

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

- Temperatures during August were near average (i.e. within 2 degree F (1.1 degrees C)) across most of the Southeast region, including Puerto Rico and the U.S. Virgin Islands. Temperatures were most above normal across far eastern Virginia and northeastern North Carolina, with observed temperatures 3-4 degrees F (1.7 to 2.2 degrees C) above normal. Cape Hatteras NC (1874-2018; tied for first warmest) reported a mean temperature of 82.2 F (27.9 C), 3.7 degrees F (2.1 degrees C) above normal. Norfolk VA (1871-2018; tied for fourth warmest) reported a mean monthly temperature of 81.0 F (27.2 C). Wallops Island/Chincoteague VA (1967-2018; tied for warmest) reported a mean temperature of 80.6 F (27.0 C) that was 5.1 degrees F (2.8 degrees C) above normal. The coolest temperatures in the Southeast were found in western Georgia and parts of Alabama, where frequent precipitation and clouds helped keep daytime temperatures low. Because of the humid conditions, maximum temperatures across the region were generally a little below average while minimum temperatures were slightly elevated, except in the areas with the warmest conditions in Virginia and North Carolina. Only six stations reported maximum temperatures ranked in the top three warmest in August compared to 13 locations, which reported average monthly minimum temperatures in the top three warmest. Fairhope AL (1917-2018; first coldest) reported a minimum temperature that was 3.5 degrees F (1.9 degrees C) below normal. The highest daily maximum temperature of 102 degrees F (38.9 degrees C) was reported at Columbia SC on August 30. No other station in the Southeast reported a temperature exceeding 100 F (37.8 degrees C) in August. Mount Mitchell NC reported the lowest daily temperature across the region during the month with 39 degrees F (3.9 degrees C) on the 23rd. These cool temperatures occurred in the wake of a cold frontal passage, which brought much-appreciated relief from the hot and humid conditions. Many stations in the Southeast observed their coldest temperatures of month during this period.
- Precipitation was highly variable across the Southeast in August, as is common during the summer. The driest areas included most of the Florida peninsula and South Carolina, and eastern Georgia. Dry conditions were also noted in far eastern Virginia and North Carolina, where the hottest conditions occurred, as noted above. Parts of the Georgia coast and northeastern South Carolina received less than 50% of their normal rainfall this month. The Key West FL International Airport (1948-2018; second driest) reported only 1.89 inches (48.0 mm) for the month, 2.49 inches (88.6 mm) below normal; the record of 1.20 inches (30.5 mm) was set in 2007. Manteo Airport (1966-2018; second driest) in far eastern North Carolina reported 1.90 inches (48.3 mm) for August, 4.74 inches (120.4 mm) below normal. Two other long-term stations in Brunswick GA and Andrews SC reported amounts that were the 5th driest for their locations. The areas that were most above normal in precipitation included the Appalachian Mountains, central North Carolina and Virginia, western Georgia, and eastern Alabama. Most of western North Carolina and Virginia as well as parts of western Georgia and southeastern Alabama reported amounts that were 150-300 percent of normal precipitation this month. In those

areas, 21 long-term stations observed precipitation totals that were ranked within their five highest values on record. Murphy NC and Saltville VA both reported their wettest Augusts on record in stations with 50 or more years of data. Asheville NC reported 10.41 inches (264.4 mm), 6.01 inches (152.7 mm) above normal, their third wettest in 125 years of record. As is typical of August, localized heavy rainfall produced flash flooding across parts of the region. Thunderstorms that began on the evening of July 31 and continued into August 1 brought precipitation amounts of over 4 inches in a 24-hour period to Albemarle County in Virginia and surrounding counties. Flooding from the heavy downpours resulted in numerous water rescues from cars that drove through water-covered streets. On August 11, Naples FL reported 3.72 inches (94.5 mm) in thunderstorms that also brought a 63 mph (101 kilometers per hour) wind gust to the station. Atlanta GA received their 5th wettest one-day August rain with 3.61 inches (91.7 mm) on August 2 and Gainesville FL received 3.73 inches (mm) on August 23, their 7th wettest one-day August rain event. In general, the wettest periods were from August 1 to 4 and August 19 to 23 as strong cold fronts approached the area. The driest period occurred between August 24 and 29, as a strong ridge of high pressure was positioned over the area.

- There were 534 severe weather reports across the Southeast during August, which is 165 percent of the median monthly frequency of 323 reports during 2000–2016. At least one severe weather report was recorded in the region on 25 days during the month. Three small confirmed tornadoes were reported in all during August, two on the 1st of the month in Georgia and South Carolina, and one on the 2nd in Virginia, compared to a median number of eight for August based on 2000-2016 data. By far the most reports were from severe winds (506, or almost 95% of the total count). Wet soils from the rainy conditions in many parts of the region in July and early August likely promoted more tree fall and thus increasing the wind damage. A church steeple was blown off the Langley First Baptist Church in Burnetown SC on the afternoon of August 6 due to thunderstorm winds. On August 9, one person was injured when a tree fell on a home in Cottageville SC, during a strong evening thunderstorm. Twelve people were injured at Traditions Park near Hayden AL on August 16, when a large tent collapsed on a crowd of approximately 150 people. The tent collapse occurred even though winds were estimated to be below severe limits and no other damage was reported in the vicinity. On August 28, four mobile homes were damaged near Venice FL, due to straight line winds just before midnight.
- Drought conditions (D1 and greater) were not observed across the Southeast region for the third consecutive month, though small pockets of abnormal dryness (D0) persisted across Alabama and grew slightly in the interior Carolinas. No abnormally dry conditions were identified in Georgia, Florida and Virginia this month except in part of Escambia County in the far western Panhandle of Florida. In Puerto Rico, abnormally dry conditions expanded from the south-central part of the island to cover more than half of Puerto Rico by the end of the month. Wet conditions, especially early in August, led to disease problems in many crops, particularly fungal diseases linked to the moist conditions. Wet soils in many parts of the Southeast kept producers from bringing heavy machinery into their fields, reducing their ability to spray and harvest and causing problems for some crops like soybeans,

peanuts and alfalfa. Hay producers had trouble finding enough dry days to produce good quality hay. Grape growers in Georgia harvested some varieties early to reduce yield loss from rot caused by the humid conditions but were pleased by drier harvest conditions at the end of the month. Irrigation was in use in some of the drier regions of the Piedmont to help improve crop yields as their growing seasons drew to a close.