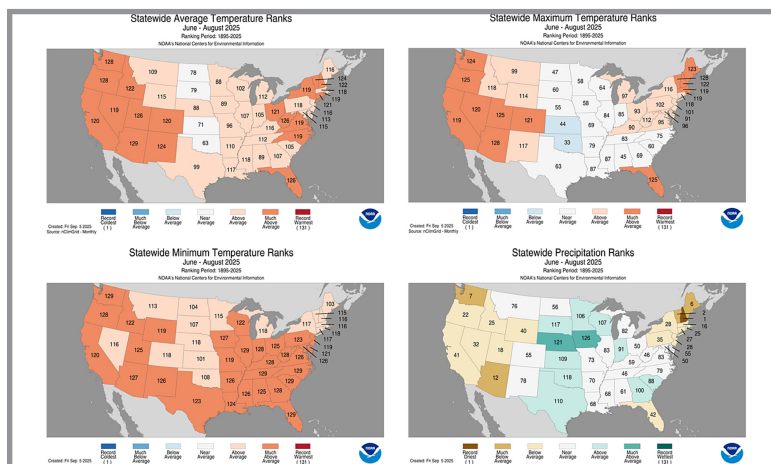


National and Regional Weather Highlights for Summer 2025



Temperatures were **above average** overall in summer but varied by month. July was the **warmest on record** for the Southeast and **2nd warmest all-time**. August was unusually cool, except in FL, with SC recording its **coldest average maximum temperature**. Precipitation was above average in GA and SC but below average in FL. June and August were mostly wet, while July was dry, especially in AL (**6th driest**), but very wet in VA (**6th wettest**). Caribbean temperatures were **above average**, while precipitation was variable. Much of the Southeast remained **drought-free** except southern AL and FL. For more information, see [NOAA's National Climate Report](#).

Highlights for the Southeast

Asheville, NC tied its **warmest month on record** in July (since 1869).

Chapel Hill, NC recorded 8 inches of rain during Tropical Storm Chantal on July 6th, making it the **wettest day on record** (since 1891).

On July 18th, Raleigh-Durham, NC tied its **all-time highest minimum temperature** of 80 degrees F (since 1887).

Tampa, FL recorded its **first 100 degree F temperature on record** (since 1890) and **highest heat index on record** (since 1937) of 119 degrees F on July 27th.

After recording one of their warmest months on record in July, numerous locations recorded **one of their coldest Augusts** on record, and **one of their coldest summer months** in over 30 years.

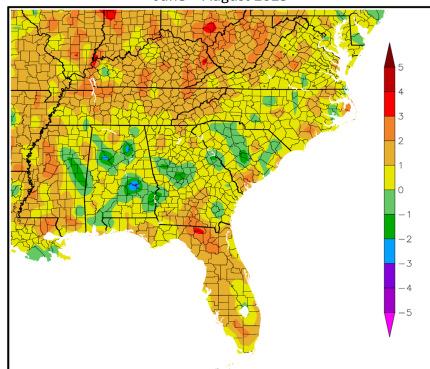
There were **17 surf zone fatalities** and **five lightning fatalities** in the Southeast this summer.

ENSO-neutral persists, and La Niña is **likely to develop** by the end of the year (71% chance) and possibly persist through winter (54% chance).

Regional Weather Overview for Summer 2025

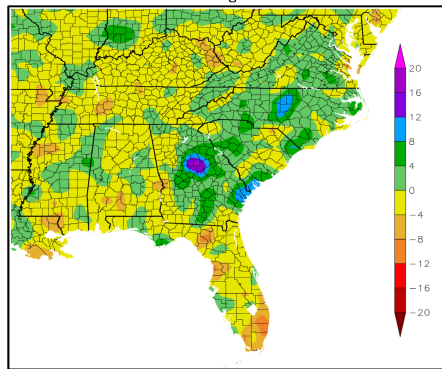
Temperature and Precipitation Anomalies

Mean Temperature Departure from Average (°F)
June – August 2025



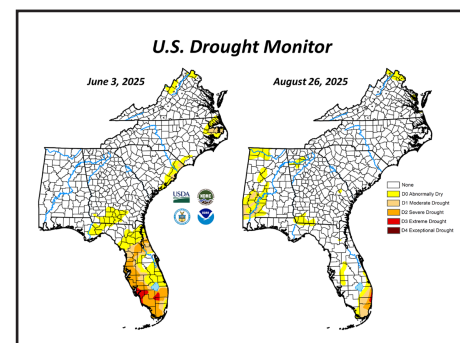
Temperatures were **near average** across much of the interior of the Southeast, with some parts of AL, GA, and the Carolinas running **up to 2 degrees F below average** for the season. In contrast, temperatures were **above average** across the northern and southern ends of the region. Several long-term stations in FL, including Jacksonville, Gainesville, Tampa, and West Palm Beach, recorded **one of their top 5 warmest summers** on record.

Precipitation Departure from Normal (in)
June – August 2025



Precipitation was **above average** across most of the region, particularly across GA, the Carolinas, and VA, where seasonal totals were **5 to 10 inches above average**, with some locations running **more than 12 inches above average**. In contrast, precipitation was **below average** across eastern portions of GA and VA, and much of AL and FL, where **seasonal deficits of 5 to 10 inches**, or only about 50% of expected totals, were observed.

Drought



Summer began with **severe (D2) to extreme (D3) drought** across the FL Peninsula and moderate (D1) drought across the coastal Carolinas. By late June, nearly **90% of the region was free of drought or dryness**. Drier conditions in July brought abnormal dryness (D0) from the Gulf Coast to the Carolinas, with moderate (D1) **drought returning** to parts of AL, GA, and SC. Much of this was **erased later in the season** as cooler, wetter conditions prevailed. **Significant improvements** were also observed across the FL Peninsula. **Late-summer dryness** led to a return of moderate (D1) drought in parts of AL, with abnormal dryness (D0) emerging across northern VA.

Regional Climate Impacts for Summer 2025

Chantal and Erin Impact the Southeast



Waves from Erin batter the Outer Banks (source: [NC SCO](#))

The 2025 Atlantic hurricane season had a relatively quiet start, but **Tropical Storm Chantal** in July and **Hurricane Erin** in August brought significant impacts to the region. [Chantal](#) made landfall just south of Myrtle Beach, SC on July 6th. Rainfall amounts up to 12 inches were recorded in central NC. **Flash flooding** inundated roads, bridges, businesses, and homes. Several rivers shattered records, including the Eno River, which crested over 23 feet. Six flood-related **fatalities** were confirmed, and overall **damages** exceeded \$50 million. On August 16th, Hurricane Erin underwent the **3rd largest 24-hour pressure drop** on record in the Atlantic. Its outer bands brought **heavy rain**, **tropical storm-force winds**, and **heavy surf** over 10 feet to parts of PR and the USVIs. Nearly 150,000 customers **lost power**. As it tracked north, Erin generated 15 to 20 foot waves along the Outer Banks, resulting in **dune breaches** and **major overwash** across Highway 12. Over 70 **rip current rescues** were performed across southeastern NC.

Severe Weather

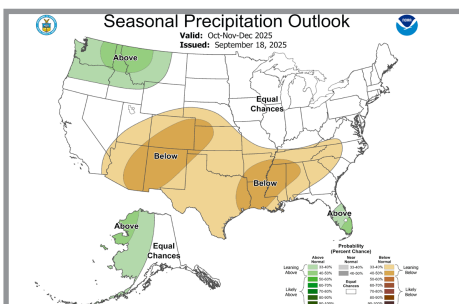
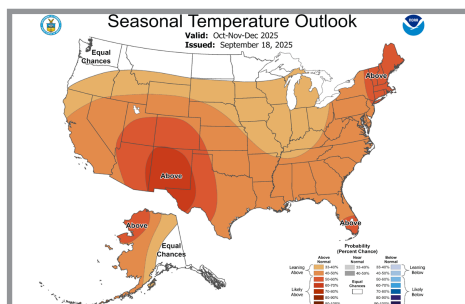
There were **2,009 reports of severe weather** this past summer, which is above the median frequency between 2000 and 2024 (116 percent of normal). There were **14 confirmed tornadoes** (2 EF-U's, 4 EF-O's, 8 EF-1's), which is about half of the median summer frequency. At least **five of these occurred in association with Tropical Storm Chantal** in early July. For the season, there were **1,902 reports of high winds**, which is above the median summer frequency. Wind gusts **over 90 mph** were recorded from a line of thunderstorms that moved across northern portions of AL, GA, and SC on June 7th. Dozens of homes were severely damaged, numerous vehicles were destroyed, and at least one person was killed. There were also **93 hail reports**, which is about half of the median summer frequency. The largest hailstones were **1.75 inches, or golf ball-sized**, in parts of AL and SC on June 25th.

Agriculture and Livestock

Agricultural conditions were marked by rapid crop development, variable moisture availability, and heightened disease pressure. June brought mostly **favorable growing conditions**, with cotton, peanuts, and wheat advancing ahead of schedule, though excessive rainfall in some areas caused **stand issues** and **fungal outbreaks**. Frequent rain and heat spurred **early crop growth** in July, but also worsened disease and insect damage, with **Tropical Storm Chantal resulting in major losses** in central NC. **Dry conditions** in parts of GA and SC stressed peanuts, soybeans, and pastures, while periods of **extreme heat** depleted farm ponds and reduced hay yields. A shift to cooler, wetter conditions in August **eased drought stress** and supported pastures, but persistently high humidity promoted **foliar diseases** in soybeans, cotton, and pecans.

Regional Climate Outlook for Autumn 2025

Temperature and Precipitation

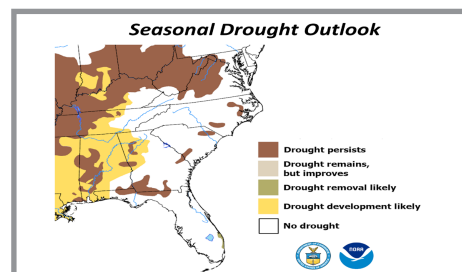


[NOAA's Climate Prediction Center \(CPC\)](#) is forecasting **above average temperatures** across the Southeast from October to December. Probabilities are highest in South FL (50-60%). **Below average precipitation** is expected across the interior of the region, while much of the FL Peninsula is **leaning above average**.

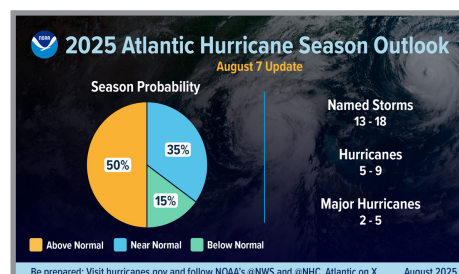
Atlantic Hurricane Season

The [mid-season outlook](#) issued on August 7th continued to predict **above-normal activity**, with as many as 18 named storms (there have been seven as of September 18th). Five to nine of these could become hurricanes (there has been one so far, Hurricane Erin), and two to five could become major hurricanes (Erin was also a major hurricane). The updated outlook continued to reflect **mostly favorable conditions**, including above average ocean temperatures and less wind shear, though some of these have waned recently. Combined with drier air and Saharan dust, this has led to a **lack of storms** during the peak of the Atlantic hurricane season.

Drought

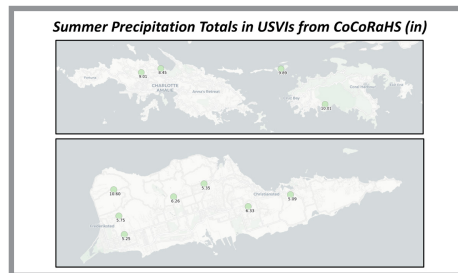
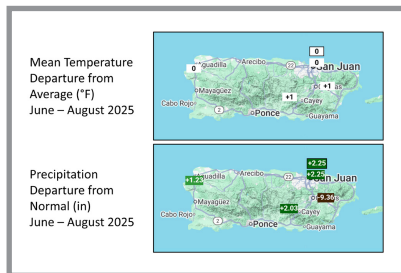


Drought is expected to **persist** across the Gulf Coast, as well as eastern portions of the Carolinas and much of VA, while **new development** is expected across western portions of GA and much of AL. Drought **removal** is expected across South FL.



Caribbean Climate Overview and Impacts for Summer 2025

Temperature and Precipitation Anomalies

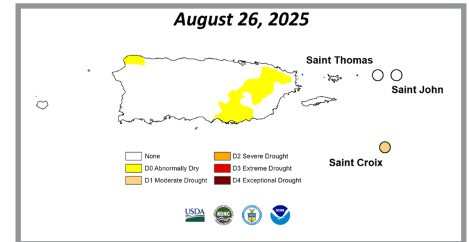
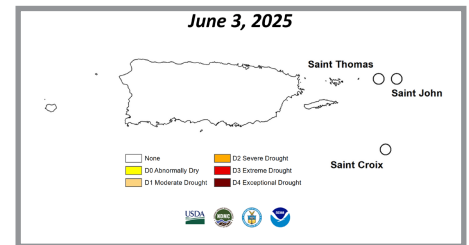


Temperatures were mostly **above average** across PR and the USVIs. Aibonito, PR (1906-2025) tied its **5th warmest summer**, while Coloso (1899-2025) recorded one of its **top 10 warmest summers**. Precipitation was **variable**, with generally below average totals in June and July and above average totals in August. **Hurricane Erin** dropped 4 to 7 inches across much of the region, with some locally higher amounts. The wettest locations were in western PR, where some places recorded **over 25 inches for the season**. In contrast, **dry conditions** prevailed across the eastern interior, with some locations recording just half of their expected seasonal totals. Juncos, PR (1931-2025) recorded its **2nd driest summer** with 10.14 inches. Precipitation was **above average** on Saint Thomas and Saint John but **below average** across much of Saint Croix.

Agriculture and Water Resources

Rainfall from **Hurricane Erin** brought **relief** to parts of PR, improving soil conditions and easing crop stress across the interior and western regions. However, intense downpours also triggered **flash flooding and landslides**. In contrast, drier conditions were observed in the central and eastern interior, where many crops showed **signs of heat stress**. Despite the dryness, reservoir levels remained adequate. The southeast also stayed dry, with groundwater **below optimal levels**. Northern areas saw improved soil moisture and **new crop growth**. The southwest saw replenished soil moisture that helped **pastures recover**. The west, which received the heaviest rain, faced flooding, as well as **weed, pest, and fungal concerns** in many crops. On Saint Thomas and Saint John, farm ponds were **full**, vegetation and crops were **improving**, and livestock was **healthy**. Saint Croix remained mostly dry, **missing out on the rain** from Erin.

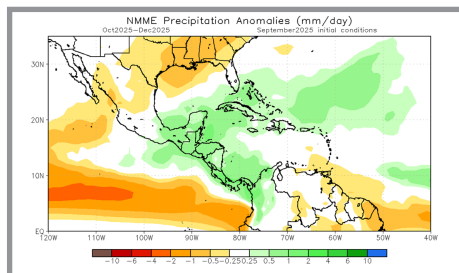
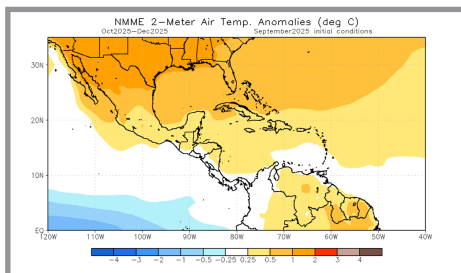
Drought



Dry conditions in June led to **abnormal dryness (D0)** in PR for the first time since **November**. These conditions persisted along the northwest and southern coasts through mid-summer, with dryness emerging in the eastern interior. **Moderate (D1) drought returned in August for the first time in over six years** but was eliminated by the end of the season. In the USVIs, abnormal dryness (D0) re-emerged in July, with **moderate (D1) drought developing on Saint Thomas and Saint Croix for the first time in over a year**. By the end of the season, drought and dryness were eliminated on Saint Thomas and Saint John but persisted on Saint Croix.

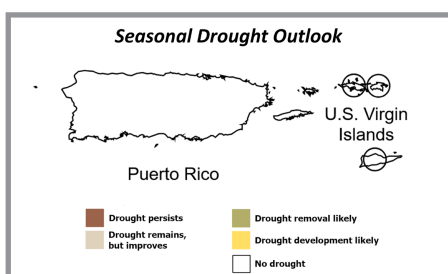
Caribbean Climate Outlook for Autumn 2025

Temperature and Precipitation



According to the [North American Multi-Model Ensemble \(NMME\)](#), **above-average temperatures and precipitation** are expected across the Caribbean during the October-December period.

Drought



According to the CPC and [Caribbean Climate Outlook Forum](#), PR and the USVIs are expected to **remain drought-free through autumn and into early winter**. Factors include the expectation of above average precipitation, the seasonal transition period, and potential for above-normal tropical activity.

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](#)

[Community Collaborative Rain Hail and Snow Network](#)