

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

- Temperatures were well above normal across the Southeast this May and near normal in Puerto Rico. Monthly mean temperatures were at least 5 degrees F (2.5 degrees C) above average for approximately 46 percent of the 280 long-term (i.e., period of record equaling or exceeding 50 years) stations across the region. A total of 36 long-term stations observed or tied monthly mean temperatures that were ranked their warmest on record. Two stations had monthly mean temperatures above 9 degrees F (4.5 degrees C), including Pelion, SC (1947-2019; 1st warmest) at 9.3 degrees F (4.7 degrees C) and Danbury, NC (1946-2019; 1st warmest) at 9.0 degrees F (4.5 degrees C). Maximum daytime temperatures ranged from 0 to 10 degrees F (0 to 5 degrees C) above normal for the region, and average nighttime minimum temperatures ranged from 0 to 11 degrees F (0 to 5.5 degrees C) above normal. During the first half of the month, the Bermuda high pressure system was ideally positioned off the southeastern coast to usher in warm, moist air from the Gulf of Mexico, which suppressed nighttime cooling during the month. Marion, NC (1893-2019) and Danbury, NC (1946-2019) each had an average minimum temperature of 11 degrees F (4.4 degrees C) above normal. During the second half of the month, the Bermuda high pressure system moved northwest to a position immediately off of the coast of South Carolina, leading to the development of a heat wave. On May 26th- 30th, many stations reported breaking or tying their highest all-time maximum monthly May temperature including Savannah, GA (1871-2019) and Gainesville, FL (1890-2019) at 102 degrees F (39 degrees C); Charleston, SC (1938-2019) and Wilmington, NC (1871-2019) at 101 degrees F (38 degrees C); and Tuscaloosa, AL (1948-2019) at 98 degrees F (37 degrees C). Charleston, SC (1938-2019), Macon, GA (1892-2019) and Wilmington, NC (1871-2019) (1947-2019) had their first 100 degrees F (38 degrees C) day in May. Pelion, SC (1947-2019) had six consecutive days of 100 degrees F (38 degrees C); Florence, SC (1948-2019), Columbia, SC (1887-2019), and Augusta, GA (1871-2019) each had five consecutive days of 100 degrees F (38 degrees C).
- Precipitation was 25 to 70 percent of normal for most locations this May, except for parts of the Florida peninsula, which was up to 200 percent of normal. The driest locations included the coastal Carolinas, central Alabama, central Georgia, the Florida peninsula, and eastern Puerto Rico. Some parts of the coastal Carolinas were more than 2 inches (51 mm) below normal, including Wilmington, NC (1871-2019; 2nd driest) at 3.9 inches (99 mm) below normal; New Bern, NC (1948-2019; 6th driest) at 2.51 inches (64 mm) below normal; and Summerville, SC (1898-2019; T-8th driest) at 2.4 inches (61 mm) below normal. Around 30 percent of the 245 long-term (i.e., period of record equaling or exceeding 50 years) stations across the region reported six or less days with measurable precipitation this month. Wilmington, NC (1871-2019) reported only three days with measurable precipitation this month, and Gainesville, FL (1890-2019) did not see any measurable precipitation from May 6th through May 27th. Precipitation in Puerto Rico showed much variability, with St. Croix, PR (1951-2019) being 2.13 inches (54 mm) above normal and San Juan, PR (1898-2019) being 3.93 inches (100 mm) below normal. St. Croix, PR received 3.70 inches (94 mm) of precipitation on May 1st, making it the 3rd wettest May day on record. Because of the close proximity of the Bermuda high pressure system, most of the region remained dry during the month of May.
- There were 566 severe weather reports across the Southeast during May, which is over 128 percent of the monthly frequency of 440 reports during 2000-2018. There were 9 confirmed tornadoes, which was a little less than the average of 11 for the month. Seven of the nine

reported tornadoes occurred during May 9th -13th when a series of cold fronts passed through the region. The strongest of these tornadoes was ranked EF-2, with winds reaching 115 mph in Wake County in east-central North Carolina. This tornado produced a 17 mile swath of damage, including several downed trees and sheet metal wrapped around a tree. No fatalities or injuries were reported with this tornado. There were 113 hail reports, less than the average of 142 reports for the month of May, including several reports of golf ball-sized hail in North Carolina on the last day of the month. The hail damaged many vehicles and homes. There were 442 wind reports including a thunderstorm wind gust of 67 mph (30 m/s) at Washington Reagan, VA (1929-2019) for May, which is 154 percent of the average 247 reports for the month.

- Drought conditions expanded across the region for the month of May. Moderate drought (D1) covered about 12 percent of the Southeast (up from 9 percent at the beginning of the month), in an area stretching from the coastal Carolinas, down through the eastern part of Georgia and small parts of central Georgia and Alabama. Abnormally dry (D0) conditions covered about 50 percent of the region from the coastal area of North Carolina, southward through most of South Carolina, and Georgia, central Alabama, and the Florida Panhandle. Drought conditions changed very little in Puerto Rico, with around 15 percent in moderate drought (D1) (down from 16 percent at the beginning of the month), and 44 percent in abnormally dry (D0) conditions (which stayed the same). With the growing drought wildfire concerns increased. The Yellow Bluff Fire began on May 22nd near Jacksonville, FL and grew to 600 acres, shutting down parts of Interstate 95 in both directions. Another fire broke out near Aiken, SC on May 28th and shut down parts of Interstate 20. The rain in the first half of the month allowed most crop planting to be about ten percent ahead of normal, however the dry conditions at the end of the month slowed down planting progress, especially cotton and peanut planting. The lack of precipitation and higher temperatures at the end of the month increased water usage of plants, and dryland crops saw some impacts with some early corn crops already being affected. Soil moisture values continued to decline, and some growers reported not being able to plant because of insufficient moisture levels. Soybean planting has stopped until more rain improves soil moisture. The peach picking began in Georgia, and, according to growers, the conditions during the spring produced a great peach crop this year. Some farms are picking 15,000 to 20,000 boxes of peaches per day, and it should continue into mid-August.