NWS Wilmington, Ohio
March 2017
Regional Climate Summary

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While the first 2/3 of the month featured mainly near or below normal temperatures, a significant warming trend developed for the final 10 days or so, with numerous days of highs in the 60s and even 70s. Although pockets of heavy rain occurred in southern parts of the region during the early morning hours of the 1st, the remainder of the month featured near normal precipitation. A series of storms resulted in a bit of a wet period from the 25th through the 27th, with many locations in the area receiving over an inch of rain in this 3-day span. The month also ended on a wet note as a low pressure system moved through the Ohio Valley during the final 2 days of the month.

Temperatures

Although the first morning of the month featured unseasonably warm temperatures, a strong cold front moved through early in the day, bringing seasonably chilly air back into the region for the next several days. However, a brief but significant warmup developed on the 5th, with temperatures reaching into the 60s and 70s for several days in a row.

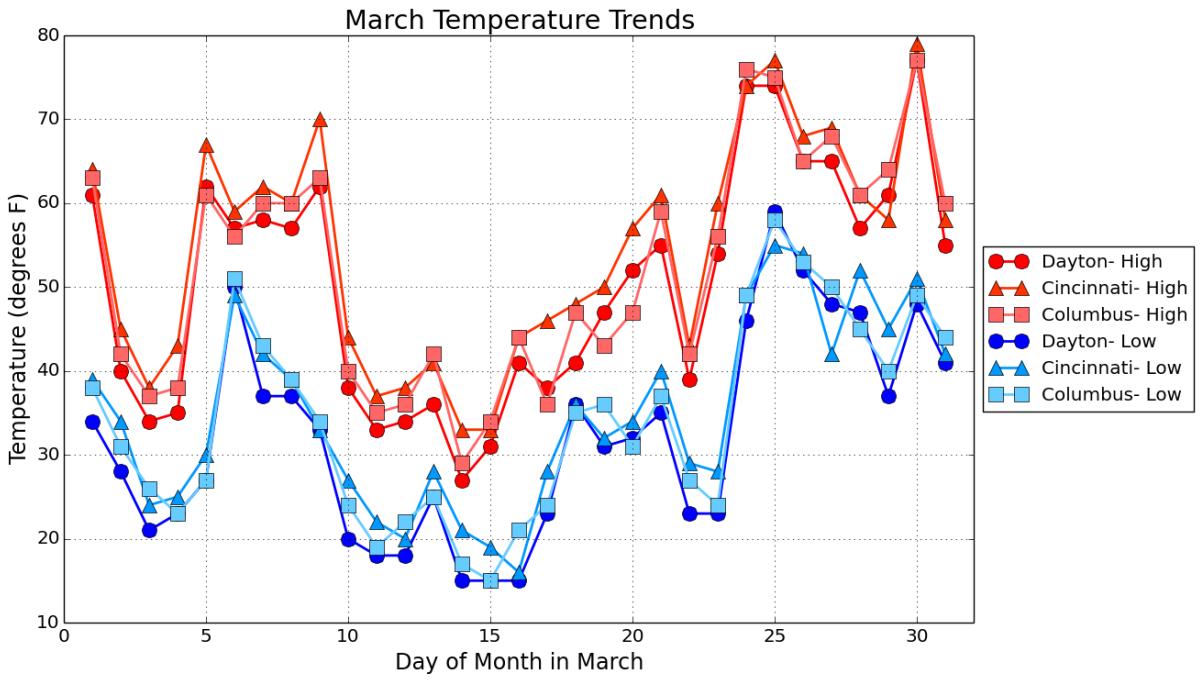
By the 9th, another sharp cold front swept through the area, bringing a return of an extended stretch of seasonably chilly air back into the Ohio Valley. In fact, temperatures were near or below normal for the next 2 weeks before a significant warmup developed as a series of systems progressed through the region past the 23rd.

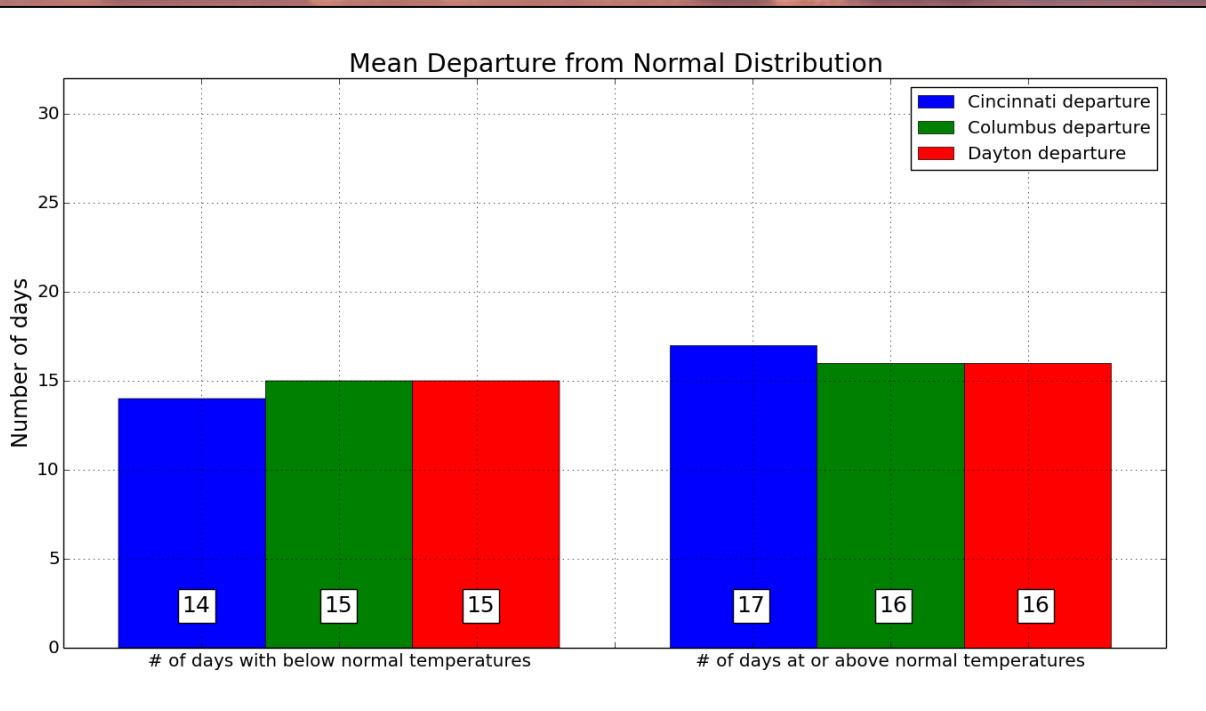
Beginning on the 24th, a much warmer pattern developed for much of the region. In fact, on the 25th, many locations in the local area had temperatures reach into the mid to upper 70s. A new daily record high minimum was set at Dayton (59°F - breaking old record of 57°F set in 1939) and tied at Columbus (58°F in 1949) on the 25th. Although the warmer temperatures did persist over the following several days, highs only reached into the 60s from the 26th through the 29th.

However, on the 30th, with a low pressure system moving through the Ohio Valley, strong warm air advection enabled temperatures to reach into the 70s once again area-wide. More seasonably mild conditions returned for the final day of the month.

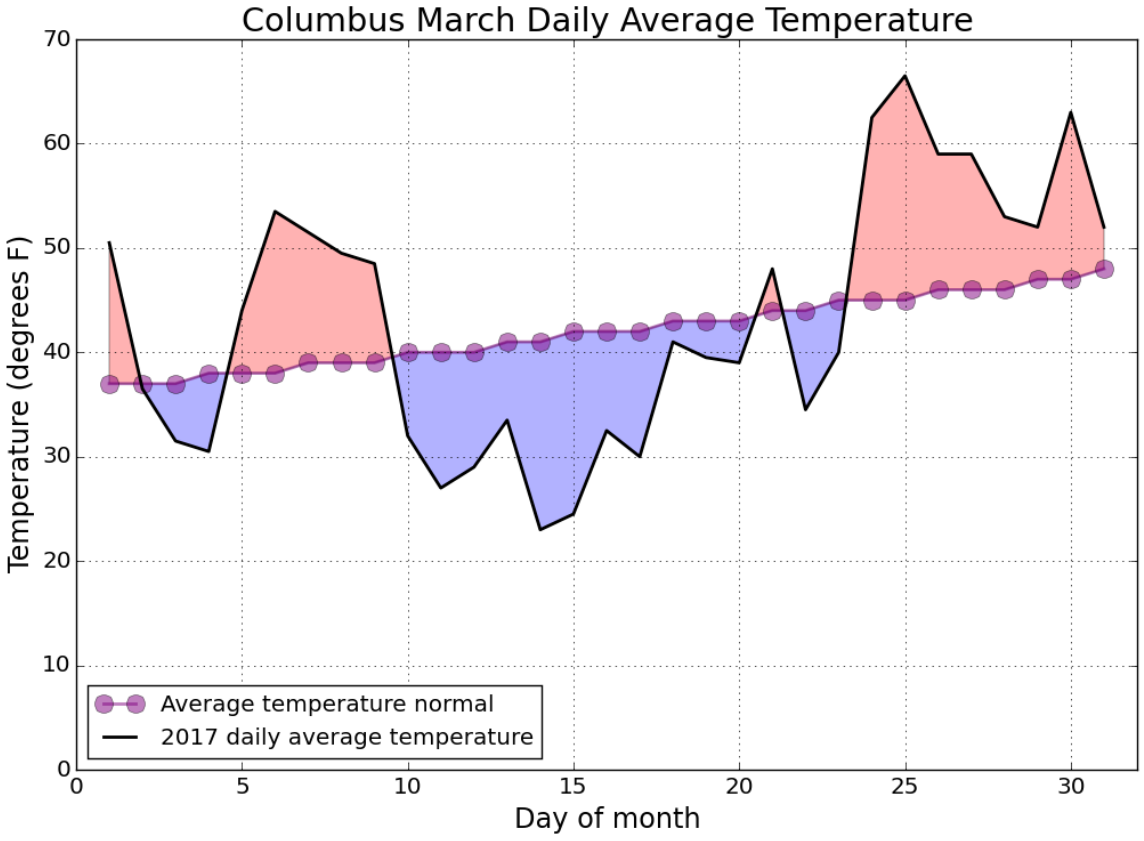
Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	44.7°F	54.4°F	35.0°F	+1.1°F	79°F (30th)	16°F (16th)
Columbus (CMH)	43.1°F	52.1°F	24.1°F	+1.2°F	77°F (30th)	15°F (15th)
Dayton (DAY)	41.2°F	50.3°F	32.2°F	+0.8°F	77°F (30th)	15°F (16th)

Temperatures (Continued)





Temperatures (Continued)



Precipitation

A potent storm system brought widespread heavy rainfall to southern and southwestern portions of the region during the early morning hours on the 1st. Past the 1st, a more seasonable precipitation pattern developed, with near normal precipitation observed through most of the month.

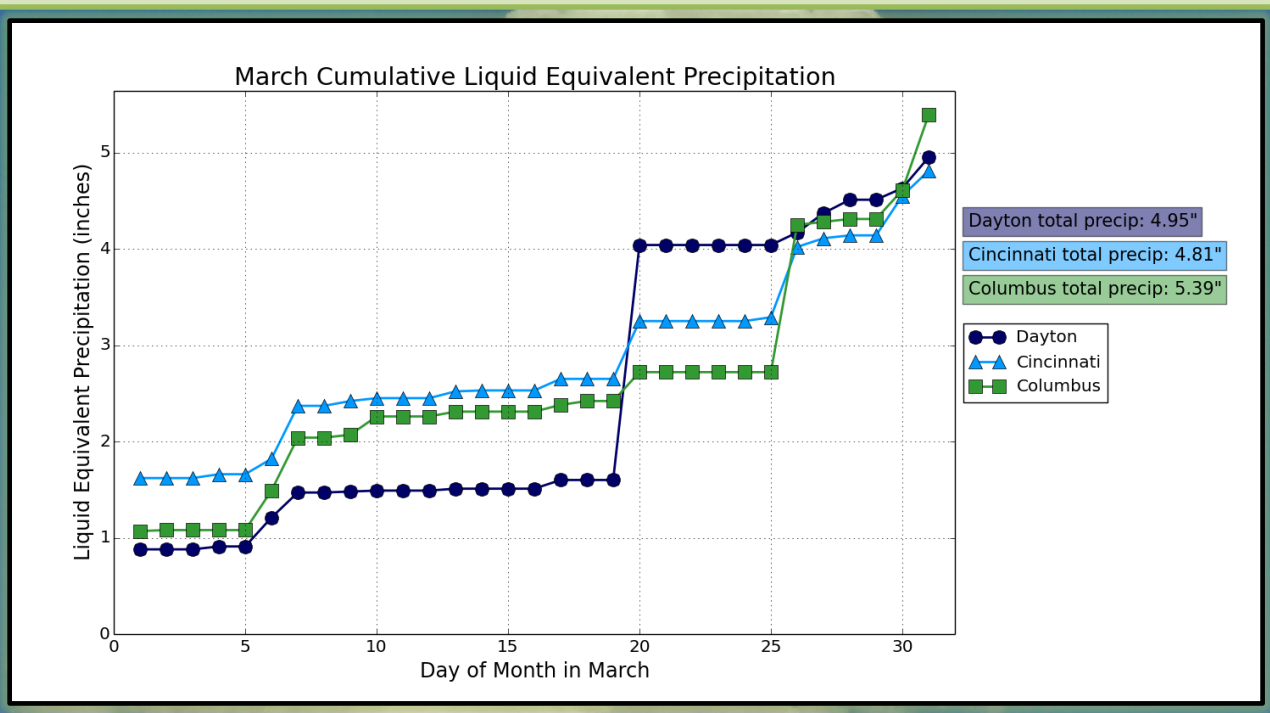
A system brought scattered showers and thunderstorms through on the 6th and the 7th. A more widespread rain event occurred on the 20th as multiple rounds of showers and thunderstorms moved from northwest to southeast through the region as a front moved toward the area. A new daily record rainfall was set on the 20th at Dayton (DAY), where 2.44" was recorded (old record was 1.12" set in 1927).

A bit of a wetter pattern developed by the 25th as several systems moved through the Ohio Valley. These systems brought scattered showers and thunderstorms, which resulted in an uneven rainfall footprint in the area, even over short distances. Although the local nature of this activity produced widely-variable rainfall, many locations received around or over an inch of rain in a 3-day period from the 25th through the 27th.

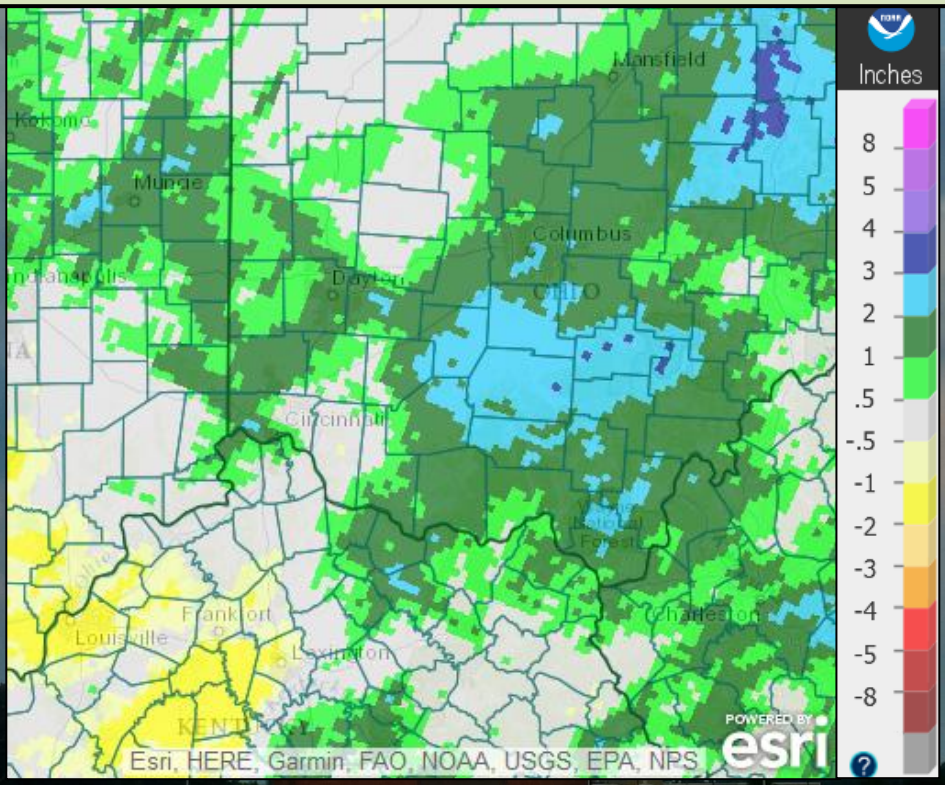
Another potent system moved through the Ohio Valley at the end of the month, bringing more widespread shower and thunderstorm activity. Once again, rainfall with this event was widely-variable, although many locations did receive around an inch of rain between the 30th and the 31st.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	4.81"	+0.85"	1.62"	03/01	2.0"	0.9"	03/04
Columbus (CMH)	5.39"	+2.37"	1.53"	03/26	1.7"	0.6"	03/13
Dayton (DAY)	4.95"	+1.61"	2.44"	03/20	1.3"	0.8"	03/13

Precipitation (Continued)



March Precipitation Departure From Normal (Inches)



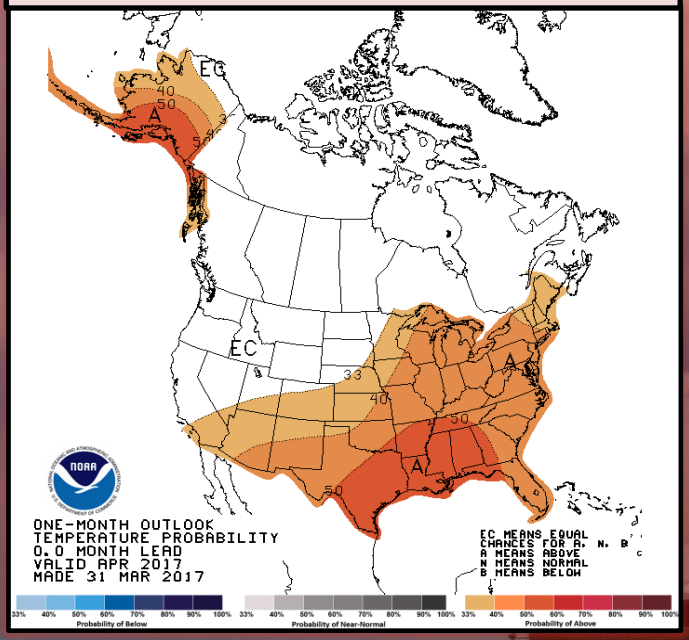
April Outlook

The latest outlook from the Climate Prediction Center (CPC) indicates favorable probabilities for above normal temperatures in the Ohio Valley during the month of April. However, there is not a clear signal for either above or below normal precipitation for the region.

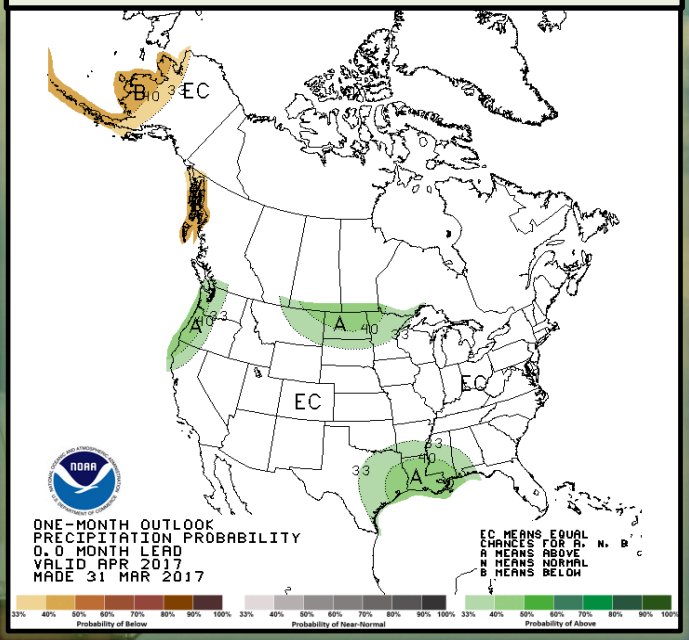
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	54.2°F	64.7°F	43.7°F
Columbus (CMH)	53.1 °F	63.5°F	42.6°F
Dayton (DAY)	51.6°F	61.9°F	41.4°F

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	3.89”	0.5”
Columbus (CMH)	3.40”	1.1”
Dayton (DAY)	4.09”	0.6”

Upcoming Temperature Outlook



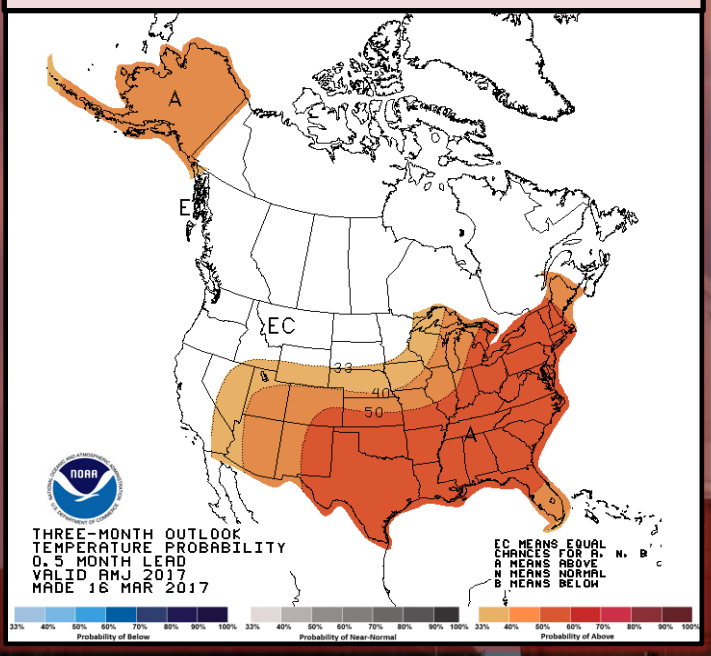
Upcoming Precipitation Outlook



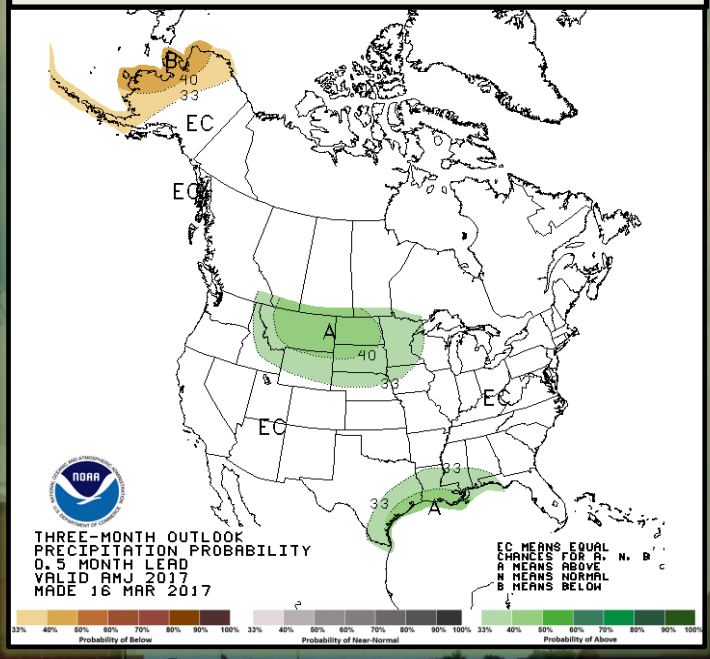
Late Spring & Early Summer Outlook

The latest seasonal outlook from the Climate Prediction Center (CPC) indicates increased likelihood for above normal temperatures in the April through June timeframe. However, there is not yet a clear signal for whether precipitation will be above or below normal for the remainder of spring into the first part of summer in the Ohio Valley. Therefore, there are equal chances for above normal and below normal precipitation during this time.

Three-Month (AMJ) Temp. Outlook



Three-Month (AMJ) Precip. Outlook



Severe Weather

A potent and violent weather system moved through the region during the early morning hours on the 1st. Several rounds of strong to severe thunderstorms barreled through the area within the first 15 hours of the month, resulting in numerous reports of flash flooding, wind damage, and even 6 tornadoes across south-central and southwestern Ohio. Several clusters of thunderstorms produced widespread swaths of significant wind damage, which survey teams estimated were caused by winds ranging from 70 to upwards of 100 MPH! In fact, an observing station in Carroll County, KY even measured a gust to 79 MPH as the storms moved through. Several locations in southwestern parts of the area received 2-4+" of rain as the system moved through.

Straight-Line Wind Damage in Carroll County, KY
Est. Peak Wind: 80-100 MPH

EF1 Tornadic Damage Near Amelia, Ohio
Est. Peak Wind: 110 MPH

Severe Weather

A weak area of low pressure moved through the Ohio Valley during the day on the 26th. This allowed for scattered showers and thunderstorms to develop in the area as a weak cold front progressed east through the region. With sufficient instability and shear, a few of the storms became severe, producing instances of hail (>= 1" in diameter) and an EF1 tornado near Williamsburg in Clermont County, Ohio. This quick spin-up was on the ground for a minute (0.3 mile path length) and had estimated peak winds of nearly 90 MPH.