



# NWS Wilmington, Ohio July 2023 Regional Climate Summary

## Regional Climate Summary

*July featured an active weather pattern locally, with episodic storminess and seasonable warmth and humidity. While some locations received near normal rainfall, others received much above normal rainfall, with a few spots in the Ohio Valley receiving more than double the typical rainfall thanks to repeated rounds of thunderstorm activity.*

# Temperatures

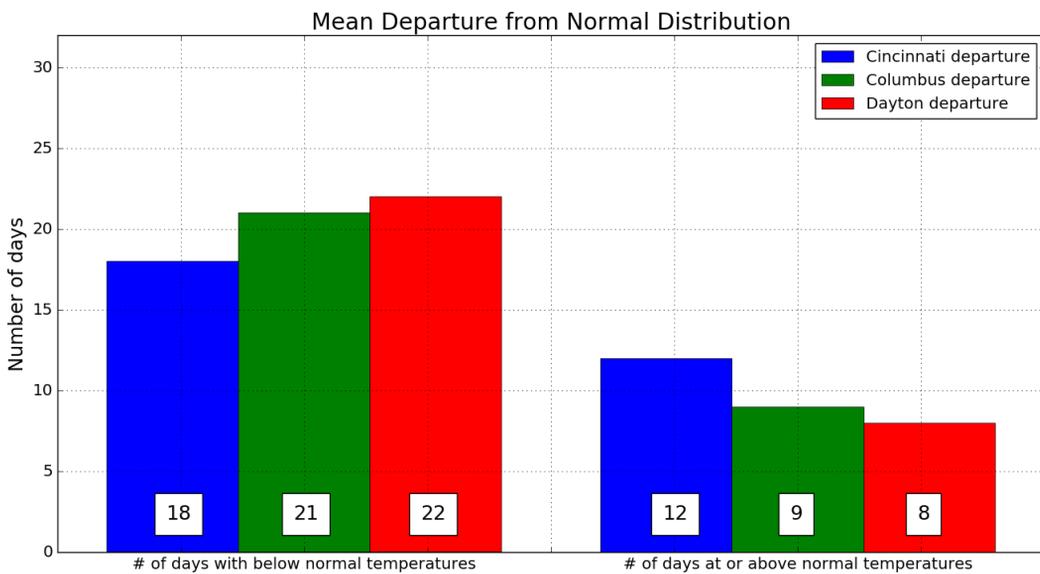
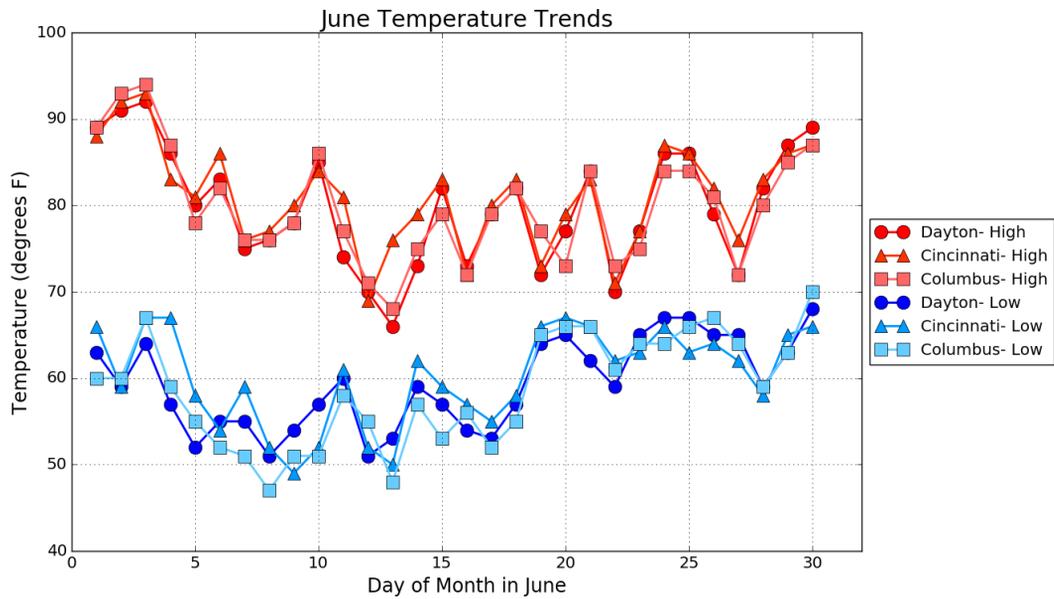
*All-in-all, temperatures throughout the July averaged out to near normal across the region, owing to fluctuations in each direction throughout the month. Seasonable warmth and humidity remained entrenched across the region to start the month, lingering through the first 10 days or so before slightly cooler/drier conditions evolved through the next week or so.*

*Seasonable warmth and humidity returned for the last 10 days of the month, persisting to various extents over this stretch. This also allowed for a wetter pattern to return, which corresponded to sharp temperatures differences over small spatial and temporal scales. The humidity became the primary heat-related factor late in the month as an oppressively-humid airmass settled into the Ohio Valley, leading to very warm overnights characterized by low temperatures in the 70s. In fact, the temperature stayed at or above 70F at Cincinnati (KCVG) for 5 consecutive days from the 26<sup>th</sup> through the 30<sup>th</sup>.*

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	75.8	85.1	66.5	-0.1	91 on 28 <sup>th</sup>	59 on 10 <sup>th</sup>
Columbus (CMH)	75.7	84.8	66.5	+0.3	91 on 4 <sup>th</sup> / 26 <sup>th</sup>	59 on 22 <sup>nd</sup>
Dayton (DAY)	76.0	85.2	66.9	0.0	92 on 26 <sup>th</sup>	61 on 10 <sup>th</sup> / 22 <sup>nd</sup>



# Temperatures (Continued)



# Precipitation

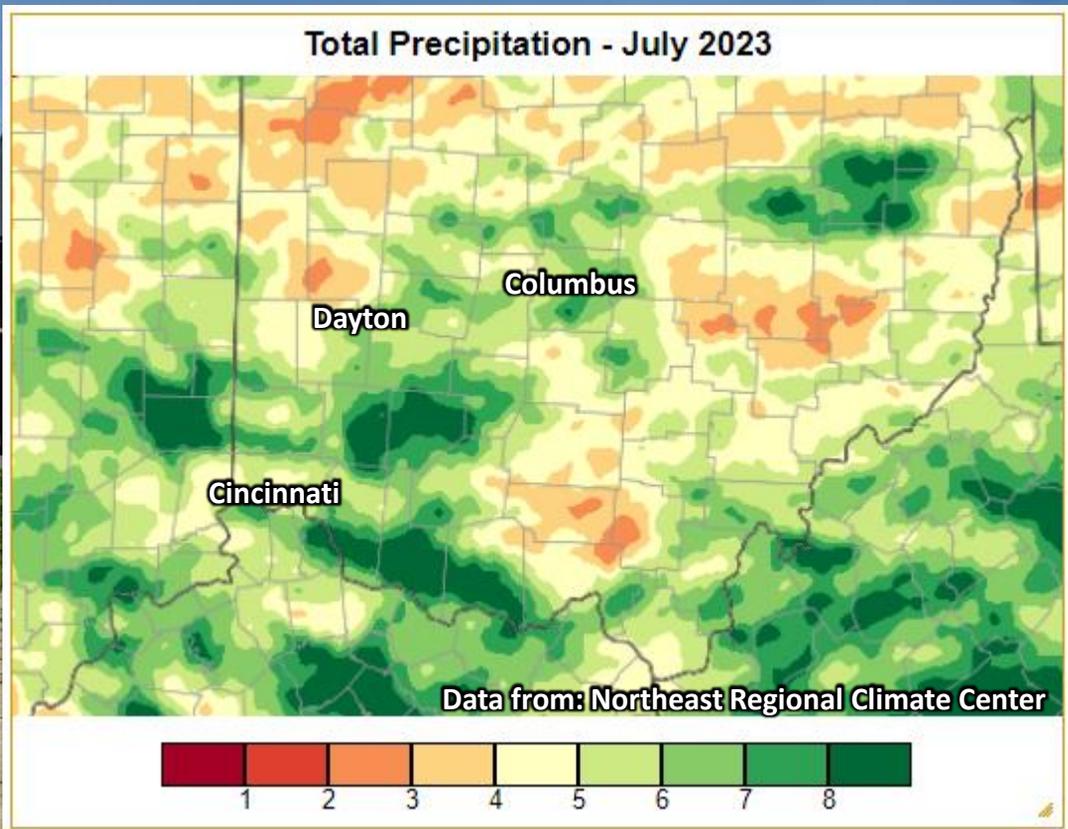
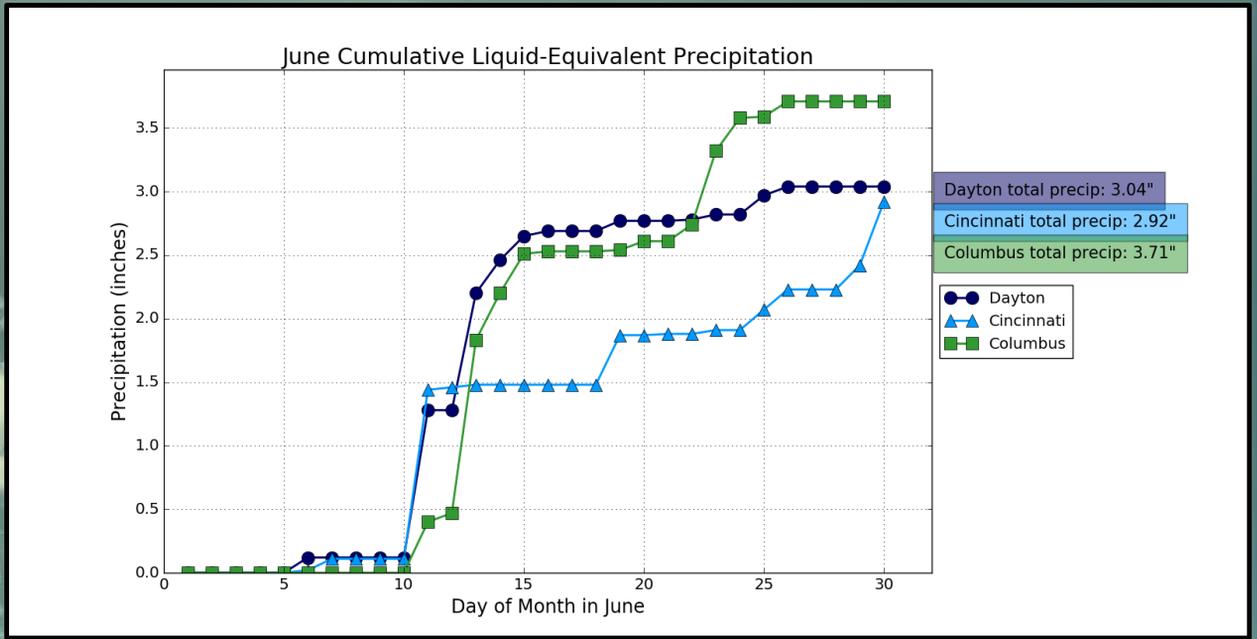
*It was a very active month across the region from a storminess perspective. The persistent mid to upper level pattern characterized by troughs in the eastern third of the U.S. and ridges across the south-central plains and southwest allowed for the Ohio Valley to remain stuck in between the two, leading to bouts of heat and humidity coinciding/overlapping with better wind flow aloft. This allowed for an increased frequency of storms across the region, some of which brought torrential rainfall to parts of the local area.*

*Some locales received nearly 10 inches of rain through the month, over double the normal rainfall over the period. Most of the local area received above normal precipitation, with only a few spotty areas receiving less than the typical rainfall. One of the factors that allowed for some locals to reach such high amounts for July, were the numerous times where heavy rain (greater than 0.50") occurred in a single day. The upper Miami River Valley and lower Scioto River Valley saw less frequent days, resulting in the lower than normal precipitation amounts for the month (page 6).*

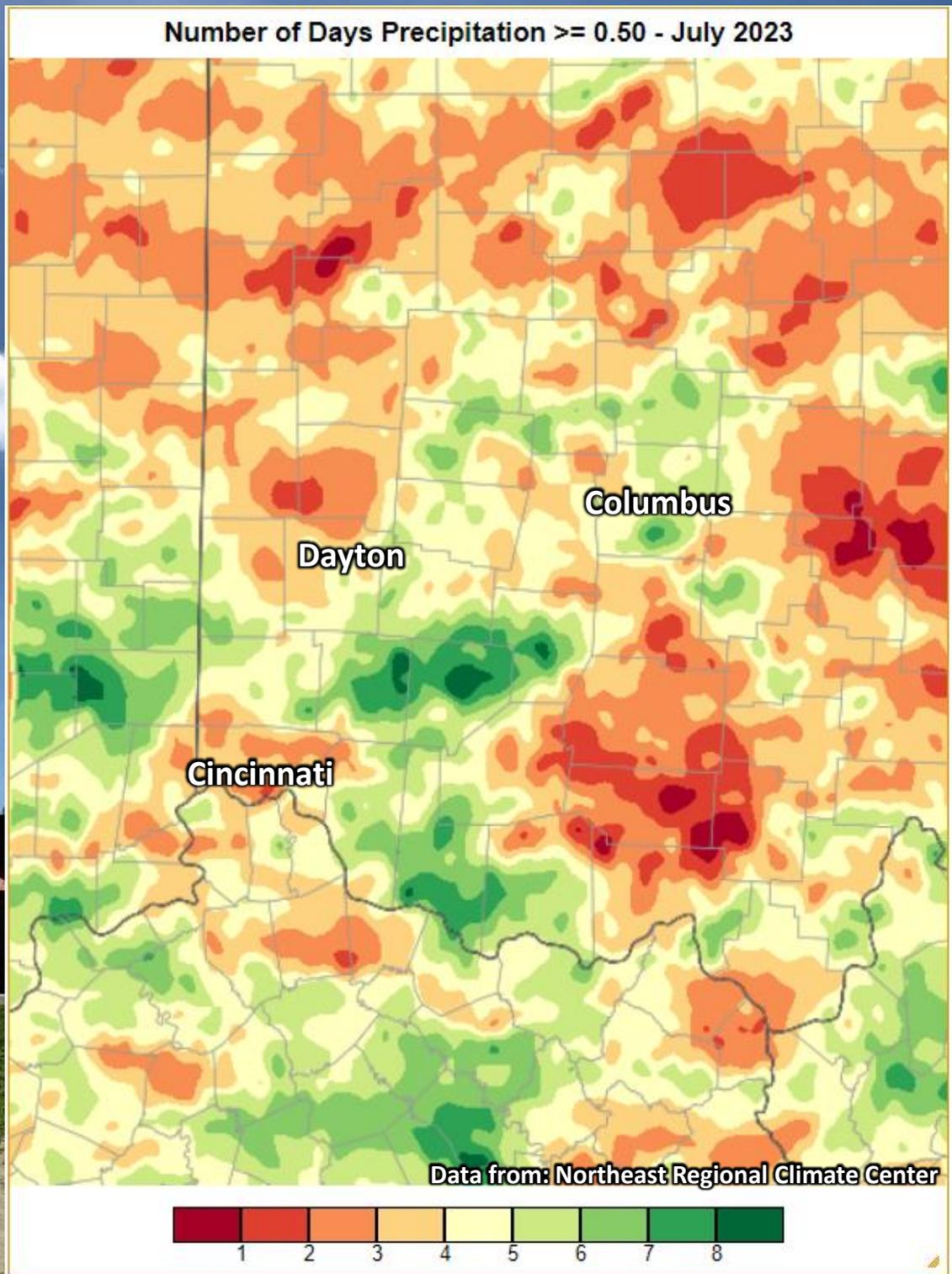
Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)
Cincinnati (CVG)	8.00"	+ 4.29"	2.79"	07/27	T (hail)
Columbus (CMH)	6.40"	+ 1.86"	1.73"	07/02	T (hail)
Dayton (DAY)	3.85"	+ 0.02"	1.28"	07/01	0.0"



# Precipitation (Continued)



# Precipitation (Continued)

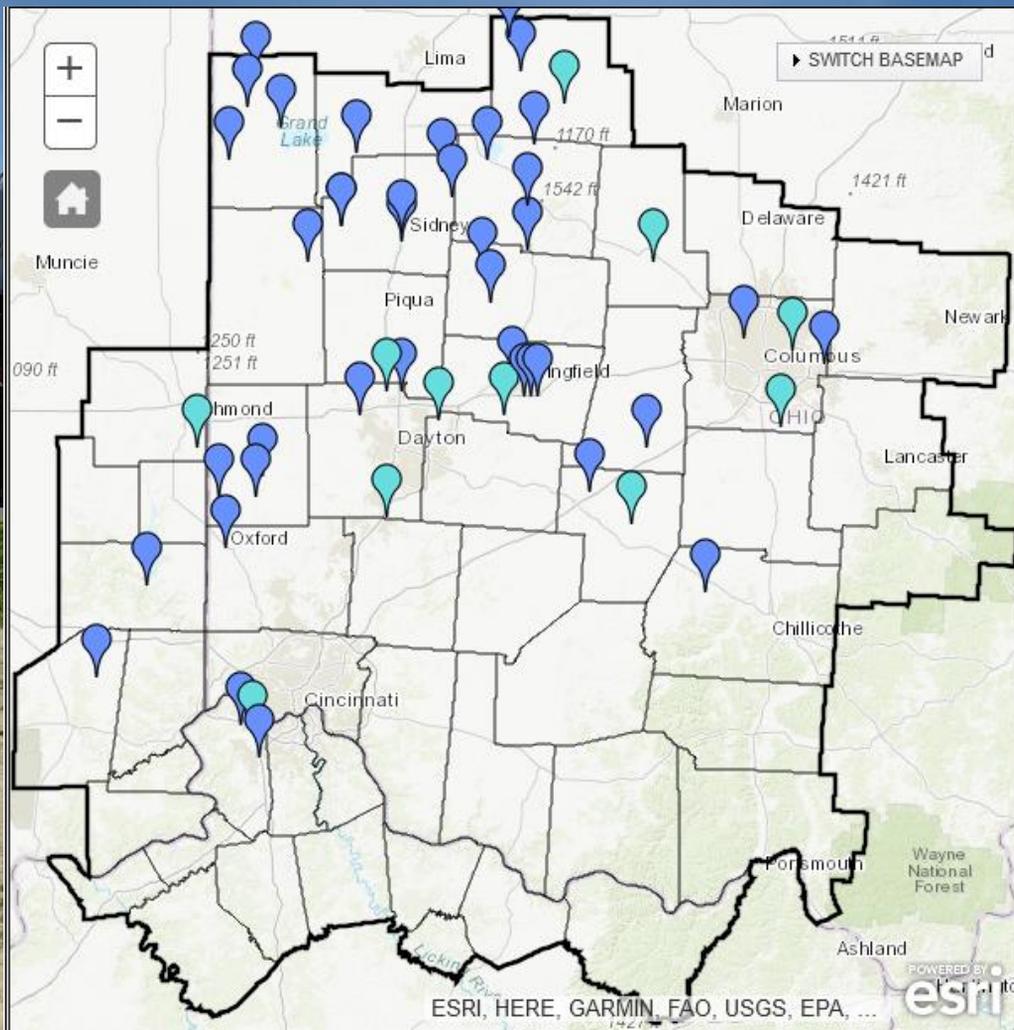


# Severe Weather

July featured a lot of thunderstorm activity, with July 29<sup>th</sup> highlighted below as one of the more active days when it came to receiving severe weather reports, primarily from straight-line wind damage. The extremely warm and humid air mass near the end of the month certainly heightened both severe weather and flooding activity.

## July 29, 2023 Severe Weather

-  Tornado
-  Hail
-  Thunderstorm Wind Gust
-  Thunderstorm Wind Damage



# August Outlook

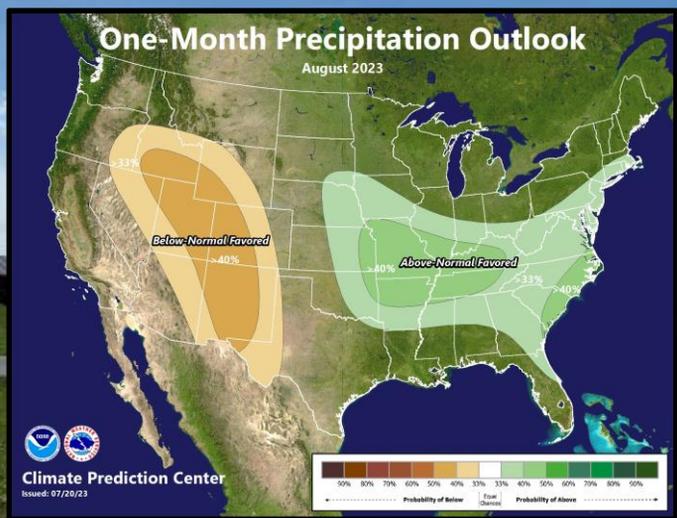
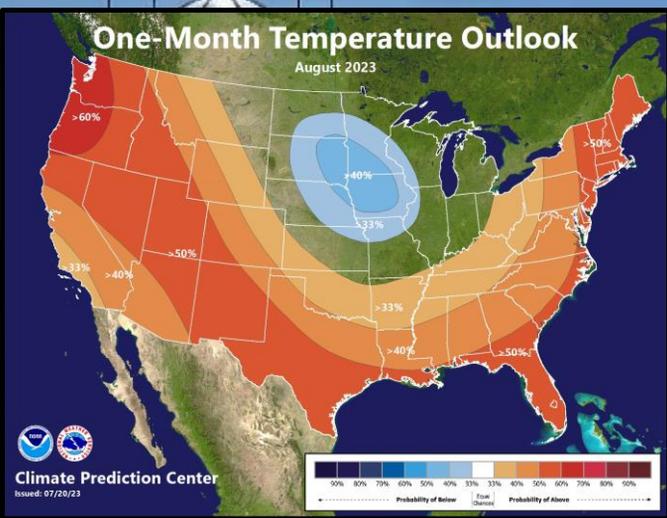
The latest outlook from the Climate Prediction Center (CPC) indicates favorable probabilities for near to above normal temperatures and near to above normal precipitation for the month of August.

Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	74.9°F	85.2°F	64.6°F
Columbus (CMH)	74.0°F	84.1°F	63.9°F
Dayton (DAY)	74.5°F	84.6°F	64.3°F

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	3.43"	--
Columbus (CMH)	3.74"	--
Dayton (DAY)	2.96"	--

## Upcoming Temperature Outlook

## Upcoming Precipitation Outlook



# Late Summer / Early Fall Outlook

*An El Nino Advisory remains in effect as El Nino conditions are being observed in the equatorial Pacific Ocean. Equatorial sea-surface temperatures remain above average across the central and eastern Pacific Ocean. There is now a greater than 90% chance that El Nino conditions will continue through the Northern Hemisphere winter.*

*Based on the latest three month outlook (August – October) from the Climate Prediction Center, above normal temperatures become favored in the Ohio Valley, with most of our counties expected to observe near normal precipitation values through this stretch.*

## Three-Month (DJF) Temp. Outlook

## Three-Month (DJF) Precip. Outlook

