



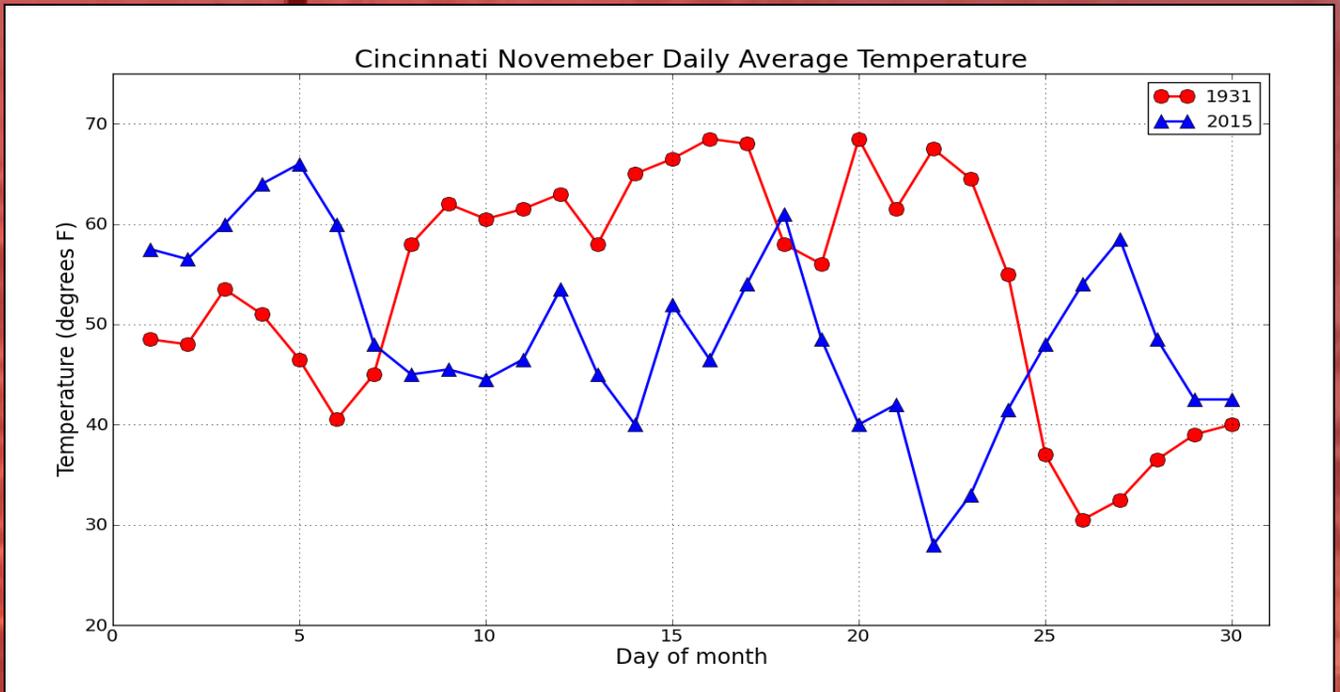
NWS Wilmington, Ohio November 2015 Regional Climate Summary

Regional Climate Summary

The month of November was characterized by warmer and slightly drier than normal weather across much of the region. There were several cold fronts which helped bring some rain and brief cold shots to the area, but temperatures tended to moderate fairly quickly. Columbus and Dayton finished the month drier than normal and Columbus, Cincinnati, and Dayton all finished in their respective top ten warmest Novembers on record.

Temperatures

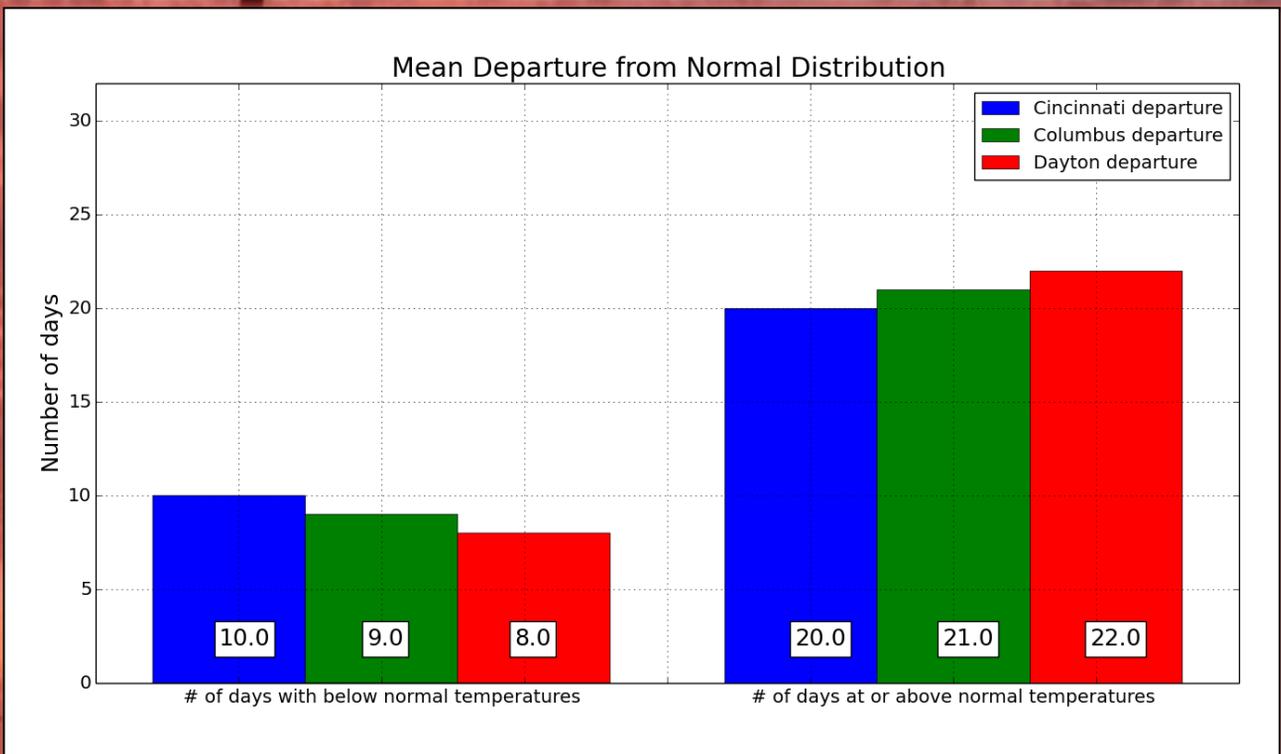
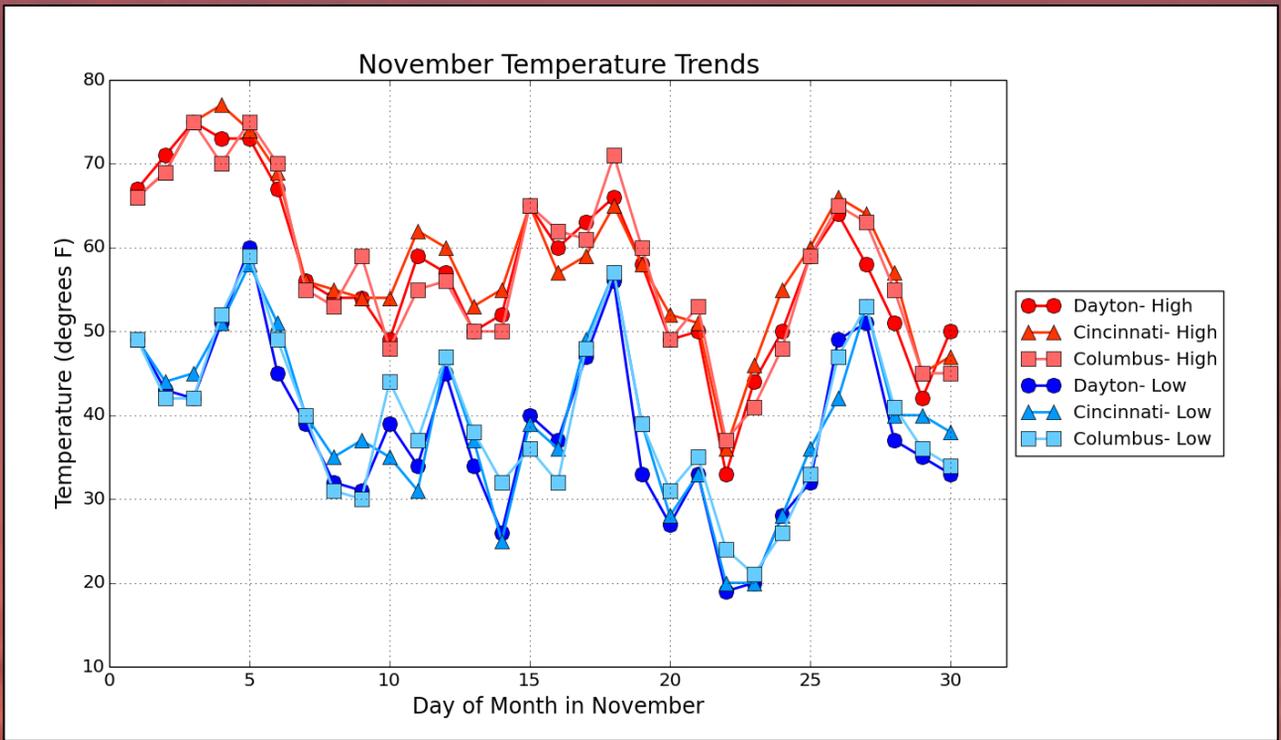
November started off very warm across the area, with all 3 sites observing several consecutive days with highs in the 70s. Persistent above normal temperatures propelled all 3 first-order sites into the top 10 warmest Novembers on record. Cincinnati finished the month tied for the 9th warmest on record while both Columbus and Dayton finished 6th warmest (see table below). The graph below shows the daily average November temperatures at Cincinnati for 2015 compared to 1931, which stands as the warmest November on record for Cincinnati. For the month, the number of days that had an average temperature above normal drastically out-numbered the number of days that had an average temperature that was below the normal daily average temperature (see page 3). In fact, the ratio of the number of days at or above normal doubled the number of days that were below normal.



| Site | November Avg Temp (°F) | Rank | Avg High Temp (°F) | Avg Low Temp (°F) | Departure From Normal (°F) |
|------------------|------------------------|-------------------|--------------------|-------------------|----------------------------|
| Cincinnati (CVG) | 49.1 | T-9 th | 58.7 | 39.4 | + 4.0 |
| Columbus (CMH) | 48.6 | 6 th | 57.5 | 39.5 | + 4.2 |
| Dayton (DAY) | 47.8 | 6 th | 57.3 | 38.2 | + 5.0 |



Temperatures (Continued)



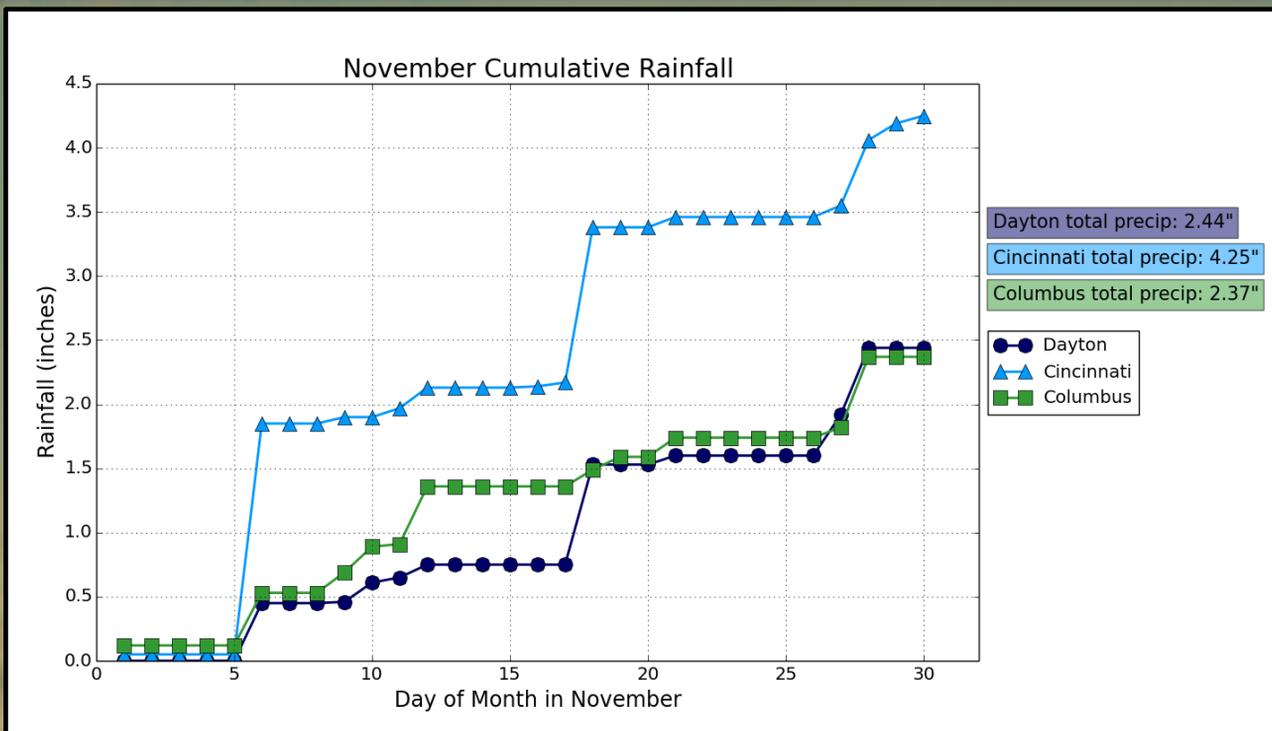
Precipitation

November for the most part was characterized by slightly below normal precipitation across the area. Parts of the Tri-State area of southeastern Indiana, northern Kentucky, and southwestern Ohio (including Cincinnati) observed precipitation that was slightly above normal, partially due to a cold front on the 6th. Storm total rainfall of 1.80" at Cincinnati from the event broke the daily record precipitation for the date of 1.49" set back in 1880. Another strong cold front moved through the area early on the 12th, bringing rain to most of the area. Through the halfway point in the month, precipitation was only slightly above normal for most of the area. A dry stretch then followed for the middle of the month before a rainmaker dropped over 1" across SW portions of the CWA on the 18th (including at CVG), with considerably less rain across central Ohio. Another dry stretch followed after the 18th as high pressure dominated the weather pattern for nearly a full week. Of note, however, is the fact that the first snowfall of the season occurred for many locations north of Cincinnati and northwest of I-71 on the 21st and into the 22nd. Most locations only saw a trace dusting of snow as a result of the first flakes of the season. Widespread rain showers returned to the region on the 27th and into the 28th as a cold front moved through the region. Even with a parade of cold fronts during the month, precipitation for most of the area remained slightly below normal, except for southwestern portions of the area.

| Site | Total Precipitation (in.) | Departure From Normal (in.) | Max Daily Precipitation (in./date) | | Total Snowfall (in.) | Max Daily Snowfall (in./date) | |
|------------------|---------------------------|-----------------------------|------------------------------------|------------------|----------------------|-------------------------------|-------------------------------------|
| Cincinnati (CVG) | 4.25" | + 0.82" | 1.80" | 6 th | 0.0" | N/A | N/A |
| Columbus (CMH) | 2.37" | - 0.83" | 0.55" | 28 th | T | T | 22 nd |
| Dayton (DAY) | 2.44" | - 0.95" | 0.78" | 18 th | T | T | 21 st / 22 nd |



Precipitation (Continued)



November Precipitation Departure From Normal



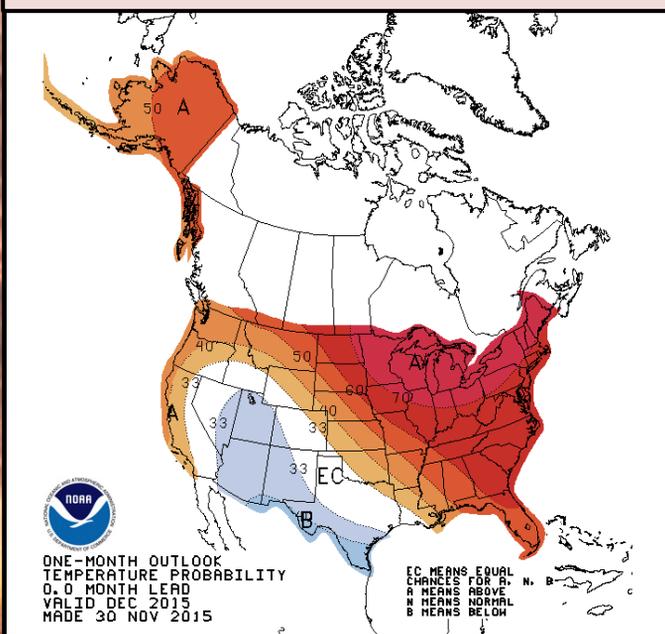
December Outlook

The latest outlook from the Climate Prediction Center for December calls for an increased likelihood of above normal temperatures. Most of the area has equal chances of above, below, or normal precipitation. This indicates that there is not as pronounced of a signal for precipitation.

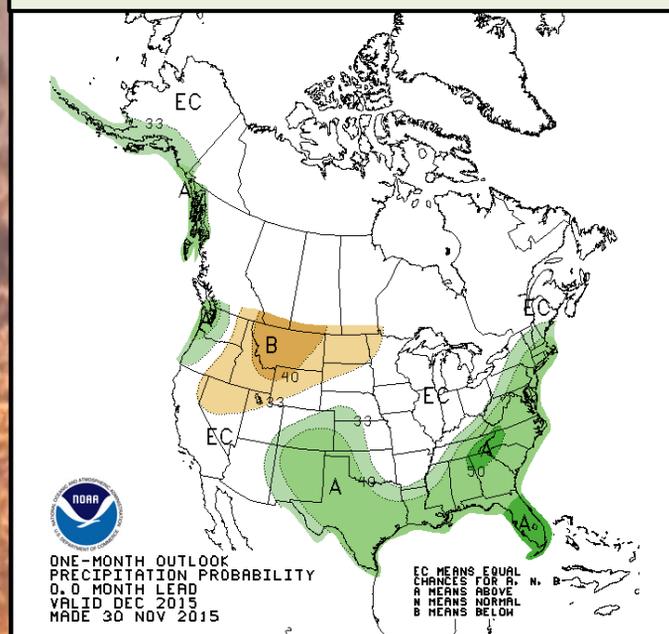
| Site | December Normal Avg Temp (°F) | December Normal High (°F) | December Normal Low (°F) |
|------------------|-------------------------------|---------------------------|--------------------------|
| Cincinnati (CVG) | 34.1 | 41.6 | 26.6 |
| Columbus (CMH) | 33.5 | 40.1 | 26.8 |
| Dayton (DAY)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

| Site | December Normal Precipitation (in.) | December Normal Snowfall (in.) |
|------------------|-------------------------------------|--------------------------------|
| Cincinnati (CVG) | 3.37 | 4.8 |
| Columbus (CMH) | 2.97 | 5.0 |
| Dayton (DAY) | 3.12 | 4.5 |

December Temperature Outlook



December Precipitation Outlook

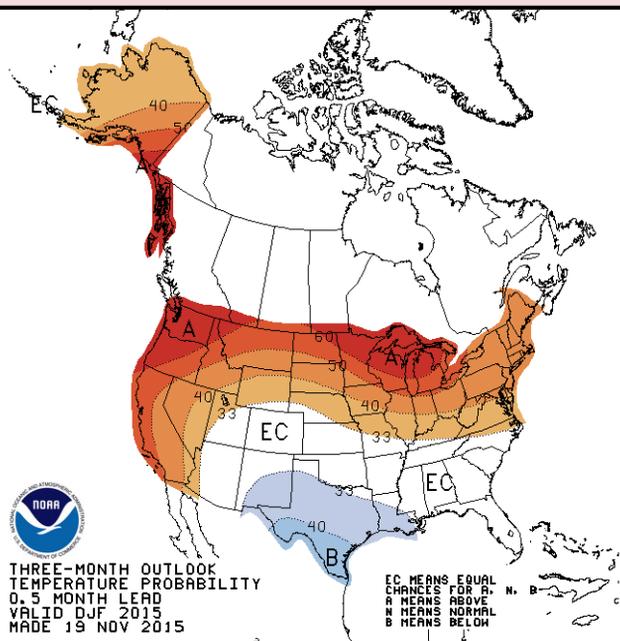


Winter Outlook

A strong El Niño has developed and is currently forecast to peak during the winter months. El Niño is expected to gradually weaken in the upcoming spring. The latest winter outlook from the Climate Prediction Center (CPC) indicates an increased likelihood of above normal temperatures and below normal precipitation across the area, which is typical of strong El Niño events. Historically, during strong El Niño periods, the combination of above normal temperatures and below normal precipitation has led to below normal snowfall across the area.

No two El Niño events are the same and big snowfall events in addition to cold temperatures are still possible even with a strong El Niño. El Niño is not the only driving force behind what will happen, however it is expected to play a significant role this winter.

Three-Month (DJF) Temp. Outlook



Three-Month (DJF) Precip. Outlook

