

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

- Temperatures were near average across much of the Southeast region and Puerto Rico for the month of September. Monthly mean temperatures were within 2 degrees F (1.1 degrees C) of average for over 90 percent of the 210 long-term (i.e., period of record equaling or exceeding 50 years) stations across the region. There were only two stations that tied or observed their warmest September on record, Stuart, FL (1935-2020; 1st warmest) and Plant City, FL (1892-2020; T-1st warmest). Maximum temperatures ranged from 3.6 degrees F (2 degrees C) above normal in Plant City, FL (1892-2020) to 6.4 degrees F (3.6 degrees C) below normal in Oneonta, AL (1894-2020). Daily temperature minimums ranged from 5.9 degrees F (3.3 degrees C) above normal in Marion, NC (1893-2020) to 1.4 degrees F (0.8 degrees C) below normal in Rome, GA (1893-2020). High rates of evaporation and the persistent influx of tropical moisture suppressed nighttime cooling during the month. Indeed, there were a few stations in Florida that saw minimum temperatures above 70 degrees F (21 degrees C) for the entire month including, Key West, FL (1871-2020) and Miami, FL (1895-2020). The warmest weather of the month occurred from the 3rd through the 5th, as the circulation around the Bermuda High, situated off the Atlantic coast, transported warm, humid air over much of the Southeast region. Daily maximum temperatures exceeded 90 degrees F (32 degrees C) across portions of every state, resulting in heat advisories for Charleston, SC (1938-2020), with heat index values between 105 -115 degrees F (41-46 degrees C). In contrast, the coolest weather of the month across the Southeast occurred from the 20th – 22nd, as the circulation around a departing mid-latitude cyclone ushered in relatively cooler and drier air from Canada. Daily minimum temperatures fell below 60 degrees F (16 degrees C) across portions of every state north of Florida, with a few locations in the higher elevations of North Carolina and Virginia falling below 40 degrees F (4.4 degrees C), prompting frost and freeze advisories. Indeed, Mt Mitchell (1925-2020) had a minimum temperature of 29 degrees F (-1.7 degrees C), and Raleigh, NC (1887-2020) experienced its lowest September minimum temperature since 2003 at 44 degrees F (6.7 degrees C).
- Precipitation was variable across the Southeast region during September, with a few wet and dry extremes recorded. The driest locations were found across central Alabama, southern Georgia, and eastern Florida. Monthly precipitation totals ranged from 70 to less than 25 percent of normal across these locations. Tuscaloosa, AL (1948-2020; 9th driest) only received 0.85 inches (22 mm) of precipitation, over 2 inches (51 mm) below normal for the month. In contrast, the wettest locations were located across the Florida Panhandle, northern Georgia, western North Carolina, and southern Virginia. Precipitation totals ranged from 150 to 300 percent of normal. Indeed, Pensacola, FL (1879-2020) received 18.51 inches (470 mm) of precipitation, which was more than 12 inches (305 mm) above average, making this the 3rd wettest September on record. On September 11th Highlands, NC (1877-2020) reached 100 inches (2540 mm) of precipitation for the year, which is the earliest it has ever made it to that value in a given year. Most of Puerto Rico and the US Virgin Islands received normal amounts of precipitation for the month. Hurricane Sally was the seventh hurricane of the Atlantic 2020 season and made landfall near Gulf Shores, AL on September 16th. However, from the 12th through the 16th, Hurricane Sally impacted parts of Florida with numerous reports of localized flooding resulting in several road closures, stalled vehicles, and water entering multiple residences and businesses. Key West, FL (1871-2020) received 9.37 inches (238 mm) of rain from the storm in a single day, making it the 5th wettest day on record. Key West, FL recorded 3.95 inches (100 mm) in a single hour, making this their second highest rain rate ever recorded. Pensacola, FL (1879-2020) received 11.85 inches (301 mm) of rainfall in a single day from the storm, which is their 4th wettest day ever reported, and the 1st wettest September day on record.

- There were 116 reports of severe weather across the Southeast during September, which is 118 percent of the median monthly frequency of 98 reports during 2000-2018. There were 22 confirmed tornadoes reported for the month (16 EF-0, 4 EF-1, 2 EF-unknown), about 157 percent of the monthly average of 14. A total of 19 of these tornadoes were associated with Hurricane Sally. The strongest of these tornadoes was rated EF-1 with winds of 110 mph (49 m/s), and occurred in Ware County, GA on September 16th. This tornado lofted and displaced gravestones along the damage path, as well as damaging a nearby church roof. No injuries or fatalities were reported. Hurricane Sally made landfall near Gulf Shores, AL on September 16th, with peak winds of 105 mph (47 m/s). Fort Morgan, AL reported a wind gust of 121 mph (54 m/s) and Mobile, AL reported a wind gust of 83 mph (37 m/s). At the height of the storm, over 103,000 customers in Baldwin County, AL and over 60,000 in Mobile County, AL were without power. Several sewage overflows were reported across Mobile County following the heavy rain from the storm, causing contamination to Dog River and Rabbit Creek. The Panhandle of Florida was also impacted by Hurricane Sally. In Pensacola, FL over 24 inches (610 mm) of rain fell and storm surge flooding reached 5.6 feet (1.7 m), the third highest storm surge ever recorded in the city. Unfortunately, there were a total of 8 fatalities from Hurricane Sally including a 45-year old female kayaker who had gone missing at the height of the storm. There were 6 reports of hail for the month, with the largest being a little larger than hen-egg sized (2.25 inches) in Wake County, NC on September 25th. There were 89 wind reports for the month, which is 116 percent of the average (77 reports). Damaging straight line winds associated with severe thunderstorms impacted the Washington, DC area on September 3rd. There were reports of several trees and large tree branches downed from these winds leaving many customers without power; however, no injuries or fatalities were reported.
- The entire Southeast region and Puerto Rico remained drought-free for the month of September. At the beginning of the month, small pockets of abnormally dry conditions (D0) were found in Georgia, Alabama, western Florida, and southern Puerto Rico. By the end of the month, however, only small pockets of abnormally dry conditions (D0) in Georgia, Alabama, and southern Puerto Rico remained. Many farmers in the Panhandle reported a loss of cotton due to the heavy rains and wind brought by Hurricane Sally. Boll rot was noted by many farmers in cotton as a result of the hurricane. Peanuts were unable to be dug in the Panhandle due to the rain, and farmers noted that fungal disease and rotting will affect the quality of the harvest. In many fields in southern Alabama, Hurricane Sally blew down the cotton crop when bolls had yet to open. Soybean wind damage was relatively minor and limited to the leaves. Pecan production was substantially impacted for this year's crop, with many immature pecans blown to the ground. However, orchards remain in good shape overall after the storm. Farmers in southern Georgia also noted an increase in boll rot in cotton as a result of the rain from Hurricane Sally. Livestock and pastures, on the other hand, were in mostly good condition. In South Carolina, portions of vegetable fields remained wet, limiting spraying and field preparations. Overall, however vegetables were growing well.