



NWS Wilmington, Ohio December 2017 Regional Climate Summary

Regional Climate Summary

Although there were fluctuations in the regional temperature trends through the month, the most extreme temperature departures from normal occurred in the final week of December when a bitterly cold airmass settled into the region. Precipitation was generally below normal for the month however snowfall was above normal for a large portion of the region. In just the month of December Dayton already surpassed all of last winter's snowfall for the entire season! Columbus is well on their way to surpass last winter, while Cincinnati still has several inches to go.

Temperatures

The month of December started off on a bit of a warm note as high temperatures reached into the 50s and 60s for the first 5 days or so until a cold front moved through and brought more seasonable air into the Ohio Valley. For the next 10 days or so, highs only reached into the 30s and 40s area-wide, with very few opportunities for extended stretches of warm weather. Temperatures generally stayed several degrees below normal for most of this period before a warming trend developed by the 16th. Highs then reached into the 40s and 50s each day for a week before cooler temperatures returned again on the 23rd.

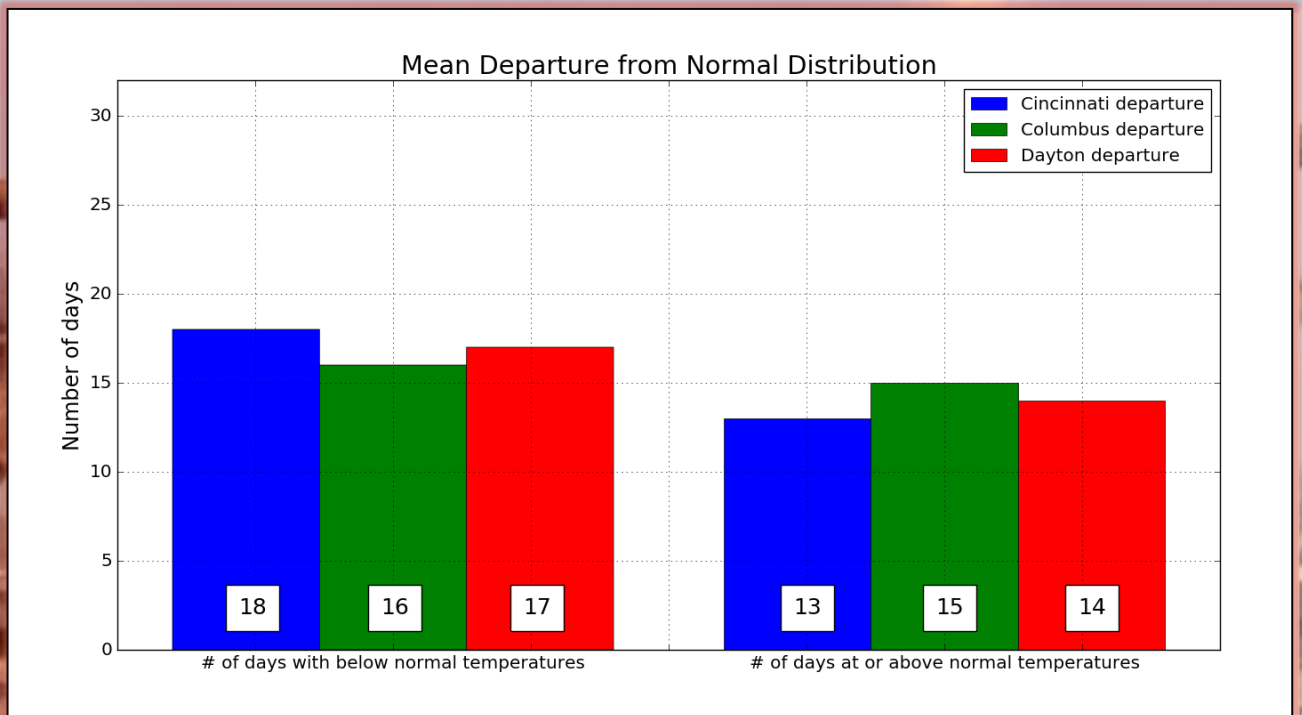
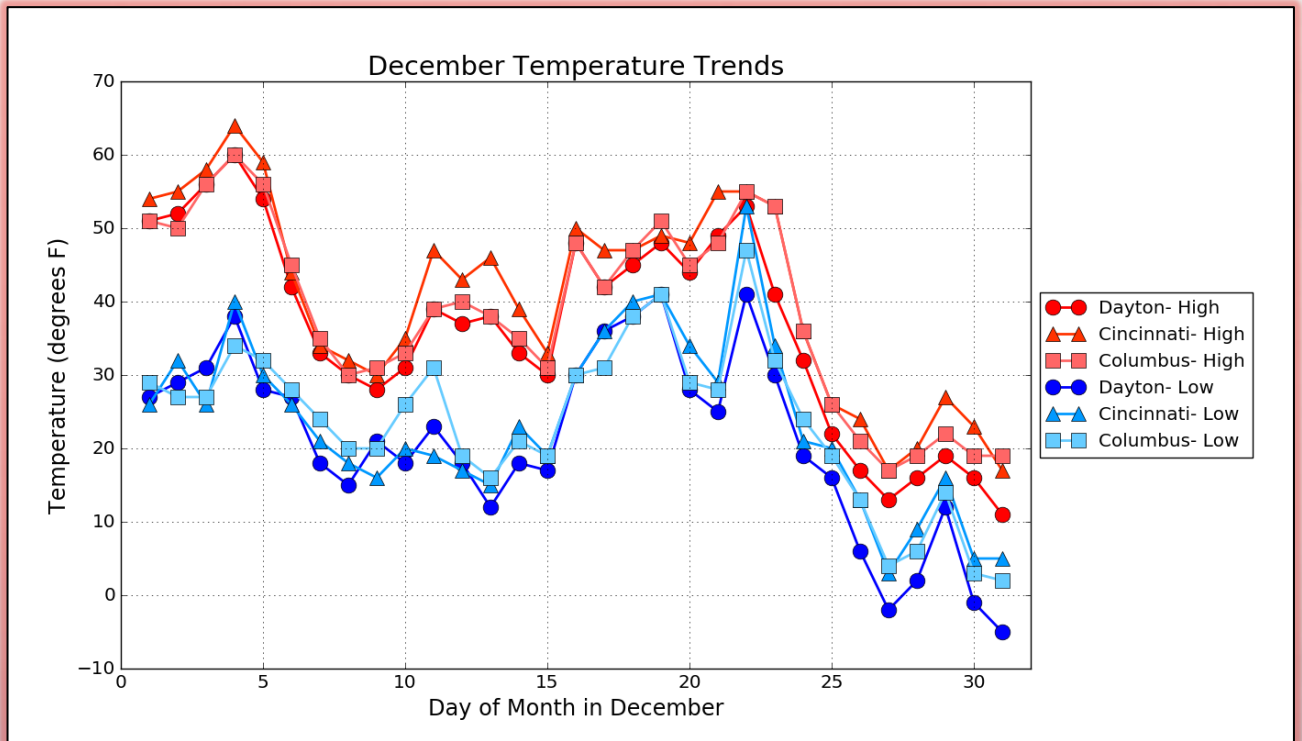
For the most part, temperatures never strayed too drastically from seasonal norms through the first 3 weeks of the month.

The final week or so of the month featured a prolonged stretch of below normal temperatures that lasted well into the first week of 2018. In fact, in the final 6 days of 2017, the temperature at Dayton failed to reach 20°F. Low temperatures in the single digits both above and below zero settled into the region for an extended period of time as a deep freeze impacted the entire Ohio Valley. Daily average temperature departures of 15-20°F below normal were common from the 26th through the 31st.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	32.3°F	40.9°F	23.8°F	-1.8°F	64°F (4 th)	3°F (27 th)
Columbus (CMH)	31.2°F	38.7°F	23.7°F	-2.3°F	60°F (4 th)	2°F (31 st)
Dayton (DAY)	28.8°F	36.5°F	21.2°F	-2.4°F	60°F (4 th)	-5°F (31 st)



Temperatures (Continued)



Precipitation

The weather pattern that evolved through most of the month of December was one in which very few expansive storm systems tracked through the region. Instead, the region experienced the normal parade of weak systems with associated warm and cold fronts which brought scattered light precipitation.

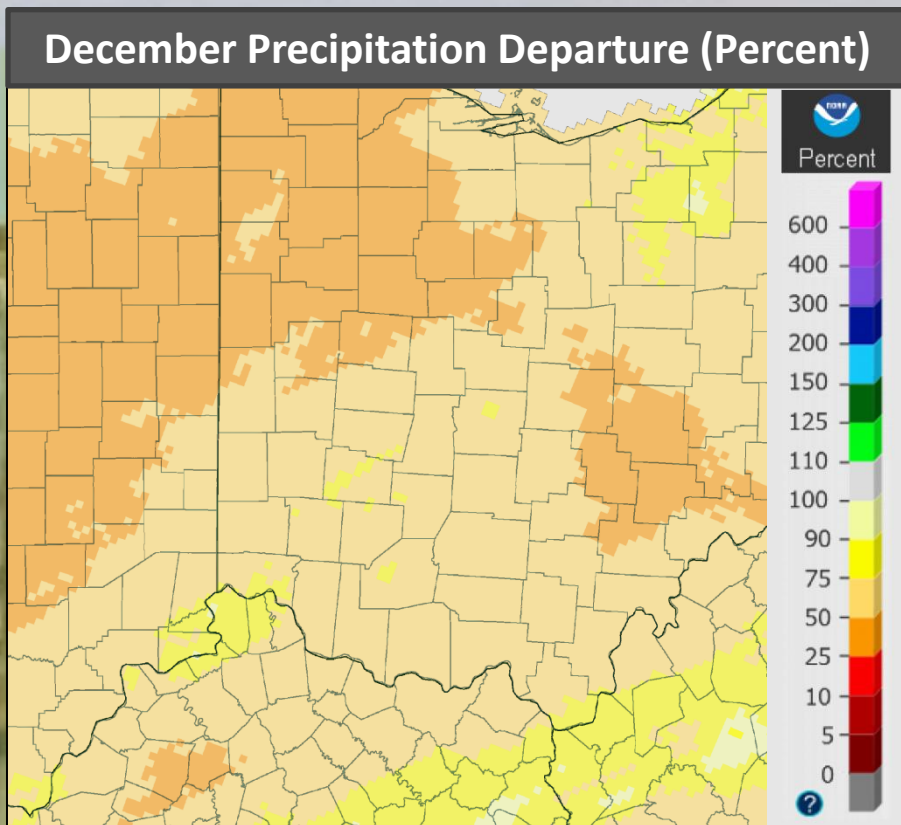
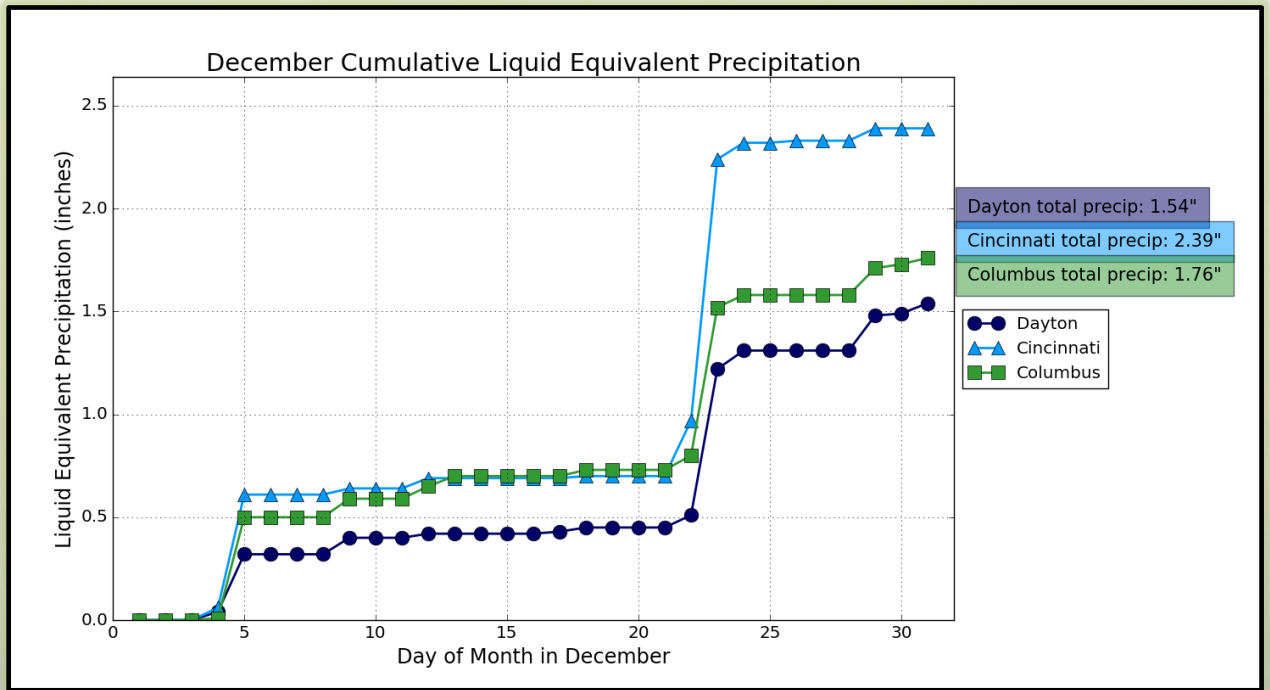
Most of the area did receive the first accumulating snowfall of the season which arrived on December 9th. Light snow progressed through the region during the afternoon and evening hours on this date as many locations in the area experienced around 1 inch, although there were a few reports of 1.5" or slightly more. Most of the accumulating snow occurred near the Ohio River and points northward. Other light snowfall events occurred through the month.

One of the primary precipitation-producing systems moved through the area on the 23rd and brought with it anywhere from around a quarter of an inch to over an inch and a half of rainfall to the region. Accumulating snow followed on the 24th. This snow included snow squalls and even some instances of thunder snow. Additional snowfall occurred around the area on the 25th, 26th, and the 28th off and on through the 31st. The system that moved through the region on the 29th and 30th yielded generally 1-3" of snow with a small area of 4-5" near the I-70 corridor near Dayton and Columbus. Many locations near and south of the Ohio River received an inch or less with this event.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	2.39"	-0.98"	1.27"	23 rd	3.8"	1.4"	24 th
Columbus (CMH)	1.76"	-1.21"	0.72"	23 rd	8.1"	2.1"	30 th
Dayton (DAY)	1.54"	-1.58"	0.71"	23 rd	8.6"	3.3"	29 th



Precipitation (Continued)



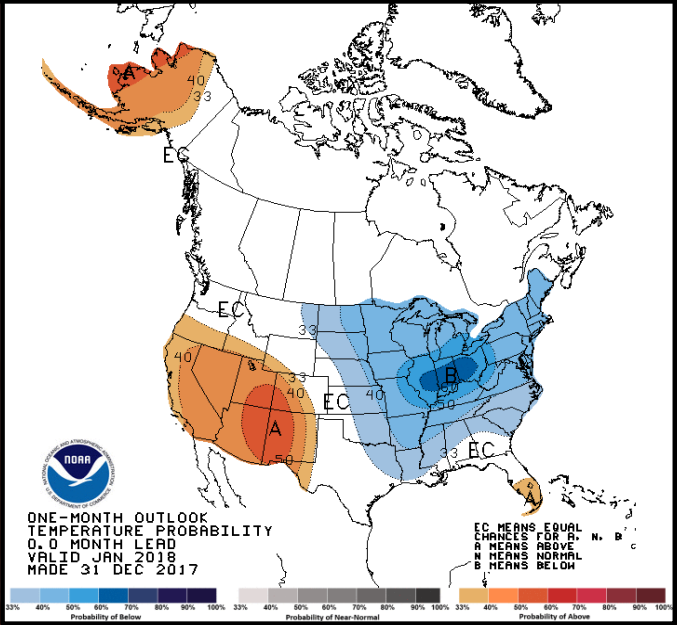
January Outlook

The latest outlook from the Climate Prediction Center (CPC) calls for an increased likelihood of below normal temperatures and an increased likelihood of wetter than normal conditions.

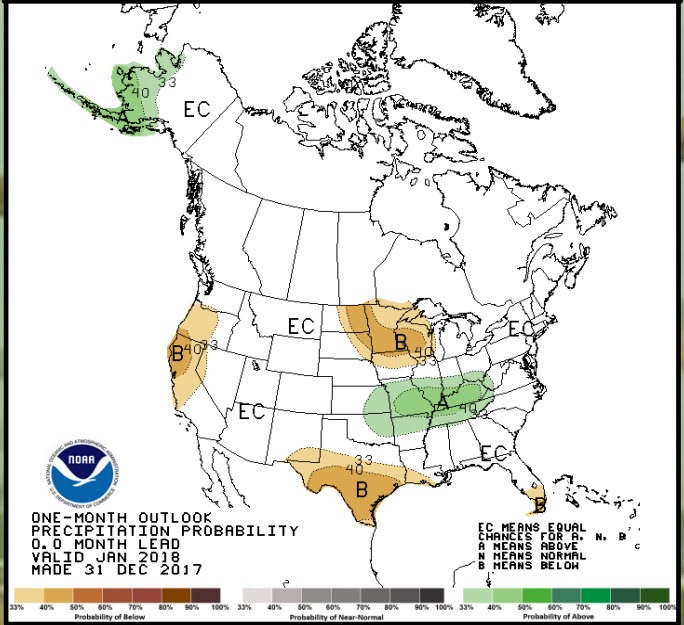
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	30.8°F	38.7°F	23.0°F
Columbus (CMH)	29.6°F	36.5°F	22.6°F
Dayton (DAY)	27.5°F	34.7°F	20.3°F

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



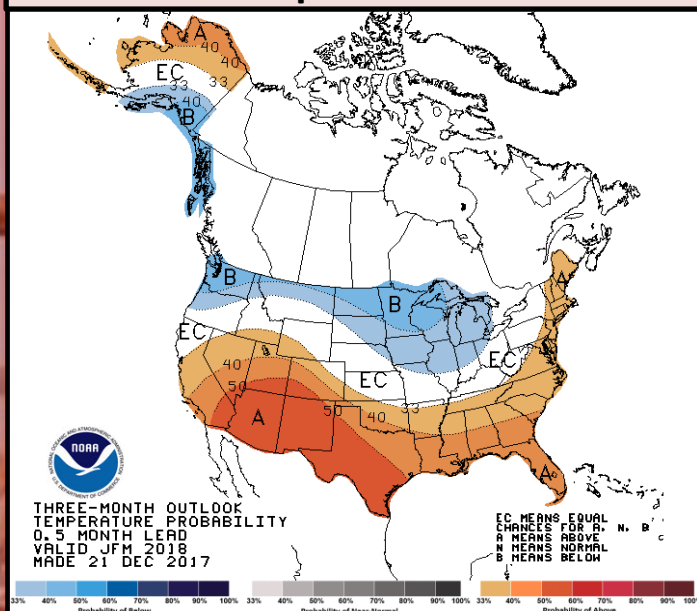
Upcoming Precipitation Outlook



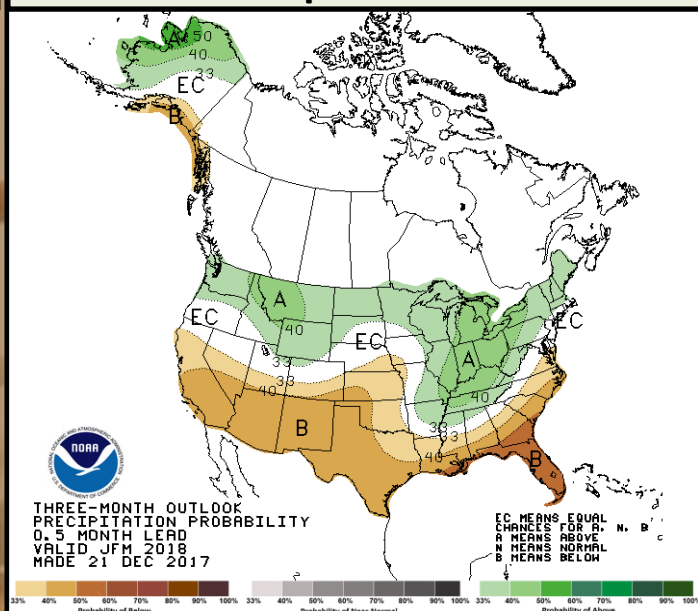
January-March Outlook

A La Niña advisory is in effect with La Niña conditions favored during the winter months. It is expected to be a weak to moderate La Niña event. For the January, February, and March three month outlook there is an increased likelihood of above normal precipitation. There is not as clear of a signal for temperatures with equal chances of below normal, normal, and above normal temperatures for a large portion of the area.

Three-Month (JFM) Temp. Outlook

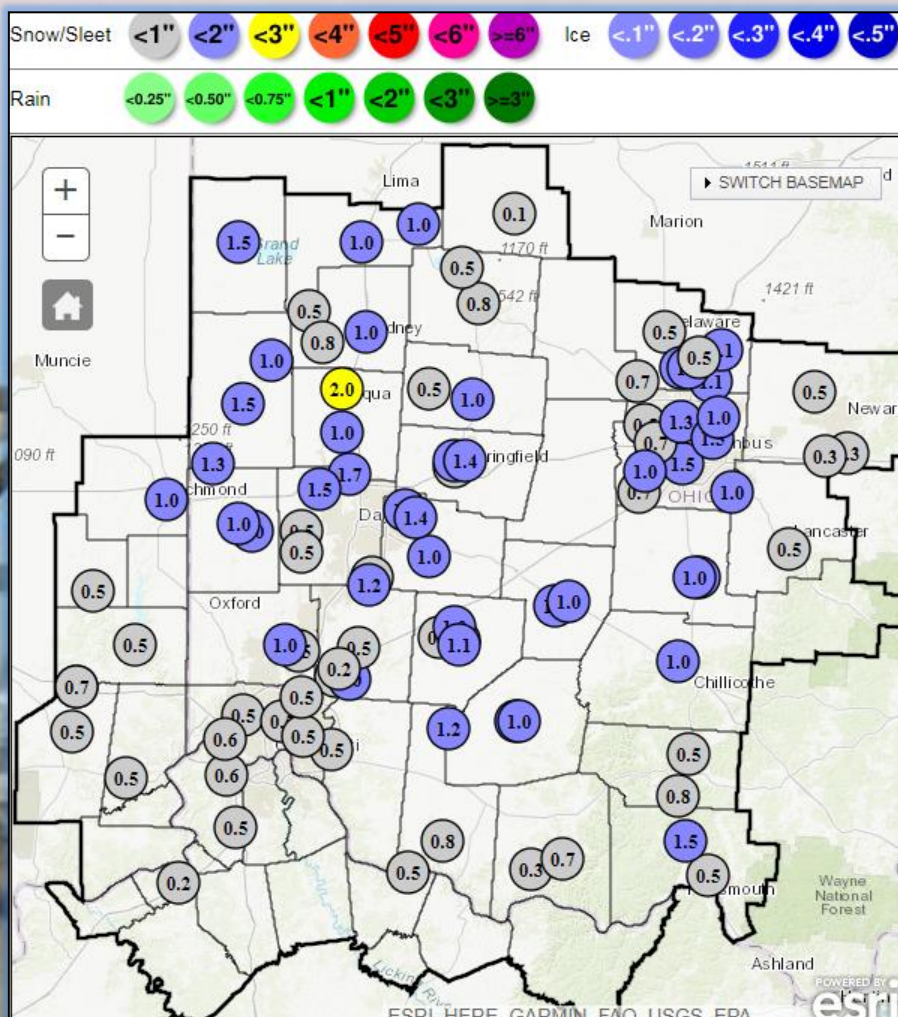


Three-Month (JFM) Precip. Outlook



Winter Weather

Many locations in the local area experienced the first widespread accumulating snowfall of the season on the 9th of December as light snow tracked through the Ohio Valley. Due to the marginal low level thermal conditions, falling snow was slow to accumulate initially during the early afternoon hours. However, with the setting of the sun, lingering light snow was able to accumulate, with many north of the Ohio River receiving about an inch of snow. A full event write-up is available here: www.weather.gov/iln/20171209. This was one of several days that experienced snowfall across the region during December.



Winter Weather (continued)

On the evening of December 29th into the early morning of December 30th a clipper system crossed the region. Many locations received over an inch of snowfall. Temperatures across the area were in the upper teens to lower 20s allowing snow to easily accumulate. A full event write-up is available here: www.weather.gov/iln/20171229.

