



NWS Wilmington, Ohio September 2016 Regional Climate Summary

Regional Climate Summary

Although September started and ended on a cool note, the month will largely be remembered for the extended stretches of summer-like warmth and dry conditions. The Ohio Valley remained under the influence of the periphery of an expansive ridge centered over the southeastern U.S. for most of September. This allowed for warm and dry conditions through most of the month, with only a few days of locally heavy rainfall.

Temperatures

After a cold front moved through on the final day of August, the month of September started off with slightly below normal temperatures with dry air in place. However, summer-like warmth quickly returned to the area by the 5th, with temperatures reaching into the upper 80s to near 90°F for nearly a week. This stretch of summer-like temperatures coincided with abnormally humid conditions and very warm overnight lows across the area.

A cold front moved through late on the 10th, allowing for much cooler and drier air to return to the region for several days. However, temperatures gradually trended above normal once again towards the middle of the month.

Another cold front moved through on the 18th, allowing for drier air to return to the area. Even though drier air moved into the area, temperatures once again trended well above normal, with an extended stretch of high temperatures reaching into the upper 80s to around 90°F. However, with the relatively-dry airmass in place, overnight lows were able to dip close to 60°F during the stretch.

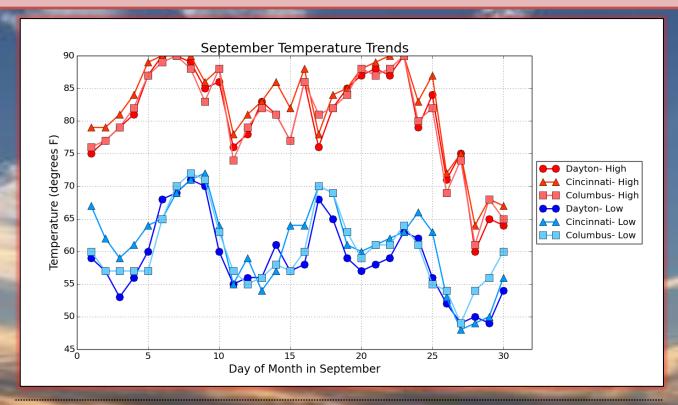
A strong cold front moved through early on the 26th, bringing an end to the period of unseasonably warm temperatures. Temperatures trended below normal for the final several days of the month as a large upper-level low pressure system rotated about the Ohio Valley.

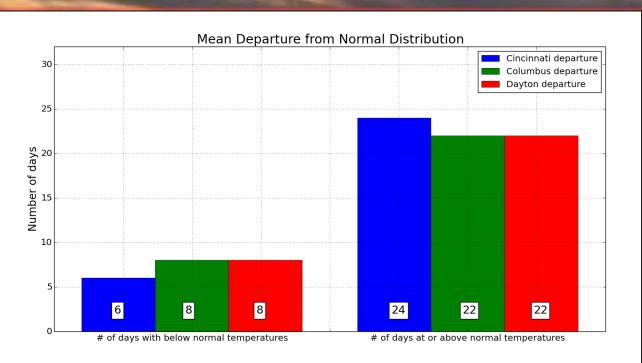
| Site | Avg Temp (°F) | Avg High Temp (°F) | Avg Low Temp (°F) | Departure From Normal (°F) | Maximum Temperature (°F) | Minimum Temperature (°F) |
|---------------------|------------------|-----------------------|----------------------|----------------------------------|--------------------------------|--------------------------------|
| Cincinnati (CVG) | 71.9°F | 82.5°F | 61.3°F | + 4.3°F | 90°F (Mult.) | 48°F (27 th) |
| Columbus (CMH) | 70.4°F | 80.6°F | 60.3°F | + 3.6°F | 90°F (Mult.) | 49°F (27 th) |
| Dayton (DAY) | 69.7°F | 80.4°F | 58.9°F | + 4.3°F | 90°F (Mult.) | 49°F (Mult.) |





Temperatures (Continued)









Precipitation

Following the passage of a cold front on the final day of August, the first part of September was characterized by an extended stretch of dry weather.

In a very warm and humid atmosphere that had developed by the 8th, scattered showers and thunderstorms developed and moved through the area.

Due to the spotty nature of the activity, there was a very uneven rainfall footprint, even over small areas. However, persistent showers/storms moved through southeastern IN and southwestern OH on the 8th, leading to several reports of flash flooding. Rainfall approached 5" in some spots in southeastern Indiana.

After the 10^{th} , a relatively dry stretch developed across the Ohio Valley as high pressure remained anchored across the region.

Several showers/storms produced locally heavy rainfall in central Ohio on the 17th, but most of the area received only a few tenths of rainfall.

Another dry stretch developed past the 17^{th} as high pressure settled into the area. Most of the region did not see a drop of rain for the next 7 days.

By the 26^{th} , a strong cold front moved through the area, providing scattered showers for the area. Most locations received only a few tenths of an inch of rain with the passage of the front.

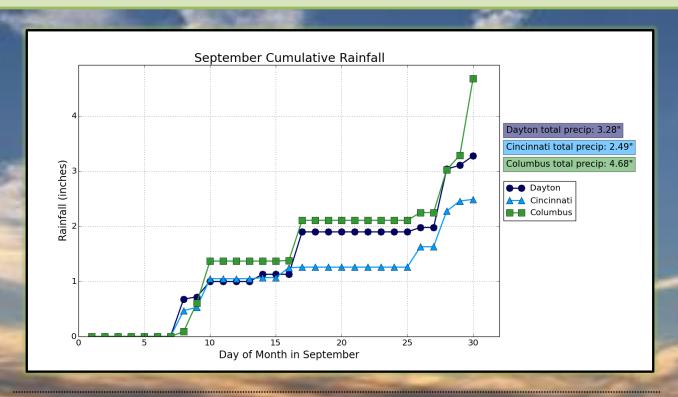
An upper level low pressure system meandered and stalled across the Ohio Valley towards the end of the month, providing several days of showers and isolated thunderstorms. This allowed for the overall dry month to end on a bit of a wet note for the area.

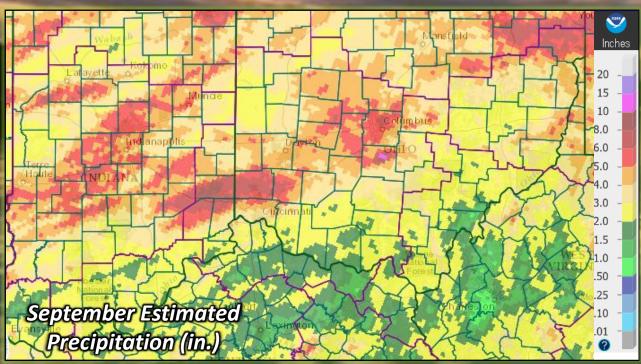
| Site | Total Precipitation (in.) | Departure From Normal (in.) | Max Daily Precipitation (in./date) | | Total Snowfall (in.) | Max Daily Snowfall (in./date) | |
|------------------|---------------------------------|-----------------------------------|--|------------------|----------------------------|----------------------------------|--|
| Cincinnati (CVG) | 2.49" | - 0.14" | 0.65" | 28 th | - | | |
| Columbus (CMH) | 4.68" | + 1.84" | 1.39" | 30 th | | | |
| Dayton (DAY) | 3.28" | - 0.02" | 1.06" | 28 th | | | |





Precipitation (Continued)









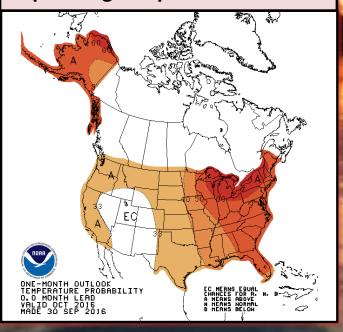
October Outlook

The latest outlook from the Climate Prediction Center (CPC) indicates favorable probabilities for above normal temperatures for the entire region in October. There are favorable probabilities for below normal precipitation for southern parts of the area during the month.

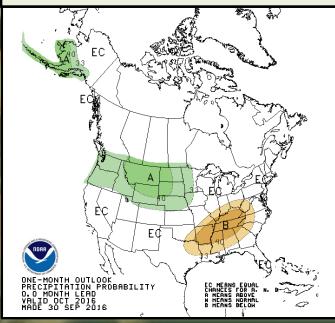
| Site Normal Avg Temp (°F) | | Normal High (°F) | Normal Low (°F) | |
|------------------------------|---------|---------------------|--------------------|--|
| Cincinnati (CVG) | 55.9°F | 66.2°F | 45.5°F | |
| Columbus (CMH) | 55.0 °F | 65.1°F | 45.0°F | |
| Dayton (DAY) | 53.9°F | 63.8°F | 44.0°F | |

| Site | Normal Precipitation (in.) | Normal Snowfall (in.) | | |
|---------------------|----------------------------------|-----------------------------|--|--|
| Cincinnati (CVG) | 3.30" | 0.4" | | |
| Columbus (CMH) | 2.61" | 0.2" | | |
| Dayton (DAY) | 2.93" | 0.4" | | |

Upcoming Temperature Outlook



Upcoming Precipitation Outlook

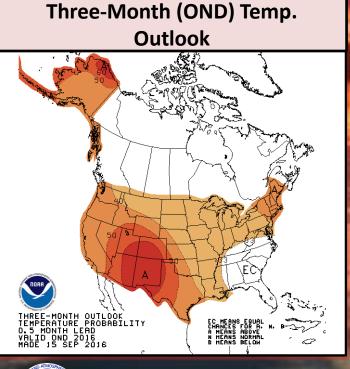


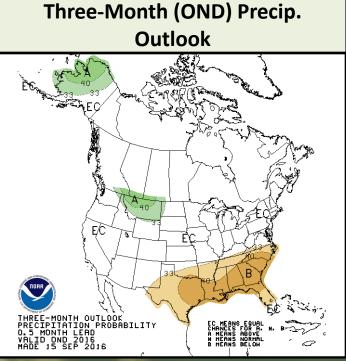




October - December Outlook

The latest outlook from the Climate Prediction Center (CPC) indicates favorable probabilities for above normal temperatures in the October through December time period for the Ohio Valley. There is no clear signal for above normal or below normal precipitation during that time frame.









Severe Weather

After a quiet start to the month, flash flooding developed on the 8th and 9th as several inches of rainfall (see image below) occurred across southeast Indiana and into southwest Ohio. Flooding issues also developed on the 10th as strong to severe thunderstorms tracked east across the area. This activity produced numerous reports of damaging wind, especially in the southwestern part of the area. With the slow-moving nature of the activity and the very moist atmosphere in place, there were several reports of heavy rain, with instances of over 1" of rain in less than 30 minutes.

