Regional Weather Highlights for Autumn 2020

Highlights for the Southeast

There were numerous extremes in average autumn temperatures across the region, particularly in Florida. Fifteen long-term stations (i.e., period of record equaling or exceeding 50 years) observed or tied their warmest autumn on record, including West Palm Beach, FL, Tampa, FL, and Savannah, GA.

Precipitation was above average across much of the region during autumn. Several long-term stations observed their wettest autumn on record, including Fort Lauderdale, FL (50.80 inches), Hickory, NC (22.65 inches), and Lynchburg, VA (21.42 inches).

Four tropical cyclones (Hurricane Sally, Hurricane Delta, Hurricane Zeta, and Tropical Storm Eta) produced significant impacts across the region. At least 26 fatalities were associated with these storms.

There were 37 confirmed tornadoes (2 unrated, 26 EF-0s, 9 EF-1s) across the region during autumn, and all but five were spawned by Hurricanes Sally and Delta.

The entire Southeast region, including Puerto Rico, remained completely drought free during autumn for the first time since 2004.

Regional Weather Overview for Autumn 2020

Temperature and Precipitation Anomalies

Well-above-average temperatures were observed across the Southeast, driven primarily by excessively warm daily minimum temperatures. In Florida, Daytona Beach and West Palm Beach observed their highest count of 60 and 63 autumn days with a minimum temperature at or above 70°F and 75°F, respectively. From November 11th–12th, a total of 56 long-term stations observed their highest daily minimum temperature on record for November.

Well-above-normal precipitation, with departures of 150% to 300% of normal, was recorded over much of Florida, as well as portions of southeastern Alabama, Georgia, the Carolinas, and southern Virginia. Several long-term stations in Florida and coastal Georgia observed or tied their highest number of autumn days with measurable precipitation, including Melbourne, FL (47 days), Brunswick, GA (41 days), and Venice, FL (38 days).

Drought

The entire Southeast region remained completely drought free during autumn for the first time since 2004. This can be attributed largely to an abundance of tropical cyclone-related rainfall during the driest season of the year, climatologically. In early September, a few small pockets of abnormally dry (D0) conditions were found across the region. By the end of November, abnormally dry conditions expanded across portions of Georgia and southern Alabama.
Regional Climate Impacts for Autumn 2020

Tropical Cyclones

Flooding from Hurricane Sally in Gulf Shores, AL (image credit: ABC 33/40 News)

Hurricane Sally made landfall near Gulf Shores, AL on September 16th, with peak sustained winds of 105 mph and a maximum wind gust of 121 mph reported at Fort Morgan, AL. Pensacola, FL observed its fourth wettest day for any month on record, with 11.85 inches of rainfall. In addition, storm surge flooding reached 5.6 feet in Pensacola, which is the third highest storm surge ever recorded in the city. There were 8 fatalities attributed to Hurricane Sally, including a 45-year-old female kayaker who had gone missing at the height of the storm. After making landfall near Creole, LA on October 9th, the remnants of Hurricane Delta impacted parts of the Southeast with heavy rain and flooding. Atlanta, GA received 4.55 inches of rainfall from Delta in a single day, making it the second wettest October day on record.

La Niña

On December 10th, the CPC maintained a La Niña Advisory that was issued in early September, as La Niña conditions (i.e., below-average sea surface temperatures) persisted in the southwestern portion of the region. Increased chances of below-normal precipitation are predicted for much of the region, notably in parts of Florida and southeastern Georgia. Drought is expected to develop in these areas, as La Niña conditions will likely suppress precipitation during winter.

Regional Climate Outlook for Winter 2020–2021

Temperature and Precipitation

NOAA’s Climate Prediction Center (CPC) forecasted an increased probability of warmer-than-normal winter temperatures for all of the Southeast, particularly in the southwestern portion of the region. Increased chances of below-normal precipitation are predicted for much of the region, notably in parts of Florida and southeastern Georgia. Drought is expected to develop in these areas, as La Niña conditions will likely suppress precipitation during winter.

Southeast Region Partners

National Oceanic and Atmospheric Administration
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Climate Prediction Center
National Hurricane Center
National Integrated Drought Information System
Carolinas Integrated Sciences and Assessments
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

Agriculture and Livestock

In September, many farmers in the Florida Panhandle and southern Alabama reported a loss of cotton, peanuts, and pecans due to the passage of Hurricane Sally. In October, Hurricane Zeta caused additional cotton losses in Georgia and the Florida Panhandle, as heavy rainfall led to an increase in boll rot. In Alabama, greenhouses and plastic bedding on vegetables were significantly damaged by Zeta’s high winds. Periods of drier weather in November allowed farmers across the Southeast to harvest their row crops and plant cover crops. Tropical Storm Eta severely damaged vegetable crops in southern Florida, with estimated costs ranging as high as $320 million. Livestock and pastures remained in good condition during autumn due to above-average temperatures and timely rainfall.