NWS Wilmington, Ohio
October 2015
Regional Climate Summary

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The month of October was characterized by large temperature swings but an overall quiet weather pattern. The month started off on the cool side, but near normal temperatures and dry conditions were the main weather story across the region. A large storm system brought a 36-hour period of rain to the area between October 27th and 28th. Most locations in the area observed 2 to 4 inches of rain with the event. Despite a very dry first 26 days of October, most locations ended up with near or even above normal precipitation for the month.

Temperatures

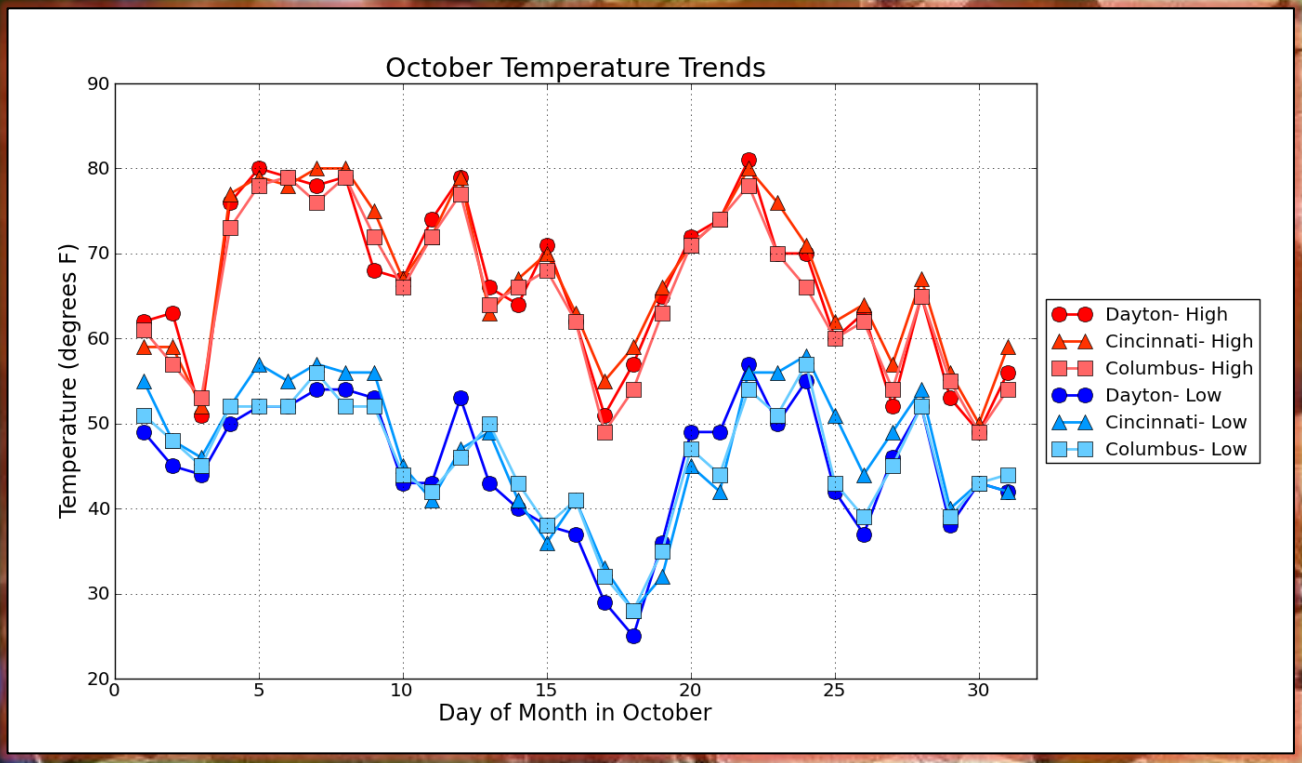
October started out cool across the area with an upper-level low south of the region providing scattered rain showers and extensive cloud cover. Dayton (DAY) and Cincinnati (CVG) both recorded a record daily low maximum temperature on October 3rd. Dayton had a high temperature of 51 degrees which was cooler than the previous record of 53 degrees set in 1987 and 1980. Cincinnati had a high temperature of 52 degrees which was cooler than the previous record of 53 degrees set in 1980.

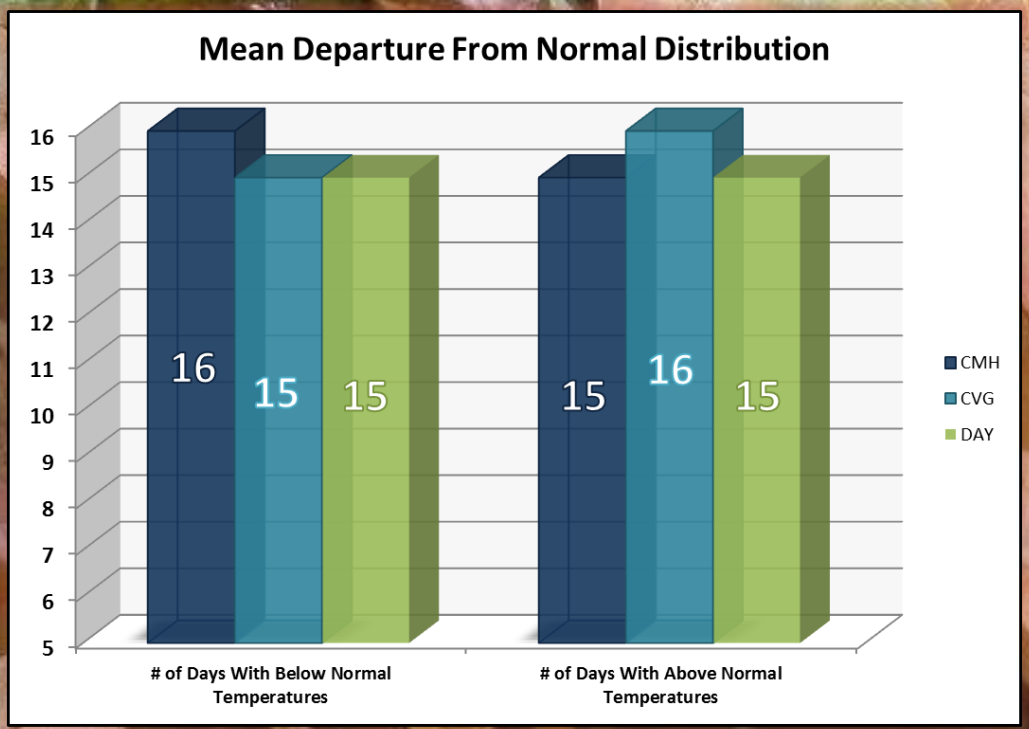
After a cool first few days of the month, a warmup occurred with several days of above normal temperatures. A cold front around the middle of the month ushered in much cooler air to the region. Many locations observed their first freeze of the season on October 17th with a hard freeze across most of the area on the 18th. High temperatures were generally in the 50s on both days, despite abundant sunshine. The frost/freeze program ended on the 18th for the entire Wilmington, Ohio forecast area.

The freeze was followed by a warmup with several days of above normal temperatures in the 70s. Some locations even reached the 80 degree mark on the 22nd. Towards the end of the month, temperatures steadied out and were closer to normal values.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)	Minimum Temperature (°F)
Cincinnati (CVG)	57.1	67.3	46.9	+1.2	80	28
Columbus (CMH)	55.5	65.4	45.7	+0.5	79	28
Dayton (DAY)	55.8	66.4	45.2	+1.9	81	25

Temperatures (Continued)





Precipitation

Precipitation occurred across portions of the area for the first few days of the month due to a frontal passage and the presence of an upper level low.

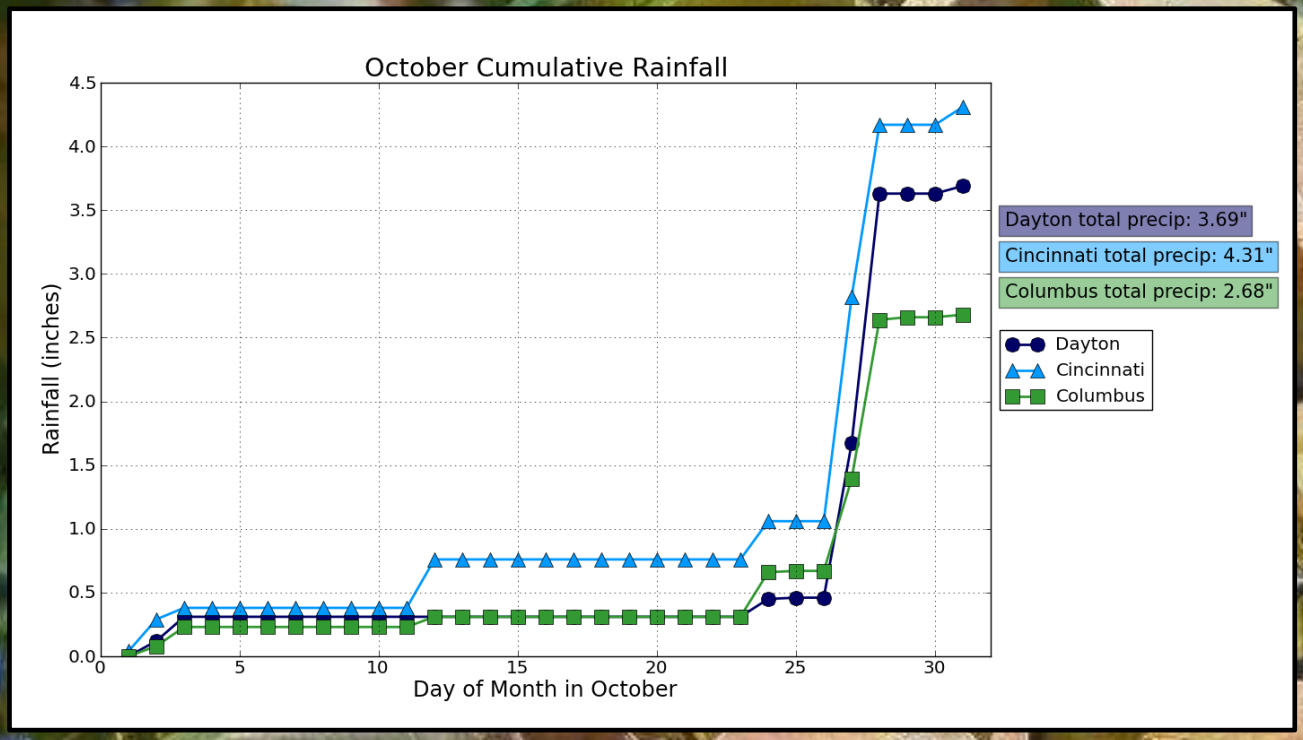
Dry conditions then developed across the region with very little measureable precipitation for the 2nd and 3rd weeks of October. Through the 23rd, area precipitation was running below normal with Columbus, Cincinnati, and Dayton all receiving less than one inch of precipitation for the month.

Two rounds of precipitation moved across the region on the 24th. The first round moved through during the overnight and into the morning hours with additional precipitation recorded in the evening hours with the cold front. Columbus and Dayton still remained below an inch for the month, however Cincinnati was able to break the one inch mark.

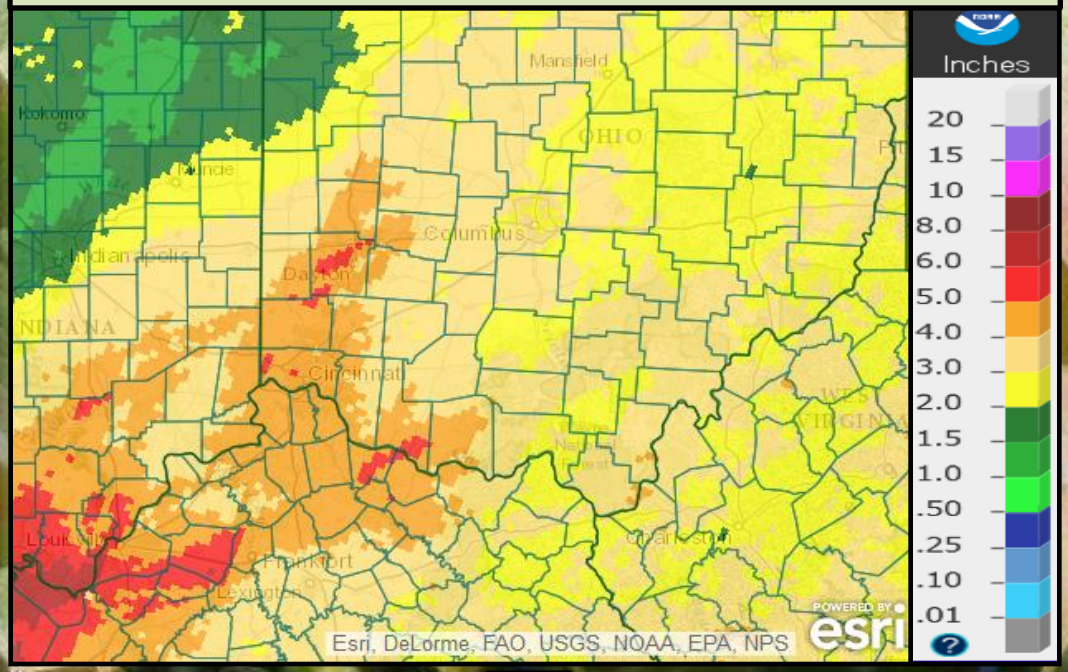
Precipitation totals quickly increased towards the end of the month as several rounds of precipitation, including the remnants of Patricia, moved into the area. Rainfall during the last week of the month pushed precipitation totals above normal at Columbus , Cincinnati, and Dayton. The 1.96 inches of rain that occurred at Dayton on the 28th breaks the previous record value for the date of 1.65 inches set in 1984. The 1.25 inches of rain at Columbus on the 28th breaks the previous record for the day of 1.10 inches that occurred in 1883.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	4.31	+1.01	1.76	27th	0	0	N/A
Columbus (CMH)	2.68	+0.07	1.25	28th	0	0	N/A
Dayton (DAY)	3.69	+0.76	1.96	28th	0	0	N/A

Precipitation (Continued)

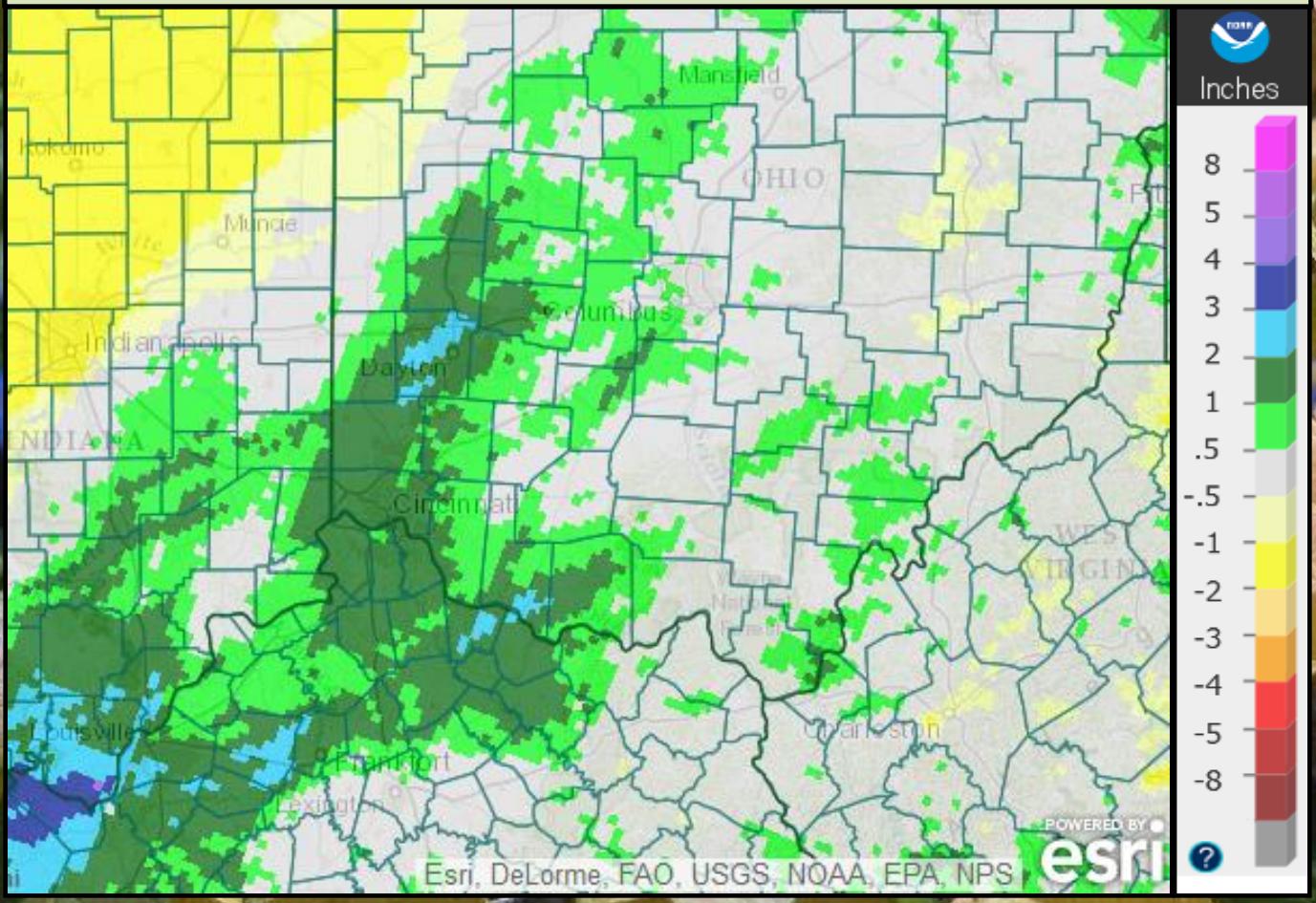


October Precipitation



Precipitation (Continued)

October Precipitation Departure From Normal



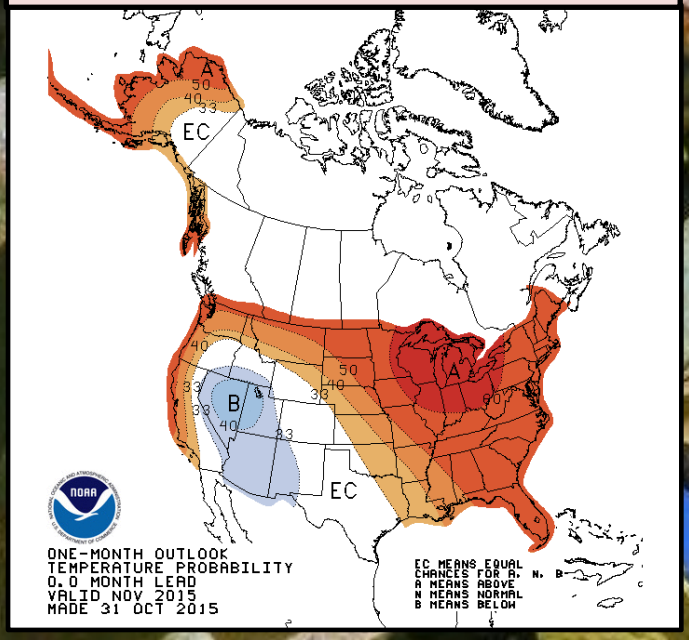
November Outlook

The latest outlook from the Climate Predication Center for November calls for an increased likelihood of above normal temperatures and an increased likelihood of above normal precipitation across the region.

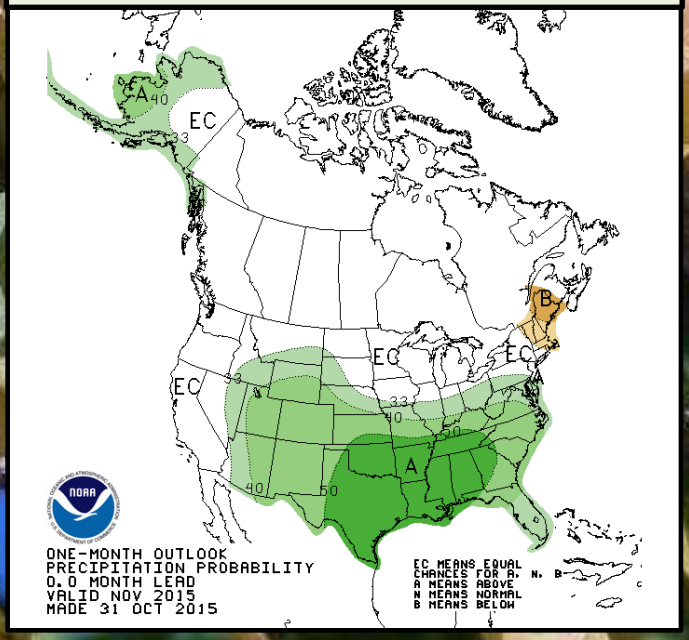
Site	November Normal Avg Temp (°F)	November Normal High (°F)	November Normal Low (°F)
Cincinnati (CVG)	45.1	54.0	36.2
Columbus (CMH)	44.4	52.6	36.1
Dayton (DAY)	42.8	51.1	34.6

Site	November Normal Precipitation (in.)	November Normal Snowfall (in.)
Cincinnati (CVG)	**3.43**	**0.4**
Columbus (CMH)	**3.20**	**0.9**
Dayton (DAY)	**3.39**	**0.6**

November Temperature Outlook



November Precipitation Outlook

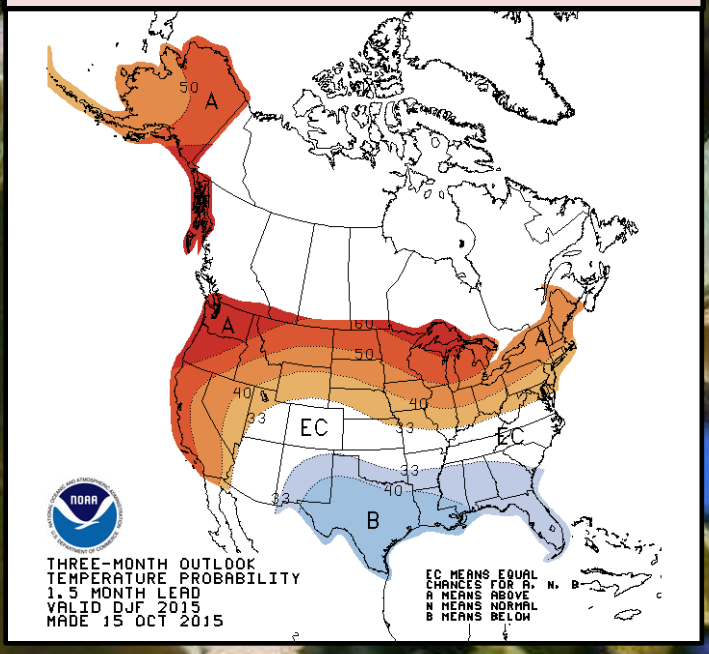


Winter Outlook

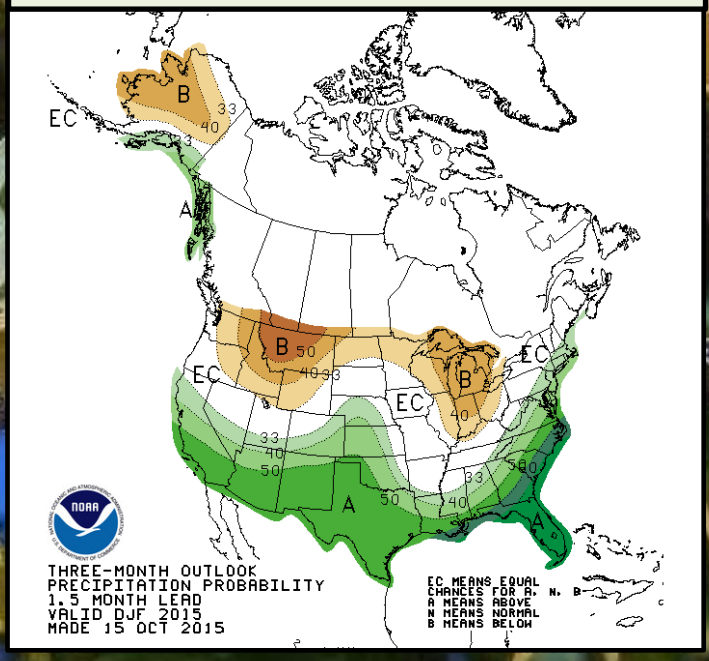
A strong El Niño is currently forecast to peak during the late fall and into the early winter months. El Niño is expected to continue through the winter and gradually weaken in the spring. The latest winter outlook from the Climate Prediction Center calls for an increased likelihood of above normal temperatures and below normal precipitation, which is typical of strong El Niño events. Historically, during a strong El Niño there is also a strong signal that indicates below normal snowfall as well.

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



Historical Strong El Niño Statistics

Cincinnati (CVG)

** Out of 7 strong El Niño events since 1950, 6 have had below normal snowfall and 1 had above normal snowfall. DJF precipitation has been below normal for 6 of the 7 as well.*

** DJF temps (avg, max, and min) have been above normal for 4 of the 7 events and below normal for 3 of the 7 events. An average of strong El Niño events yielded slightly warmer than normal temperatures.*

** Normal snowfall for the entire winter is 22.1 inches. The average value for strong El Niño years is 17.2 inches which is 78% of normal. The snowfall range for strong El Niño years 6.6 inches (82-83) to 31.4 inches (97-98). The average # of days with >1 inch of snow occurring for strong El Niño event years is 5 days and >4 inches is 0.7 day. Both of these are below the period of record average (POR). The POR average number of days with >1 inch of snow is 6.5 and >4 inches of snow is 1 day.*

Columbus (CMH)

** Out of 7 strong El Niño events since 1950, all 7 have had below normal snowfall. December, January, and February (DJF) precipitation has been below normal for all 7 events as well.*

** DJF temps (avg, max, and min) have been above normal for 4 of the 7 events and below normal for 3 of the 7 events. An average of strong El Niño events yielded slightly warmer than normal temperatures.*

** Normal snowfall for the entire winter is 26.7 inches. The average value for strong El Niño years is 18.2 inches which is 68% of normal. The snowfall range for strong El Niño years is 10 inches (97-98) to 24.5 inches (72-73). The average # of days with > 1 inch of snow occurring for strong El Niño event years is 5.1 days and >4 inches is 1 day. Both of these are below the period of record average (POR). The POR average number of days with >1 inch of snow is 8.1 and >4 inches of snow is 1.1 days.*

Dayton (DAY)

** Out of 7 strong El Niño events since 1950, 6 have had below normal snowfall and 1 event had normal snowfall. DJF precipitation has been below normal for 6 events and above normal for 1.*

** DJF temps (avg, max, and min) have been above normal for 4 of the 7 events and below normal for 3 of the 7 events. An average of strong El Niño events yielded warmer than normal temperatures by about 2 degrees.*

** Normal snowfall for the entire winter is 23.3 inches. The average value for strong El Niño years is 16.3 inches which is 70% of normal. The snowfall range for strong El Niño years is 5.5 inches (82-83) to 23.3 inches (57-58). The average # of days with > 1 inch of snow occurring for strong El Niño event years is 4.9 days and >4 inches is 0.4 day. Both of these are below the period of record average (POR). The POR average number of days with >1 inch of snow is 7.7 and >4 inches of snow is 1.2 days.*

Climate Report Prepared By:
National Weather Service WFO in Wilmington, Ohio