

# **CLIMATE SUMMARY**

Vol. 1, Issue 4

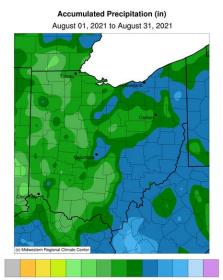
August / 2021

# Precipitation

According to the National Centers for Environmental Information (NCEI), the statewide average August precipitation was 4.23 inches, 0.72 inches *above* the long-term mean (1991-2020). This was 0.52 inches greater than August 2020 and 1.43 inches less than July 2021. August 2021 ranks as the 31<sup>st</sup> wettest on record (Table 1). *Table 1: Ohio August Precipitation Ranking* 

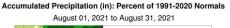
Period	Value	Average	Anomaly	Rank	Wettest/Driest Since	Record Year
August 2021	4.23"	3.51"	+0.72"	31 <sup>st</sup> Wettest	Driest since: 2020 Wettest since: 2018	1.31" (1951) 6.77" (1979, 1980)

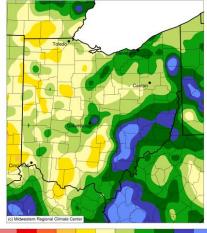
Ohio was received a lot of precipitation during August 2021. The western portion of the state received between 2 to 3 inches, while the eastern half accumulated more, at around 4 to 7.5 inches (Fig. 1). The state also experienced near average precipitation for most of western and central Ohio (1991-2020), with areas mostly towards the southeast receiving much higher than average precipitation. (Fig. 2).



0.01 0.1 0.5 1 1.5 2 3 4 5 7.5 10 12.5 15 Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoCGR45, WMO, ICGA0, NWSLJ, Midwestern Regional Climate Center cli-MATE: MRCC Application Tools Environment Generated at 9/13/2201 11:8229 PM CDT

Figure 1: Accumulated August precipitation (inches). Courtesy of the Midwestern Regional Climate Center.

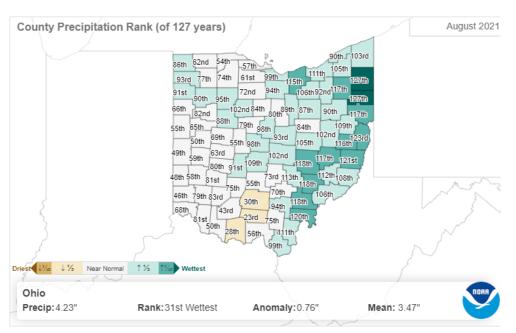




5 10 25 50 75 100 125 150 175 200 Stations from the following networks used: WBAN, COOP, FAA, GHCN, ThreadEx, CoOPIaHS, WMO, ICAO, NWSLI, Midwestern Regional Climate Center cl-MATE: MRCC Application Tools Environment Generated at 913/2021 1:20:52 PM COT

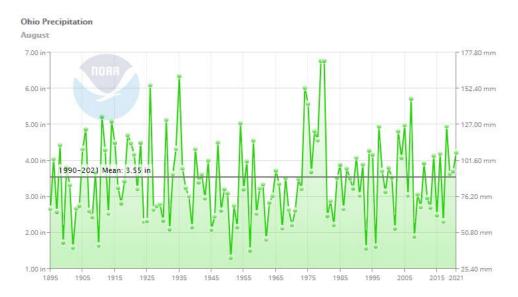
Figure 2: Percent of Normal Accumulated Precipitation in Inches for the Month of August. Courtesy of the Midwestern Regional Climate Center.

A partnership between OSU Extension, Byrd Polar and Climate Research Center, and the State Climate Office of Ohio Mahoning County in northeastern Ohio received the greatest precipitation accumulation in August, with 8.29 inches of precipitation, making this the 1<sup>st</sup> wettest August for that county in the 127-year period (Fig. 3). The driest county during August was Pike County in southwestern Ohio, with an accumulation of 2.29 inches of precipitation, making it the 23<sup>rd</sup> driest August for the county. Historical statewide trends for the state show that 1895-2021, the lowest recorded precipitation during this period was 1.31 inches in 1951, with the greatest occurring in 1979 at 6.77 inches (Fig. 4).



#### Figure 3: Ohio County Precipitation Ranking (NCEI, NOAA)

Figure 4: Ohio Historical Precipitation Time Series (NCEI, NOAA)



#### A partnership between OSU Extension, Byrd Polar and Climate Research Center, and the State Climate Office of Ohio 2

## Temperature

The average state temperature for Ohio during the month of August was 74.8°F, which was 3.0°F *warmer* than the long-term mean (1991-2020). This was also 2.6°F warmer than August 2020 and is 1.8°F warmer than August 2021, making August 2021 the 7<sup>th</sup> warmest August in the 127-year record (Table 2).

 Table 2: Ohio August Temperature Ranking

Period	Value	Average	Anomaly	Rank	Coolest/Warmest Since	Record Year
August 2021	74.8°F	71.8°F	+3.0°F	7 <sup>th</sup> Warmest	Coolest since: 2020 Warmest since: 2016	

Average temperatures for the month of August ranged from 70-75°F in northern Ohio to 75-80°F in southern Ohio (Fig. 5). When we compare this to the long-term mean, this was close to normal, even though this was the 7<sup>th</sup> warmest August in the 127-year record for Ohio. There are a few pockets of warmer than normal temperatures in north-central and south-eastern Ohio, each area being anywhere from 3 to 4°F warmer than normal (Fig. 6).

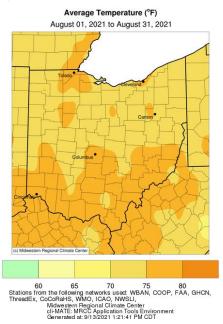


Figure 5: Average August Temperature in °F. Courtesy of the Midwestern Regional Climate Center.

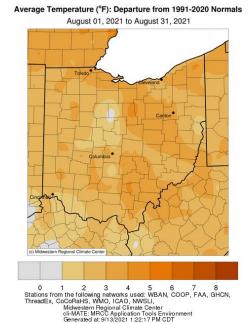


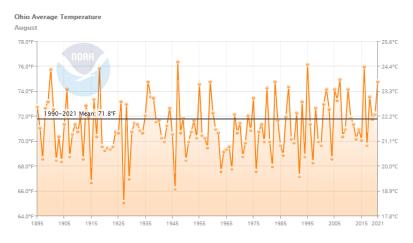
Figure 6: Departure from Normal Average August Temperature in °F. Courtesy of the Midwestern Regional Climate Center.

A partnership between OSU Extension, Byrd Polar and Climate Research Center, and the State Climate Office of Ohio Similar to July, Hamilton County averaged the warmest during August, with an average temperature of 76.9°F, making it the 17<sup>th</sup> warmest August for the county. Geauga County on in northeastern Ohio was the coolest county, with monthly average temperature of 72.8°F, and this was the 4<sup>th</sup> warmest August for the county (Fig. 7). Historically, the coolest August average temperature during the period was 65.1°F in 1927 and the warmest average temperature was 76.4°F in 1947 (Fig. 8).



### Figure 7: Ohio County Temperature Ranking (NCEI, NOAA)

Figure 8: Ohio Historical Temperature Time Series (NCEI, NOAA)



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