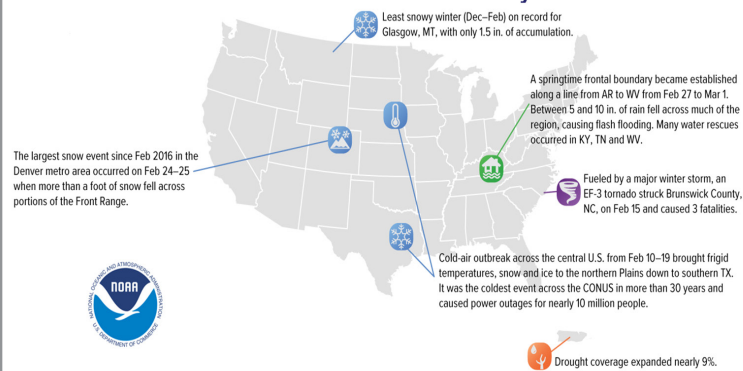


National and Regional Weather Highlights for Winter 2020-2021

U.S. Selected Significant Climate Anomalies and Events for February and Winter 2021



Near-average **temperatures** were observed across the Southeast this winter. Florida observed a below-average monthly mean temperature in December, which was the first time since March 2018. Numerous slow-moving low pressure systems crossed the region throughout the winter, causing **flooding** in local areas. However, other parts of the region reported below average precipitation. A deadly EF-3 tornado occurred in Brunswick County, NC. For more information, see: <https://www.ncdc.noaa.gov/sotc/national>

Highlights for the Southeast

There were **few extremes in winter temperatures** across the region. However, Asheville, NC, Huntsville, AL, Atlanta, GA, and Orlando, FL all recorded their coldest Christmas Day in at least two decades.

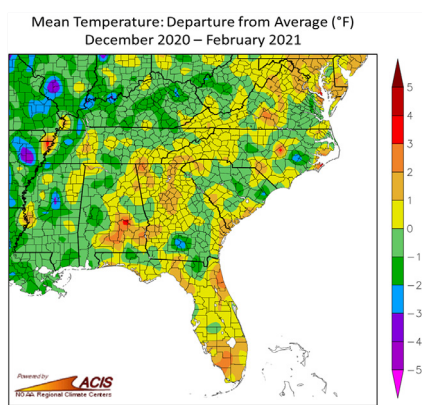
Precipitation was variable across the Southeast for the winter. From February 17th-19th, a **strong low pressure system** tracked eastward across the region and produced over 3 inches of snow for Huntsville, AL, as well as ice to Hanover County, VA. Virginia State Police responded to 385 traffic crashes and 255 disabled vehicles due to the storm.

The instability with a strong low-pressure system contributed to the rare occurrence of **thundersnow** in Wake County, NC on January 28th.

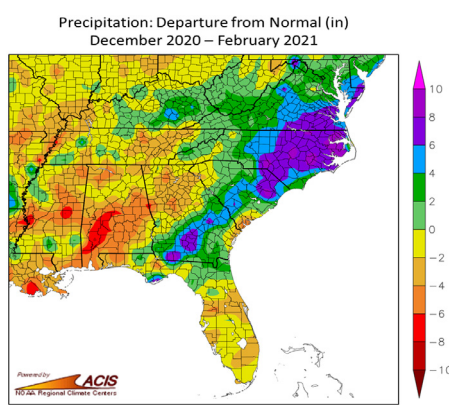
Severe weather occurred across the Southeast this winter with two powerful and deadly EF-3 tornadoes. The first was on January 25th in Jefferson County, AL with one fatality and over 30 injuries. The second was on February 15th in Brunswick County, NC with three fatalities and ten injuries. Strong winds were also observed across the region with a reported gust of 77 mph in Tangier, VA.

Regional Weather Overview for Winter 2020-2021

Temperature and Precipitation Anomalies

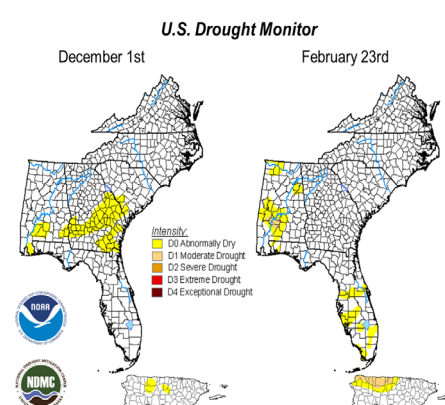


Near-average temperatures were recorded over most of the Southeast. On December 26th, Greensboro, NC dropped to 16 degrees F ending its longest streak of 694 consecutive days with a daily minimum temperature at or above 20 degrees F. In contrast, Augusta, GA and Columbia, SC both set a new winter (DJF) daily maximum temperature record on February 28th at 88 and 86 degrees F, respectively, and Miami, FL observed its fourth warmest February since 1895.



Precipitation ranged from below normal in the Alabama to over 10 inches above normal in parts of eastern NC and southern GA. A few stations observed a winter that ranked within the top five wettest on record, including Raleigh, NC (2nd wettest; 17.21 inches), Richmond, VA (3rd wettest; 15.40 inches) and Elizabeth City, NC (3rd wettest; 17.42 inches). In contrast, parts of Alabama received less than 10 inches of precipitation for the winter (DJF).

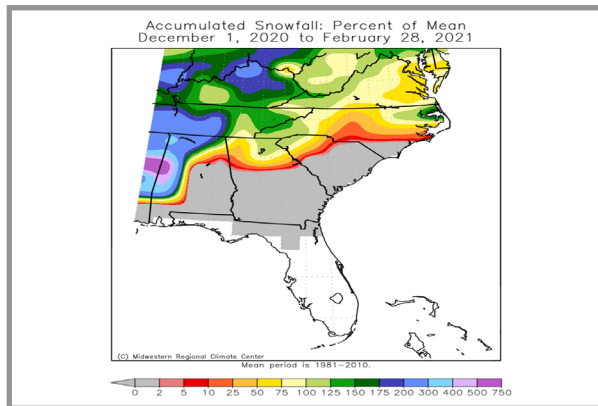
Drought



In early December, there were pockets of abnormally dry conditions (D0) in Georgia, Alabama and Puerto Rico. Below average winter precipitation in Alabama and Puerto Rico led to the development of pockets of moderate drought (D1) by the end of February. Throughout the winter, variable precipitation in Florida increased abnormally dry conditions (D0) across the state, while decreasing the coverage of abnormally dry conditions in Georgia.

Regional Climate Impacts for Winter 2020-2021

Winter Snowfall



Snowfall Percent of Mean DJF (image credit: [MRCC](#))

While measurable snowfall was observed in portions of the region that rarely receive snow, some of the climatologically snowiest locations in the region recorded much-below-normal snowfall during the winter. The **Washington, DC** area received 2.3 inches of snow on January 31st, ending its **second longest streak of no measurable snowfall** over 1 inch. In contrast, snow flurries on December 25th were reported as far south as Charleston International Airport, SC, which is only its second trace of snowfall for Christmas day since 1938. In addition, Asheville, NC observed 1.1 inches, making this the fifth highest snowfall on Christmas Day. In February, **ice was reported** in parts of Hanover County, VA, resulting in over ten thousand customers without power and numerous traffic crashes.

Severe Weather

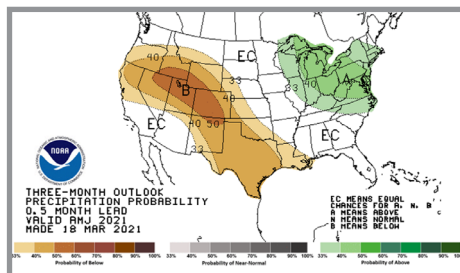
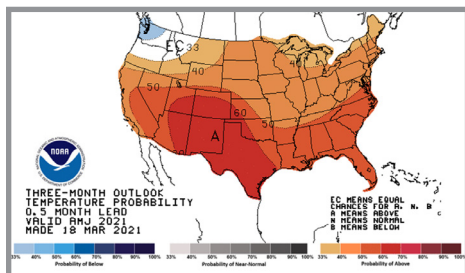
There were **172 reports of severe weather** this winter, which is 93% of the median winter count observed during 2000-2019. **Twenty-four tornadoes** (10 EF-0s, 10 EF-1s, 2 EF-2s, 2 EF-3s) were confirmed from December - February, which is near the average count of 25 tornadoes observed during 2000-2019. An EF-3 tornado occurred on January 25th, resulting in winds of 150 mph and causing **one fatality** in Alabama. Another EF-3 tornado was reported on February 15th in North Carolina, resulting in **three fatalities**. This was the strongest tornado on record for Brunswick County. There were 136 reports of strong thunderstorm winds this winter, 94% of the average 145. **Strong wind gusts** of 77 mph in Tangier, VA, and 76 mph in Panama City, FL, brought down several trees and power lines throughout February.

Agriculture and Livestock

The **wet conditions** across Georgia and North Carolina hindered the harvest of cotton, soybeans, and other crops, plus prevented farmers from applying fertilizer to small grains and winter wheat. Many cattle producers were forced to **rely on hay** due to the rain. In South Carolina, livestock producers had to manage pasture and feed areas more intensively to reduce mud and increase drainage. Crop growers in southern Florida reported higher than normal **disease and pest pressure** on lettuce and beans, due to the saturated fields during December. Producers in Alabama struggled with ice and snow that delayed fieldwork. Cooler weather kept **blueberry bushes dormant** this winter; therefore, early maturity varieties did not blossom in February as they did in 2020.

Regional Climate Outlook for Spring 2021

Temperature and Precipitation



[NOAA's Climate Prediction Center \(CPC\)](#), forecasted that much-above-normal temperatures are likely for the entire Southeast region. Above-normal precipitation is likely for Virginia and North Carolina, with equal chances of above-normal and below-normal precipitation for the rest of the area. Drought development is likely for Florida with drought removal in Georgia and Alabama. Drought conditions are likely to persist in Puerto Rico for the spring.

La Niña

NOAA's Climate Prediction Center indicated on [March 11th](#), that a transition to **ENSO neutral conditions are likely** during the spring 2021 (~60% chance) and continue through the summer. Below-average sea surface temperatures (SSTs) were reported across the western, central, and far eastern Pacific Ocean during February. However, overall, the coupled ocean-atmospheric system is consistent with a weak or decaying La Niña. The current forecast for September- November remains at a lower confidence.

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