August was a rather stormy month which led to numerous days of scattered showers and storms across the local area. This resulted in a very erratic and chaotic rainfall footprint, with a few locations receiving 6-8” of rain through the month while others received only 2-3.” As is typical for August, there were very few notable temperature fluctuations throughout the course of the month with very little in the way of extreme heat either, despite the ample humidity.
During the month of August there were no major temperature fluctuations away from normal values, however on a few days average temperatures were as much as 10 degrees above normal.

The month did start out on a cooler note, however after the first week of the month above normal temperatures were present for a large majority of the remainder of the month. The heat and humidity led to several days in the 90s with heat index values in the middle 90s to low 100s.

A record high minimum temperature of 76°F was tied at Dayton on August 12th, breaking the daily record in 2016. A record high minimum temperature of 75°F was set at Dayton on August 25th, breaking the previous daily site record of 74°F set in 1936.

As is typical in the month of August, there were very few large fluctuations in the temperature. There were 11 days at Cincinnati (KCVG) in which the temperature reached at least 90°F, the most at the site in the month of August since 2012. Meanwhile, the 10 days at Dayton (DAY) with a temperature of least 90°F is the most at the site in the month of August since 2007. Overall, monthly average temperatures generally were 2-3 degrees above normal.

<table>
<thead>
<tr>
<th>Site</th>
<th>Avg Temp (°F)</th>
<th>Avg High Temp (°F)</th>
<th>Avg Low Temp (°F)</th>
<th>Departure From Normal (°F)</th>
<th>Maximum Temperature (°F)</th>
<th>Minimum Temperature (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati (CVG)</td>
<td>77.3°F</td>
<td>86.7°F</td>
<td>67.9°F</td>
<td>+ 2.4°F</td>
<td>93°F (Mult.)</td>
<td>57°F (08/01)</td>
</tr>
<tr>
<td>Columbus (CMH)</td>
<td>76.7°F</td>
<td>86.1°F</td>
<td>67.3°F</td>
<td>+ 2.7°F</td>
<td>92°F (Mult.)</td>
<td>58°F (08/02)</td>
</tr>
<tr>
<td>Dayton (DAY)</td>
<td>76.9°F</td>
<td>86.5°F</td>
<td>67.4°F</td>
<td>+ 2.4°F</td>
<td>94°F (08/27)</td>
<td>55°F (08/02)</td>
</tr>
</tbody>
</table>
Temperatures (Continued)

August Temperature Trends

Dayton- High
Cincinnati- High
Columbus- High
Dayton- Low
Cincinnati- Low
Columbus- Low

Mean Departure from Normal Distribution

Cincinnati departure
Columbus departure
Dayton departure

Number of days

# of days with below normal temperatures
9
6
8

# of days at or above normal temperatures
22
25
23
Due to the convective nature of much of the precipitation, rainfall was highly variable on several days leading to highly variable precipitation values for the month.

Prior to the 26\textsuperscript{th}, many locations northwest of Interstate 71 were below normal on precipitation. Near and southeast of Interstate 71 many locations were experiencing near normal to above normal precipitation values, with only some pockets of below normal precipitation. Adding to this, a record rainfall of 1.55 inches was set in Columbus on August 16\textsuperscript{th}. This broke the old record of 1.26 inches for the day set in 1934. The 17\textsuperscript{th} had additional heavy rain in portions of the Columbus area.

On the 26\textsuperscript{th} however, very slow moving storms developed over the Dayton area and lead to flash flooding. While many locations in and near Dayton saw over an inch of rain and in some cases several inches of rain, the airport received less than a quarter of an inch of precipitation. The storms then started to develop in other area locations as well leading to flash flooding in Adams County Ohio as well.

With numerous days of scattered showers and thunderstorms, especially in central OH, Columbus (KCMH) more than doubled the normal monthly rainfall, recording their T-5\textsuperscript{th} wettest August on record.

<table>
<thead>
<tr>
<th>Site</th>
<th>Total Precipitation (in.)</th>
<th>Departure From Normal (in.)</th>
<th>Max Daily Precipitation (in./date)</th>
<th>Total Snowfall (in.)</th>
<th>Max Daily Snowfall (in./date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati (CVG)</td>
<td>5.06”</td>
<td>+ 1.63”</td>
<td>1.79” 08/16</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Columbus (CMH)</td>
<td>7.16”</td>
<td>+ 3.42”</td>
<td>1.55” 08/16</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Dayton (DAY)</td>
<td>2.91”</td>
<td>- 0.05”</td>
<td>0.91” 08/30</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>
Precipitation (Continued)

August Cumulative Rainfall

Dayton total precip: 2.91"
Cincinnati total precip: 5.06"
Columbus total precip: 7.16"

August Estimated Precipitation Departure From Normal (Inches)

Drier

Wetter

Wetter

Wetter

Precipitation Departure From Normal (Inches)
Several days of isolated severe weather occurred during the month. While the month started out on a quiet note, sporadic severe weather occurred on the 7th, 11th, 12th, 13th, 17th, 25th, and 26th.

While no tornadoes occurred during the month, there were reports of damaging wind, hail, and flash flooding. The 7th, 11th, 13th, and 25th had damaging wind. The 12th had reports of damaging wind and hail, the 17th had flash flooding, and the 25th had damaging wind and flash flooding.

Visit our local weather event archive for write-ups and summaries for our major weather events.
The latest outlook from the Climate Prediction Center (CPC) indicates favorable probabilities for near normal temperatures and above normal precipitation, especially for the eastern Ohio Valley.

### Upcoming Temperature Outlook

<table>
<thead>
<tr>
<th>Site</th>
<th>Normal Avg Temp (°F)</th>
<th>Normal High (°F)</th>
<th>Normal Low (°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati (CVG)</td>
<td>68.1°F</td>
<td>78.9°F</td>
<td>57.3°F</td>
</tr>
<tr>
<td>Columbus (CMH)</td>
<td>67.2°F</td>
<td>77.8°F</td>
<td>56.5°F</td>
</tr>
<tr>
<td>Dayton (DAY)</td>
<td>67.7°F</td>
<td>78.6°F</td>
<td>56.8°F</td>
</tr>
</tbody>
</table>

### Upcoming Precipitation Outlook

<table>
<thead>
<tr>
<th>Site</th>
<th>Normal Precipitation (in.)</th>
<th>Normal Snowfall (in.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cincinnati (CVG)</td>
<td>3.11”</td>
<td>0.0”</td>
</tr>
<tr>
<td>Columbus (CMH)</td>
<td>3.14”</td>
<td>0.0”</td>
</tr>
<tr>
<td>Dayton (DAY)</td>
<td>3.31”</td>
<td>0.0”</td>
</tr>
</tbody>
</table>
According to the Climate Prediction Center (CPC), there is an increased likelihood of above normal temperatures for the September, October, and November timeframe. There are equal chances of below normal, normal, and above normal precipitation.

According to the Climate Prediction Center, La Niña could potentially emerge during the fall season and last through the 2021-2022 winter (70% chance during November-January). Due to this, a La Niña watch remains in effect.