



# NWS Wilmington, Ohio November 2018 Regional Climate Summary

# **Regional Climate Summary**

It was a seasonable but somewhat wet start to the month for much of the region before an extended stretch of below normal temperatures settled into the region for most of the remainder of the month. Persistent colder-than-normal temperatures became the norm for the final 3 weeks or so of the month, with numerous days with highs in the 30s and 40s and lows in the 20s and 30s. The cooler stretch also brought with it slightly drier conditions as compared to the first third of the month – although much of the area still received above normal precipitation for the month.

# **Temperatures**

The month of November started on a very seasonable note, with highs in the 50s and lower 60s for the first several days before a strong cold front moved through during the early morning hours on the  $6^{th}$ . This front brought much chillier air to the Ohio Valley, which stuck around for the better part of the next week or so as a series of cold fronts/upper level systems brought reinforcing shots of cool air every couple of days or so. In fact, the pattern of colder-than-normal temperatures persisted across the region for most of the remainder of the month, except for a few very brief warmups scattered throughout the final 3 weeks of the month.

The persistence of not only colder-than-normal conditions across the area, but the number of days in which the high temperatures failed to reach even 40°F or 50°F was notable for the month of November. In fact, the temperature failed to reach 50°F on 19 days at Cincinnati (CVG), which is the most such occurrences at the site in November since 1996. Moreover, the high temperature failed to go above freezing at Cincinnati (CVG) on 3 separate days – tied for the most in November since 1956 at the site. There were several days where daily average temperatures were 10-15 degrees below normal.

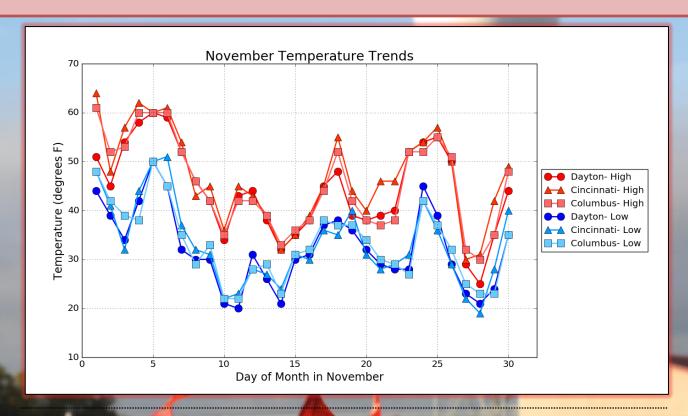
A record daily low maximum temperature of 32°F was tied at Cincinnati on Wednesday November 14<sup>th</sup>. This ties the old daily record low maximum set in 1916. Columbus also tied at 33°F with the previous occurrence in 2014. A record low temperature of 20°F was tied at Dayton on November 11<sup>th</sup> with the low in 1980.

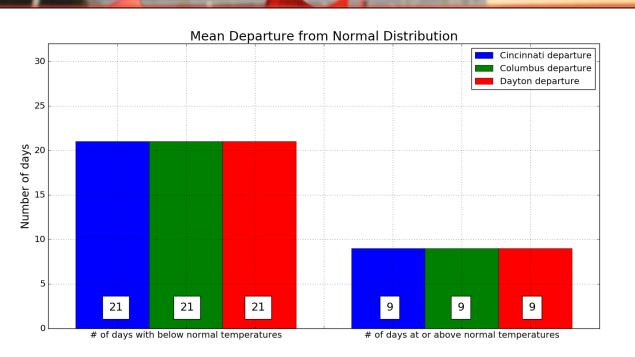
Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	40.0°F	46.8°F	33.2°F	-5.1°F	64°F on 1st	19°F on 28th
Columbus (CMH)	39.2°F	45.2°F	33.2°F	-5.2°F	61°F on 1st	22°F on 10 <sup>th</sup> /11 <sup>th</sup>
Dayton (DAY)	38.2°F	44.1°F	32.3°F	-4.6°F	60°F on 5th	20°F on 11th





# **Temperatures (Continued)**









# **Precipitation**

The month of November started off on a very wet note as a large weather system brought widespread heavy rain to the region – particularly for locations near and just to the north of the I-71 corridor. Between the  $31^{st}$  of October and the  $1^{st}$  of November, most locations in the local area received 1-2" of rain, with locally higher amounts in excess of 3" reported in some spots.

The wet start to the month was followed by several dry days before another complex system brought more rain to the area late on the  $5^{th}$  into the  $6^{th}$ . Many spots picked up another inch or so, with some locally higher amounts closer to 2."

The wet start to the month was soon followed by a cooler and slightly drier stretch for the remainder of the month. There were several days in which large synoptic-scale systems moved through, bringing 0.50-1+" of rain, which, when combined with the wet first third of the month, yielded above normal precipitation for the month — with many spots picking up 5-7" of rain throughout the month as a whole. For an areal average, much of the region received about double the usual amount of liquid-equivalent precipitation. And although temperatures were generally below normal (leading to one of the coolest Novembers on record for some of the local climate sites), the total snow was approximately normal with what is usually seen in November (around 0.5"-1.0").

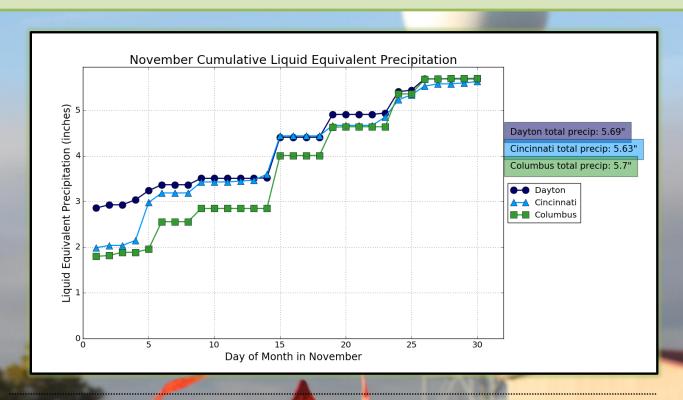
The other interesting item from a precipitation perspective was the number of days in which either rain or snow was measured across the area. For example, Cincinnati (CVG) recorded measurable liquid-equivalent precipitation on 18 of the 30 days, the most at the site in the month of November since November of 1985 and second most for November on record. This does not even include the 3 days in which a trace of precipitation was measured at the site.

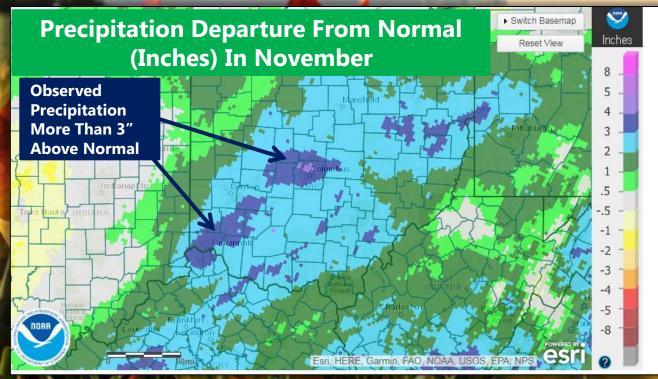
Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Precipi (in./d		Total Snowfall (in.)		aily Snowfall n./date)
Cincinnati (CVG)	5.63"	+2.20"	1.99"	1 <sup>st</sup>	1.9"	1.0"	27 <sup>th</sup>
Columbus (CMH)	5.70"	+2.50"	1.80"	1 <sup>st</sup>	2.1"	1.3"	15 <sup>th</sup>
Dayton (DAY)	5.69"	+2.30"	2.86"	1 <sup>st</sup>	1.0"	0.5"	26 <sup>th</sup>





# **Precipitation (Continued)**



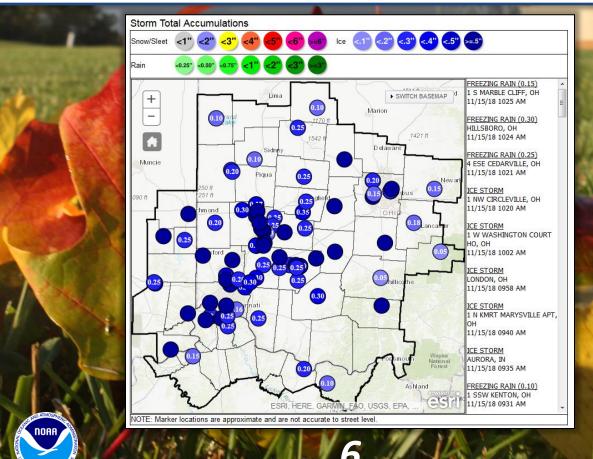






## Winter Weather

An unusually-early and potent ice event transpired in the region on November 15<sup>th</sup> as abundant moisture moved into an area with a shallow near-surface cold layer. The result was an extended period of freezing rain, which led to ice accretions in excess of 0.25" in some spots. The heavy icing led to fairly extensive tree and powerline damage throughout the local area, with some customers without power for more than a day.



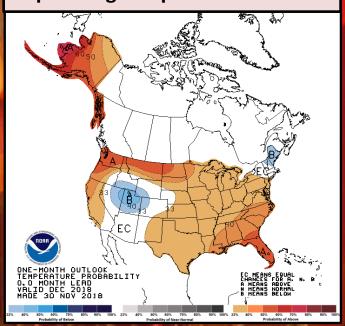
## **December Outlook**

The latest outlook from the Climate Prediction Center (CPC) indicates increased probability for above normal temperatures throughout the Ohio Valley and much of the eastern U.S. However, there is less of a consensus on whether precipitation will be above or below normal in the region during the month of December – with much of the area expected to receive near normal precipitation during the month.

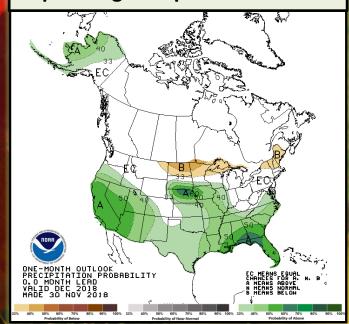
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)	
Cincinnati (CVG)	34.1°F	41.6°F	26.6°F	
Columbus (CMH)	33.5°F	40.1°F	26.8°F	
Dayton (DAY)	31.2°F	38.1°F	24.3°F	

		A COLUMN TWO IS NOT THE OWNER.		
	Site	Normal Precipitation (in.)	Normal Snowfall (in.)	
	Cincinnati (CVG)	3.37"	4.8"	
1	Columbus (CMH)	2.97"	5.0"	
	Dayton (DAY)	3.12"	4.5"	

#### **Upcoming Temperature Outlook**



### **Upcoming Precipitation Outlook**





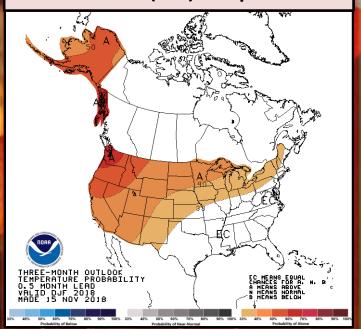


## **Winter Outlook**

There is an increased likelihood of above normal temperatures across the northern half of Ohio during the December-February time-frame. Elsewhere across the region there are equal chances of above normal, normal, and below normal temperatures. Drier than normal conditions are favored for the December-February time-frame across the entire region. This pattern for the region is typical for an El Niño pattern.

The El Niño watch continues with a 80% chance of an El Niño to develop and continue through the winter. It is also likely for the El Niño to continue into the springtime months as well.

#### Three-Month (DJF) Temp. Outlook



#### Three-Month (DJF) Precip. Outlook

