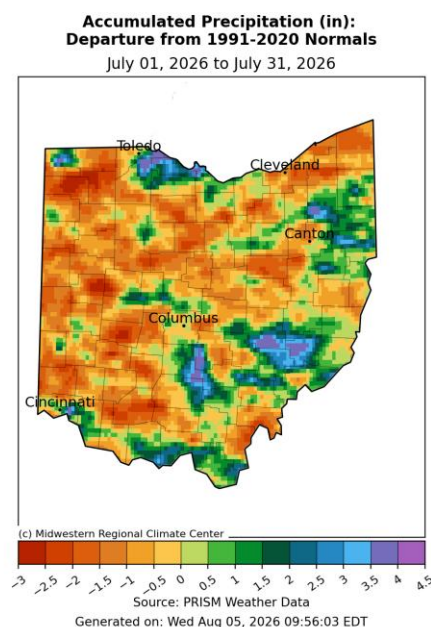


Figure 3a: Accumulated precipitation and 3b: Departures from Normal for the month of July. Data courtesy of the Midwestern Regional Climate Center (<http://mrcc.purdue.edu>).

Precipitation

July's precipitation heavily favored southeastern Ohio, leaving much of the rest of the state comparatively dry. The highest monthly totals, reaching 8–10 inches, occurred south and southeast of Columbus and southeast of Toledo, with surrounding areas generally receiving 4–6 inches. In contrast, western and northeastern Ohio saw pronounced deficits, with only 0.5–2 inches of rainfall (Fig. 3a). This is prominently due to the localized heavy rainfall that is common with the summer months. The departure from normal mirrors this pattern: areas southeast of Toledo, south of Columbus, and far southeastern Ohio were 3–4.5 inches above normal, while most remaining regions were up to 3 inches below normal (Fig. 3b).

Ohio's county-level precipitation rankings fluctuated widely, with areas dipping below, hovering near, and rising above average throughout the state. Statewide precipitation totaled 3.98 inches, coming in 0.31 inches below the long-term average. Overall, Ohio received 92.2% of the expected July rainfall, narrowly missing the monthly benchmark and placing July 2026 as the 55th driest on record (Fig. 4).

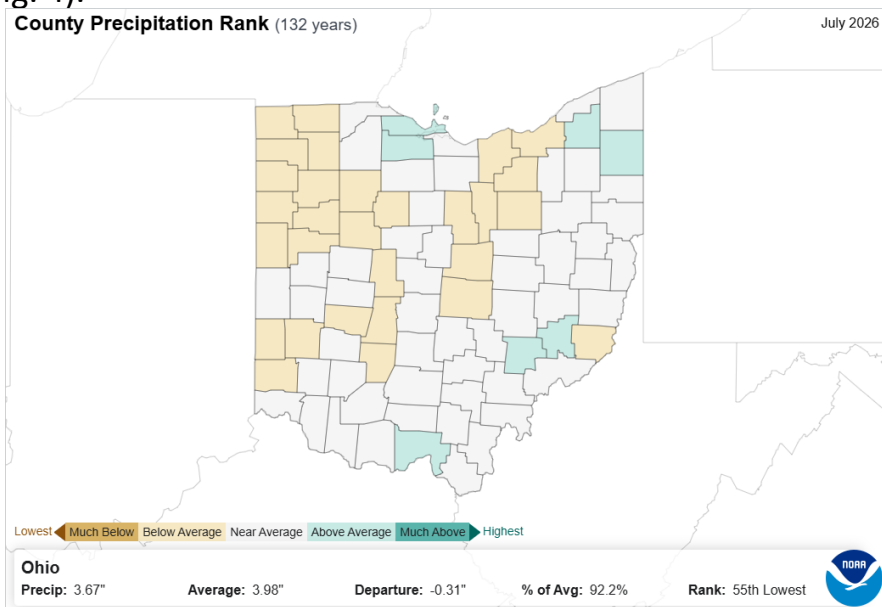
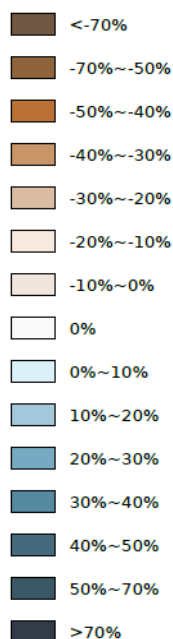
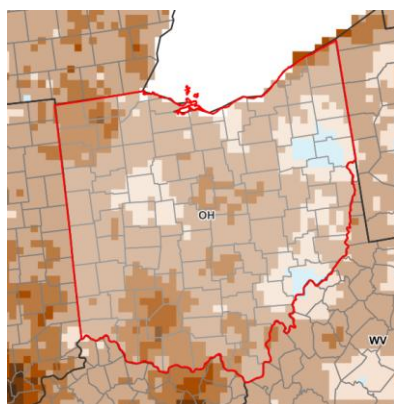


Figure 4: State of Ohio precipitation ranks by county for July. Courtesy of the National Centers for Environmental Information (<https://www.ncdc.noaa.gov/sotc/>).

Review – July 2026

a)



b)

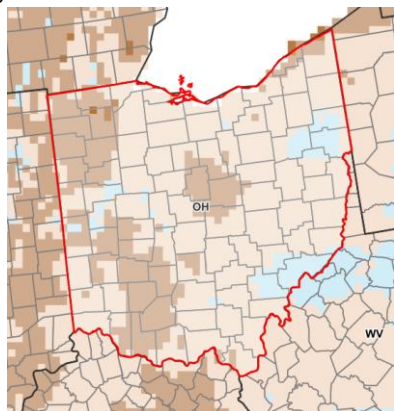


Figure 5a: Top (6 inches) and 5b: Sub (3 feet) soil moisture percentile on the last day of July, 2026. Legend to the right uses the soil moisture anomalies from 2015 to present, with negative values indicating below-average conditions and positive values indicating above-average conditions. Courtesy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

Soil and Energy

Ohio's six-week stretch without drought came to an end in July, with soil moisture responding quickly to recent dry spells. Topsoil, which dries first, showed widespread declines across the state except in southeastern and eastern Ohio. The driest conditions were in northwest and southwest Ohio, where topsoil moisture fell to 40–50% below normal. Elsewhere, values were generally near normal, with a few pockets reaching up to 10% above normal where heavy rains fell (Fig. 5a). Subsoil moisture remained more stable, though 20–30% below-normal areas persisted across western and central Ohio (Fig. 5b).

Although Ohio's average temperatures did not exceed 80°F, the lingering effects of the late-June heat wave pushed Cooling Degree Days (CDDs) to 330 statewide, which is 67 above normal. Heating Degree Days (HDDs) were slightly below normal, averaging 3 for the month (Fig. 6).

Climate Division	Heating Degree Days	Normal	Departure	Cooling Degree Days	Normal	Departure
1	2	3	-1	336	268	68
2	2	4	-2	329	264	65
3	6	9	-3	296	222	74
4	4	3	1	320	264	56
5	3	3	0	338	269	69
6	5	7	-2	285	229	6
7	4	5	-1	302	241	61
8	2	2	0	361	298	63
9	1	1	0	366	292	74
10	1	3	-2	337	258	79
Statewide	3	4	-1	330	263	67



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



Review – July 2026

Notable Events

Wildfires dominated the conversation in July as Ohio recorded some of its highest AQI values on record. Although wildfires are a natural ecological process that helps control pests and invasive species, their size and intensity have increased dramatically in recent years. On July 16, 2026, the EPA issued a statewide air quality alert as smoke from Canadian wildfires drifted south into Ohio. Figure 7 shows the extent of the fires on that day, with red points indicating out-of-control fires in Ontario. The concentration of red points was the main area of fire density and therefore the smoke source for the following day in the Midwest and East Coast. PurpleAir sensors, which continuously monitor the Air Quality Index (AQI), quickly detected the smoke's impact. On the morning of July 17, 2026, AQI values exceeded 225 ppm, and even reaching into the 400s, indicating that the air was unhealthy for all groups (Fig. 8). Ohio had not seen AQI levels this severe since the summer of 2023, also driven by Canadian wildfires. As a result, community pools, sports events, and long-duration outdoor activities were canceled to limit exposure to hazardous smoke. The smoke was not only detectable by smell, it also reduced visibility, especially on the morning of July 17. The sunrise appeared more like a sunset due to the orange hue in the sky, and distant objects across open fields became difficult to see (Fig. 9; Fig. 10). Unfortunately, events like this are expected to become more frequent as longer warm periods elevate wildfire risk.

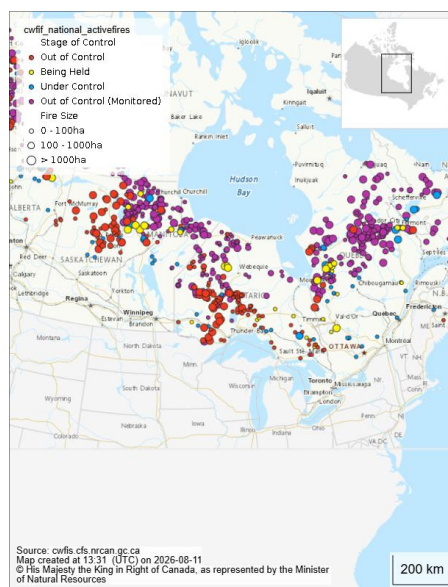


Figure 7: Wildfires detected on July 16, 2026 updated daily from fire management agencies (provinces, territories, and Parks Canada). The Canadian Wildland Fire Information System . Accessed at <https://cwfis.cfs.nrcan.gc.ca/en/interactive-map?selectedDate=2026-07-16&layerIds=public%3Acwfif-national-activefires>

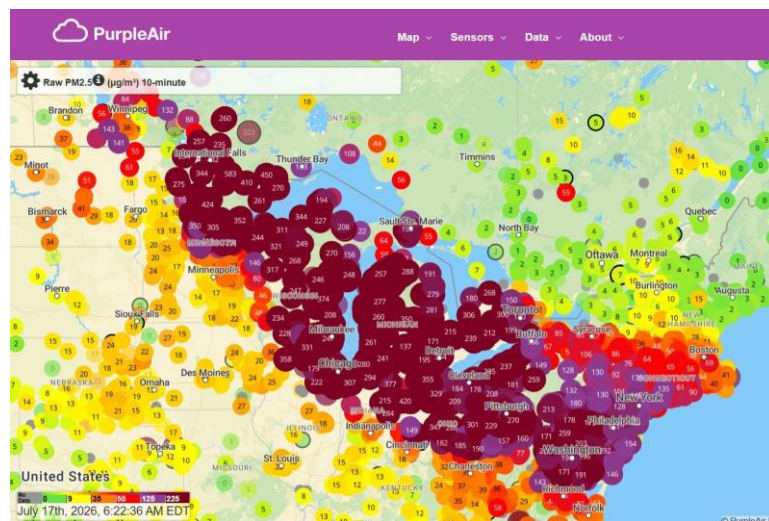


Figure 8: AQI values throughout the Midwest and East Coast on the morning of July 17, 2026. PurpleAir. Accessed at <https://map.purpleair.com/#1/25/-30>



Figure 9 (Left): Sunrise in Lewis Center, OH on July 17, 2026. Adam Cairns. Figure 10 (Right): Smoke on a corn field in Dublin, OH on July 17, 2026. Kyle Robertson. Both accessed at <https://tinyurl.com/columbus-haze-2026>



Forecast: Aug-Oct 2026

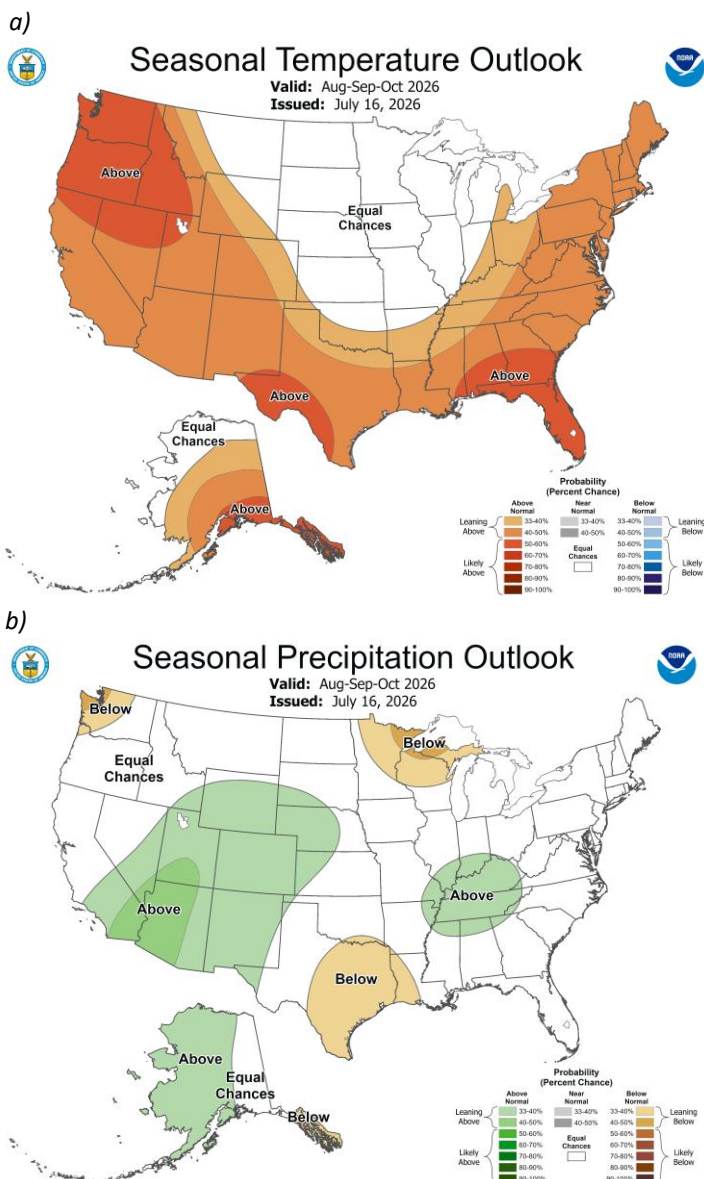


Figure 11a: Nationwide Seasonal 3 Month Temperature and 11b: Precipitation. Courtesy of the Climate Prediction Center (<https://www.cpc.ncep.noaa.gov/>).

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Looking Ahead

With fall approaching, Ohio is expected to experience warmer-than-normal temperatures, though the signal is modest. The seasonal outlook places most of the state in a 40–50% likelihood of above-average temperatures, with eastern Ohio showing the strongest tilt toward warmth (Fig. 9a). Precipitation, however, remains uncertain. The three-month outlook indicates equal chances of above-, near-, or below-normal precipitation across Ohio, offering no clear directional trend for the upcoming season (Fig. 9b). August's current precipitation totals, however, are exceeding normal values as the midpoint in the month approaches.

Current crop outlooks for the harvest season remain very favorable, with growth rates running ahead of schedule. Winter wheat is fully harvested and closely aligned with the five-year average. Farmers continue to report good soil conditions, and 62% of Ohio's corn is rated in good to excellent condition¹. The only notable concern is the typical late-summer dry spell that often develops in August and September.

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

[1. Ohio Crop Progress Report, August 3rd, 2026. Ohio's Country Journal.](#)

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