

Southeast Region: (Information provided by the Southeast Regional Climate Center)

- Temperatures were close to normal across the Southeast this March, with warmer temperatures in the middle of the month balanced by cooler temperatures towards the beginning and end of the month. The northern portion of the region saw slightly below average maximum daytime temperatures, ranging from 0 to 6 degrees F (0 to 3 degrees C) below normal. Many stations ranked in the top ten coldest, including Covington, VA (1960-2019; 7th coldest), and Yadkinville, NC (1957-2019; 9th coldest). The southern portion of the region saw slightly above average maximum daytime temperatures ranging from 0 to 5 degrees F (0 to 2.5 degrees C) above normal. A few stations ranked in the top ten warmest, including Hialeah, FL (1941-2019; 8th warmest), and Gainesville, FL (1960-2019; 9th warmest). The northern portion of the region, experienced slightly below average nighttime minimum temperatures, ranging from 0 to 6 degrees F (0 to 3 degrees C) below normal. The southern portion of the region experienced slightly above average nighttime minimum temperatures ranging from 0 to 4 degrees F (0 to 2 degrees C) above normal. Stations that ranked in the top ten coldest included Covington, VA (1960-2019; 5th coldest) and Mount Mitchell, NC (1980-2019; 9th coldest). Stations that ranked in the top ten warmest included Jacksonville, FL (1944 -2019; T-4th warmest). On March 4th, the temperature in Atlanta, GA (1878-2019) reached 30 degrees F (-1.1 degrees C), ending a 32 consecutive day streak of minimum temperatures above 32 degrees F (0 degrees C). This was the 5th longest streak (from December to March) with minimum temperatures above freezing, the first occurring in 1956-1957 at 43 days. By March 6-7, the cold air provided the lowest minimums of the month in several places. Charlottesville, VA (1962-2019) and Richmond, VA (1871-2019) both recorded a minimum of 21 degrees F (-6.1 degrees C) on March 7th; New Bern, NC (1948-2019) recorded 23 degrees F (-5 degrees C); Wilmington, NC (1871-2019) and Florence, SC (1948-2019) recorded 27 degrees F (-2.7 degrees C); and Tallahassee, FL (1896-2019) and Alma, GA (1948-2019) were also below freezing at 31 degrees F (-0.5 degrees C) on March 7th. In mid-March, The Bermuda High shifted westward, thus forcing the storm track north of the region and allowing for temperatures to warm. On March 14-15, the region recorded the warmest maximum temperatures of the month for many stations, including: Gainesville, FL (1890-2019) at 88 degrees F (31.1 degrees C), Savannah, GA (1871-2019) at 86 degrees F (30 degrees C), and Norfolk (1871-2019) at 81 degrees F (27.2 degrees C). Although Puerto Rico was around average for temperatures this month, Arecibo Observatory (1980 -2019) recorded the lowest minimum temperature at 44 degrees F (6.6 degrees C).
- Although the winter season was very wet, precipitation across the Southeast was more than 3 inches (mm) below normal in many areas for March, with much of it falling at the tail ends of the month. On March 4th, the 2nd longest streak of days with measurable rain came to an end in Mobile, AL (1871-2019) at 15 days. The first longest streak was in July 1945 at 17 days. Toward the end of the month, 2.69 inches (68.3 mm) of rain fell at Washington Dulles (1962-2019), making it the wettest March day on record. The previous record was 8 years ago in 2011 with 2.30 inches (58.4 mm) of rain. As mentioned above, the Bermuda High shifted a little westward during the middle of the month, and this led to dry conditions across much of Florida, Alabama, Georgia and southeastern South Carolina. Monthly precipitation totals were 50 to less than 5 percent of normal in these areas. Many stations ranked in the top 5 driest including: Pensacola, FL (1879-2019; 0.15 inches (3.81 mm); 2nd driest), Robertsedale, AL (1913-2019; 0.38 inches (9.7 mm); 3rd driest), and Charleston, SC (1938-2019; 0.69 inches (17.5 mm); 4th driest) A mid-latitude cyclone and associated cold front produced modest, maximum one-day rainfall totals for the month including: Atlanta, GA (1878 - 2019; 1.13 inches (28.7 mm)), Savannah, GA (1871 - 2019;

1.08 inches (27.4 mm)), Asheville, NC (1869 - 2019; 0.45 inches (11.43 mm)), and Charleston, SC (1938 - 2019; 0.29 inches (7.4 mm)). It was dry in Puerto Rico and the U.S. Virgin Islands as well. St. Croix (1951-2019) measured 0.02 inches (0.51mm) of precipitation ranking it the driest March on record but also tying for the second driest month of all. Snow was mostly confined to the mountains of western North Carolina and Virginia. Mill Gap, VA (1976-2019) measured 6.1 inches (155 mm) of snowfall, the highest in the region for the month, while Mt. Mitchell, NC (1980-2019) measured 3.5 inches (89 mm).

- There were 289 severe weather reports across the Southeast during March, which is near the median monthly frequency of 217 reports during 2000–2016. There were 47 confirmed tornadoes for March, which is more than double the average value of 18. The strongest of these tornadoes was ranked an EF-4 with winds reaching 170 mph (km/s) through Alabama in the counties of Macon and Lee. This tornado continued its 68.8 mile track through Muscogee, Harris and Talbot counties in Georgia, but lost some strength as it ranked EF-3. Multiple homes were damaged, and trees and power lines were brought down. This is the first EF-4 tornado that has occurred in the United States within the past two years. Another EF-3 tornado went through Leon and Jefferson counties in Florida with a track length of 6.5 miles. Seven tornadoes were ranked EF-2, 21 were ranked EF-1 and 10 were ranked EF-0. Tornadoes were also accompanied by strong winds during the storm outbreak: the University of Georgia weather network, for example, reported a wind gust of 102.5 mph (km) in Cairo, GA. There were 83 high wind reports total and 17 hail reports with this outbreak. Unfortunately, this severe weather outbreak resulted in 23 fatalities and over 100 injuries. Between March 25<sup>th</sup> & 27<sup>th</sup>, severe thunderstorms produced over 35 wind & hail reports in Alabama, Georgia & Florida. Thunderstorms associated with this system produced hen egg (2.00 inches mm) and golf ball (1.75 inches mm) sized hail in Brevard County Florida. This is the second consecutive March with hail 2.0 inches (50.8 mm) in size or greater. Hail of this size has only been observed on 28 of the prior 67 years (from 1950-2017).
- Drier conditions during the month caused drought conditions to expand across the region in coverage. Abnormally dry (D0) conditions covered 27 percent of the Southeast, in an area stretching from extreme southeastern North Carolina through much of South Carolina, south central Georgia, southeastern Alabama, and portions of Florida. Moderate drought (D1) conditions covered about 3 percent of the region from the coastal South Carolina, through small sections of Georgia and a small part of southeastern Alabama. Drought conditions improved slightly for Puerto Rico with the month ending at 30 percent in moderate drought (D1) conditions and 87 percent in abnormally dry (D0) conditions and. During the month of March, the threat of spring freezes is always a concern, and on March 6-7, temperatures in Georgia dipped below freezing just weeks after many peach trees and blueberry bushes started to bloom. The dry March was a welcomed relief for parts of the Southeast that have received much above normal precipitation this past winter. The hailstorm that hit Florida on March 26<sup>th</sup> damaged many young watermelon plants, potentially delaying, and in some cases destroying much of this year's crop.