

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

- Temperatures were near average to above average across much of the Southeast region and Puerto Rico for the month of January. Monthly mean temperatures were within 2 degrees F (1.1 degrees C) of average for 70 percent of the 139 long-term (i.e., period of record equaling or exceeding 50 years) stations across the region. Consequently, there were no long-term stations that observed their warmest or coldest January on record. However, Truman Field Airport, USVI (1953-2020) tied for the seventh warmest January on record. Due to a strong temperature inversion and the persistence of fog in the valley location, the greatest range in daily maximum temperatures across the entire region occurred in the mountains of western North Carolina, from 5.3 degrees F (2.9 degrees C) above normal in Celo, NC (1948-2021) to 3.6 degrees F (2 degrees C) below normal in Marion, NC (1893-2021). Daily temperature minimums ranged from 7.7 degrees F (4.3 degrees C) above normal in Marion, NC (1893-2021) to 2 degrees F (1.1 degrees C) below normal in Fort Pierce, FL (1901-2021). The first week of the year was exceptionally warm, with much of the region recording mean temperatures more than 15 degrees F (8.3 degrees C) above normal. Daily maximum temperatures exceeded 60 degrees F (16 degrees C) across portions of every state, with parts of Florida exceeding 80 degrees F (26.7 degrees C). Indeed, Plant City, FL (1892-2021), had a daily maximum temperature of 87 degrees F (31 degrees C) on the 1st setting a daily record. In contrast, the coolest weather of the month across the Southeast occurred on the 29th and 30th, as the circulation around a departing mid-latitude cyclone ushered in cold, dry air from Canada. Daily minimum temperatures fell below 30 degrees F (-1.1 degrees C) as far south as northern Florida, with Crestview, FL (1948-2021) reaching 29 degrees F (-1.7 degrees C). Several stations to the north, however, had daily minimum temperatures that fell below 20 degrees F (-6.7 degrees C), including Richmond, VA (1871-2021) at 17 degrees F (-8.3 degrees C) and Mt Mitchell (1925-2021) at 7 degrees F (-14 degrees C).
- Precipitation was variable across the Southeast region during January, with a few wet and dry extremes recorded. The driest locations were found across Florida, Alabama, northern Georgia, northern Virginia, and Puerto Rico. Monthly precipitation totals ranged from 50 to less than 5 percent of normal across these locations. Melbourne, FL (1937-2021; 2nd driest) only received 0.04 inches (1 mm) of precipitation, which was over 2 inches (51 mm) below normal for the month. St. Thomas, USVI (1953-2021) reported its 3rd driest January on record with only 0.75 inches (19 mm) of precipitation, and Roosevelt Roads, PR (1942-2021) had its 7th driest January observing only 1.27 inches (32 mm) of precipitation. In contrast, the wettest locations were located across southern Georgia, central South Carolina, and eastern North Carolina. Precipitation totals ranged from 150 to 300 percent of normal. Indeed, Cape Hatteras, NC (1874-2021) received 7.47 inches (190 mm) of precipitation, which was more than 2 inches (51 mm) above average. A few low-pressure systems brought snowfall to the Southeast region throughout the month. From January 7th – 8th a low-pressure system tracking across the deep South brought light snowfall from northern Georgia to Virginia. Charlotte, NC (1878-2021) measured .1 inches (2.5 mm) of snowfall and continues to report a trace or more of snow every year for the period of record. On January 11th another low-pressure system on a similar track brought measurable snowfall to northern Alabama, as Huntsville, AL (1894-2021) observed .3 inches (7.6 mm). On January 28th, yet another low-pressure system on a similar track brought 7.3 inches (183 mm) of snow to Lynchburg, VA (1893-2021) and 5.3 inches (135 mm) of snowfall to Roanoke, VA (1912-2021). The instability with this extremely dynamic system contributed to the rare occurrence of thundersnow in Wake County, NC. Washington, D.C. (1871-2021) measured 2.3 inches (58 mm) of snow on January 31st, ending its second longest streak of no measurable snowfall over 1 inch (25 mm). The highest amounts of snowfall for the month, were reported across

the higher elevations of the region, with Burkes Garden, VA (1896-2021) measuring 24.3 inches (617 mm) and Beech Mountain, NC (1991-2021) measuring 21.6 inches (549 mm).

- There were 26 reports of severe weather across the Southeast during January, which is 46 percent of the median monthly frequency of 57 reports during 2000-2019. There were 7 confirmed tornadoes reported for the month (3 EF-0, 3 EF-1, 1 EF-3), which is the monthly average. The strongest of these tornadoes was rated EF-3 with winds of 150 mph (67 m/s) and occurred in Jefferson County, AL on January 25th. It caused substantial damage in a subdivision, with a home swept off its foundation and debris thrown a considerable distance. A teenager was killed and several of his family members were critically injured when their home collapsed, trapping them in the basement. In total, 30 injuries and 1 fatality were reported. This was the first EF-3 or stronger tornado in January for Alabama since 2012. Another EF-1 tornado with winds of 95 mph (42 m/s) occurred in Monroe County, GA on January 1st. This tornado flipped a mobile home on its side, causing one injury. There were no reports of hail for the month and only 18 wind reports for the month, which is 38 percent of the average (48 reports). A strong low-pressure system on January 28th brought strong gusty winds to parts of the Southeast. There were numerous reports of wind damage with wind gusting up to 51 mph (23 m/s) in Asheville, NC.
- Drought slightly intensified for Alabama and Puerto Rico, and abnormally dry conditions (D0) increased in coverage across portions of Florida and Georgia in January. At the beginning of the month, pockets of abnormally dry conditions (D0) were found in Georgia, Alabama, Florida, South Carolina and northern Puerto Rico. By the end of the month, these pockets of dryness (D0) expanded with a small area of moderate drought (D1) developing in Alabama, as well as in northern Puerto Rico. Growers had to irrigate the groves, as dry conditions developed in the citrus growing region of Florida. Persistent rains in some locations in Georgia has led to pasture conditions being subpar compared to previous years and hay was being fed at a rapid pace. Vegetable planting was delayed in some areas due to the wet field conditions. Untimely rainfall hampered the last of the winter wheat planting in South Carolina. Due to cold, wet conditions, cover crops and small grains grew slowly. A few producers were able to begin preparing fields for spring row crop planting when breaks in the rain allowed. Wet conditions delayed field activity in North Carolina. Pastures are muddy and small grain crops were showing nutrient deficiencies due to the saturated soil conditions. Cold weather kept blueberry bushes dormant, and farmers are hopeful that early maturity varieties will not blossom in February as they did in 2020.