

NWS Wilmington, Ohio

August 2017

Regional Climate Summary

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August 2017 was a month that featured very little in the way of weather extremes or high-impact events in the local area. Temperatures never strayed too far from normal and severe weather activity was on the low side. With extended bouts of slightly cooler than normal temperatures, storm activity was often isolated in nature – which led to near normal or below normal precipitation.

Temperatures

The first several days of the month featured near normal temperatures and dry conditions. However, on the 4th, a cold front moved through the region, marking the beginning of an extended stretch of below normal temperatures in the local area that would continue until the middle part of the month.

By mid-August, seasonably warm and humid air built back into the region, with several days with high temperatures in the upper 80s and even the lower 90s. This warm spell stretched 5 or 6 days before the warmth and humidity were scoured out of the area due to the passage of a strong cold front on the 22nd.

A second extended stretch of near normal to below normal temperatures evolved for the final third or so of the month. In fact, each site recorded several days where high temperatures did not make it out of the 70s.

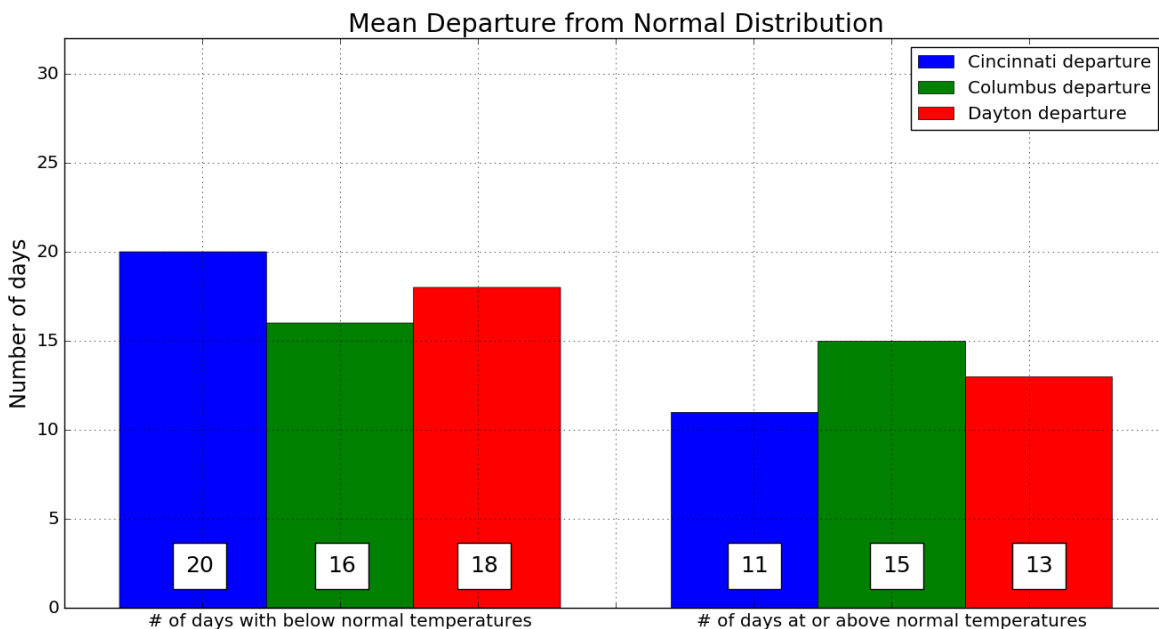
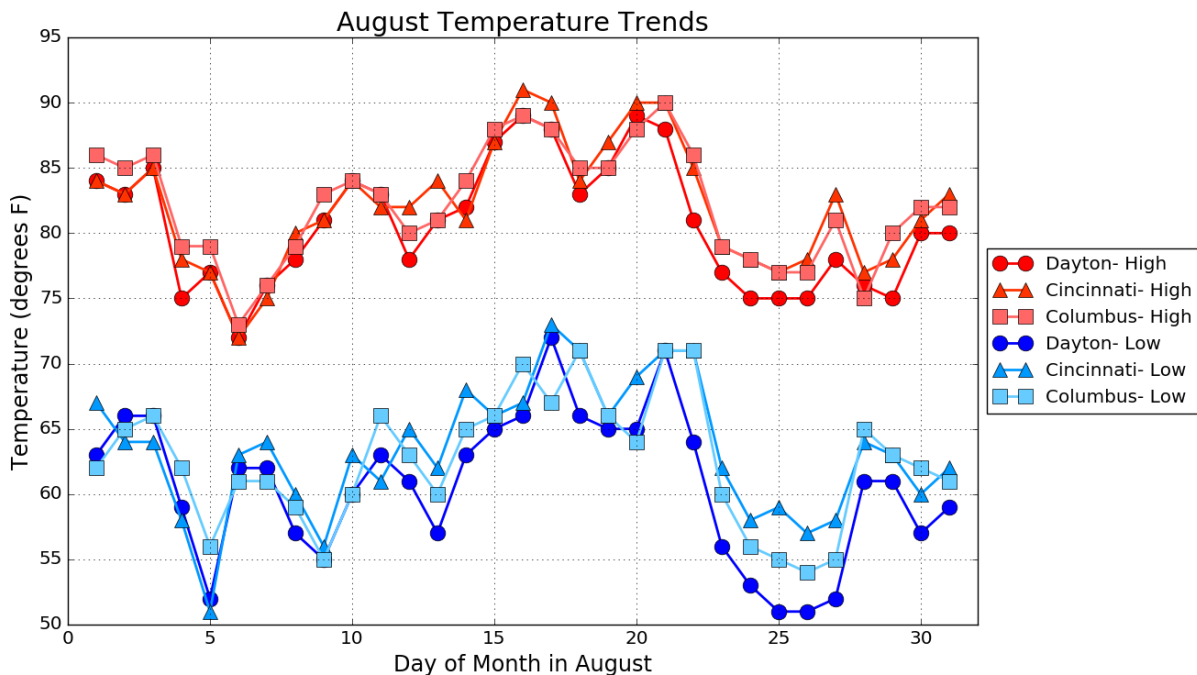
Overall, the month of August featured persistent upper-level troughing in the eastern third of the U.S. This pattern translated to extended periods of cool and dry conditions in the local area, which also helped limit thunderstorms for much of the month (see precipitation section). This being said, temperatures never strayed too far from daily norms and because of this, neither did the overall average temperature for the month. August 2017 was remarkably unremarkable from both a precipitation and temperature perspective.

Although the temperature never reached 90°F at Dayton (DAY), this occurrence isn't all that unusual. In fact, it has happened more than a dozen times (Augusts) on record – most recently in 2015.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	72.7°F	82.1°F	63.3°F	- 2.1°F	91°F (08/16)	51°F (08/05)
Columbus (CMH)	72.4°F	82.2°F	62.5°F	- 1.5°F	90°F (08/21)	54°F (08/26)
Dayton (DAY)	70.7°F	80.7°F	60.7°F	-2.0°F	89°F (Mult. Days)	51°F (Mult. Days)



Temperatures (Continued)



Precipitation

As briefly referenced in the temperature section of this summary, August 2017 featured very little in the way of unusual or significant precipitation. With the extended bouts of dry and cool air, thunderstorm coverage was sparse at best, even when seasonable warmth and humidity were able to build into the region. Severe weather, when it did occur, was pretty isolated in nature.

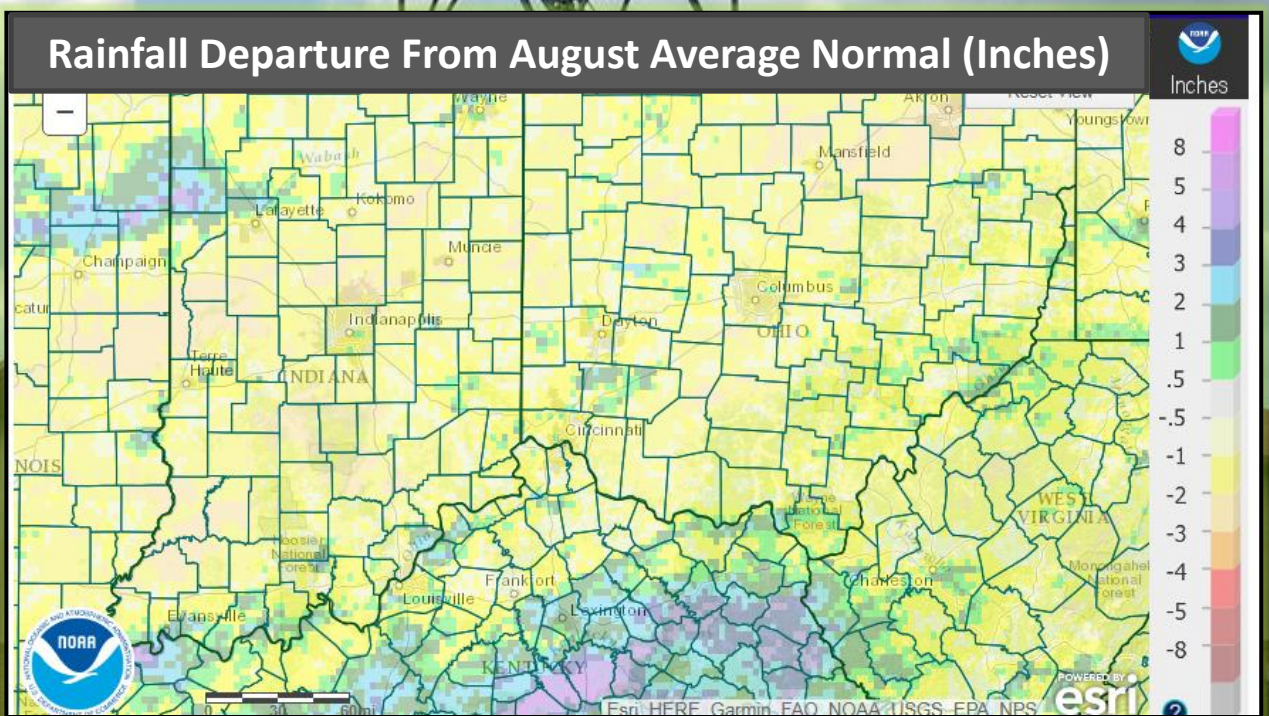
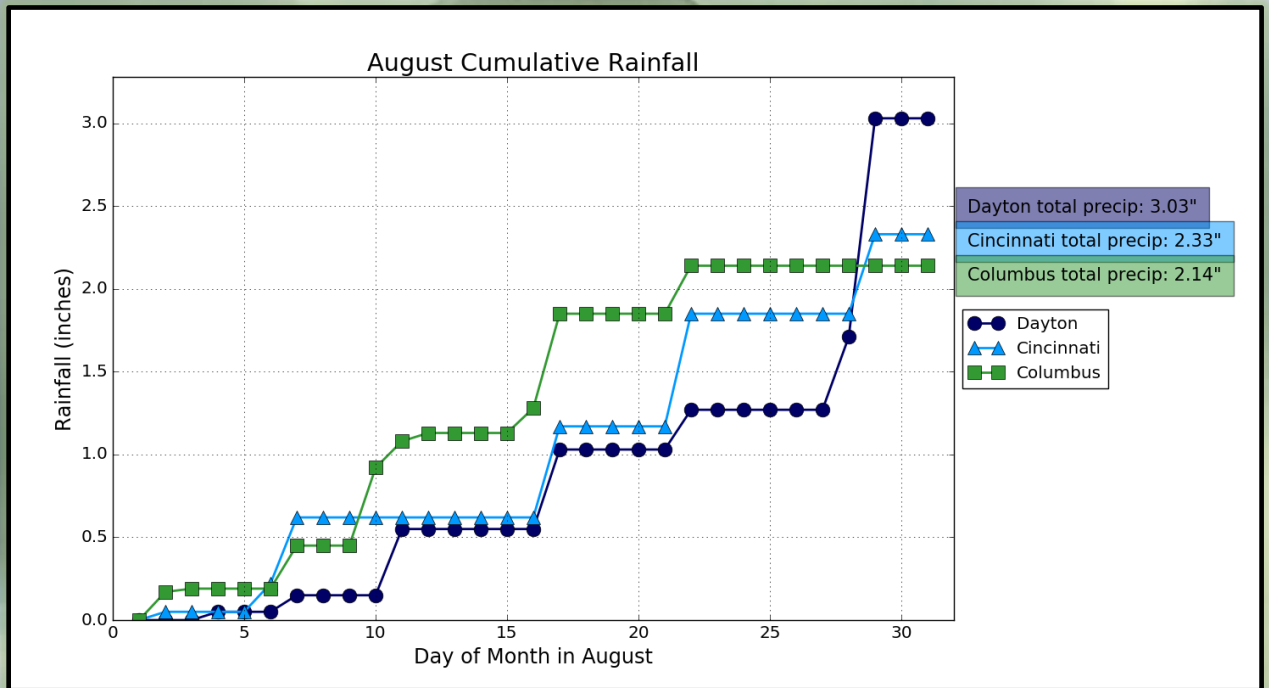
There were numerous days throughout the month where each climate site recorded exactly 0.00" of rain. And even when it did rain, it usually didn't rain that hard or for that long. Although there was a heavy rain event that impacted parts of northeastern Kentucky and south-central Ohio on the afternoon of the 22nd, thunderstorms were hard to come by in August. This being said, a daily record rainfall of 1.32" was set at Dayton of the 29th, breaking the old record of 1.06" set in 2003.

With the persistent dry and cool pattern that evolved over much of the month, both Cincinnati and Columbus recorded below normal rainfall for the month, with Dayton very close to normal. Although too much dry weather can be an issue, August's drier than normal pattern was a change from the previous months of June and July which featured numerous heavy rainfall events which led to many reports of flooding and flash flooding.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	2.33"	- 1.08"	0.68"	08/22	--	--	--
Columbus (CMH)	2.14"	- 1.18"	0.57"	08/17	--	--	--
Dayton (DAY)	3.03"	+ 0.04"	1.32"	08/29	--	--	--



Precipitation (Continued)



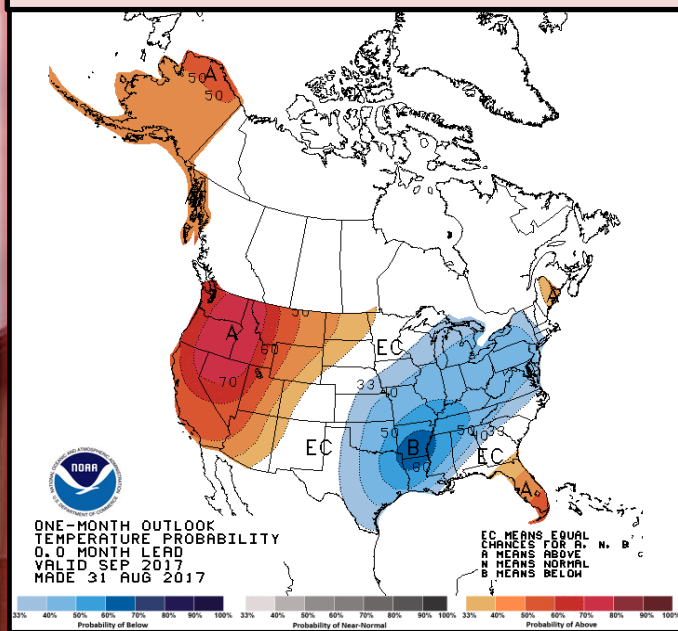
September Outlook

The latest outlook from the Climate Prediction Center (CPC) indicates an increased likelihood for above normal precipitation and below normal temperatures across most of the Ohio Valley during the month of September.

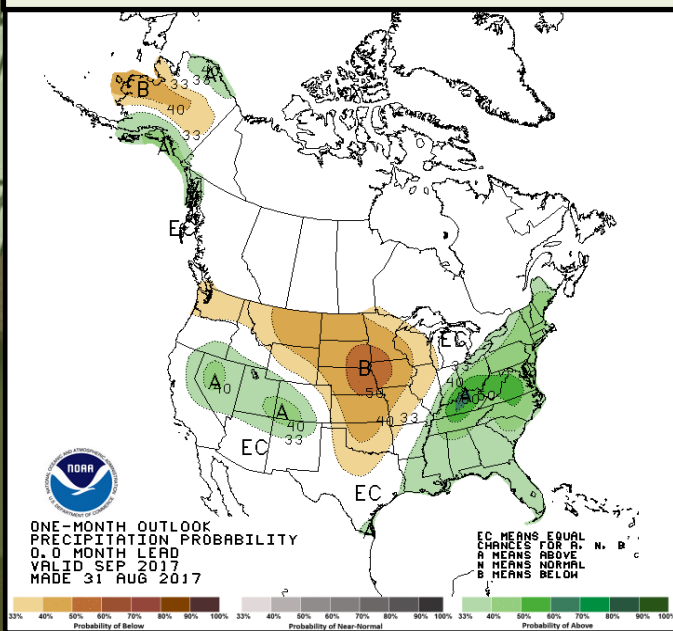
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	67.6°F	78.1°F	57.0°F
Columbus (CMH)	66.8°F	77.0°F	56.5°F
Dayton (DAY)	65.4°F	75.9°F	54.9°F

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	2.63"	--
Columbus (CMH)	2.84"	--
Dayton (DAY)	3.30"	--

Upcoming Temperature Outlook



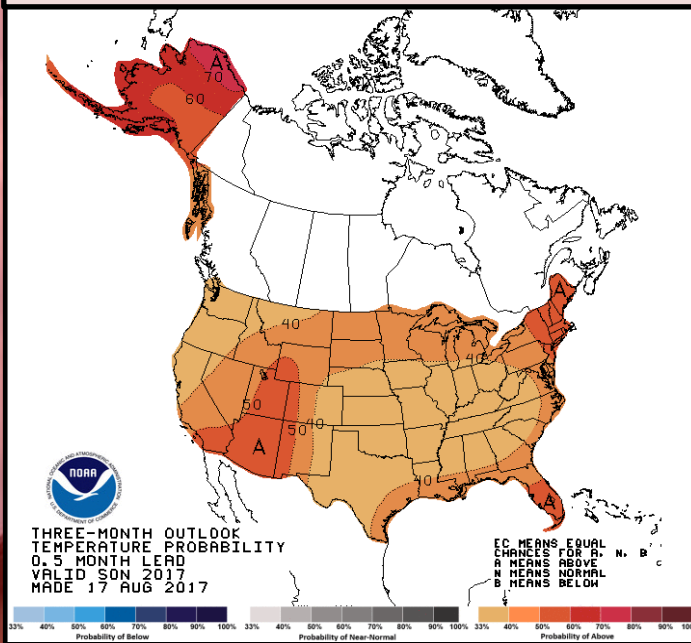
Upcoming Precipitation Outlook



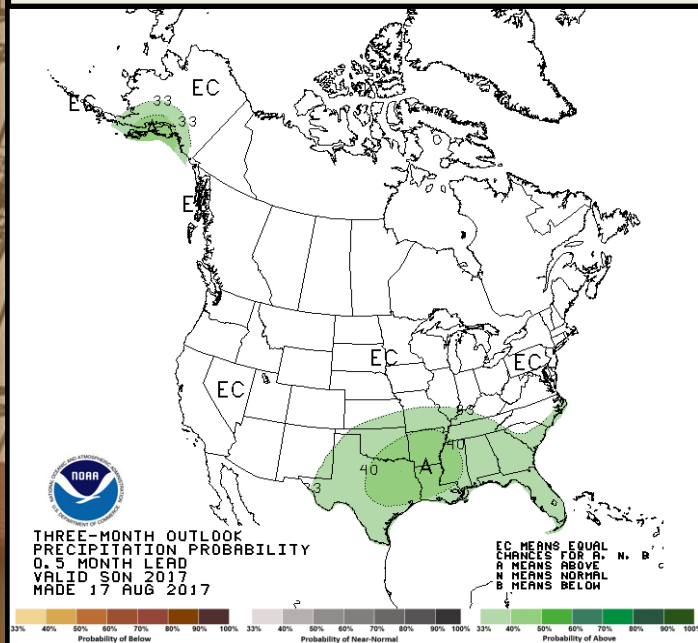
Autumn Outlook

According to the Climate Prediction Center (CPC), there is an increased likelihood that temperatures across the region and across the United States will be above normal for the September, October, and November time frame. There is not as clear of a signal for precipitation with equal chances of below, normal, and above normal precipitation.

Three-Month (SON) Temp. Outlook



Three-Month (SON) Precip. Outlook



Eclipse

On Monday August 21st, a solar eclipse occurred across the region. Although the local area was not in the path of total obscuration, there were weather changes that were noted as a result. At the National Weather Service in Wilmington, Ohio there was a special weather balloon launched at peak obscuration. The temperature dropped over 6 degrees at the National Weather Service office, however some locations observed over a 10+ degree drop.

