

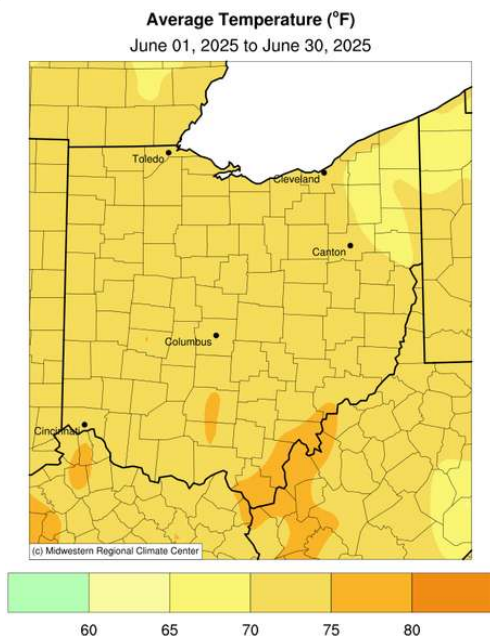
## Review – June 2025

### Temperature

In June, temperatures across Ohio were consistently above average. Most of the state recorded average temperatures between 70°F and 75°F. A small area in southern Ohio reached 75–80°F, while a portion of northeast Ohio saw slightly cooler temperatures between 65°F and 70°F (Fig. 1a). Nearly the entire state experienced warmer-than-normal conditions, though the degree of warming varied. Temperature departures ranged from 0 to 4°F above average, with no clear regional pattern (Fig. 1b).

At the county level, every county in Ohio ranked within the top third of its warmest Junes on record. Notably, 61 counties placed in the top 10% of their 131-year temperature history. Mercer County recorded its 4th warmest June, while eight other counties reported their 5th warmest. Overall, June 2025 ranked as the 10th warmest June on record for the state (Fig. 2).

a)



b)

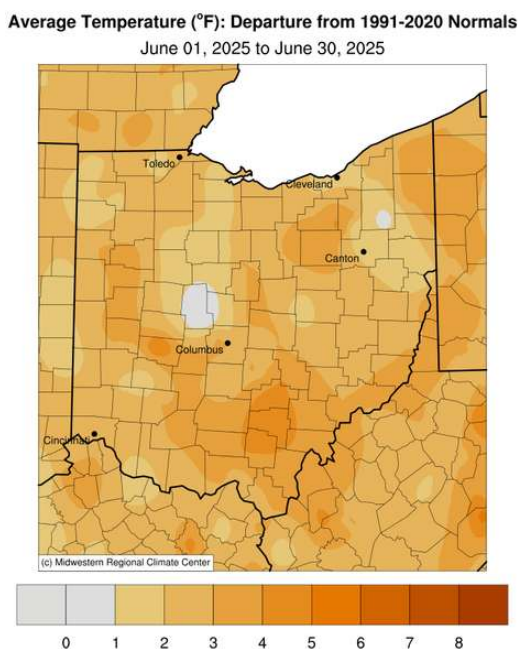


Figure 1a: Average temperature and 1b: Departure from Normal for the month of June 2025. Data courtesy of the Midwestern Regional Climate Center (<http://mrcc.purdue.edu>).

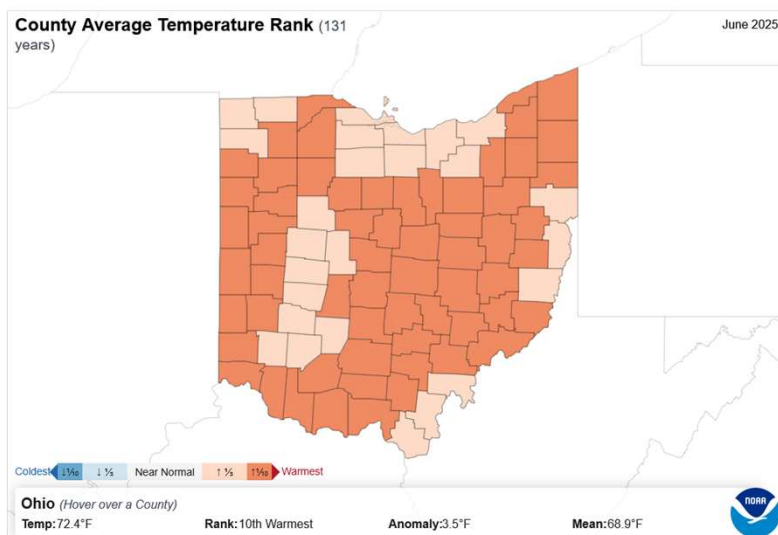
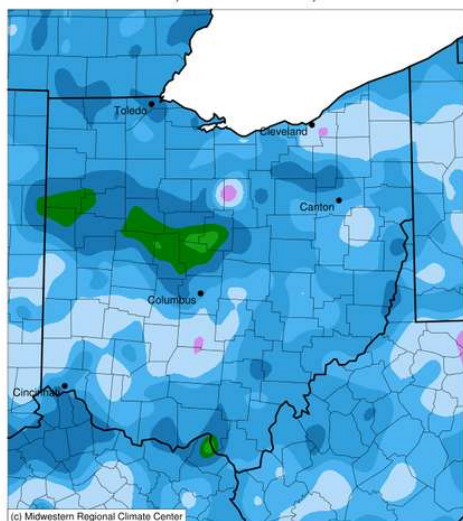


Figure 2: State of Ohio average temperature ranks by county for June 2025. Courtesy of the National Centers for Environmental Information (<https://www.ncdc.noaa.gov/sotc/>).

## Review – June 2025

a)

Accumulated Precipitation (in)  
June 01, 2025 to June 30, 2025



b)

Accumulated Precipitation (in): Departure from 1991-2020 Normals  
June 01, 2025 to June 30, 2025

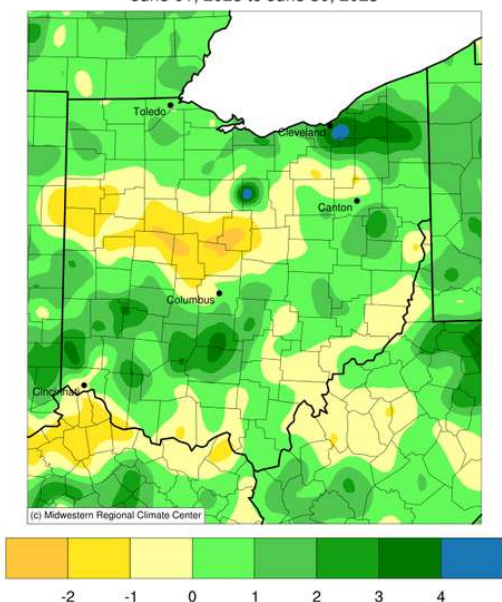


Figure 3a: Accumulated precipitation and  
3b: Departures from Normal for the month  
of June 2025. Data courtesy of the  
Midwestern Regional Climate Center  
(<http://mrcc.purdue.edu>).

## Precipitation

Precipitation across Ohio during June was highly variable, with some areas experiencing above-average rainfall while others saw below-average totals. Most of the state recorded between 4 and 8 inches of accumulated precipitation, though a section of western Ohio received only 2 to 4 inches (Fig. 3a). Compared to historical averages, much of Ohio fell within 1 inch above or below normal, though several regions recorded departures of 1 to 4 inches above average. In contrast, a portion of northwest Ohio experienced deficits of up to 3 inches below normal (Fig. 3b).

At the county level, most counties in Ohio ranked within the wettest third of their 131-year records. Trumbull, Pickaway, and Butler counties ranked in the top 10% for wettest Junes, while Hardin County fell into the driest third of their record. Notably, Pickaway County recorded its 3rd wettest June on record. Statewide, June 2025 ranked as the 32nd wettest June on record (Fig. 4).

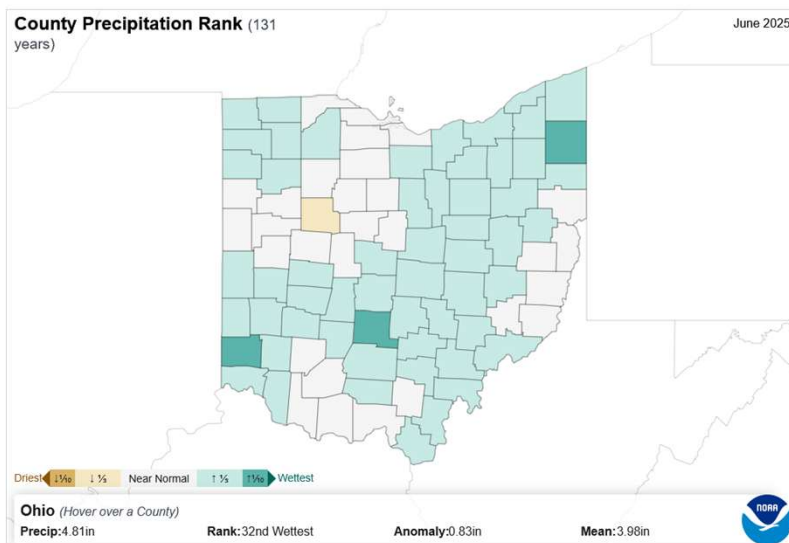


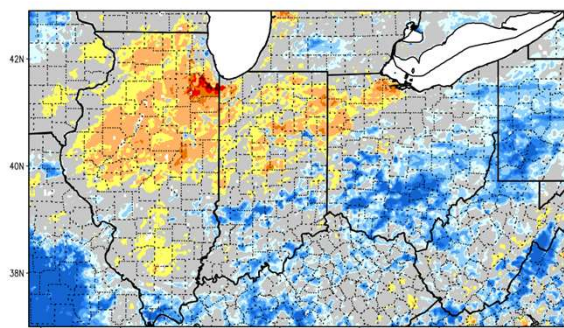
Figure 4: State of Ohio precipitation ranks by county for June 2025. Courtesy of the National Centers for Environmental Information (<https://www.ncdc.noaa.gov/sotc/>).



## Review – June 2025

a)

SPoRT-LIS 0–40 cm Soil Moisture percentile valid 30 Jun 2025



SPoRT-LIS 0–200 cm Soil Moisture percentile valid 30 Jun 2025

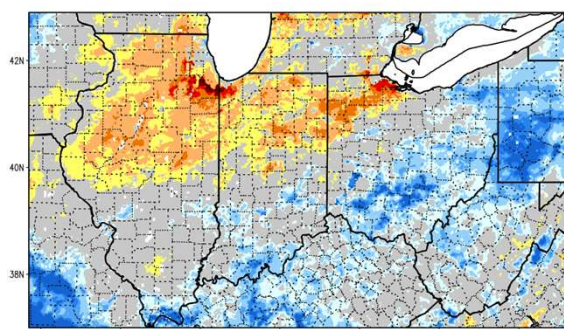


Figure 5a: 0–40 cm and 5b: 0–200 cm soil moisture percentile across the region at the end of June 2025. Courtesy of NASA SPoRTLIS ([https://weather.msfc.nasa.gov/sport/case\\_studies/lis\\_IN.html](https://weather.msfc.nasa.gov/sport/case_studies/lis_IN.html)).

## Soil and Energy

Soil moisture conditions at the end of June showed notable regional differences across Ohio. The 0–40 cm soil moisture map indicated broadly wet surface conditions across southeastern Ohio, while slightly below-normal moisture levels were observed in the northwest (Fig. 5a). At deeper levels (0–200 cm), soil moisture was lower in the southeast compared to surface conditions, suggesting recent precipitation may not have fully penetrated the soil profile yet. The northwest continued to show relatively dry conditions throughout the soil column (Fig. 5b). These patterns may reflect rainfall that occurred later in the month, which can take additional time to infiltrate deeper soil layers. The above-average temperatures observed in June led to a significantly higher number of Cooling Degree Days (CDDs) and a lower number of Heating Degree Days (HDDs) across Ohio (Fig. 6). This shift suggests increased energy demand, particularly for air conditioning, as residents and businesses worked to maintain comfortable indoor temperatures during the unusually warm month.

**Product Note:** Both NASA SPoRT LIS soil moisture products contain small pockets of inaccurate data indicating extremely wet or dry conditions. These small-scale errors can emerge in remote sensing products covering large areas or grid-spacings. For more information, please contact Geddy Davis ([davis.5694@osu.edu](mailto:davis.5694@osu.edu)).

Climate Division	Heating Degree Days	Normal	Departure	Cooling Degree Days	Normal	Departure
1	13	34	-21	245	161	84
2	15	39	-25	242	149	93
3	30	57	-28	198	114	84
4	12	27	-16	276	173	103
5	15	26	-11	275	169	106
6	19	42	-23	244	135	109
7	23	40	-16	228	132	96
8	12	20	-8	286	187	99
9	13	20	-7	299	182	117
10	17	29	-12	278	152	126



Figure 6: (Left) June 2025 heating & cooling degree days. (Right) Corresponding Ohio Climate Divisions. Data courtesy of the Midwestern Regional Climate Center (<http://mrcc.purdue.edu>).

# State of Ohio Monthly Climate Update



THE OHIO STATE UNIVERSITY

*Review – June 2025*

## Notable Events

Throughout June, Ohio experienced extreme heat and heavy precipitation, but the most notable event occurred on June 18, when a strong low-pressure system moved northeast through the Midwest into the Great Lakes region. This system triggered a severe line of thunderstorms that swept across the state, bringing widespread wind damage, heavy rainfall, and three confirmed tornadoes (Fig. 7).

Two EF0 tornadoes were confirmed in Ottawa County, causing minor structural and tree damage. An EF1 tornado in Huron and Lorain counties reached peak winds of 100 mph and snapped numerous trees along a 9-mile path. While the tornadoes caused localized impacts, the most widespread damage resulted from straight-line wind gusts of 60 to 70 mph across much of Ohio. The highest gust, 81 mph, was recorded at Lorain County Regional Airport (KLPR). These winds brought down countless trees and powerlines, leading to significant damage and leaving over 200,000 customers without power across the state (Fig. 8). Fortunately, no injuries were reported, and many of the outages were restored within the following one to two days.

Ohio Severe Weather Reports: June 18th, 2025

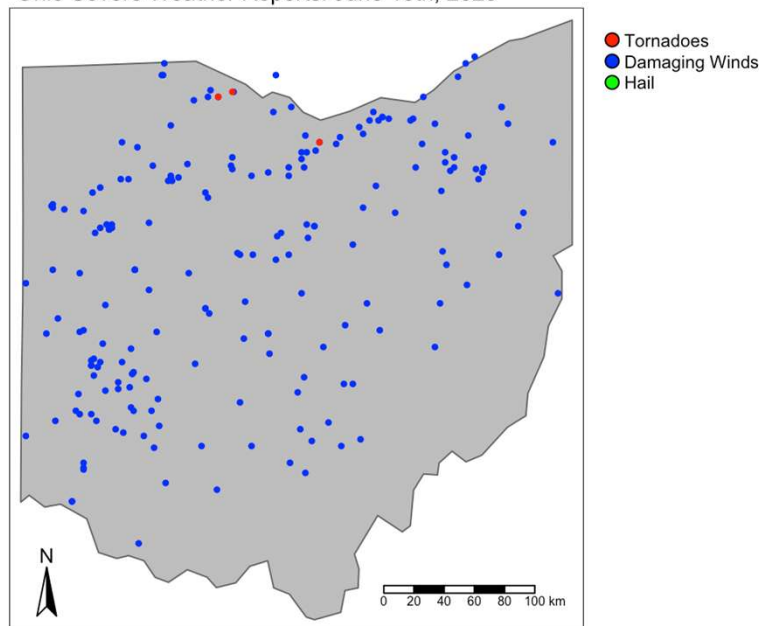


Figure 7. Local storm reports from June 18, 2025, in Ohio. The graphic was created by Geddy Davis using SPC data.



Figure 8. Large tree toppled onto a house in Bowling Green, OH, on June 18, 2025. Photo credit: Paxton Reynolds, via NWS Cleveland June 18 Storm Report.

Slide 4

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AR1

June 18th

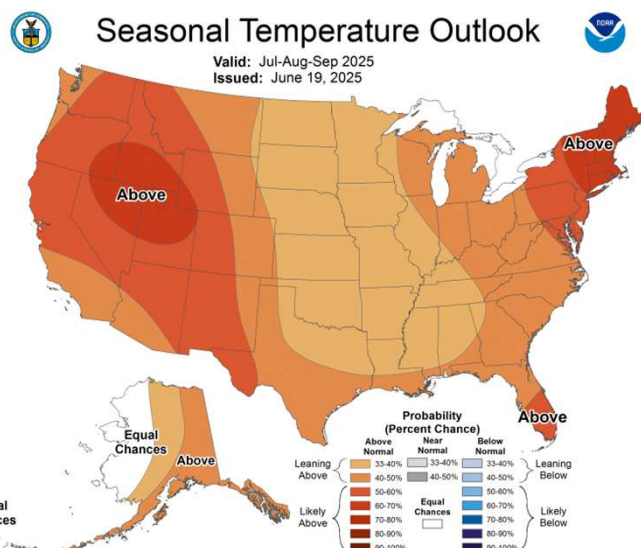
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## Forecast: July – September 2025

a)



b)

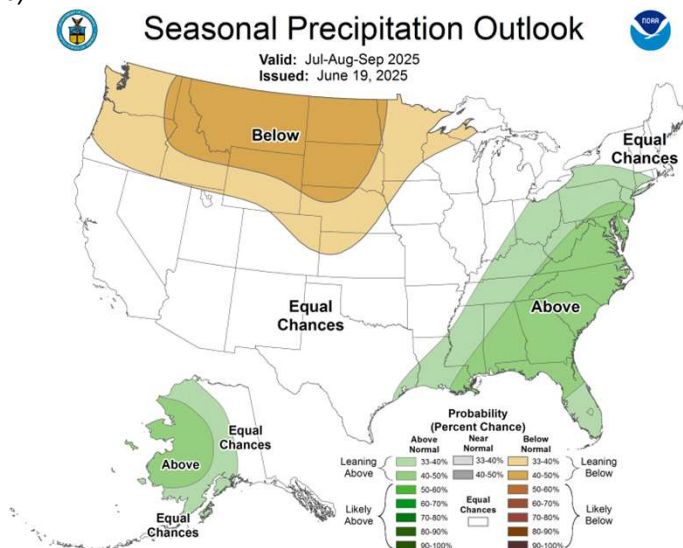


Figure 9a: Nationwide Seasonal Temperature and 9b: Precipitation Outlook for July-September. Courtesy of the Climate Prediction Center (<https://www.cpc.ncep.noaa.gov/>).

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## Looking Ahead

The latest Climate Prediction Center (CPC) outlook continues to suggest warmer- and wetter-than-average conditions across Ohio over the next three months. Above-average temperatures are expected statewide with moderate confidence (Fig. 9a), while precipitation is likely to be above normal across most of the state—except for the far northwest—though forecast confidence remains low (Fig. 9b).

These conditions may benefit crop development, particularly in areas that had recent dryness. However, excessive rainfall could lead to fieldwork delays, waterlogging, and increased risk of plant diseases. Warmer temperatures may speed up crop growth but could also raise concerns about heat stress in livestock and higher pest or disease activity. As the growing season continues, tracking short-term weather patterns and soil moisture conditions will be important for managing potential agricultural challenges and taking advantage of favorable conditions where they occur.

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