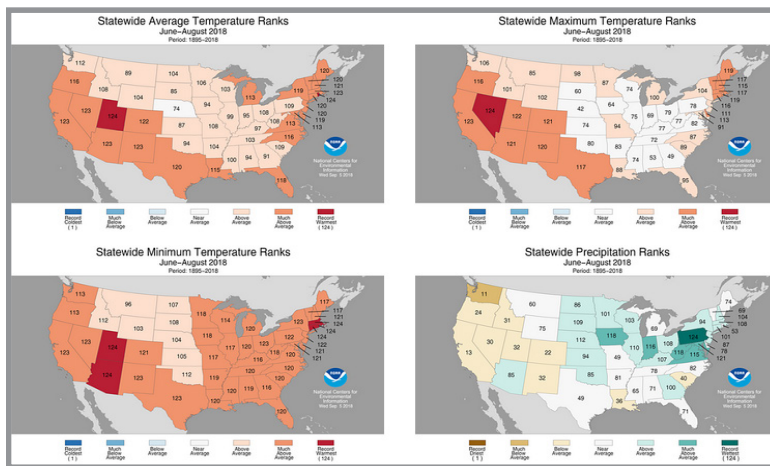




Regional Weather Highlights for Summer 2018



Frequent heavy rains during June and July brought very wet conditions to eastern North Carolina and Virginia. Virginia had the [10th wettest summer in 124 years of observations](#). Florida, North Carolina and Virginia were much above normal in average temperature. While daytime maximum temperatures were near normal for most of the region, nighttime minimum temperatures were much above normal, and every state in the region was ranked in the top seven warmest minimum temperature for 1895-2018.

Highlights for the Southeast

Localized heavy rain across the region during the season resulted in numerous water rescues and flash flood warnings, particularly in eastern North Carolina and Virginia. June and July were the [wettest months](#) in those areas, with drier conditions returning in August.

Puerto Rico's abnormally dry conditions expanded to cover more than half the island by the end of summer. The exception was the northwestern part of the island, where rainfall was over [200% of normal](#) in August.

A dry spell beginning on August 12 that lasted into September was among the [top five driest 3-week periods](#) for late August on record for many stations in Georgia and South Carolina, including the **driest on record for Atlanta airport (89 years) and Athens airport (75 years)**, both in Georgia.

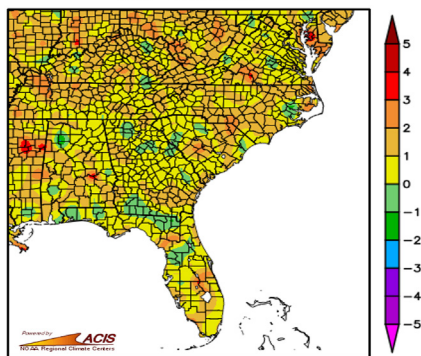
Only 14 confirmed tornadoes were reported during the summer, less than half the median number of 32.

A four-inch hailstone was reported near Covington in southern Alabama on July 22.

Regional Weather Overview for Summer 2018

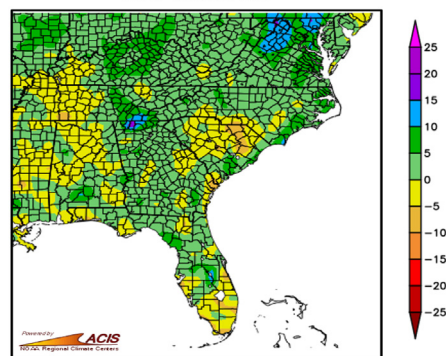
Temperature and Precipitation Anomalies

Mean Temperature: Departure from Average (°F)
June – August 2018



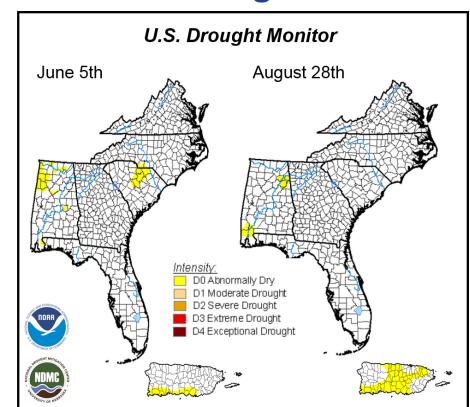
Above-average temperatures were recorded over most of the Southeast. Mean temperatures were in the top five warmest at 27 long-term [stations](#). Maximum temperatures were generally near normal, but minimum temperatures were 1-4 F above normal due to high humidity and cloud cover. Punta Gorda, FL observed its warmest summer in 49 years, and Cape Hatteras, NC had its second warmest summer mean temperature in 126 years.

Precipitation: Departure from Normal
June – August 2018



Precipitation values ranged from 50% of normal in South Carolina to over 200% of normal in northern Virginia. Cheraw, SC reported only 8.06 inches for the period, its 6th driest in 126 years. Several long-term [stations](#) observed their wettest summer on record, including Washington Dulles Intl. Airport (22.61 inches) in Virginia. Precipitation at most stations in Puerto Rico was less than 50% of normal, contributing to an increase in abnormally dry conditions there.

Drought

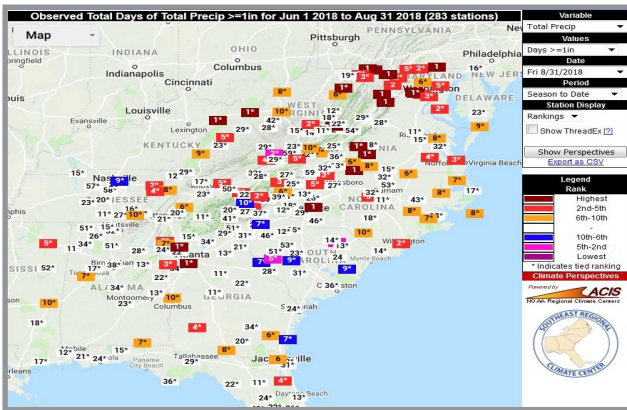


The Southeast was free of drought in summer 2018. Frequent rain kept soils generally moist in June and July, but a long dry spell in a region stretching from eastern Georgia to south central North Carolina at the end of summer expanded dry conditions there. As of August 28, just 4% of the region was [abnormally dry](#). In Puerto Rico, dry conditions expanded throughout the summer and over 50% of the island was considered abnormally dry by August 28.



Regional Climate Impacts for Summer 2018

Heavy Rain and Flooding



Climate Perspectives rankings of 1.00 inch rain counts

NOAA's Storm Prediction Center recorded **332 reports of heavy rain** and **203 reports of flash flooding** during the summer, most in June and July. More than 20 stations reported the number of days with 1 inch or greater rainfall in their top-3 highest. On June 22, Richmond, VA airport [closed for several hours](#) due to flooding. Downpours in Charleston on July 4 led to the closure of downtown streets due to 9 inches of water in the roads, [impacting holiday tourism](#). Charleston was hit by a **second round of flooding** on July 20; a [CoCoRaHS](#) observer reported receiving **8.76 inches of rain overnight**, the highest one-day rainfall reported in the Southeast this summer. **The failure of a small dam** in Emanuel County, GA on July 30 washed out a road and led to [two injuries](#).

Severe Weather

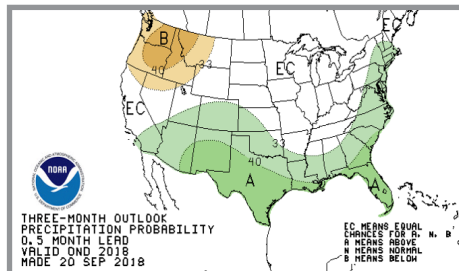
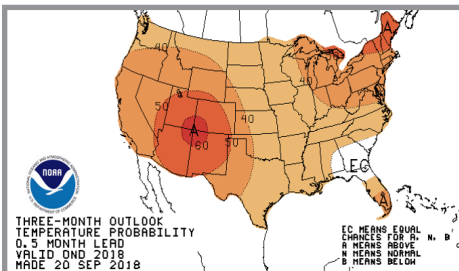
Only eight days were free of severe weather across the Southeast during summer. Almost **2,300 reports of severe weather** were received according to [NOAA's Storm Prediction Center](#), 140% of the normal number based on 2000-2017. About 93% of these reports were associated with strong winds, and **exceptionally wet soils** in some areas contributed to an increased number of falling trees. Fourteen confirmed tornadoes were observed during the summer, less than half of the average count of 47 tornadoes observed during 2000-2016. On July 11 a [tennis-ball-sized hailstone](#) (4.0" diameter) fell near Covington, AL. On August 16 a **tent collapsed in Traditions Park** in Hayden, AL, [injuring 12 people](#). Seven fatalities were due to the impacts of wind or lightning strikes. summer.

Agriculture and Livestock

Frequent rainfall provided **ample moisture for crops** but increased the occurrence of fungal diseases in [grapes](#) and cotton and delayed the harvest of [corn](#). Treatments were delayed due to the **almost daily occurrence of showers**. Rainfall also slowed [hay](#) drying and delayed field work since equipment could not be used on the saturated soils. Wet conditions early in June **delayed the planting of crops** like [cotton](#). Heavy rainfall in Florida saturated [pastures](#) in June and drowned crops in eastern [Virginia](#) and North Carolina in August. At the end of August, dry conditions in [Georgia](#) and the Carolinas forced farmers to irrigate to improve crop yields.

Regional Climate Outlook for Autumn 2018

Temperature and Precipitation



NOAA's Climate Prediction Center (CPC), forecasted that warmer-than-normal temperatures are likely to occur for most of the Southeast with the exception of southern Georgia and South Carolina, southeast Alabama, and northern Florida, where no trend is seen. Precipitation is expected to be wetter-than-normal everywhere in the region except for northern Alabama. Drought development is likely in southern Puerto Rico.

Atlantic Hurricane Season

The Atlantic hurricane seasonal [outlook](#) from CPC on August 9th indicates a 60% chance of a below-normal number of named tropical systems this year. This is due to cool ocean temperatures in the eastern Atlantic, Saharan dust, and upper-level wind shear from the developing El Niño. A total of 9-13 named storms are predicted (5 formed by the end of August), including 4-7 hurricanes and 0-2 major (Category 3 or greater) hurricanes. Tropical activity was beginning to increase at the end of summer.

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](#)
- [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](#)

