NWS Wilmington, Ohio
March 2016
Regional Climate Summary

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While March was largely characterized by unseasonable warmth, much of the region had a coating of snow within the first several days of the month. However, the winter chill was soon replaced by springtime warmth and thunderstorms, with several days of severe weather and high temperatures topping out in the 70s. Despite the cold start to the month, most of the area experienced one of its top ten warmest months of March on record!

Temperatures

The first day of the month started out very warm, but a winter chill soon returned to the area, with high temperatures only reaching the 30s from the 2nd through the 4th.

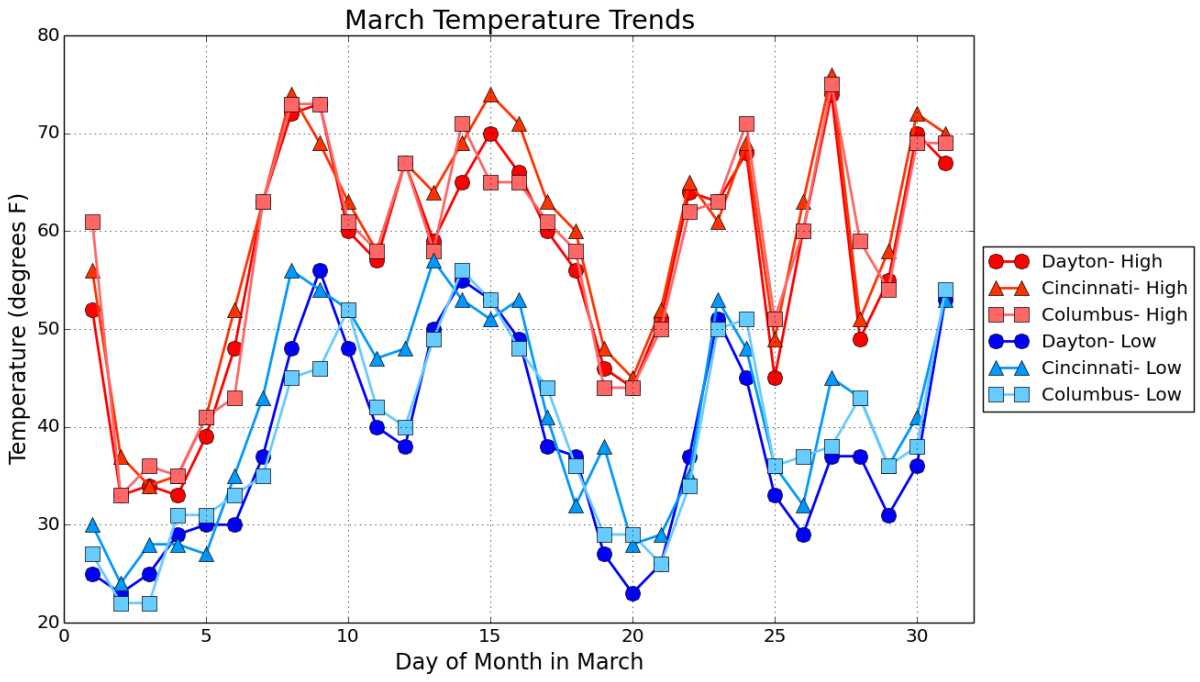
Following the brief winter blast, springtime temperatures gradually built into the region, leading to several days with highs in the 60s and 70s from the 7th through the 10th as an expansive ridge set up in the southeastern United States. This ridge allowed for persistent southerly flow which ushered in very warm air that remained entrenched across the area for a long period of time. In fact, on the 9th, Dayton (DAY) set a new daily record high maximum (73°F, breaking old record of 72°F set in 1918 & 1974) and record high minimum (56°F, breaking old record of 55°F set in 1897).

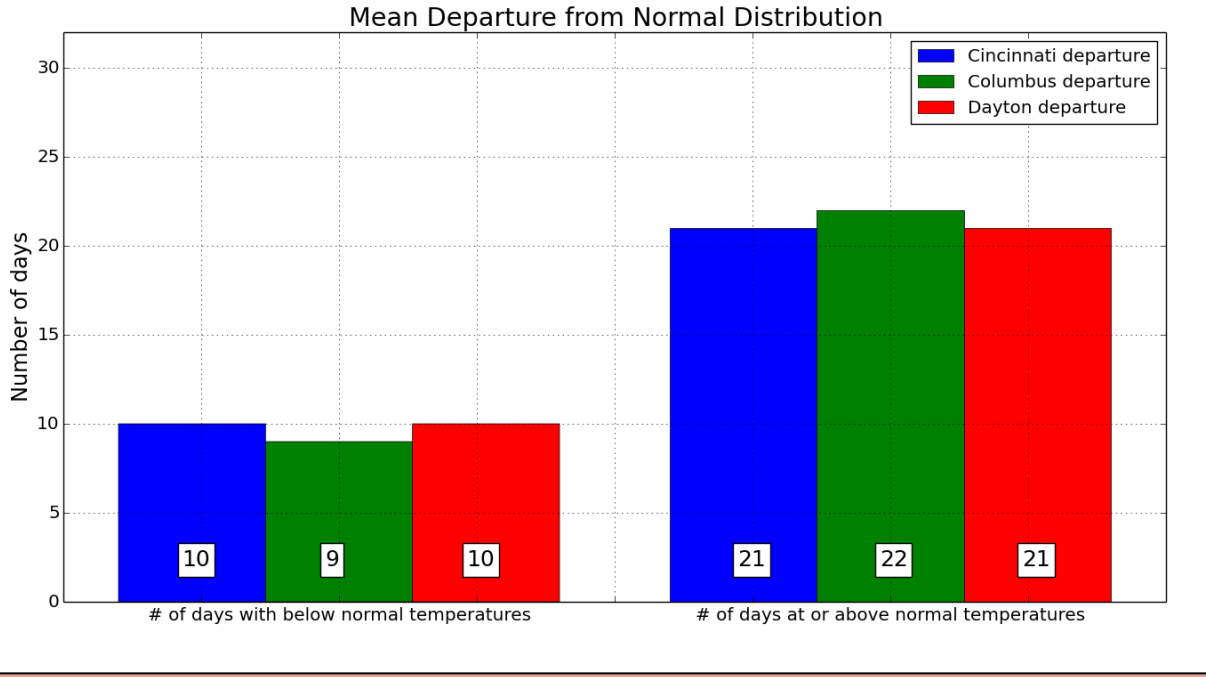
After a brief cool-down, above normal temperatures returned to the area for the middle of the month, with highs reaching the 60s and 70s once again. Slightly cooler air returned to the area around the 20th of the month, before another warming trend became established across the Ohio Valley. High temperatures again topped out in the 60s from the 22nd through the 24th before a cold front brought an end to the warm streak. Despite the numerous brief cool-downs during the month, temperatures often rebounded very quickly. March ended on a very warm note, with temperatures around 10° above normal for the 30th and 31st.

With a daily average temperature of 50.1°F, Cincinnati recorded its 10th warmest March on record. Meanwhile, Columbus (48.5°F) and Dayton (47.4°F) recorded their 7th and 12th warmest months of March on record, respectively.

Site	Avg Temp (°F)	Avg High Temp (°F)	Avg Low Temp (°F)	Departure From Normal (°F)	Maximum Temperature (°F)		Minimum Temperature (°F)	
Cincinnati (CVG)	50.1°F	59.0°F	41.2°F	+6.5°F	76°F	27th	24°F	2nd
Columbus (CMH)	48.5°F	57.8°F	39.1°F	+6.6°F	75°F	27th	22°F	2nd, 3rd
Dayton (DAY)	47.4°F	56.9°F	37.9°F	+7.0°F	74°F	27th	23°F	2nd, 20th

Temperatures (Continued)





Precipitation

While the month started out on the wet side across the region, it quickly turned from wet to white as unseasonably cold temperatures settled into the area. Snow affected the area from the 2nd through the 4th, dropping 2.2" at Cincinnati (CVG) on the 3rd and 1.0" at Dayton (DAY) on the 3rd. On March 4th, Columbus recorded 1.5" of snow.

Several dry days followed as an expansive ridge developed across the southeastern U.S. to begin the 2nd week of March. However, a nearly-stationary frontal boundary nudged into the Ohio Valley from the 9th into the 10th, bringing widespread steady rain to the area. The event brought between 1 and 2 inches of rain to the area between the two days.

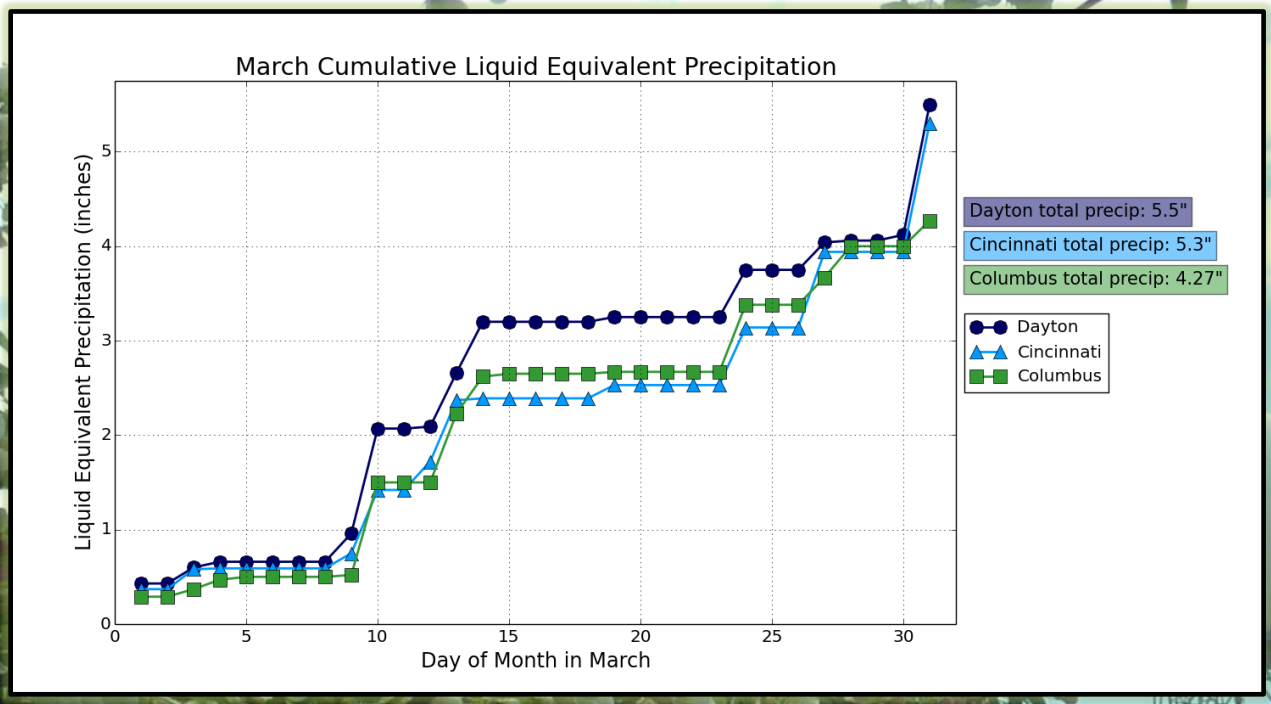
Despite some rain near the middle of the month, a fairly dry stretch evolved across the Ohio Valley, even as a cold front brought around 0.5" of rain to the area on the 24th.

The weather pattern remained active for the final full week of the month, with several days of scattered showers and thunderstorms. However, a strong cold front, with widespread showers and thunderstorms, moved through on the 31st, resulting in over 1" of rain for large portions of the area. In fact, Cincinnati, 1.36," (1.34"/1996) and Dayton, 1.38," (0.82"/1989) both recorded new daily record rainfall for the 31st.

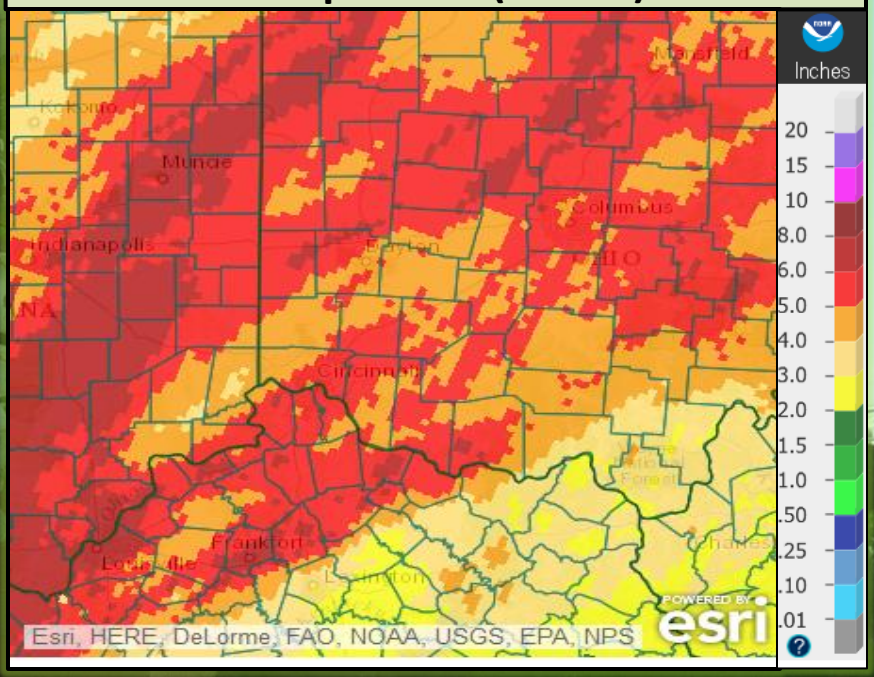
With the very wet end to the month, most of the area finished March with above normal precipitation.

Site	Total Precipitation (in.)	Departure From Normal (in.)	Max Daily Precipitation (in./date)		Total Snowfall (in.)	Max Daily Snowfall (in./date)	
Cincinnati (CVG)	5.30"	+1.34"	1.36"	31st	2.3"	2.2"	03/03
Columbus (CMH)	4.27"	+1.25"	0.98"	10th	2.3"	1.5"	03/04
Dayton (DAY)	5.50"	+2.16"	1.38"	31st	1.4"	1.0"	03/03

Precipitation (Continued)



March Observed Liquid-Equivalent Precipitation (Inches)



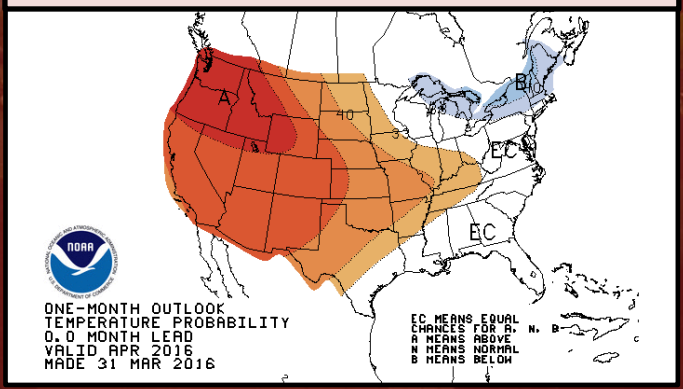
April Outlook

The latest outlook from the Climate Predication Center (CPC) shows an increased likelihood of above normal temperatures across northern Kentucky, Indiana, and southwest Ohio. There is no clear indication of above normal, normal, or below normal temperatures for the month of April across central Ohio. There is also no clear indication of above normal, normal, or below normal precipitation across the region for April.

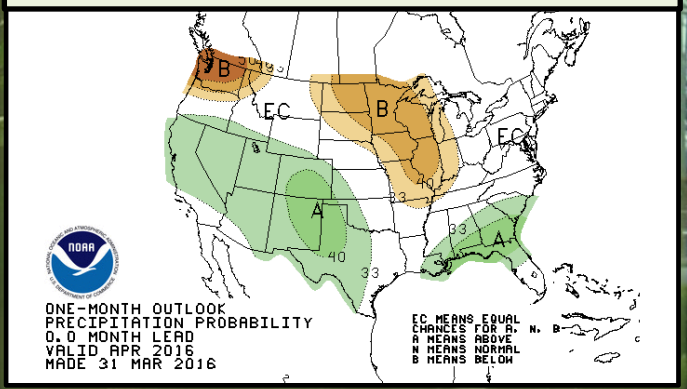
Site	Normal Avg Temp (°F)	Normal High (°F)	Normal Low (°F)
Cincinnati (CVG)	54.2°	64.7°	43.7°
Columbus (CMH)	53.1°	63.5°	42.6°
Dayton (DAY)	51.6°	61.9°	41.4°

Site	Normal Precipitation (in.)	Normal Snowfall (in.)
Cincinnati (CVG)	3.89”	0.5”
Columbus (CMH)	3.40”	1.1”
Dayton (DAY)	4.09”	0.6”

April Temperature Outlook



April Precipitation Outlook

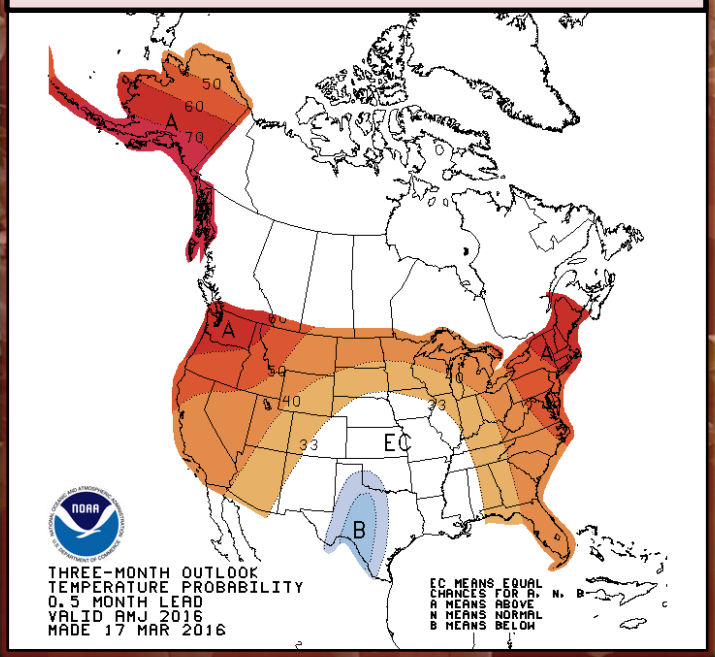


Late Spring / Early Summer Outlook

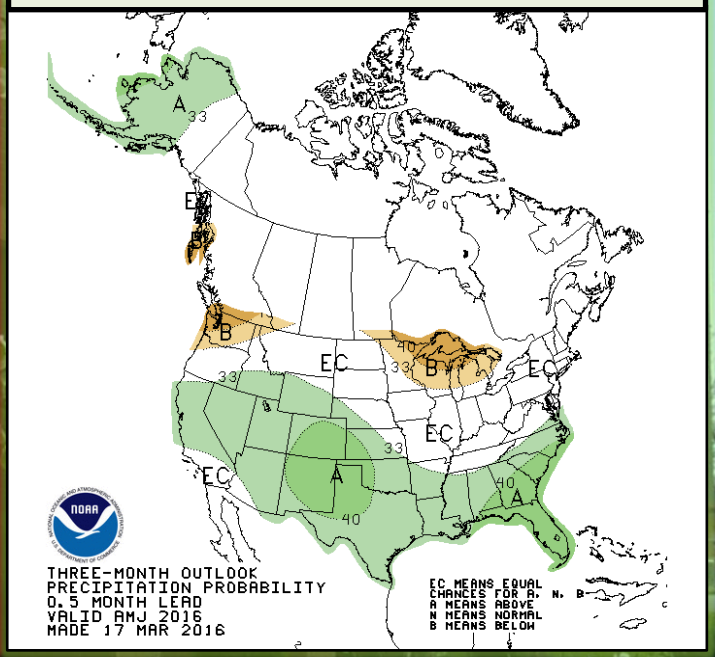
The latest seasonal outlook from the Climate Prediction Center (CPC) indicates an increased likelihood of above normal temperatures for the period April through June across the Ohio Valley. Current data suggests equal chances of above normal, normal, and below normal precipitation for late spring and early summer across the area.

El Niño will continue to weaken this spring and a transition to ENSO-neutral conditions is likely during the late spring or early summer. There is also close to a 50% chance for La Niña conditions to develop by the fall.

Three-Month (AMJ) Temp. Outlook



Three-Month (AMJ) Precip. Outlook



Severe Weather

There were three main severe weather events during the month of March. The first one occurred on March 14th, the second one occurred on March 27th, and the third one on March 31st.

A weak area of low pressure migrated from east central Indiana to west central Ohio during peak heating inducing a series of mini-supercells along and just south of a weak warm front. Five tornadoes including three EF1s and two EF0s occurred with these supercells just west and northwest of Dayton, Ohio. In addition, clearing occurred across portions of central and southcentral Ohio allowing for storm development across these locations as well. Isolated hail and strong winds occurred across these locations.

The second event occurred late in the day on Easter, March 27th. An area of low pressure over central Indiana moved northeast into the southern Great Lakes. A trailing cold front pushed into the region. What was more of a hail threat over central and northern Indiana transitioned to more of a damaging wind threat across eastern Indiana and west central Ohio.

The final event moved through the region during the late afternoon and into the early evening hours on the 31st of March. A strong low pressure system moved through the Great Lakes. Showers and thunderstorms developed out in advance of a cold front. Damaging winds occurred with some of these storms including barn damage and numerous trees down.