NWS Wilmington, Ohio
December 2022
Regional Climate Summary

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The main weather story for the month was the winter storm, in some cases blizzard conditions, that occurred on December 22nd to the 23rd and the subsequent cold air, gusty winds, and dangerously cold wind chill values. The first half of the month featured mostly above temperatures with little in the way of winter weather, while the second half of the month was mostly below normal and had several days of winter weather conditions. The month wrapped up with temperatures well above normal for several days.

Temperatures

While a few days were below normal during the first half of the month, most of the first half of the month featured above normal temperatures. There were several days where the temperatures were over 10 degrees above normal.

This changed drastically for the second half of the month as a majority of the days featured below normal temperatures. The main temperature story was the record temperature drops and record cold temperatures associated with the passing of the cold front on the 22nd. The very cold air lingered for several days before a warm up near the end of the month.

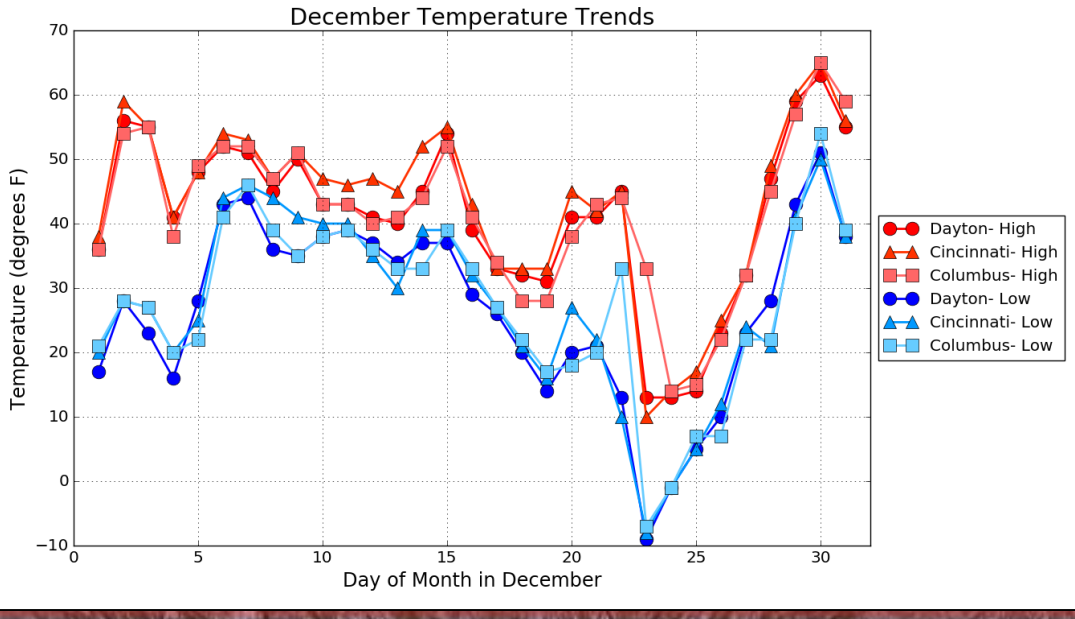
On the 23rd average temperatures were over 30 degrees below normal in some locations. With temperatures below zero on the 23rd and 24th. The high temperatures on the 23rd occurred at the start of the day with many locations not even making it above zero during the day of the 23rd! Wind chill values were -30F or colder in many locations.

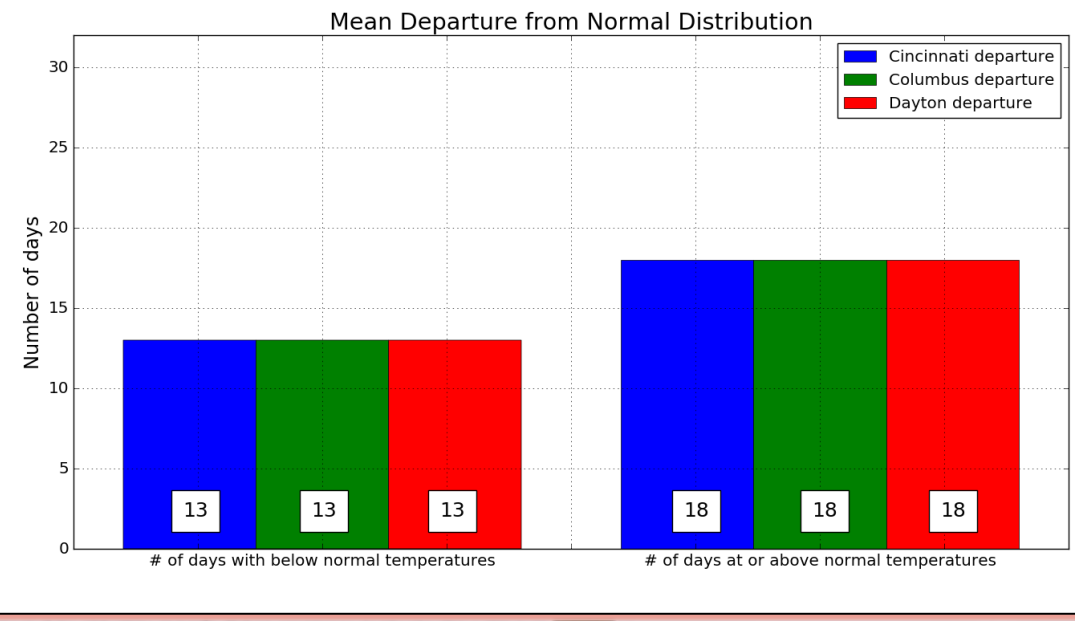
Records that occurred included a record low minimum temperature of -9F at Dayton on December 23rd, breaking the old record of -8F set in 1960. The high temperature on December 23rd at Cincinnati was 10F. This is the coldest on record breaking the old record of 12 in 1983. There were also record temperature drops with this event which are discussed more in the winter weather section.

The month wrapped up with above normal temperatures, which included records high temperatures on the 30th.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	35.4	43.2	27.6	-0.2	65 on 30th	-8 on 23rd
Columbus (CMH)	34.6	41.8	27.4	+0.1	65 on 30th	-7 on 23rd
Dayton (DAY)	33.9	41.3	26.5	-0.4	63 on 30th	-9 on 23rd

Temperatures (Continued)





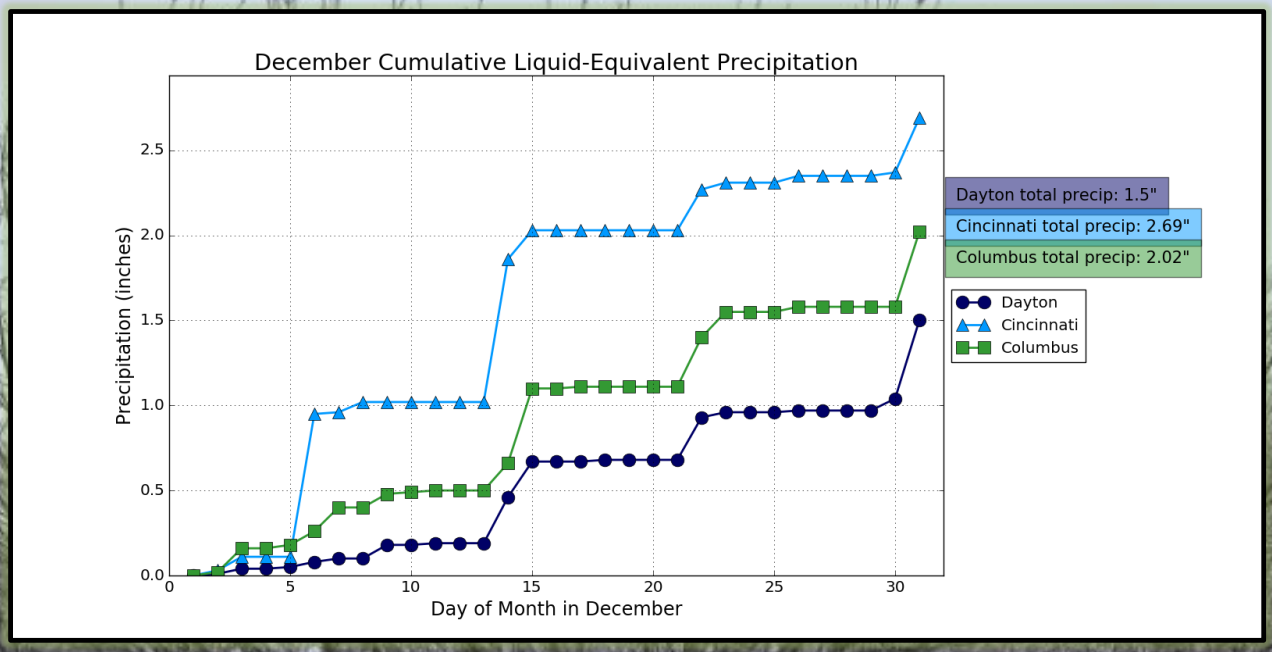
Precipitation

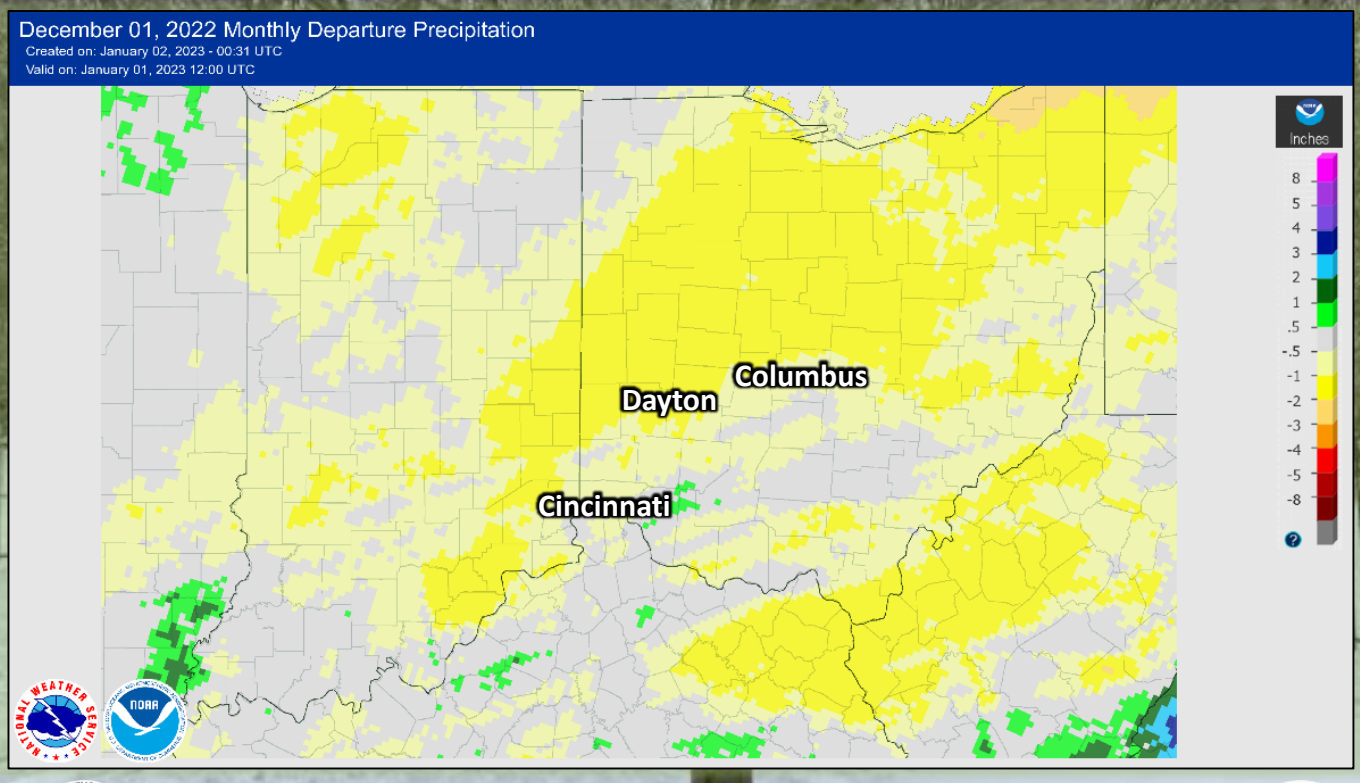
Precipitation ended below normal for the month, but snowfall amounts were above normal for Columbus and Cincinnati. The precipitation occurred quite infrequently throughout the month, likely contributing to the below normal departures.

Cincinnati observed the heaviest daily precipitation amounts with two separate days, the 6th and 14th, seeing 0.84 inches. Both Columbus and Dayton failed to have a single day observe over one half inch. The heaviest rain for those sites was observed on the last day of the month.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	2.69”	-1.04”	0.84	6th 14th	5.6”	3.6”	22nd
Columbus (CMH)	2.02”	-1.11”	0.44	15th 31st	5.8”	4.9”	23rd
Dayton (DAY)	1.50”	-1.55”	0.46	31st	3.1”	1.7”	23rd

Precipitation (Continued)





Winter Weather

There was little in terms of snowfall for the first half of the month, however there were several days of snowfall and winter weather during the second half of the month of December. Two of the more noticeable events in terms of impacts included a light snow event and black ice set up on December 17th to 18th and also the winter storm starting the evening of December 22nd and continuing into the 23rd.

With the December 17th to 18th event light snow fell across the area during the evening and into the overnight. South of Interstate 70 primarily trace snowfall occurred, while near and north of Interstate 70 up to around an inch and a half occurred. Still most locations were around a half inch or less. With falling temperatures, roadways became very slick north of Interstate 70, especially near the Columbus area leading to several accidents. A winter weather advisory was issued for these locations.

The next, and most impactful system of the month, was the winter storm (and blizzard conditions in some locations) of December 22nd to the 23rd. A very strong cold front brought very pronounced and record temperature drops. At CVG for example it was the fastest 6hr temperature drop (39F drop) and fastest 12hr drop (52F drop) since records began in 1947. Several hours of snow followed along with very gusty winds and bitterly cold temperatures for multiple days. This event severely impacted holiday travels across the region. More information on this event can be found here: https://www.weather.gov/iln/20221223

Additional light snow fell on the 26th. Most locations received around a half inch or less of snow, however in southeast Indiana there were snowfall values of upwards of an inch to two inches. Later in the evening very light snowfall and in some cases, freezing drizzle occurred.

Freezing fog on the 27th occurred to add to the winter scene across the area as temperatures finally started to warm up.

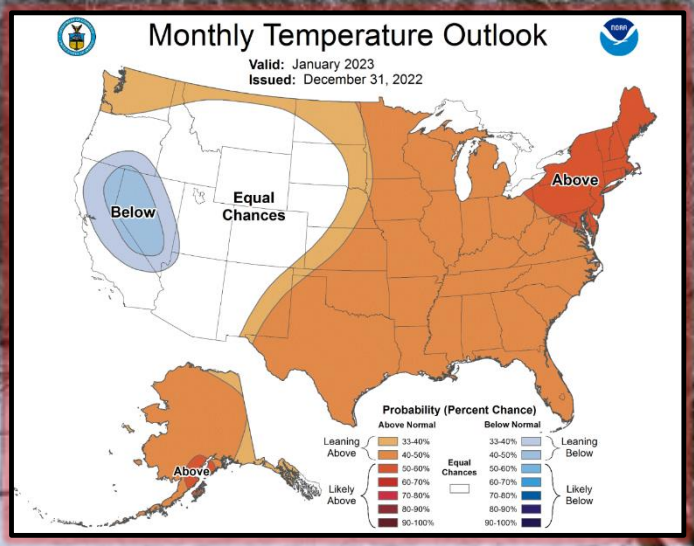
January Outlook

The latest outlook from the Climate Prediction Center calls for increased likelihood of above normal temperatures. There is also a signal for above normal precipitation.

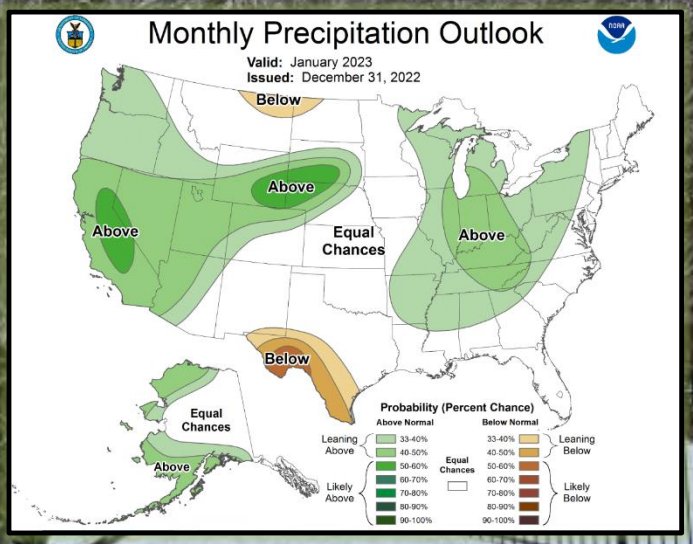
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	31.4	39.6	23.1
Columbus (CMH)	29.6	37.1	22.0
Dayton (DAY)	29.4	37.1	21.8

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

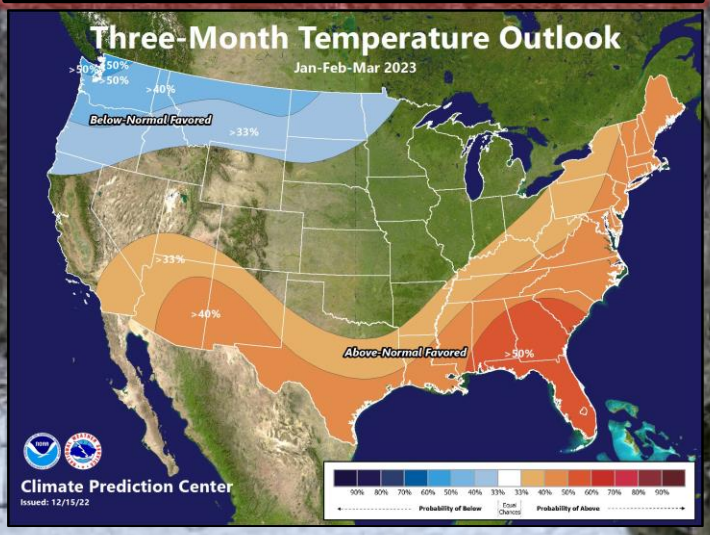


January-March Outlook

La Nina is expected to continue into the winter with equal chances of La Nina and ENSO-neutral conditions for January through March 2023. For February through April 2023, there is a 71% for ENSO-neutral conditions.

With La Nina expected to continue into the winter months, there is an increased likelihood of above normal precipitation. There is also an increased likelihood for above normal temperatures, especially across the southeastern half of Ohio and all of Kentucky.

Three-Month (JFM) Temp. Outlook



Three-Month (JFM) Precip. Outlook