NWS Wilmington, Ohio
December 2021
Regional Climate Summary

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Overall during the month of December warm and wet conditions were prevalent. Brief cool downs along with light snowfall values were observed, however in general temperatures were well above normal for the month. The average temperature at Cincinnati and Columbus ended up being the 4th warmest on record, and Dayton ended up with the 2nd warmest December on record. Along with the warm air, severe weather in the form of damaging winds and a tornado occurred on the 11th.

Temperatures

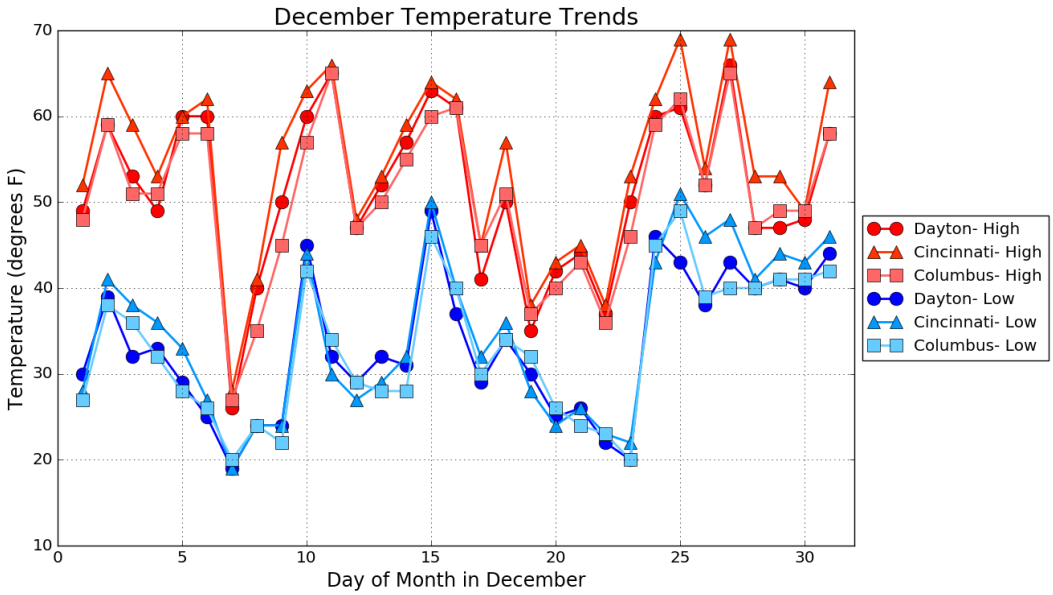
Above normal temperatures were present for most of the first week of the month, however there was a sharp cool down by the 7th with temperatures being well below normal. This cool period was short lived and widespread 60 degree temperatures were seen around the area by the 10th. The well above normal temperatures continued into the 11th before a strong system moved through bringing temperatures back closer to normal values.

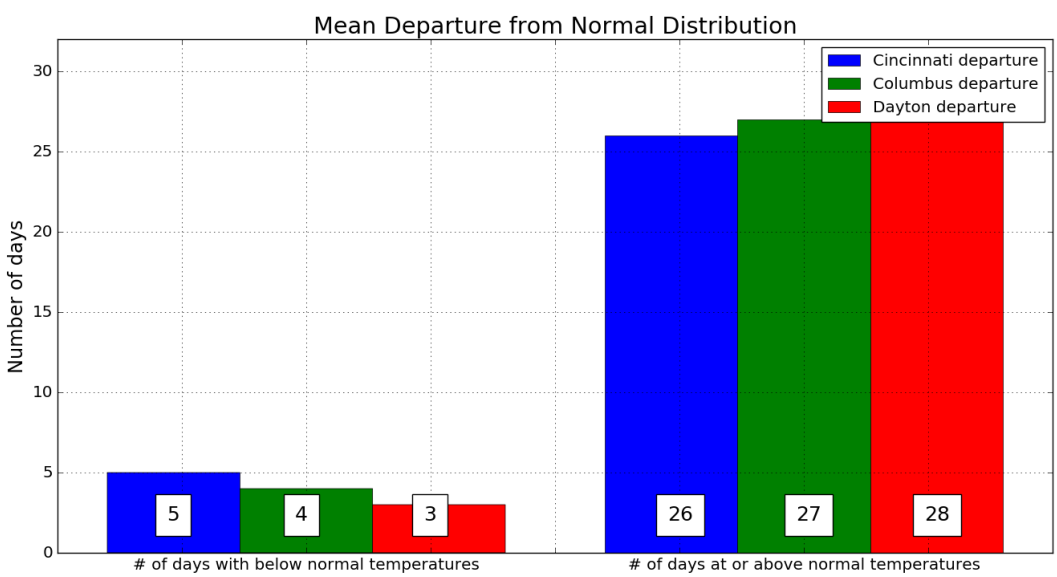
Another warm up and widespread 60+ degree air returned by the 15th where temperatures were over 20 degrees above normal in many locations. The record high temperature at Dayton was tied on the 15th with a high temperature of 63. A record high minimum temperature of 49 was tied at Dayton on the 15th as well.

The 16th through the 18th featured a roller coaster of temperatures with well above normal temperatures, closer to normal temperatures, and then back well above normal once again for the 18th. Temperatures settled out closer to normal for the 19th through the 23rd. The last week of the month featured well above normal temperatures and in some cases record breaking warmth. A record high temperature of 69 degrees was set at Cincinnati on the 25th. This breaks the old record of 66 set in 1893. A record high temperature of 66 was tied at Dayton on December 27th with the previous occurrence being in 2008.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	44.5	54.3	34.7	+8.9	69 on 25th/27th	19 on 7th
Columbus (CMH)	41.8	50.5	33.1	+7.3	65 on 11th /27th	20 on 7th/23rd
Dayton (DAY)	42.3	51.3	33.3	+8.0	66 on 27th	19 on 7th

Temperatures (Continued)





Precipitation

Several systems brought multiple days of rainfall to the region during the month. With temperatures overall being well above normal, snowfall occurred on very few occasions during the month.

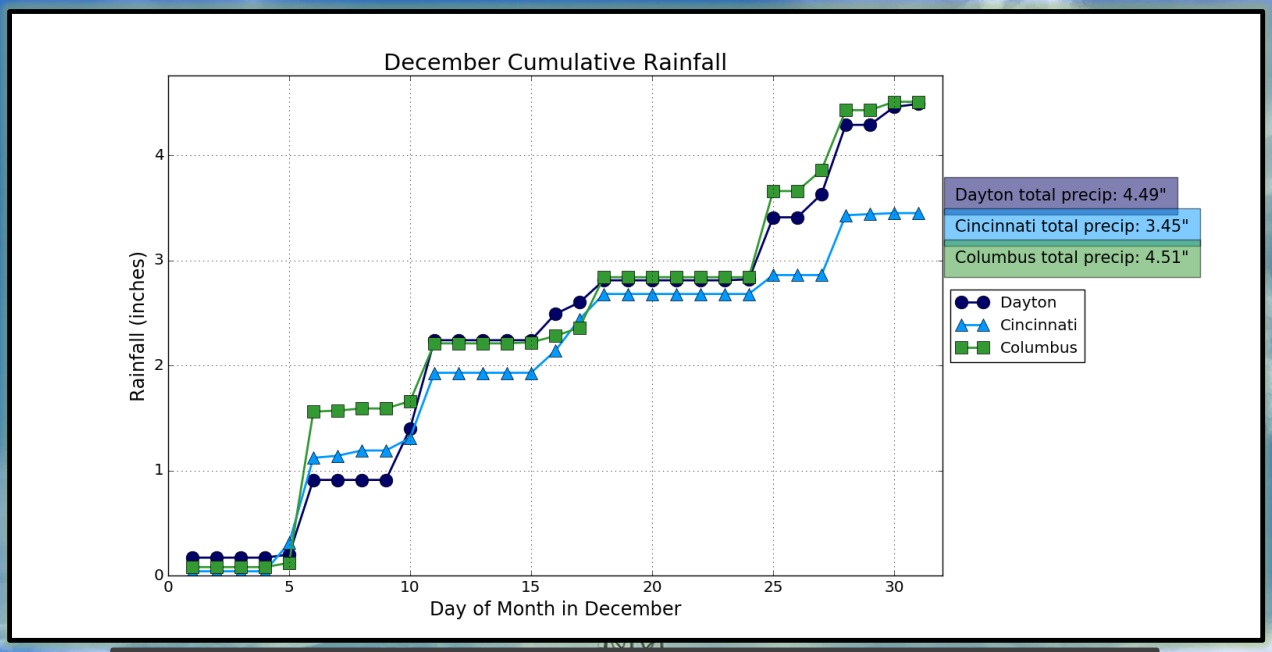
There was an overall lack of snow during the month with most locations getting less than an inch of snow. Cincinnati and Columbus reported 0.5 inches of snow for the month and Dayton had 0.3 inches.

Multiple precipitation records were set or tied during the month of December. A record rainfall of 0.71 was tied at Dayton on the 6th. This last occurred in 2014. At Columbus, a record rainfall of 1.44 inches was set for the day on December 6th. This breaks the old record of 1.10 set in 1971. A record rainfall for the day of 0.82 inches was set at Dayton on December 25th breaking the old record of 0.79 set in 2009.

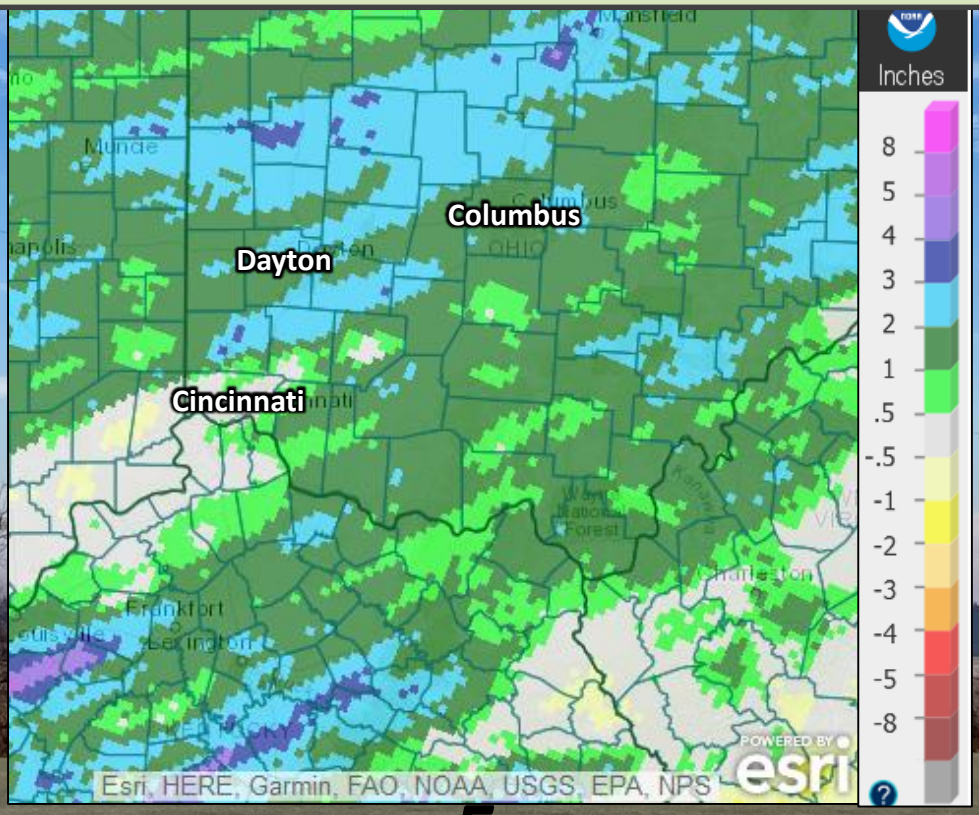
While most locations ended up with above normal precipitation, portions of the Tristate ended up with below normal precipitation including Cincinnati.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	3.45	-0.28	0.81	6th	0.5	0.3	8th
Columbus (CMH)	4.51	+1.38	1.44	6th	0.5	0.3	7th
Dayton (DAY)	4.49	+1.44	0.84	11th	0.3	0.2	8th

Precipitation (Continued)

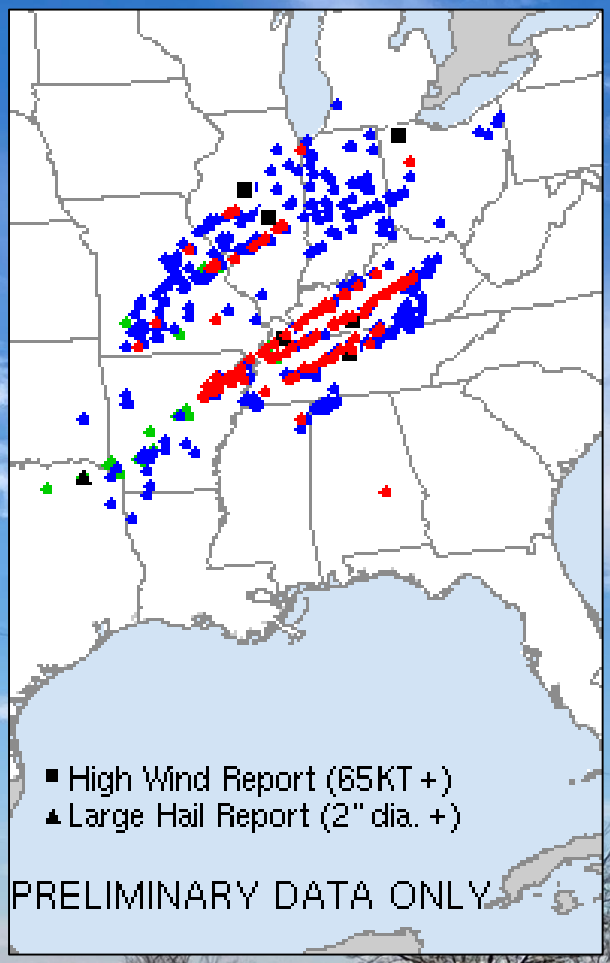


December Precipitation Departure From Normal (In.)



Severe Weather

During the early morning hours of the 11th severe weather moved into the region producing damaging winds and an EF1 tornado. The tornado occurred 3 miles south of Ada in Hardin County, Ohio. Gusty damaging winds also occurred later in the day.



TORNADO REPORTS.. (117)
WIND REPORTS/HI..... (413/7)
HAIL REPORTS/LG..... (25/1)
TOTAL REPORTS..... (555)

National Weather Service
Storm Prediction Center
Norman, Oklahoma

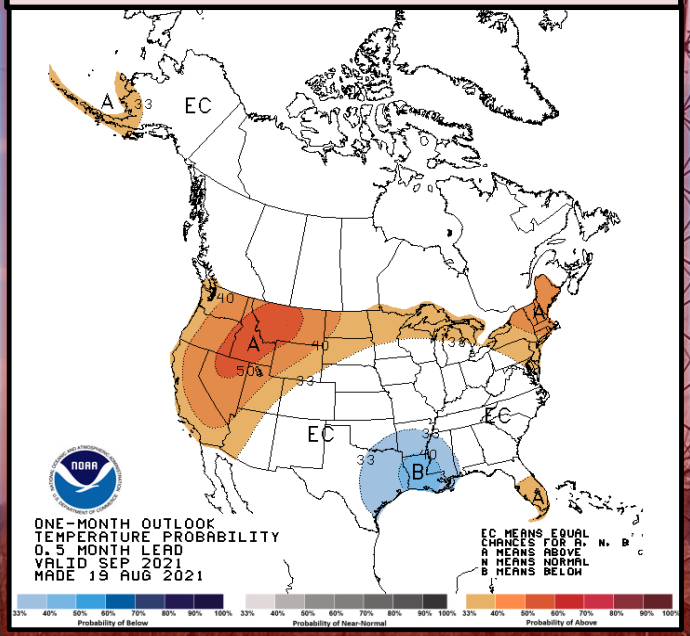
January Outlook

The latest outlook from the Climate Prediction Center calls for an increased likelihood of above normal precipitation. There is not a clear signal for temperatures with equal chances of below, above, and normal temperature values.

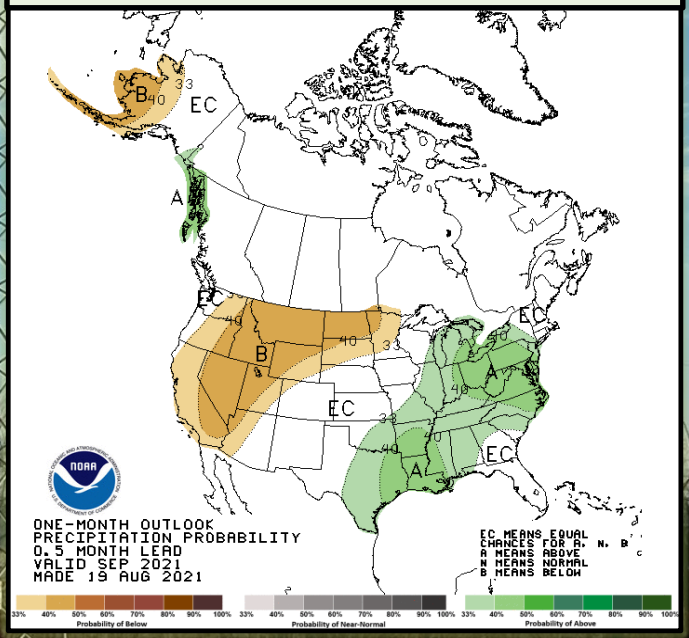
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	31.4	39.6	23.1
Columbus (CMH)	29.6	37.1	22.0
Dayton (DAY)	29.4	37.1	21.8

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	3.30	7.7
Columbus (CMH)	3.00	9.5
Dayton (DAY)	3.08	8.3

Upcoming Temperature Outlook



Upcoming Precipitation Outlook



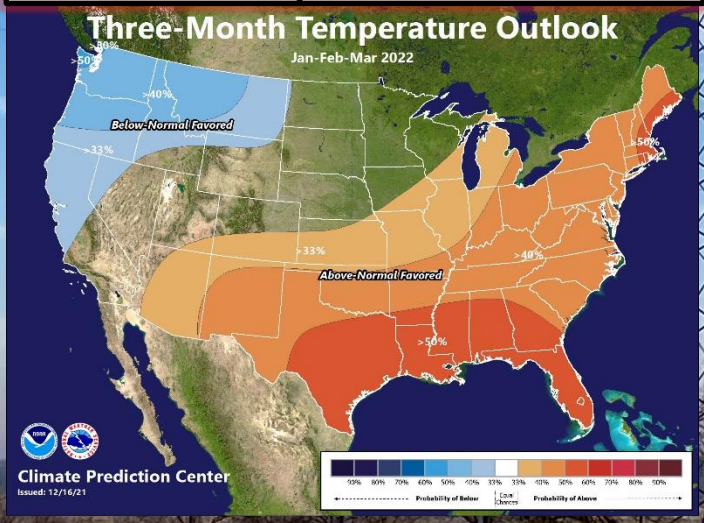
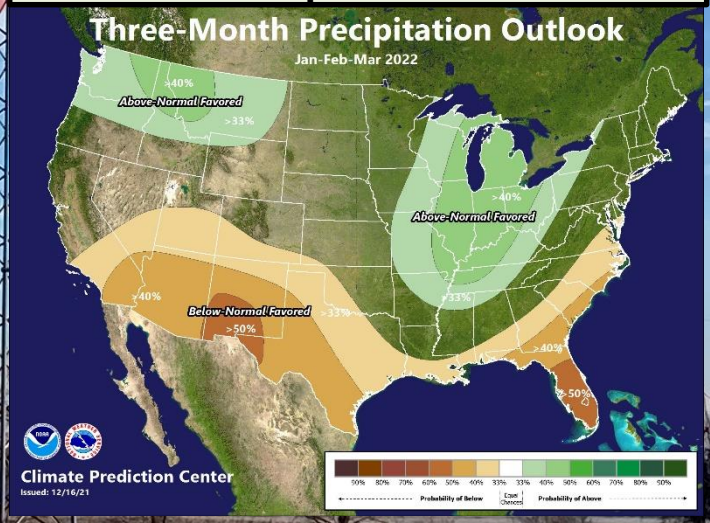
January-March Outlook

According to the Climate Prediction Center (CPC), La Niña is expected to last through the winter. Due to this, a La Niña advisory remains in effect.

And with a La Niña evolving for the entirety of the winter season, there is an increased likelihood of above normal temperatures and above normal precipitation for the entire region for this timeframe.

A return to ENSO-neutral conditions is expected during the spring.

Three-Month (JFM) Temp. Outlook



Three-Month (JFM) Precip. Outlook