

# NWS Wilmington, Ohio June 2016 Regional Climate Summary

## Regional Climate Summary

*June featured seasonable warmth and storminess across the Ohio Valley as upper level ridging set up across the central part of the country for most of the month. Northwest flow on the eastern side of this ridge allowed for several periods of active/severe weather across the area. Due to the inherently local nature of the thunderstorms, there was a lot of variability in the overall total rainfall amounts for the month. Nevertheless, a summer pattern of heat and humidity persisted for much of the month.*

# Temperatures

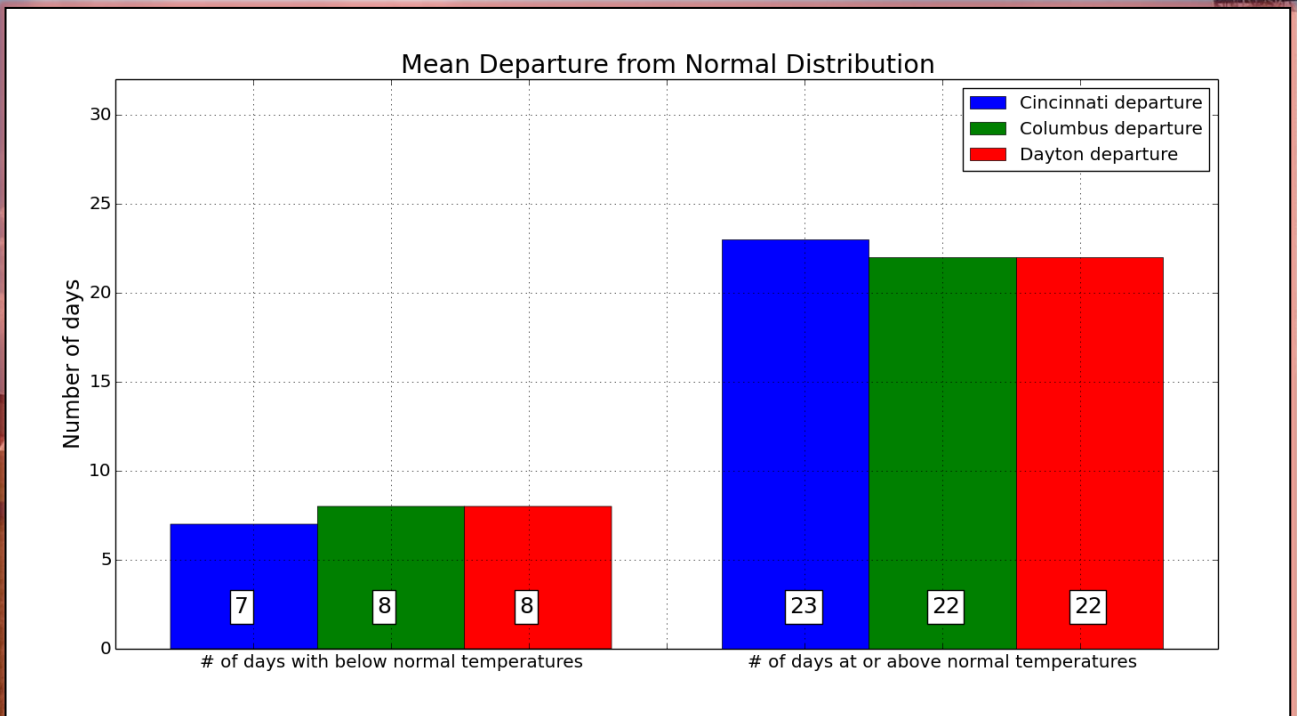
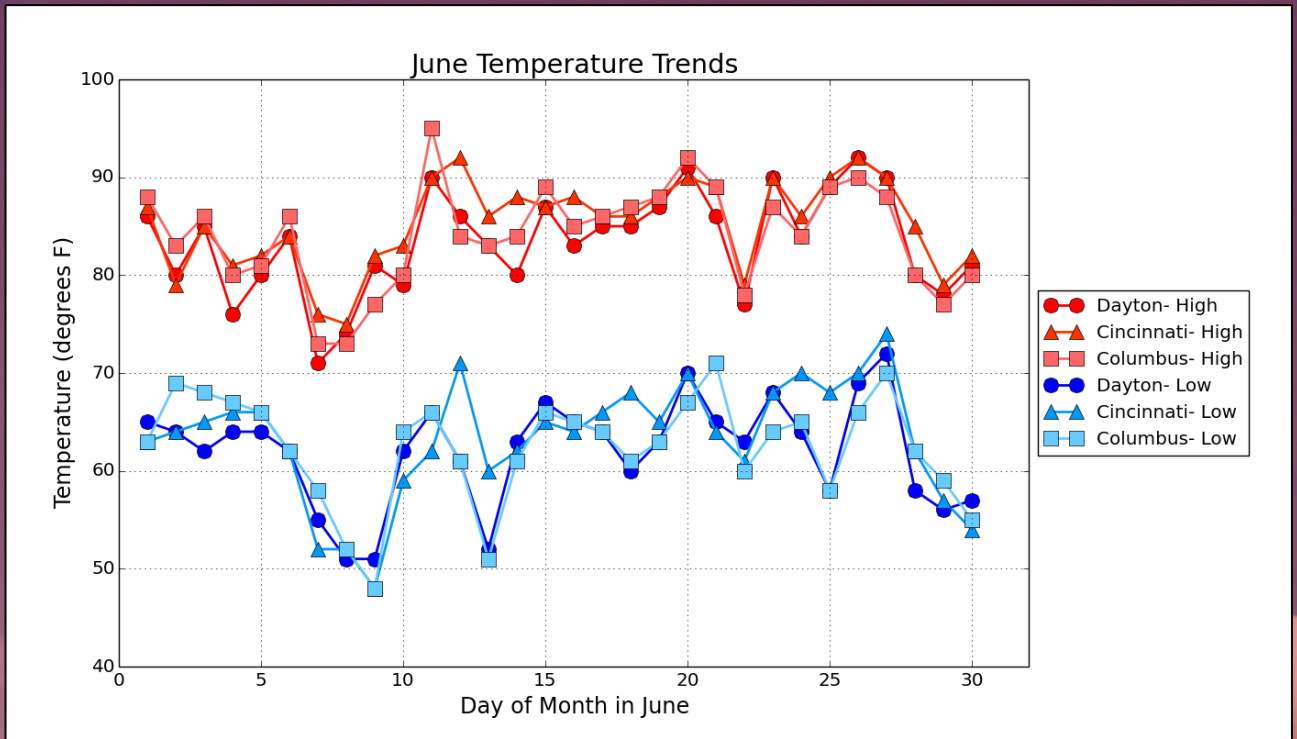
*The first week of June was largely characterized by seasonably warm temperatures and several days of thunderstorms across the region. Due to the spotty nature of the thunderstorm activity, rainfall amounts varied considerably across the region. Nonetheless, high temperatures reached close to or above 80 degrees throughout the area for the first 6 days of June before a strong cold front ushered in cooler and drier air on the 6<sup>th</sup>/7<sup>th</sup>. Behind the front, unseasonably cool air spilled into the area on the 7<sup>th</sup> and 8<sup>th</sup> and persisted for several days. However, by the 11<sup>th</sup>, a strong upper-level ridge began to build across the central part of the country. It expanded into the Ohio Valley, allowing for seasonable heat to develop and persist across the region for an extended period of time. Temperatures mostly remained near normal or above normal until the 28<sup>th</sup>, when a cold front ushered in much cooler and drier air to the area. In this stretch, Cincinnati hit 90°F on 7 days, Columbus on 3, and Dayton on 5. In fact, the high temperature at CVG reached at least 86°F for 16 of the 17 days during the time period.*

*Early on the 28<sup>th</sup>, a cold front swept through the area, marking an end to the extended warm stretch. The last few days of June featured low humidity and highs/lows in the lower 80s/upper 50s.*

| Site             | Avg Temp (°F) | Avg High Temp (°F) | Avg Low Temp (°F) | Departure From Normal (°F) | Maximum Temperature (°F) | Minimum Temperature (°F) |
|------------------|---------------|--------------------|-------------------|----------------------------|--------------------------|--------------------------|
| Cincinnati (CVG) | 74.2          | 85.2               | 63.3              | +2.2                       | 92                       | 48                       |
| Columbus (CMH)   | 73.2          | 84.1               | 62.4              | +1.7                       | 95                       | 48                       |
| Dayton (DAY)     | 72.7          | 83.3               | 62.0              | +2.1                       | 92                       | 51                       |



# Temperatures (Continued)





# Precipitation

*The first full week of June was characterized by seasonable shower and thunderstorm activity, which resulted in large variations in precipitation across the area. While thunderstorm activity was generally scattered in nature, there were several instances where isolated but persistent thunderstorms did result in localized flooding in southern parts of the area on several days in early June. In fact, Cincinnati (CVG) recorded precipitation on the first 5 days of the month.*

*A decaying mesoscale convective system (MCS) worked into the region during the morning hours of the 10<sup>th</sup> and remained in place into the afternoon hours. This persistent rainfall sparked flood advisories and even a flash flood warning across eastern Indiana. After the 10<sup>th</sup>, an upper-level ridge expanded into the Ohio Valley, allowing for an extended period of drier than normal conditions to develop.*

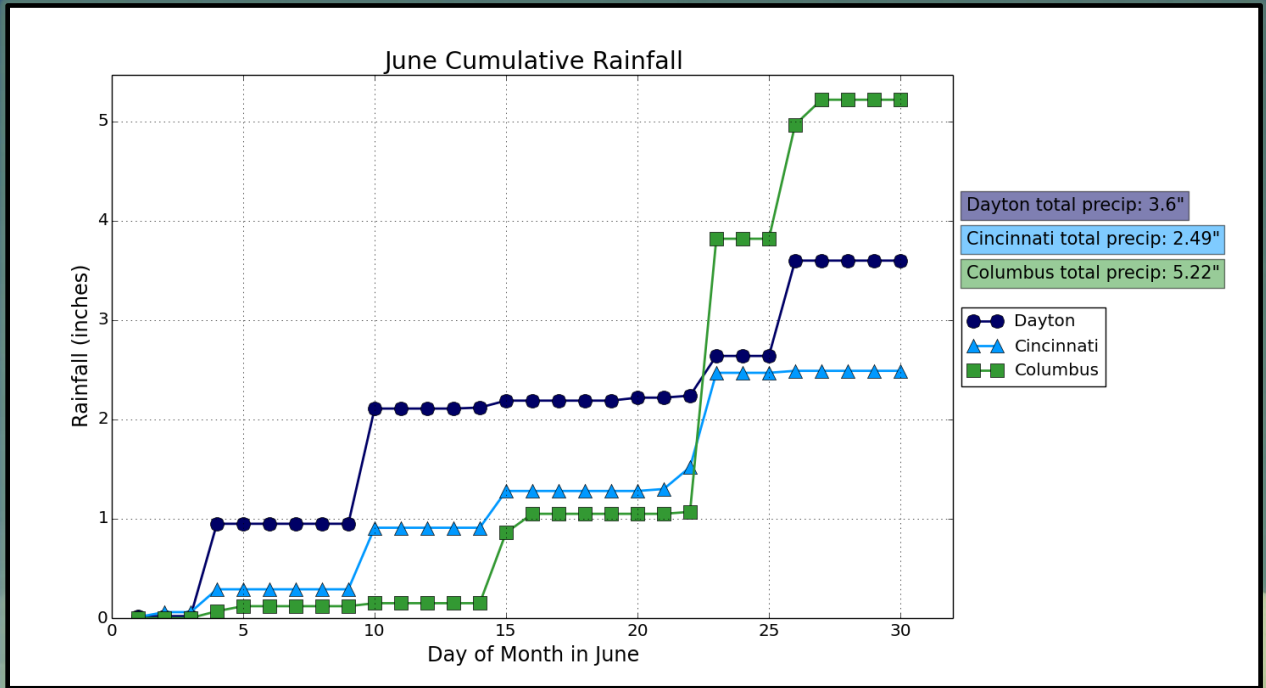
*By the 20<sup>th</sup>, this ridge began to break down across the Ohio Valley. Several days of thunderstorms, including severe storms, impacted the region on the 20<sup>th</sup>/21<sup>st</sup> and again on the 23<sup>rd</sup> and the 26<sup>th</sup>. Most locations in the area received appreciable rainfall from this activity, but the scattered/local nature of thunderstorms resulted in wide variations in rainfall in the region. Columbus (CMH) had training thunderstorms move in early on the 23<sup>rd</sup>, resulting in locally torrential rainfall. CMH recorded 2.75" of rain for the day, breaking the old record for the date of 2.30" (1901). About 2.5" of the 2.75" fell in a two hour span.*

*High pressure settled into the Ohio Valley on the 28<sup>th</sup>, allowing for a dry end to the month.*

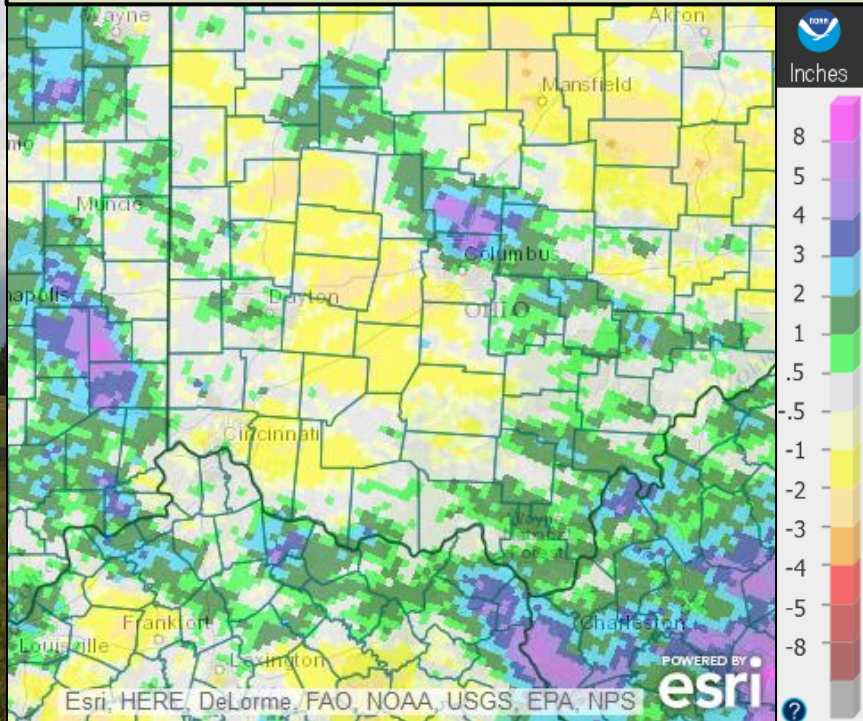
| Site             | Total Precipitation (in.) | Departure From Normal (in.) | Max Daily Precipitation (in./date) |       |
|------------------|---------------------------|-----------------------------|------------------------------------|-------|
| Cincinnati (CVG) | 2.49                      | -1.54                       | 0.95                               | 06/23 |
| Columbus (CMH)   | 5.22                      | +1.21                       | 2.75                               | 06/23 |
| Dayton (DAY)     | 3.60                      | -0.57                       | 1.16                               | 06/10 |



# Precipitation (Continued)



## June Rainfall Departure From Normal





# Severe Weather

*Severe weather occurred on several days throughout the month of June. The most widespread severe weather event occurred during the overnight hours early on June 23<sup>rd</sup>. Tornadoes, damaging winds, and flash flooding occurred with this event. Two EF1 tornadoes occurred across the area including one west of Washington Court House in Fayette County Ohio and another tornado that occurred from near Waynesville to Wilmington in Warren and Clinton Counties in Ohio. The top two photos below are from Warren and Clinton Counties and the bottom two photos are from Fayette County Ohio.*



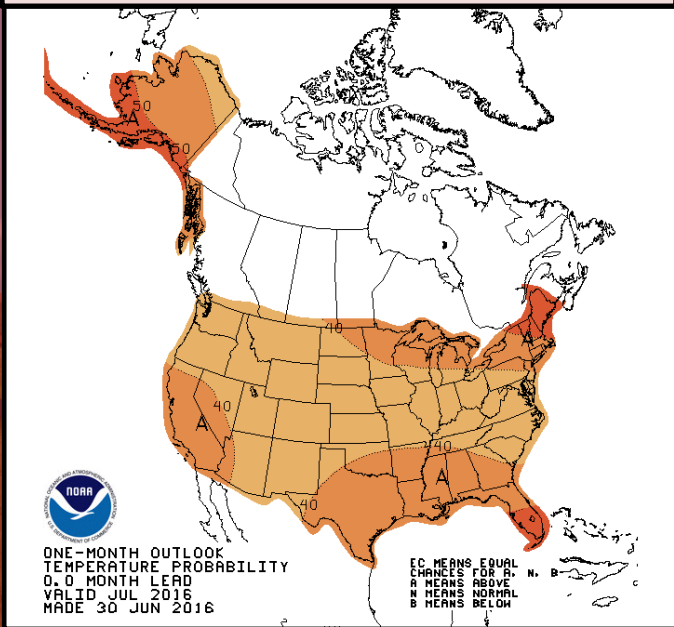
# July Outlook

The latest outlook from the Climate Prediction Center calls for an increased likelihood of above normal temperatures. There is not a clear signal for precipitation. There are equal chances of above, below, and normal precipitation across the region for July.

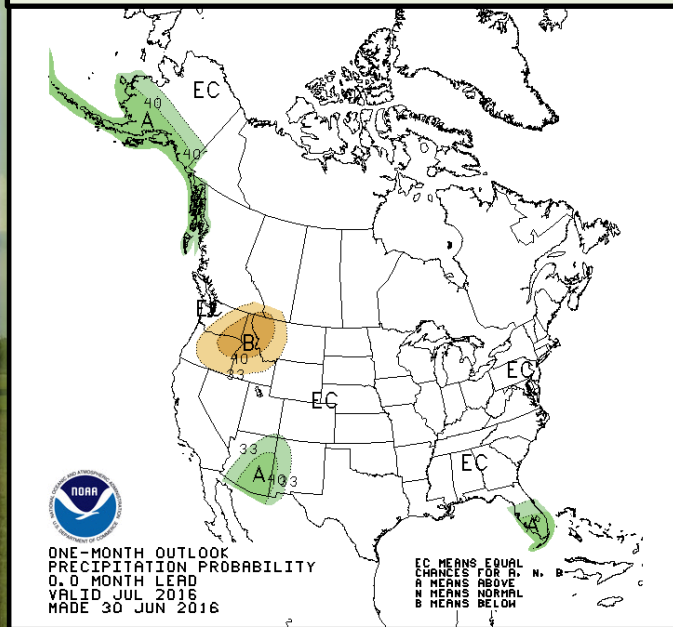
| Site             | Normal Avg Temp (°F) | Normal High (°F) | Normal Low (°F) |
|------------------|----------------------|------------------|-----------------|
| Cincinnati (CVG) | 75.9°F               | 85.6°F           | 66.1°F          |
| Columbus (CMH)   | 75.2°F               | 84.9°F           | 65.5°F          |
| Dayton (DAY)     | 74.1°F               | 83.8°F           | 64.5°F          |

| Site             | Normal Precipitation (in.) |
|------------------|----------------------------|
| Cincinnati (CVG) | 3.76"                      |
| Columbus (CMH)   | 4.79"                      |
| Dayton (DAY)     | 4.11"                      |

## Upcoming Temperature Outlook



## Upcoming Precipitation Outlook

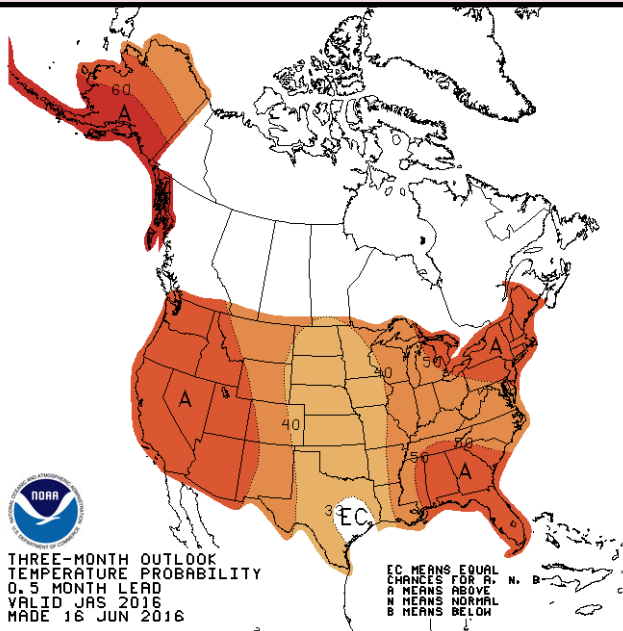




# Late Summer Outlook

The latest outlook from the Climate Prediction Center calls for an increased likelihood of above normal temperatures. There is not a clear signal for precipitation. There are equal chances of above, below, and normal precipitation across the region for July-September. El Niño has decayed and there has been a transition to a neutral state. La Niña may develop as early as later this summer, however there is a 75% chance that it will develop by winter. El Niño and La Niña are opposite phases of each other in a natural cycle. Although these patterns and circulations are present in the tropics, they have impacts on our patterns and weather here. Summer impacts due to La Niña in this area are minimal, however past La Niña events have shown a tendency for an increased likelihood of above normal precipitation during the winter months.

## Three-Month (JAS) Temp. Outlook



## Three-Month (JAS) Precip. Outlook

