

NWS Wilmington, Ohio August 2023 Regional Climate Summary

Regional Climate Summary

There were multiple days of severe weather during the month of August which included 3 tornadoes and several damaging wind reports. Due to the convective nature of the rainfall, precipitation was highly variable around the region with some locations above normal and some locations finishing the month below normal. Temperatures at Dayton, Columbus, and Cincinnati were just a little cooler than normal for the month.

Temperatures

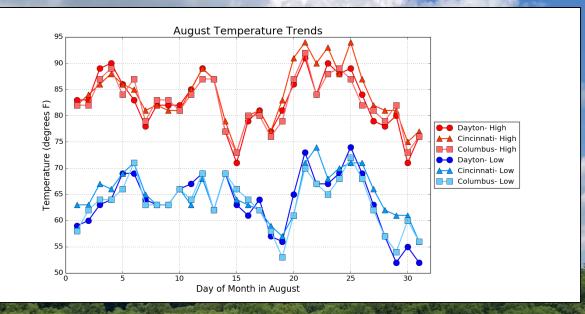
Temperatures during the first half of the month were close to normal with slight fluctuations in the temperatures above and below normal. The coolest day during the first half of the month was the 15th where high temperatures in many locations were only in the lower 70s. Another shot of cooler air moved in after a cold front on the 17th, however this was short lived. Temperatures started to warm after the 18th with above normal temperatures by the 20th. Most of our counties would observe high temperatures in the 90s for consecutive days around this timeframe as a broad area of high pressure provided a large heat dome over much of the central and eastern US. As the days went on, dew points would also climb into the 70s and even into the 80s for some on August 25th, creating a very humid, Florida-like air mass. This would result in multiple days with heat indices exceeding 100 degrees.

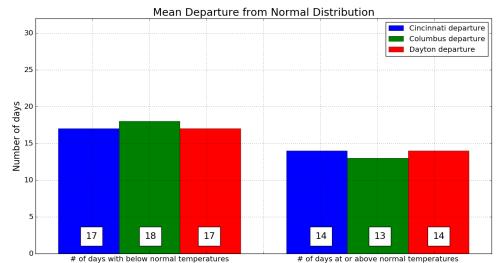
We would end the month of August with temperatures dropping back below seasonal normals. There were no temperature records during the month.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	74.5	84.0	65.0	-0.4	94 on 21 st and 25 th	56 on 31 st
Columbus (CMH)	73.0	82.6	63.5	-1.0	92 on 21 st	53 on 19 th
Dayton (DAY)	73.1	82.6	63.6	-1.4	91 on 21 st	52 on 29 th and 31 st

NOAA

Temperatures (Continued)









NOAA

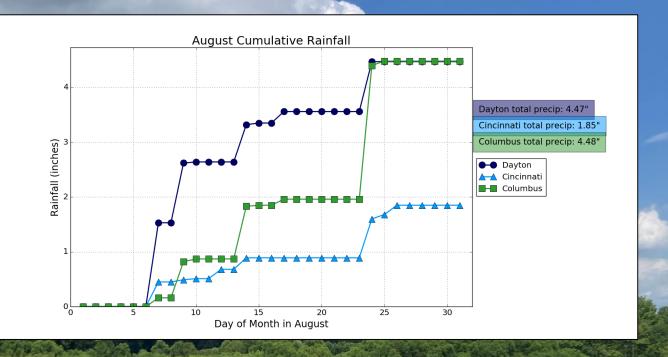
Precipitation

August began on a dry note across our major climate sites as no precipitation was recorded the first few days. The end of the first week into the second week of August saw an uptick in observed rainfall. Due to the convective nature of summer rainfall, precipitation amounts during the first half of the month were highly variable. August 7th provided over 1.5" to the Dayton area, while Columbus Airport observed less than 0.2". Overall, most locations received near normal to above normal precipitation the first couple weeks of August.

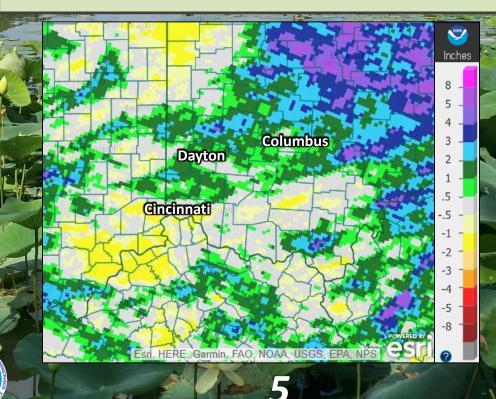
There was another several day stretch in the third full week that provided a break in observed precipitation. This was then followed by a pretty big amount of rainfall on August 24th, with 2.44 inches of rain recorded at the Columbus Airport. This value set a new record for the day, breaking the old record of 1.65 inches set in 1999. Dry conditions finished off the month across the region.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Precipi (in./c		
Cincinnati (CVG)	1.85 in.	-1.58 in.	0.71 in.	24 th	
Columbus (CMH)	4.48 in.	+0.74 in.	2.44 in.	24 th	34.00
Dayton (DAY)	4.47 in.	+1.51 in.	1.53 in.	7 th	
					MEATRE

Precipitation (Continued)



August Precipitation Departure From Normal (In.)



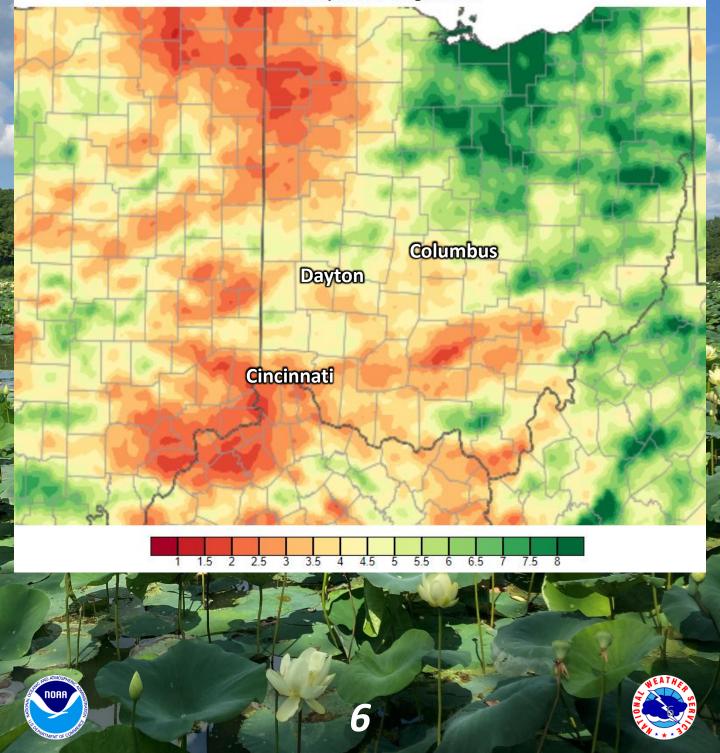
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Precipitation (Continued)

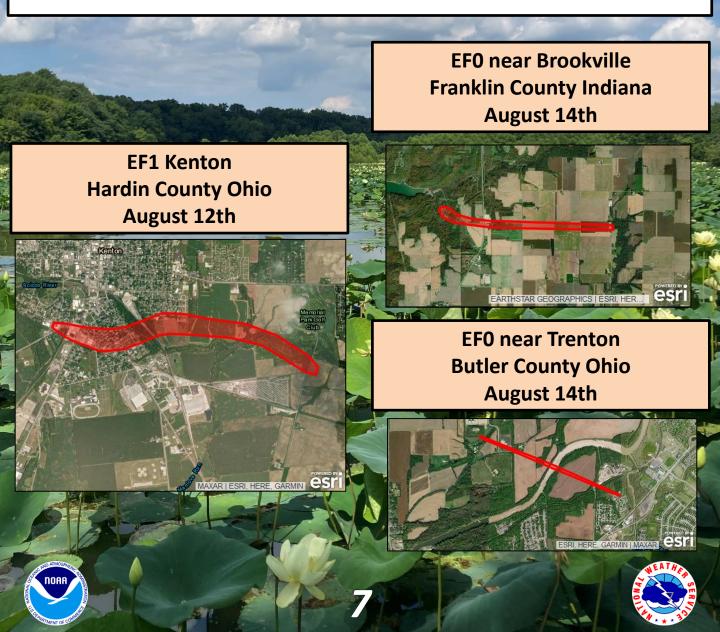
August Precipitation Total (In.)

Total Precipitation - August 2023



Severe Weather

An EF1 tornado occurred in Kenton in Hardin County Ohio on August 12th. Two additional tornadoes occurred on August 14th including an EFO near Brookville in Franklin County, Indiana and an EFO near Trenton in Butler County, Ohio. Additional severe weather occurred on the 23rd north of the Ohio River with several reports of trees down due to damaging winds. Multiple reports of wind damage occurred on the 25th near and south of the Ohio River.

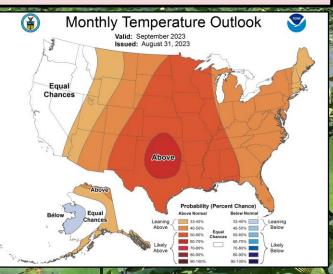


September Outlook

The latest outlook from the Climate Prediction Center is forecasting above normal temperatures across the region for September. The region will have an increased likelihood of below normal precipitation generally northwest of I-71.

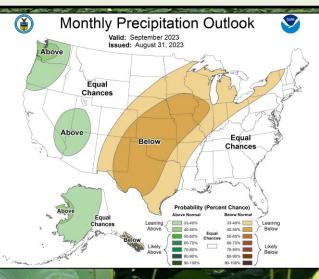
	Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)	Site	Normal Precipitation (in.)	Normal Snowfall (in.)
(Cincinnati (CVG)	68.1	78.9	57.3	Cincinnati (CVG)	3.11	0.0
(Columbus (CMH)	67.2	77.8	56.5	Columbus (CMH)	3.14	0.0
	Dayton (DAY)	67.7	78.6	56.8	Dayton (DAY)	3.31	0.0

Upcoming Temperature Outlook



NOAA

Upcoming Precipitation Outlook





September-November Outlook

The Climate Prediction Center maintains an El Nino Advisory. Equatorial sea surface temperatures (SSTs) are above average in the central and eastern Pacific Ocean, which are consistent with El Nino conditions. There is now a greater than 95% chance that El Nino conditions continue through December 2023 – February 2024.

The latest three month outlook (September – November) slightly favors above normal temperatures for a good portion of the Ohio Valley. Meanwhile, equal chances for above normal, near normal, and below normal precipitation is expected during this time span for most of the region with a slight lean towards above normal precipitation across portions of southeast Ohio and northern Kentucky.

