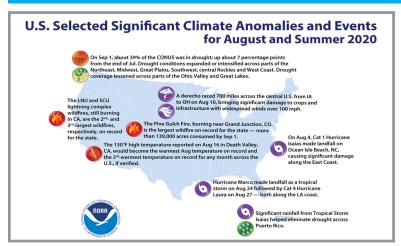
September 2020

National and Regional Weather Highlights for Summer 2020



Above-average temperatures were observed across the Southeast this summer. Precipitation varied across the Southeast over the summer, while five tropical systems and slow-moving thunderstorms caused flooding in local areas. Virginia experienced its 10th wettest summer on record. Puerto Rico remained drought-free for August. Hurricane Isaias made landfall near Ocean Isle Beach, NC, spawning a rare EF-3 tornado. For more information, see: https://www.ncdc.noaa.gov/sotc/national

Highlights for the Southeast

There were **few extremes in summer temperatures** across the region. However, Cape Hatteras, NC and Sarasota, FL each observed their **warmest summer** (JJA) on record. July was the warmest month of the season, with Norfolk, VA observing a record highest count (5-days) and longest consecutive streak (4-days) of a daily maximum temperature that reached or **exceeded 100 degrees F.**

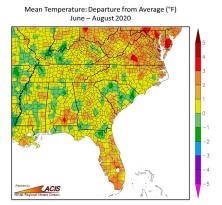
Precipitation varied greatly across much of the Southeast for the summer. The Tampa International Airport tied it's 3rd longest streak of 14 consecutive days with **no measurable precipitation** during Florida's rainy season (June 1 - September 30).

Five tropical systems, Cristobal, Fay, Isaias, Kyle and Laura impacted our region this summer, dropping significant amounts of rain and causing much damage.

The **Saharan Air Layer** (SAL) moved across parts of the Southeast and the Caribbean in June. Puerto Rico reported hazy conditions and **poor air quality**, while in Asheville, NC visibility decreased to 3 miles due to the **high dust** concentrations.

Regional Weather Overview for Summer 2020

Temperature and Precipitation Anomalies

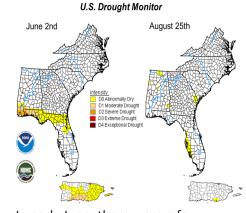


Above-average temperatures were recorded over Virginia and Florida, with near-average temperatures reported over the rest of the Southeast. Several stations observed their highest count of July days with a maximum daily temperature of at least 90 F, including Raleigh, NC (28 days) and Washington Reagan, DC (28 days). Many stations also reported their longest streak of consecutive 90-degree days including Charlottesville, VA (35 days).

Precipitation: Departure from Normal (in)
June – August 2020

Precipitation ranged from slightly below normal in central Georgia to over 8 inches above normal in western NC and eastern VA. A few stations observed their top 5 wettest summers on record, including Staunton, VA (1st wettest; 26.09 inches), and Hickory, NC (2nd wettest; 24.78 inches). In contrast, parts of Florida and Georgia only had 70 percent of normal summer precipitation. Fort Myers, FL reported more than 6 inches below normal.

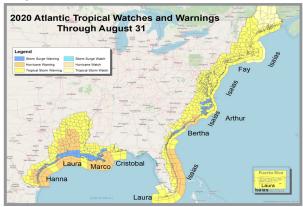
Drought



In early June, there were a few pockets of abnormally dry conditions (D0) in Alabama. As the summer progressed, the abnormally dry conditions (D0) expanded across Georgia with a few pockets of moderate drought (D1) developing. Adequate rainfall towards the end of the season eliminated this drought. Puerto Rico started the summer with drought, and ended the season drought-free due to the precipitation from the tropical systems.

Regional Climate Impacts for Summer 2020

Tropical Storms



Tropical Watches and Warnings (image from NWSCorpus)

Tropical Storm **Cristobal** impacted the region in June, providing beneficial rainfall to the Florida Panhandle and southern Alabama. In July, Tropical Storm **Isaias** passed over Puerto Rico. Juncos, PR received over 9 inches of rain, and multiple fallen trees, mudslides, and river flooding were reported, according to local emergency management officials. Strengthening to a hurricane, Isaias made landfall near Ocean Isle Beach, NC on August 3rd, with peak winds of 85 mph. Federal Point, NC reported a wind gust of 99 mph. Unfortunately, the 8-9 feet of storm surge destroyed many dunes and sea turtle nests in Oak Island, NC. At the height of the storm, over 53,000 customers were without power. Hurricane **Laura** brushed by Puerto Rico, dropping over 6 inches of rain. Two people had to be rescued due to river flooding.

Severe Weather

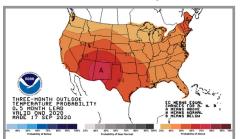
There were 1738 reports of severe weather this summer, which is over 108% of the median summer count observed during 2000-2018. Thirty eight tornadoes (16 EF-0s, 17 EF-1s, 4 EF-2s, 1 EF-3) were confirmed from June - August, which is over 126% of the average count of 30 tornadoes observed during 2000-2018. A total of 22 tornadoes were associated with Hurricane Isaias. A rare EF-3 tornado spawned by the hurricane resulted in winds of 140-145 mph and caused two fatalities and fourteen injuries. Damaging straight line winds impacted the Daytona Beach Flea and Farmers Market in June, with the strongest gust at 65 mph. Damage consisted of trees down and roof debris blown onto portions of I-95. On August 3rd, tennisball sized hail (2.5 inches) was reported in Georgia. There were 3 lightning fatalities for the season.

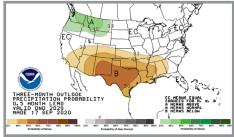
Agriculture and Livestock

The persistent influx of tropical moisture and high humidity across most of the Southeast increased disease pressures, with mold, and fungus on corn and peanuts. Meanwhile, producers were reporting fall army worms in several pastures and hay fields. In Georgia, the increase in rain toward the end of the season, paired with the high humidity, slowed the drying down of corn, and many farmers were battling with whiteflies and boll rot in cotton. Grove activities in the citrus growing region in Florida continued as normal. Heavy rain in the Midlands region of South Carolina washed out some recently planted fall vegetable fields that will need to be replanted; however, overall fall vegetable field preparations and planting were proceeding at a good pace.

Regional Climate Outlook for Autumn 2020

Temperature and Precipitation





NOAA's Climate Prediction Center (CPC), forecasted that above-normal temperatures are likely for all of the Southeastern region, during the months of October, November, and December. Precipitation is expected to have equal chances of wetter or dryer than average across most of the Southeast, with dryer than average chances for Alabama and western Georgia. The entire Southeast region including Puerto Rico, should remain drought-free.

Atlantic Hurricane Season

Updated by NOAA's Climate Prediction Center on <u>August 6th</u>, the Atlantic hurricane season outlook indicates a 85% chance of an **above-normal season**, a 10% chance of a near-normal season, and a 5% chance of below-normal season. The above-average season consists of 19-25 named storms, with 7-11 reaching hurricane strength, and 3-6 becoming major (category 3-5) hurricanes. This outlook reflects the contributing climate factors of the <u>La Niña advisory conditions</u> and above average SSTs.

Southeast Region Partners

National Oceanic and Atmospheric Administration

National Centers for Environmental Information

National Weather Service Eastern Region

National Weather Service Southern Region

Climate Prediction Center

National Hurricane Center

National Integrated Drought Information
System

<u>Carolinas Integrated Sciences and Assessments</u>

National Sea Grant Office

Southeast and Caribbean Regional Collaboration Team

State Climatologists

Southeast Regional Climate Hub

Southeast Climate Science Center

South Atlantic Landscape Conservation Cooperative