

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

- Temperatures were above average across much of the Southeast and Puerto Rico for the month of March. Monthly mean temperatures were over 3 degrees F (1.7 degrees C) of normal in more than 60 percent of the 182 long-term (i.e., period of record equaling or exceeding 50 years) stations across the region. In contrast, there were only a few stations that observed monthly mean temperatures that were ranked within their ten warmest values on record, including Wallops Island, VA (1966-2021; 7th warmest March), and West Palm Beach, FL (1888-2021; 9th warmest March). Daily maximum temperatures ranged from 8.1 degrees F (4.5 degrees C) above normal in Celo, NC (1948-2021) to 1.3 degrees F (0.72 degrees C) below normal in Bamberg, SC (1951-2021). Likewise, daily temperature minimums ranged from 8.1 degrees F (4.5 degrees C) above average in Oneonta, AL (1894-2021) to 0.8 degrees F (0.4 degrees C) below average in Covington, VA (1960-2021). The warmest weather of the month occurred on the 26th -28th, as warm and humid air surged northward ahead of an approaching cold front. Daytime maximum temperatures reached or exceeded 80 degrees F (27 degrees C) across much of the region, with portions of central Florida reaching or even exceeding 90 degrees F (32 degrees C). Indeed, Plant City, FL (1892-2021) had a daily maximum temperature of 94 degrees F (34 degrees C), which set a new daily maximum temperature record. In contrast, the coldest weather of the month occurred on March 7th – 8th, as a continental high-pressure system ushered in cold, dry air from the northwest. Daily minimum temperatures fell below 32 degrees F (0 degrees C) across portions of every state north of Florida, with a few mountain locations dropping into the teens F (-12 to -7.2 degrees C). Indeed, Mt. Mitchell, NC (1925-2021) recorded a daily minimum of 12 degrees F (-11 degrees C) and Blacksburg, VA (1893-2021) reported 18 degrees F (-8 degrees C).
- Precipitation varied across the Southeast region during March. The driest locations were found across all of Florida, eastern North Carolina, and northern Virginia, where precipitation totals were 50 to less than 5 percent of normal. Vero Beach, FL (1965-2021) only received 0.21 inches (5.3 mm) of precipitation for the month, making this the 4th driest March on record. In contrast, the wettest locations were found across Alabama and western North Carolina, where precipitation totals were 150 to more than 200 percent of normal. Guntersville, AL (1910-2021; 2nd wettest) reported 13.04 inches (340 mm) of rainfall for the month, over 8 inches (203 mm) above normal. On the 17th, a line of thunderstorms produced heavy rainfall across Alabama, with 24-hour precipitation totals exceeding 4 inches (102 mm) and numerous reports of localized flooding. Muscle Shoals, AL (1893-2021) reported 4.74 inches (120 mm) of rain making this the 6th wettest March day on record. Precipitation in Puerto Rico and the US Virgin Islands was near average for the month, with most stations observing totals within an inch (25 mm) of normal. Snow was mostly confined to the mountains of western North Carolina and Virginia. Mt. Mitchell, NC (1925-2021) measured 0.5 inches (13 mm) of snowfall, the highest in the region for the month.
- There were 284 reports of severe weather across the Southeast during March, which is 143 percent of the median monthly frequency of 198 reports during 2000-2019. There were 49 confirmed tornadoes reported for the month (15 EF-0, 23 EF-1, 6 EF-2, 4 EF-3, and 1 EF-4), 258 percent of the monthly average of 19. About 36 of these tornadoes were produced by a line of thunderstorms with embedded supercells that developed ahead of a cold front, which moved across the region on March 17th – 18th. The most damaging tornado occurred in Dallas County, AL and was rated an EF-2 with winds of 115 mph (51 m/s). The tornado rolled a manufactured home on its side and injured the two occupants inside. Fortunately, there were no fatalities with this storm. Another severe weather

outbreak occurred on March 25th-26th, with 13 tornadoes. The strongest tornado was rated EF-4 with winds of 170 mph (76 m/s). This tornado caused widespread damage in several neighborhoods, including one fatality, throughout the counties of Heard, Coweta, and Fayette, GA. It was the first EF-4 tornado to occur in Georgia since 2011. There were 67 reports of hail for the month, with the largest being baseball sized (2.75 inches) in Pickens County, AL. There were 139 wind reports for the month, which is 128 percent of average (108 reports). Strong winds were observed with the severe weather outbreak on March 17th, including 82 mph (37 m/s) gusts in Bay, FL with reports of roof damage. Strong winds were also observed across the region on March 28th, with the strongest reported gust at 63 mph (28 m/s) in Sumter, SC. Highway patrol reported several trees and powerlines down.

- Above normal amounts of precipitation for the month of March improved drought conditions across Alabama. The area of moderate drought (D1) is gone; however, a few pockets of abnormally dry conditions (D0) still remain. Due to below-average precipitation, the coverage of abnormally dry conditions (D0) increased across Florida, with a few small pockets of moderate drought (D1) developing by the end of the month. Drought conditions improved slightly in Puerto Rico, with an area of moderate drought (D1) ringed by an area of abnormally dry conditions (D0) on the northwestern portion of the island. The citrus growing region of Florida received very little rainfall for the month and therefore required the frequent use of irrigation. The Panhandle and northern parts of the state experienced a late frost that affected strawberries, corn, and watermelons. In the southern part of the peninsula, warm weather increased the pest pressure on vegetables. In Georgia, farmers prepared fields and applied herbicides, as conditions were sufficiently dry. Wet conditions in the northwestern parts of the state limited planting activities. A late season frost damaged some crops, and producers remained uncertain about the potential wheat damage. Heavy rain and storms flooded fields and delayed planting in Alabama. Late-season freezing temperatures temporarily stalled corn planting, but there were no reports of frost damage. Farmers continued to clean up debris and make repairs to structures damaged by the March tornadoes. In South Carolina the frosts caused some damage to summer pastures, but producers covered strawberries, and no damage was reported. Similarly, in North Carolina, the cold weather led to crop damage, especially fruit.