NWS Wilmington, Ohio
September 2024
Regional Climate Summary

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Dry conditions were entrenched across much of the region during the first few weeks of the month, leading to exceptional drought conditions in some area locations. This has resulted in the worst drought in several decades across portions of the region. Eventually, a pattern shift and remnants of Hurricane Helene brought much needed rainfall to the region. Severe weather occurred on a few days during the month as well, which included damaging winds, isolated large hail, and a tornado.

Temperatures

While temperatures fluctuated above and below normal the first ten days of the month, a large majority of the days were below normal. After this time, several days of above normal temperatures occurred.

Many days during the month there was a large diurnal range in temperatures due to the dry conditions. Temperatures would cool off quickly at night, but then warm quickly during the day. Much cooler high temperatures occurred beginning on the 23rd when upper 80s and 90s were replaced with 70s to lower 80s in many locations. Temperatures on a whole however were still above normal because low temperatures were warmer given increased cloud cover. The diurnal swing tightened up with many locations only having low temperatures in the 60s.

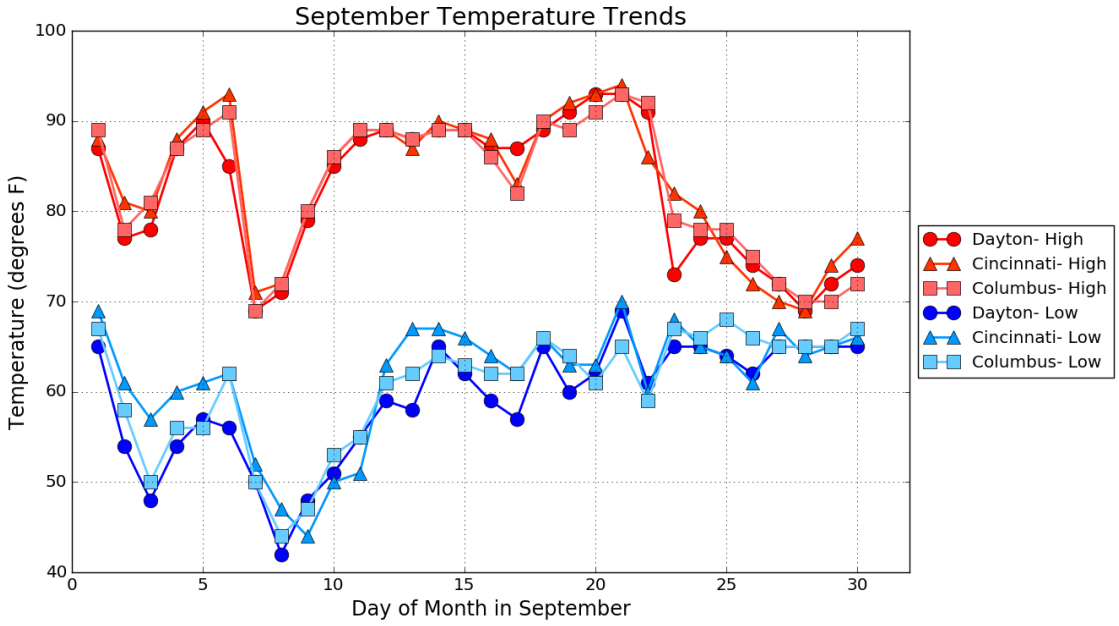
The remnants of Hurricane Helene late in the month brought several days of cloud cover and kept temperatures from fluctuating much.

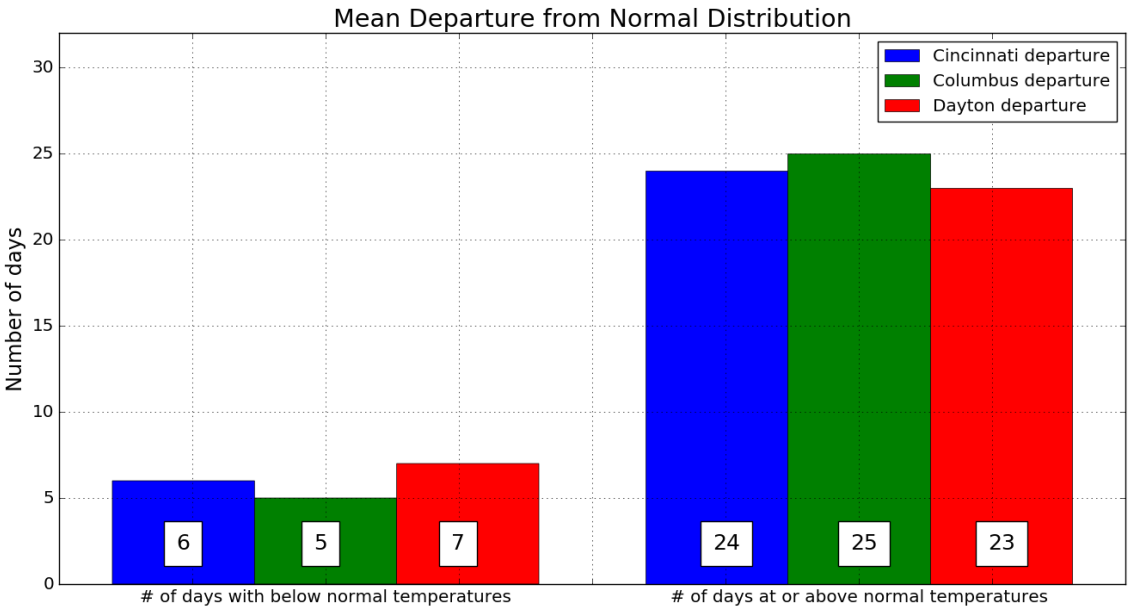
While there were some days of below normal temperatures around the start of the month, a majority of the month was above normal and temperatures on a whole for the month ended up above normal.

The only temperature record during the month was a tied record low temperature of 42 degrees in Dayton, Ohio on the 8th. The previous time this occurred was in 1898.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	72.5	83.5	61.5	+4.4	94 on 21st	44 on 9th
Columbus (CMH)	71.7	82.8	60.5	+4.5	93 on 21st	44 on 8th
Dayton (DAY)	70.7	82.3	59.1	+3.0	93 on 20th and 21st	42 on 8th

Temperatures (Continued)





Precipitation

The first three weeks of the month were overall very dry across the region. Drought conditions worsened to 'exceptional' and the entire area was experiencing at least some level of drought conditions. The 4th week of the month was a vastly different story. The entire region saw over an inch of rain, with many locations receiving 3 to 5 inches of rain. Some locations even saw 6 to over 8 inches of rain due to the remnants of Helene across the area. While some locations (especially portions of central Ohio) were still below normal for the month, rainfall during the 4th week of the month put many locations above normal for the entire month as a whole.

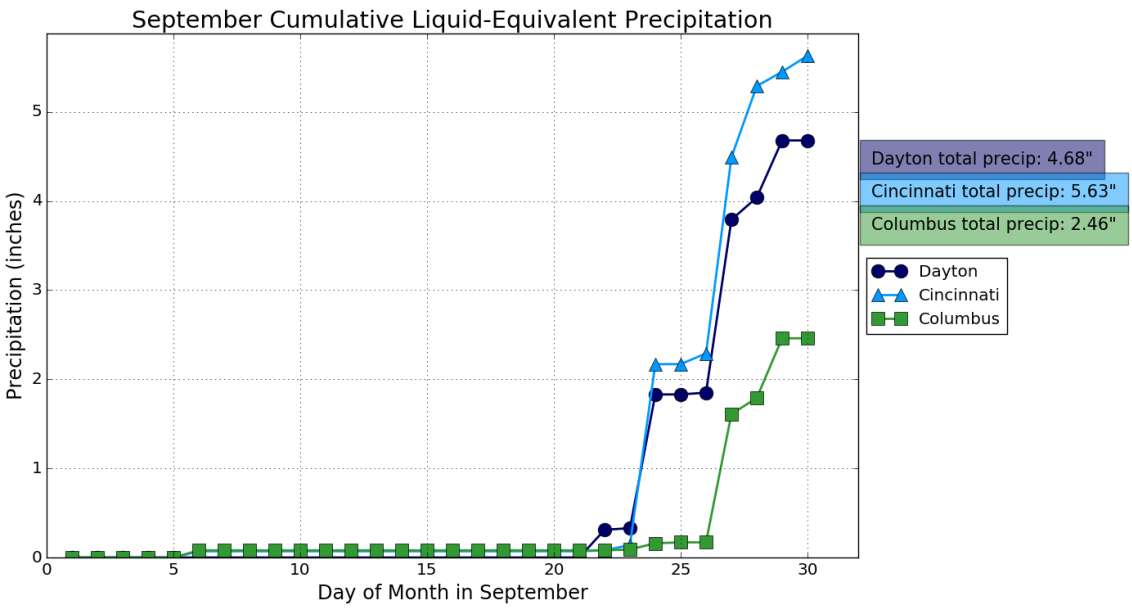
A record daily maximum rainfall was set at Cincinnati, Ohio on the 24th. 2.03 inches of rainfall occurred, breaking the old record for the day of 1.87 inches set in 1972.

A record daily maximum rainfall was set at Dayton, Ohio on the 24th. 1.5 inches of rainfall occurred, breaking the old record of 1.15 inches set in 1945.

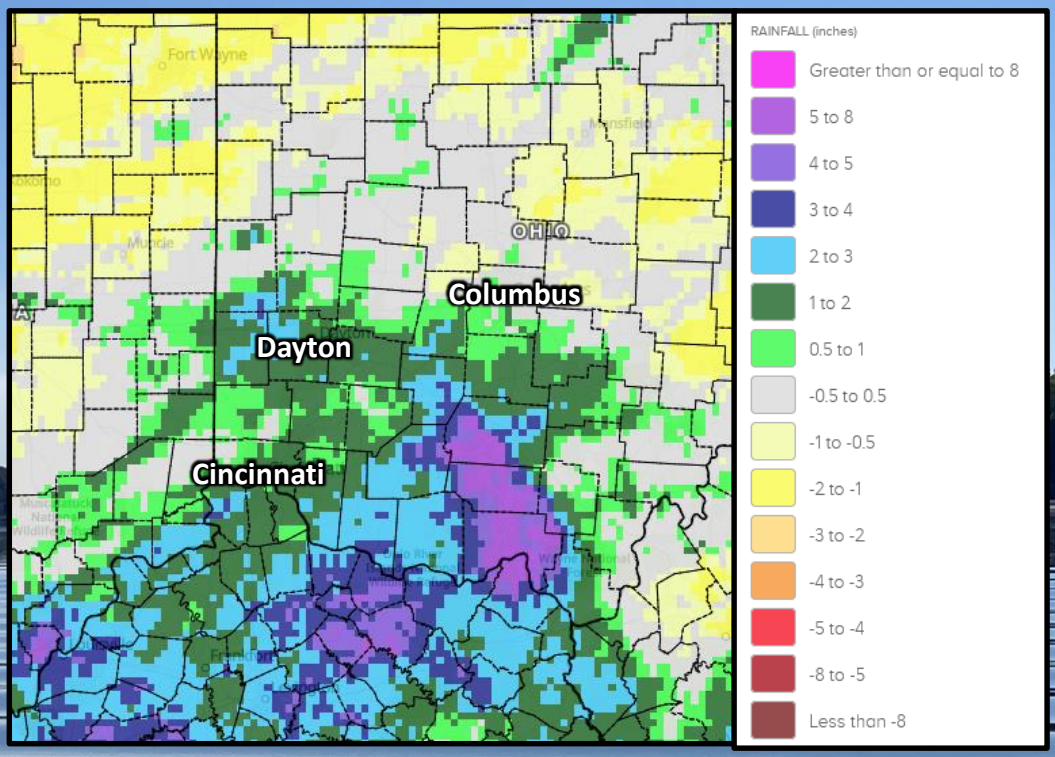
A record daily maximum rainfall was set at Columbus, Ohio on the 27th. 1.44 inches of rainfall occurred, breaking the old record of 1.29 inches set in 1886.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)	
Cincinnati (CVG)	5.63	+2.52	2.20	27th
Columbus (CMH)	2.46	-0.68	1.44	27th
Dayton (DAY)	4.68	+1.37	1.94	27th

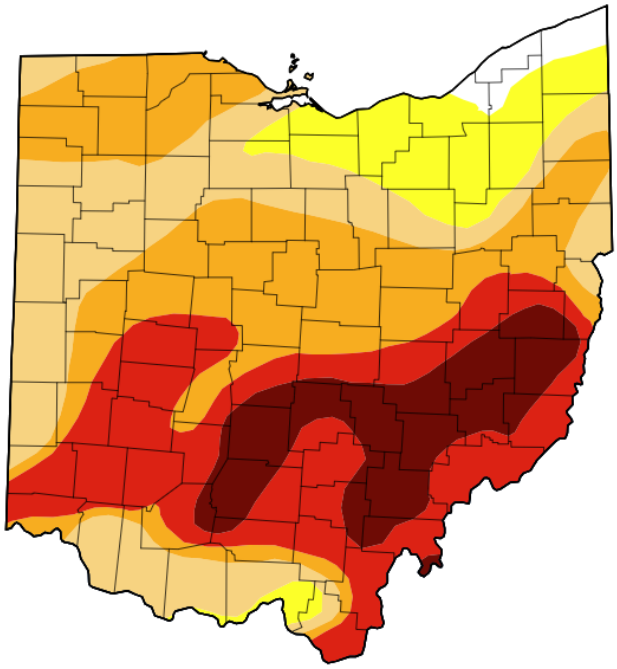
Precipitation (Continued)



September Precipitation Departure From Normal (In.)



U.S. Drought Monitor



Map released: Thurs. September 26, 2024

Data valid: September 24, 2024 at 8 a.m. EDT

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data

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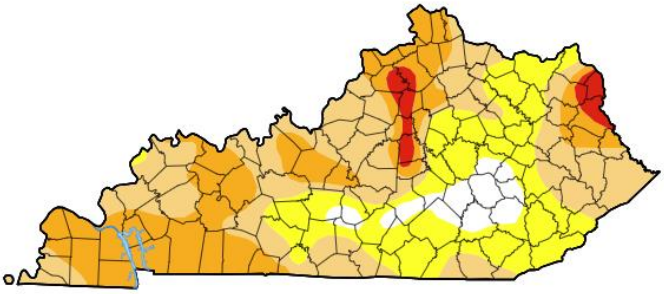
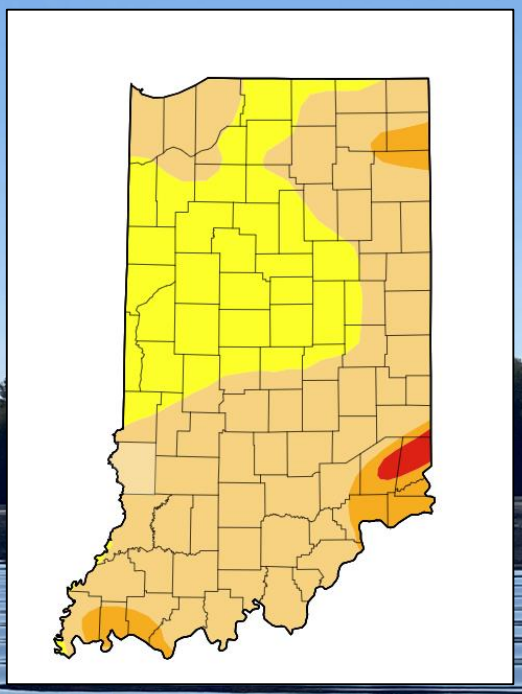




Severe Weather

Despite the dry conditions for the first few weeks of the month, there was some isolated severe weather that did occur. Damaging winds and isolated large hail occurred on the 6th.

A break in the severe weather then occurred until the 22nd when damaging winds were reported once again. With the more active pattern, severe weather also occurred on the 24th. An EF0 tornado occurred in Preble County, OH, with estimated maximum wind speeds up to 65 mph. Damaging thunderstorm wind gusts also occurred in the region. Another EF0 tornado was observed in Hocking County, OH on the morning of the 25th.

...NWS Damage Survey for 09/24/2024 Tornado Event...

Rating:	EF0
Estimated Peak Wind:	65 mph
Path Length /statute/:	1.45 miles
Path Width /maximum/:	30 yards
Fatalities:	0
Injuries:	0
Start Date:	09/24/2024
Start Time:	04:47 PM EDT
Start Location:	2 E Eaton / Preble County / OH
Start Lat/Lon:	39.7429 / -84.597
End Date:	09/24/2024
End Time:	04:50 PM EDT
End Location:	2 WNW West Alexandria / Preble County / OH
End Lat/Lon:	39.7557 / -84.5755

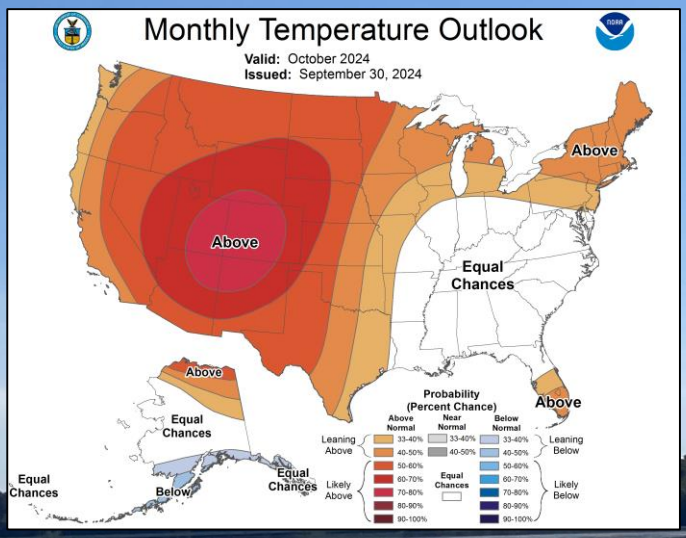
October Outlook

The latest outlook from the Climate Prediction Center calls for an increased likelihood of below normal precipitation. There are equal chances for above, below, and normal temperatures.

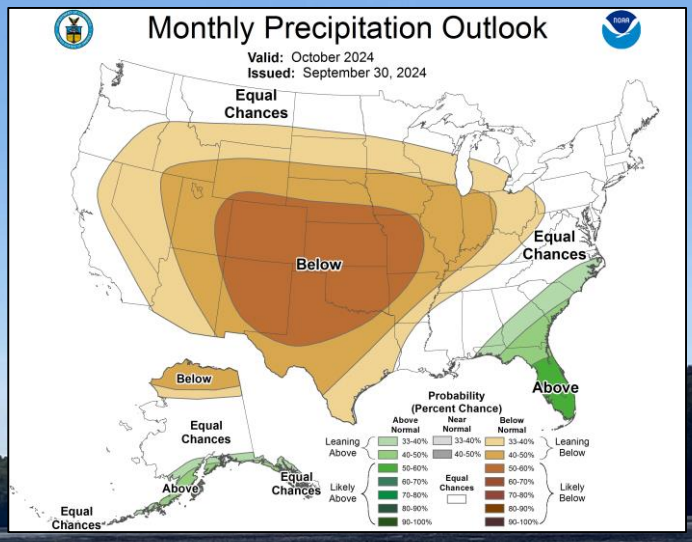
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	56.2	66.7	45.7
Columbus (CMH)	55.2	65.5	44.8
Dayton (DAY)	56.0	66.2	45.9

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	3.35	0.2
Columbus (CMH)	2.90	0.2
Dayton (DAY)	2.95	0.2

Upcoming Temperature Outlook



Upcoming Precipitation Outlook



October-December Outlook

A La Niña Watch is in effect with La Niña favored to emerge this fall (71% chance). La Niña is expected to persist through January-March timeframe 2025.

Above normal temperatures are favored during the October to December timeframe. There is an increased likelihood of above normal precipitation across portions of northern Indiana and Ohio, while the remainder of the region has equal chances of seeing above, below, or near normal precipitation.

Three-Month (OND) Temp. Outlook	Three-Month (OND) Precip. Outlook