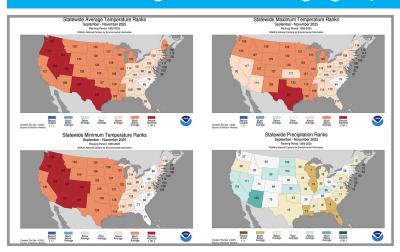
Southeast Region

December 2025

National and Regional Weather Highlights for Autumn 2025



Temperatures in autumn were **above average** across most of the Southeast, except the Carolinas, which were near average. Regionally, it was the **6th driest autumn on record**, and the driest in nearly 50 years. It was the 4th driest autumn on record in Georgia, which recorded less than half of its expected seasonal total, and 6th driest in Florida. Temperatures were **above average** and precipitation was **below average** across Puerto Rico and the Virgin Islands. **Exceptional drought** returned to the region for the first time in two years, while abnormal dryness persisted across the Caribbean. For more information, see <u>NOAA's National Climate Report</u>.

Highlights for the Southeast

One year after recording its wettest autumn on record with 29.57 inches, Tampa, FL recorded its **driest autumn on record** with just 1.16 inches

Repeated **coastal storms** led to significant **beach erosion** across the Outer Banks of NC, where over a dozen **homes collapsed into the ocean**, most in the towns of Buxton and Rodanthe.

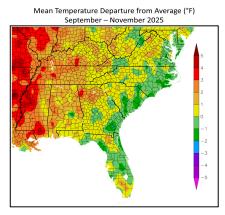
An early-season Arctic outbreak from November 10th to the 12th brought temperatures up to 25 degrees F below normal, including freezing conditions into FL, single-digit lows in the NC mountains, as well as record-early snowfall at coastal locations including Wilmington and Cape Hatteras, NC

Gainesville, FL recorded its **first month on record** with no precipitation in November, breaking the previous record of a trace that had been recorded five times previously; Jacksonville, FL recorded its **2nd month all-time with no precipitation**

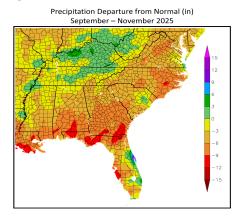
There were <u>six surf zone fatalities</u> and <u>two lightning fatalities</u> in the Southeast this autumn.

Regional Weather Overview for Autumn 2025

Temperature and Precipitation Anomalies

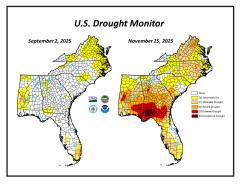


Temperatures were above average across much of the interior of the Southeast, with some parts of AL and GA running over 2 degrees F above average for the season. Atlanta, GA recorded its 5th warmest autumn on record, while Muscle Shoals, AL tied its 5th warmest. In contrast, temperatures were below average across much of FL and the Atlantic coastal plain, with some locations running up to 2 degrees F below average.



Autumn was very dry across most of the Southeast, with many locations running 4 to 8 inches below average. The driest locations were found across southern portions of AL and GA, much of the FL Panhandle, and southwest portions of the Peninsula, where seasonal totals were more than 10 inches below average. Several locations recorded one of their driest autumns on record, including Macon, GA, Augusta, GA, Tallahassee, FL, and Sarasota, FL.

Drought

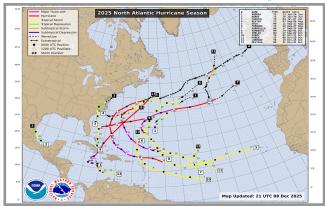


Autumn began with more than 70% of the region free of drought or abnormal dryness. Dry conditions during September and early October led to rapid deterioration, with 2 to 3 category degradations observed across parts of AL, GA, and northern FL, where extreme (D3) drought emerged, as well as across northern VA and eastern NC, where severe (D2) drought developed. Exceptional (D4) drought returned to the region for the first time in two years, affecting north-central FL and extreme southern GA. By the end of the season, over 85% of the region was in drought or abnormal dryness, with more than 25% experiencing at least severe (D2) drought.



Regional Climate Impacts for Autumn 2025

Atlantic Hurricane Season Summary



2025 Atlantic tropical cyclone tracks (source: NOAA/NHC)

The 2025 Atlantic hurricane season saw 13 named storms, five hurricanes, and four major hurricanes (Category 3+). While the number of named storms and hurricanes fell below their 30-year averages, the count of major hurricanes was double the long-term average of two. Notably, three hurricanes (Erin, Humberto, and Melissa) reached Category 5 intensity, an occurrence observed only one other time in 2005. No hurricanes made landfall in the U.S. for the first time in a decade. The only landfalling system was Tropical Storm Chantal, which produced devastating flooding across parts of NC in early July. Although several hurricanes remained offshore (Erin, Gabrille, Humberto, Imelda), they generated high surf and dangerous rip currents that led to dune breaches, coastal erosion, overwash, and hundreds of water rescues in the region. In the Caribbean, multiple systems and their predecessor disturbances (Erin, Imelda, Jerry, Melissa) brought flooding rains, gusty winds, and high surf.

Severe Weather

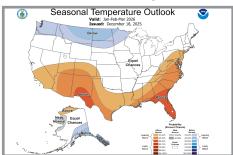
There were **176 reports of severe weather** this past autumn, which matches the median frequency between 2000 and 2024 (100 percent of normal). There were **eight confirmed tornadoes** (4 EF-0s, 4 EF-1s), which is well-below the median frequency of 34 (24 percent of normal). Several of these struck southern portions of AL and northwest FL on the 26th and 27th of October, injuring at least 10 people in an RV park. For the season, there were **142 reports of high winds**, which is above the median frequency of 127 (112 percent of normal). There were also **26 hail reports**, which is above the median frequency of 15 (173 percent of normal). The largest stones were 2 inches, or hen egg-sized, and occurred as part of a severe weather outbreak in early November that also brought 70 mph winds and a weak tornado across parts of AL, GA, and SC.

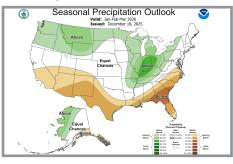
Agriculture and Livestock

Dry conditions across the Southeast in autumn slowed crop maturity, reduced pasture growth, and forced early hay feeding. Peanuts, soybeans, cotton, and pecans were especially stressed, with non-irrigated fields suffering major losses and irrigated farms facing higher costs. Dry soils complicated harvests, particularly for peanuts, and hindered fall vegetable and strawberry planting in the driest areas. Diseases such as sooty blotch and Alternaria further reduced crop quality. An early-season hard freeze in November ended the growing season several weeks earlier than normal, damaging warm-season vegetables and stressing leafy greens, brassicas, and strawberries. Parts of GA also saw hail-related citrus losses.

Regional Climate Outlook for Winter 2026

Temperature and Precipitation





NOAA's Climate Prediction Center (CPC) is forecasting above average temperatures across the Southeast from January to March. Probabilities are highest across FL and southern GA (50-60%). **Below average precipitation** is expected across the region, with the highest probabilities across the northern Gulf Coast and southern GA and SC (50-60%).

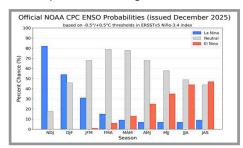
ENSO Forecast

According to the <u>latest ENSO update</u> issued by CPC on December 11th, **La Niña is expected to develop for a second consecutive winter**. However, like last year, **it is expected to be weak**. The most recent outlook indicates a 54% chance that La Niña will persist through February, followed by a **transition to ENSO-neutral during the January-March period** (68% chance). Conditions in the tropical Pacific remain consistent with La Niña, including low-level easterly wind anomalies, enhanced convection over Indonesia, and suppressed convection across the central equatorial Pacific.

Drought

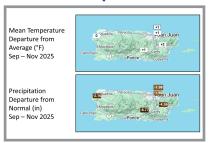


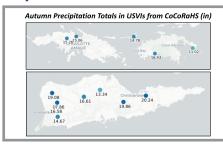
With warmer and drier than normal conditions forecast, **drought is expected to persist** through the January to March period, with **new development** across much of the remainder of the Southeast, except for far interior portions of the region.



Caribbean Climate Overview and Impacts for Autumn 2025

Temperature and Precipitation Anomalies



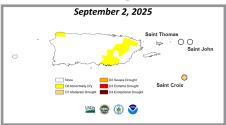


Temperatures were mostly **above average** across PR and the USVIs. Aibonito, PR (1906-2025) recorded its **5th warmest autumn on record**, while Coloso (1899-2025) recorded **one of its top 10 warmest autumns**. Precipitation was **below average** across much of PR, as well as on Saint Thomas and Saint John, while **above average** precipitation was found on Saint Croix. The wettest locations were found in west-central PR where some locations recorded **over 30 inches of precipitation**. In contrast, the driest locations were found across the east-central, southern, and northwestern portions of the island, where several locations recorded **less than 12 inches of precipitation**. Calero Camp (1955-2025), located in the municipality of Aguadilla in northwest PR. recorded its **driest autumn on record** with 6.93 inches.

Notable Weather

Rainfall in September improved soil moisture and crop conditions, though some agricultural wells in southern PR remained below optimal levels. Tropical waves during the month also brought widespread flooding, landslides, water rescues, and some structural damage across the region, with gusty winds contributing to high surf and rip currents. By October, crop stress emerged across southern PR, while reservoir and groundwater levels continued to run low. A waterspout formed over Lago Guajataca early in the month. Rainfall from the precursor to Hurricane Melissa and a tropical wave in early November caused some localized flooding; however, by the end of the season, streamflows, soils, and vegetation were once again drying out, with some rivers near the 10th percentile. A few lightning-related injuries were also reported this past autumn.

Drought

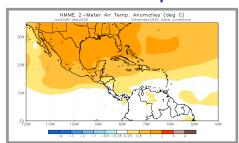


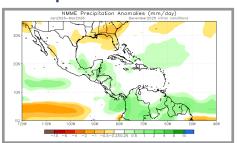


Autumn began with areas of abnormal dryness (D0) across eastern PR and parts of the extreme northwest, while moderate (D1) drought was observed on Saint Croix. Conditions improved during September and early October. However, a return to drier weather later in the season led to an expansion of abnormal dryness (D0) across the central interior and northern slopes of PR, along with a reemergence of abnormal dryness (D0) across the USVIs.

Caribbean Climate Outlook for Winter 2026

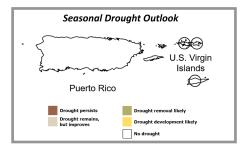
Temperature and Precipitation





According to the <u>North American Multi-Model Ensemble (NMME)</u> **above-average temperatures and precipitation** are expected across the Caribbean during the January to March period.

Drought



According to the CPC, PR and the USVIs are expected to remain drought-free through winter and into early spring. However, the <u>Caribbean Climate Outlook Forum</u> noted that recent dryness ahead of the climatological dry season could lead to longer-term moisture deficits and impacts in the region.

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</u> Assessments

National Sea Grant Office

Southeast and Caribbean Regional Collaboration Team

State Climatologists

Southeast Regional Climate Hub

Southeast Climate Science Center

Community Collaborative Rain Hail and Snow Network

