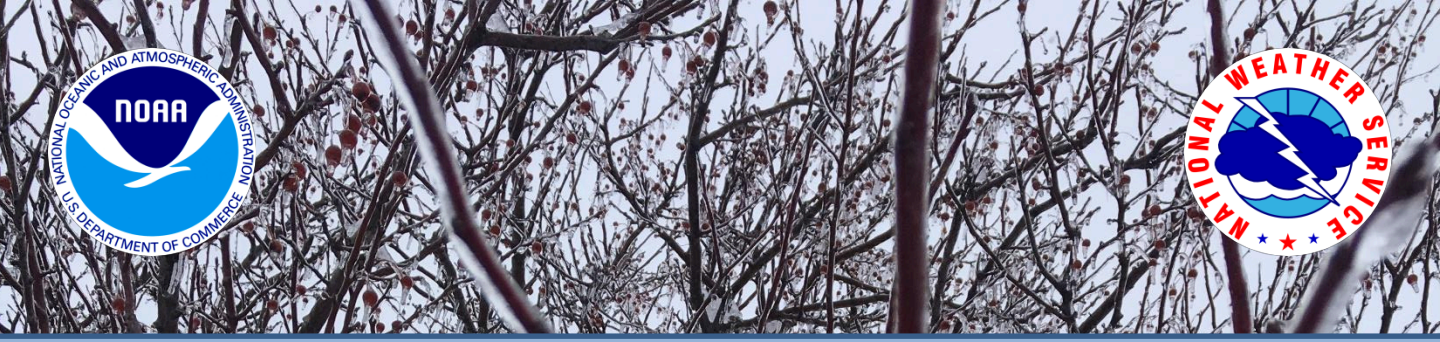
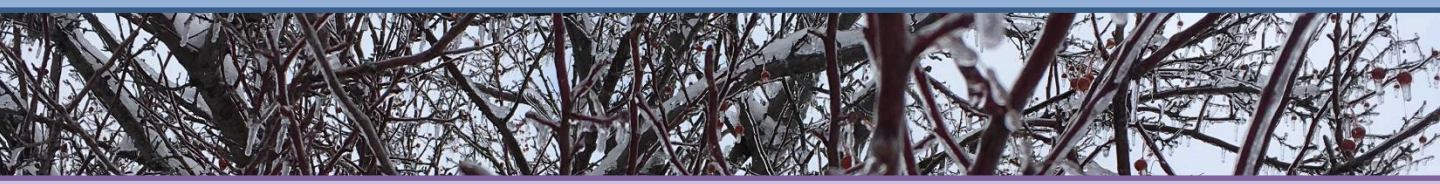


NWS Wilmington, Ohio
December 2019
Regional Climate Summary



Regional Climate Summary

This December had a variety of weather including, snow, sleet, freezing rain, rain, fog, and windy conditions. Most of the month of December was above normal for temperatures with only about a week out of the month experiencing below normal conditions. Temperatures on some days were well above normal, particularly around the Christmas Holiday.

Temperatures

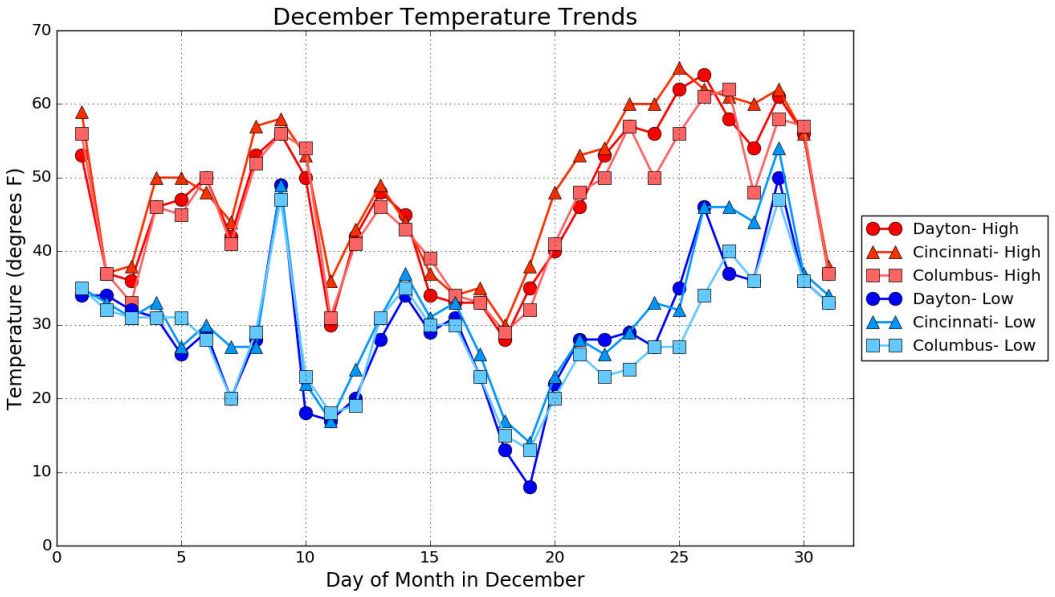
The month of December, unlike what was the case for much of November, generally featured a large majority of warmer-than-normal temperatures. Through the first week or so of the month, temperatures ran fairly close to normal before a very warm day evolved by the 9th when temperatures were nearly 20°F above normal. However, slightly cooler air returned shortly thereafter and allowed for a return to closer to normal temperatures.

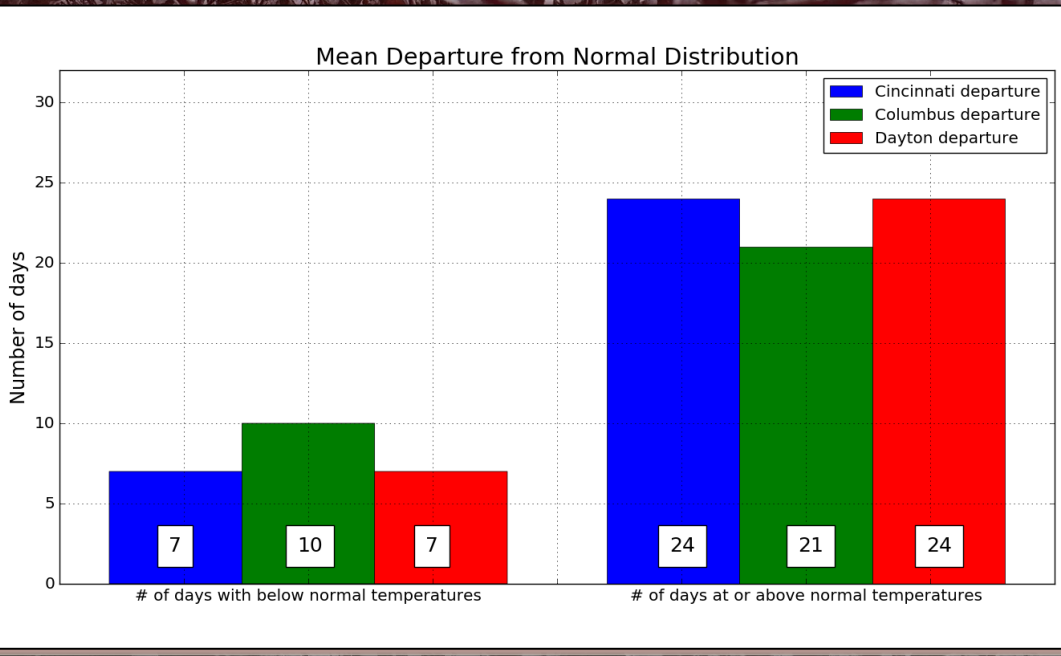
Each day past the 20th seemed to get progressively warmer, with daytime highs getting into the 40s, 50s, and eventually even the 60s! Even with these warm temperatures, with the wet nature of the snow on the ground from the middle of the month and the low sun angle, it took over a week to melt away all the snow in some areas. The average temperatures near and on Christmas were 10 to around 20 degrees above normal. Closer to the end of the month a record daily high minimum temperature of 54°F was tied in Cincinnati on December 29th. Also a record daily high minimum temperature of 50°F was set in Dayton on December 29th.

Cooler air moved in the night of the 29th into the 30th, but overall many spots in the local area had a December that was much warmer than normal.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	40.2°F	49.0°F	31.5°F	+ 6.1°F	65°F (12/25)	14°F (12/19)
Columbus (CMH)	37.4°F	45.9°F	28.8°F	+ 3.9°F	62°F (12/27)	13°F (12/19)
Dayton (DAY)	38.0°F	46.5°F	29.4°F	+ 6.8°F	64°F (12/26)	8°F (12/19)

Temperatures (Continued)





Precipitation

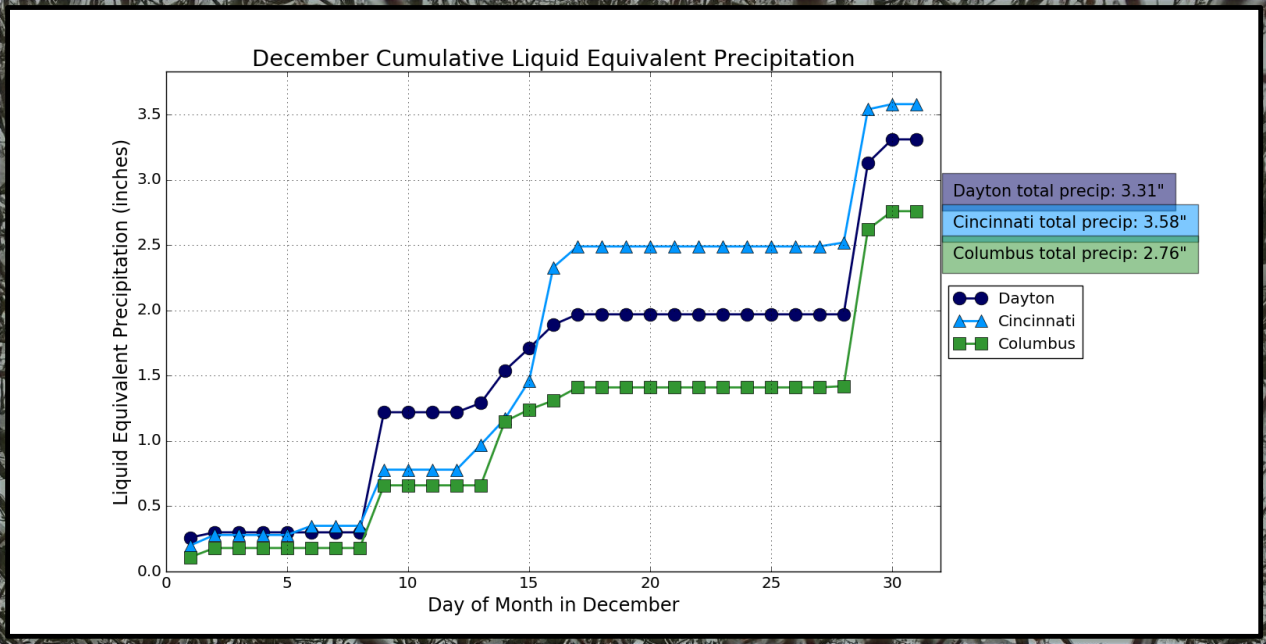
The month of December featured a few typical wintry/wet days, especially from the 15th through the 17th. Some light rain and snow affected the area through the first few days of the month with another more widespread event on the 9th which produced between 0.25"-0.50" of rain.

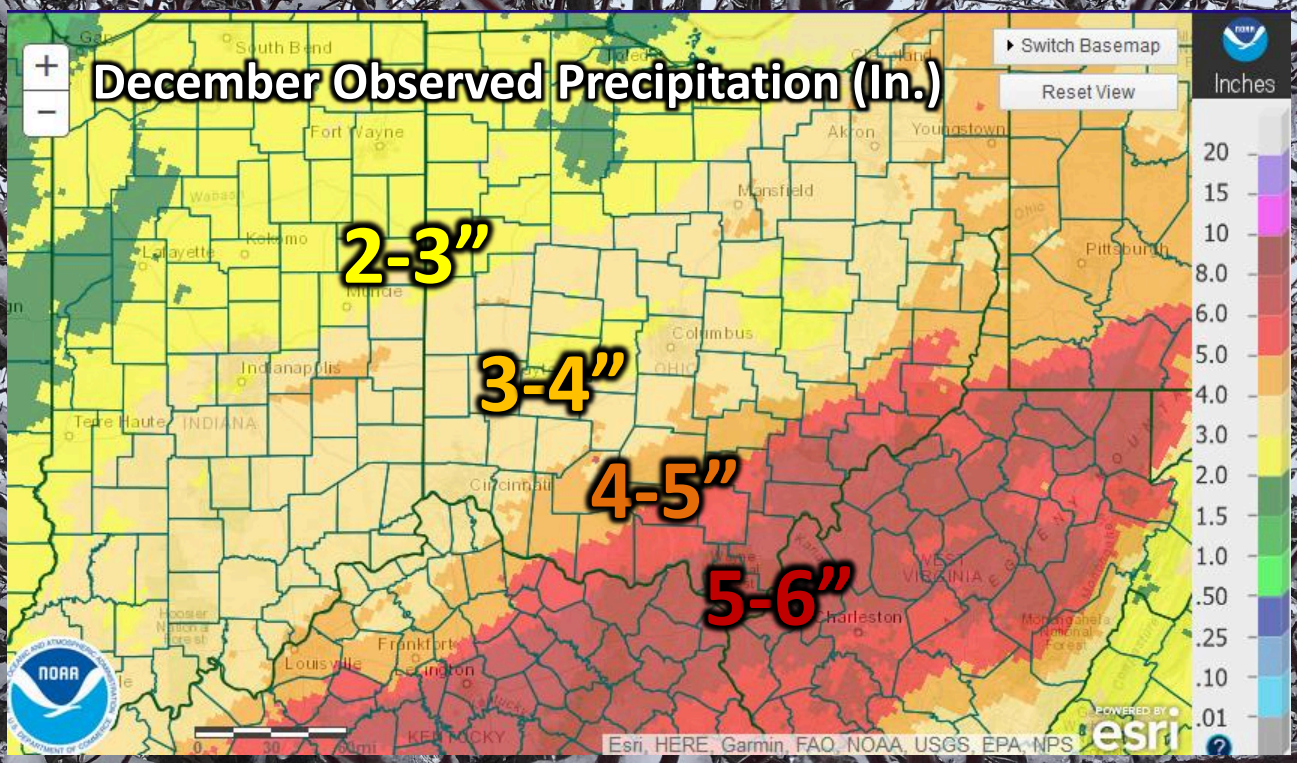
A somewhat wetter pattern evolved by the middle of the month, with several consecutive days of rain or snow or both through much of the region. In fact, at Cincinnati (CVG), for example, at least 0.15" was recorded at the site on 5 consecutive days from the 13th through the 17th, which is tied for the 11th longest stretch on record at the site. It was on the 16th into the 17th when very heavy rain fell in parts of northern/northeastern Kentucky and south-central Ohio, with reports of 1.5-2+" in these areas during the 2-day span which caused localized flooding in parts of these areas. Amidst this wetter stretch was some snow, sleet, and freezing rain as well. There were many spots that received at least several inches of snow followed by an extended period of either rain or freezing rain on the 16th. This wintry weather came to an end by the 18th, beginning an extended stretch of dry weather toward the latter part of December.

A few showers moved across on the 28th and widespread rain moved across the region the 29th. This widespread rain led to a couple of record daily maximum rainfall values at Dayton and Columbus. Some bands of rain moved through on the 30th. Some of these bands during the early morning hours enhanced wind gusts as well.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	3.58"	+ 0.21"	1.02"	12/29	3.0"	2.5"	12/15
Columbus (CMH)	2.76"	- 0.21"	1.20"	12/29	2.3"	1.5"	12/15
Dayton (DAY)	3.31"	+ 0.19"	1.16"	12/29	3.8"	2.5"	12/15

Precipitation (Continued)

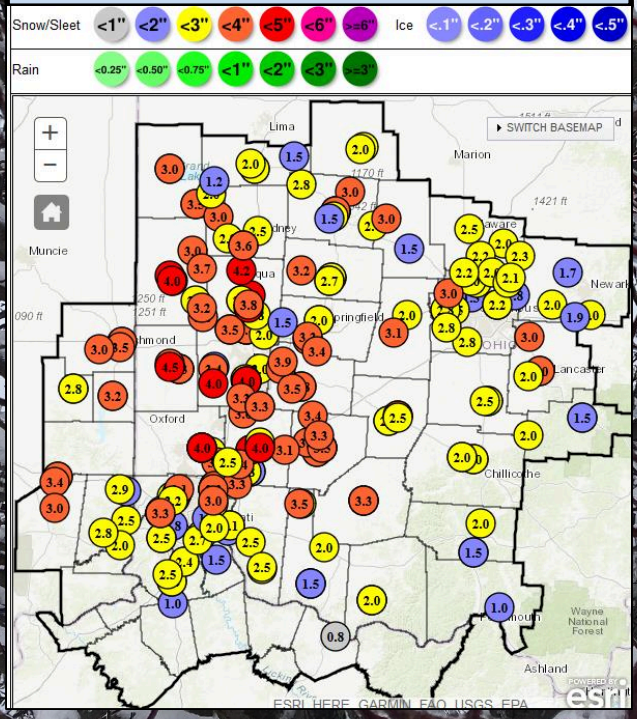




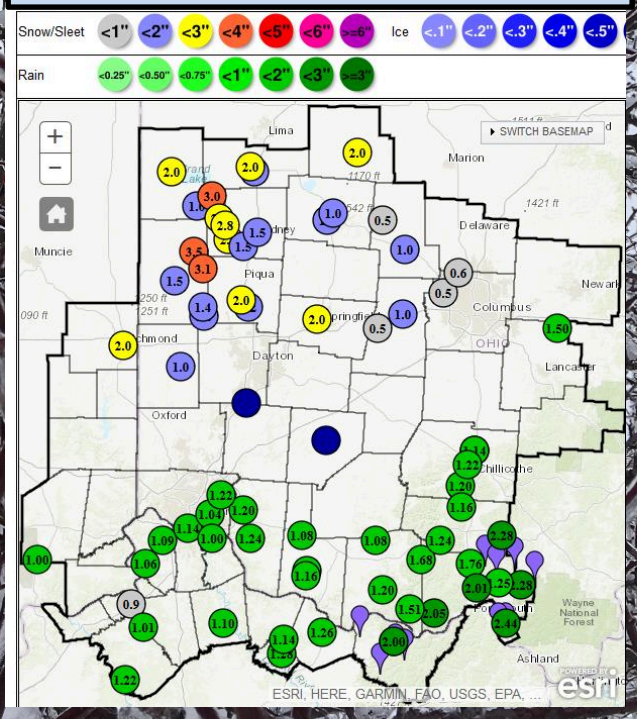
Winter Weather

A two-part winter system impacted the Ohio Valley starting on the 15th and going into the early morning hours on the 17th. The initial batch of precipitation was primarily snow – especially for locations north of the Ohio River. Snowfall from the evening of the 15th into the early morning hours on the 16th ranged from 2-4." A second round of precipitation – a mix of rain, freezing rain, and snow, moved in on the afternoon hours on the 16th into early on the 17th. A light glaze of ice formed on trees across portions of the area with parts of west-central OH and east-central IN remaining all snow, picking up another several inches of snow. Most spots near and south of the Ohio River received mainly rain with the second batch, with some heavier rain in parts of northeastern KY and south-central Ohio.

December 15th-16th Snow

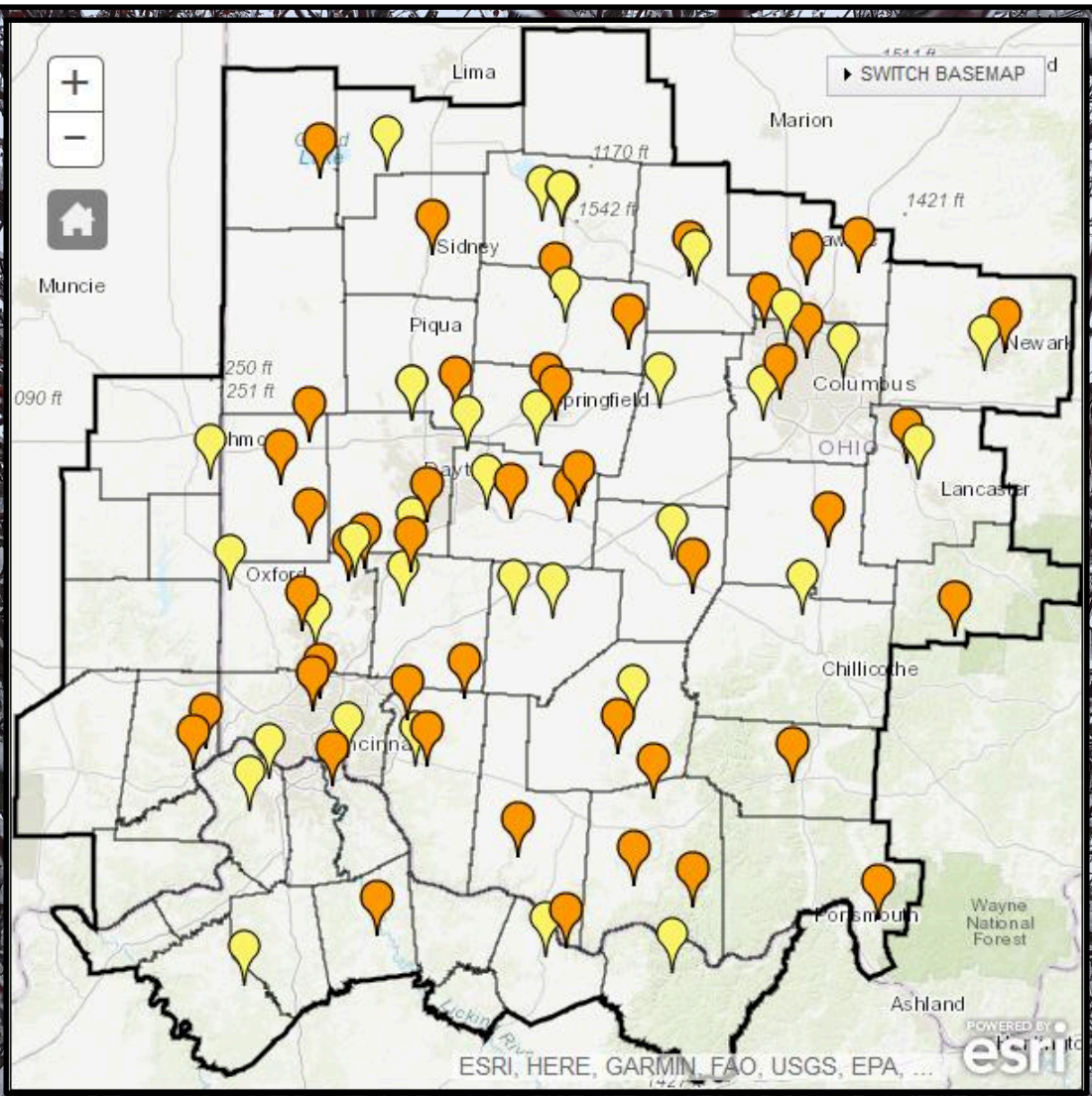


December 16th-17th Snow/Ice/Rain



High Wind December 30th

A rapidly-deepening low pressure system moved through the region in the pre-dawn hours on December 30, 2019, with an extremely tight/local pressure gradient setting up for a several hour period across much of the Ohio Valley. This yielded strong wind gusts in the 50-60 MPH range, with isolated observed gusts of 70 MPH.



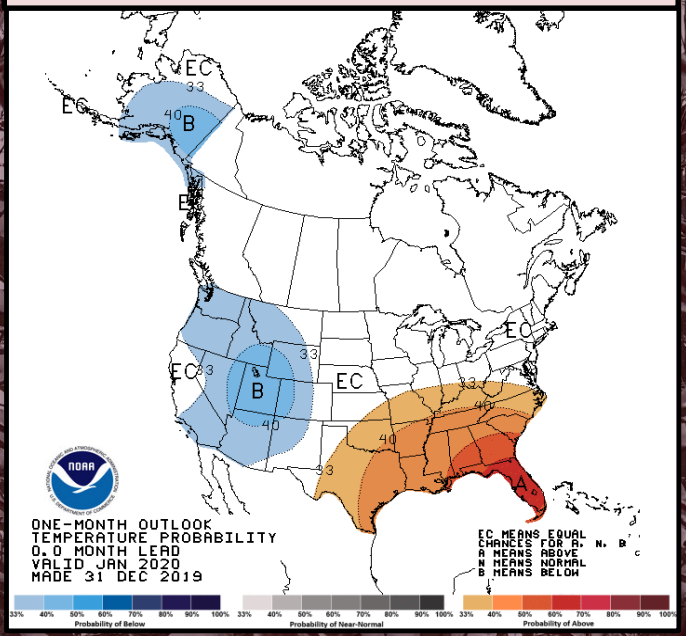
January Outlook

The latest outlook from the Climate Prediction Center (CPC) indicates increased probabilities for above normal temperatures (especially for southern portions of the region) and increased probabilities for above normal precipitation.

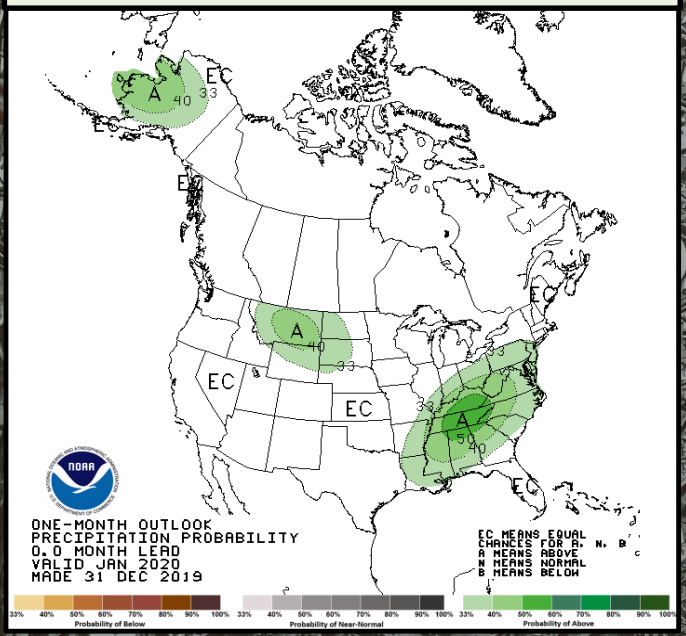
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	30.8°F	38.7°F	23.0°F
Columbus (CMH)	29.6°F	36.5°F	22.6°F
Dayton (DAY)	27.5°F	34.7°F	20.3°F

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	3.00”	6.5”
Columbus (CMH)	2.73”	9.2”
Dayton (DAY)	2.71”	7.9”

Upcoming Temperature Outlook



Upcoming Precipitation Outlook

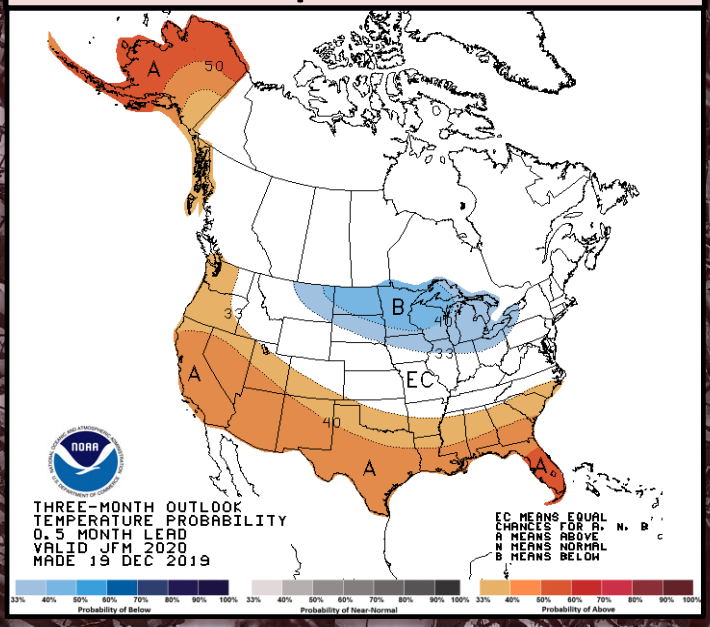


January-March Outlook

ENSO neutral conditions are in place and will likely continue through the winter months and into the spring months as well.

There is an increased likelihood of above normal precipitation across the region. The signal for temperatures is not as notable. Northern portions of Ohio and Indiana have an increased likelihood of below normal temperatures, however the rest of the region has equal chances of below, normal, and above normal temperatures.

Three-Month (JFM) Temp. Outlook



Three-Month (JFM) Precip. Outlook