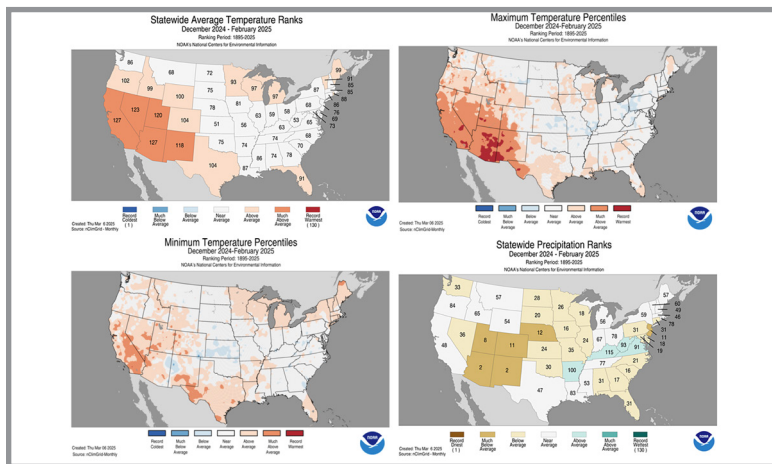




National and Regional Weather Highlights for Winter 2024-2025



The mean winter temperature was **near average** across the Southeast, but there was **much variability**. January was **one of the coldest months** in over a decade, while February was much above average, with Florida recording its **7th warmest February**. Precipitation was below average, especially in January, with North Carolina recording its **7th driest January**. The exception was Virginia, which recorded its **4th wettest February**. Temperatures and precipitation were **above average** across most of the Caribbean. **Drought** was largely eliminated across the interior of the region but emerged across the Florida Peninsula. For more information, see [NOAA's National Climate Report](#).

Highlights for the Southeast

Mobile, AL recorded a temperature of 6 degrees F on morning of January 22nd, which **tied for the third coldest temperature on record** (since 1871).

On January 10th, Greenville-Spartanburg, SC and Charlotte, NC ended their **longest snow droughts on record** of 1,089 and 1,076 consecutive days, respectively, without measurable snow.

Charlotte, NC and Raleigh-Durham, NC recorded their **second and third earliest 80 degree F day on record**, respectively, on February 4th, **nearly two months earlier than average**.

Record-breaking wind gusts were recorded across parts of Alabama during a severe weather outbreak on February 15th and 16th, including 84 mph at Muscle Shoals, 75 mph at Huntsville, and 70 mph at Montgomery.

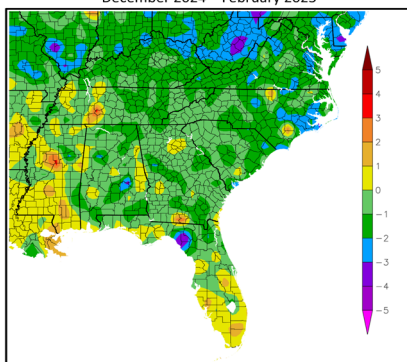
There were 46 confirmed tornadoes in the Southeast in December, **breaking the previous December record** of 29 tornadoes set in 1983.

There were [three rip current fatalities](#) in Puerto Rico this winter.

Regional Weather Overview for Winter 2024-2025

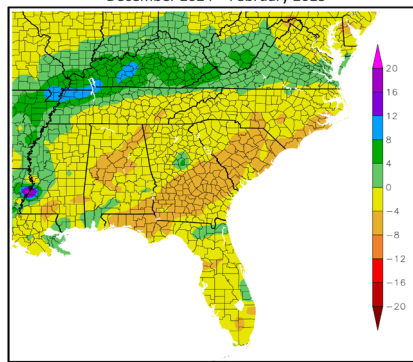
Temperature and Precipitation Anomalies

Mean Temperature Departure from Average (°F)
December 2024 – February 2025



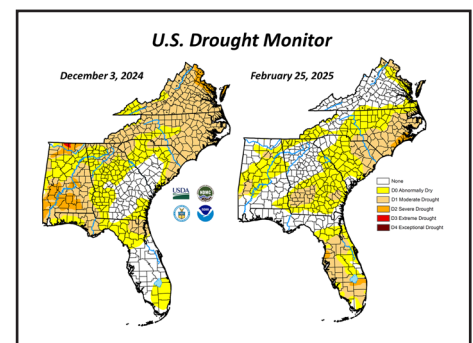
Temperatures were **near to below average** across most of the Southeast this winter. The greatest departures were found across central and eastern portions of NC and VA, where **several locations were 2 to 3 degrees F below average**. In contrast, temperatures were 1 to 2 degrees F **above average** across **South FL**. There was **much variability**, with January ranking as the 16th coldest and February ranking as the 10th warmest, regionally (since 1895).

Precipitation Departure from Normal (in)
December 2024 – February 2025



Precipitation was **below average** across much of the Southeast this winter. The driest locations extended from the northern Gulf Coast through eastern portions of GA and the Carolinas, as well as central portions of AL, where seasonal totals were **4 to 8 inches below average**. Some locations recorded [one of their driest winters on record](#). In contrast, much of VA saw **above average** precipitation this winter.

Drought

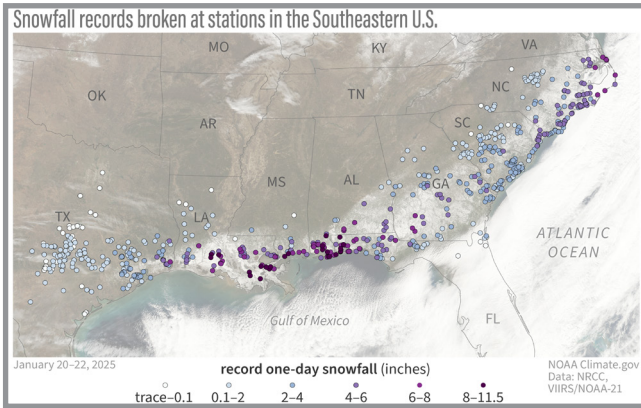


Winter began with **about half of the region in at least moderate (D1) drought**. This included much of AL, NC, and VA. **Severe (D2) drought** was found across southern portions of AL and northern portions of VA, with a very small pocket of **extreme (D3) drought** across northern AL. These areas saw **significant improvements**, particularly in February. Drought was also **eliminated** across the FL Panhandle and much of the interior and northern parts of the region. On the other hand, **moderate (D1) and severe (D2) drought emerged** across parts of South FL, with **dryness returning** across eastern portions of GA and SC.



Regional Climate Impacts for Winter 2024-2025

Historic Snow Blankets Southern Beaches



Record 1-day snowfall from January 20-22 (source: NOAA)

A historic winter storm swept across the Gulf Coast and Southeast from January 21st to 23rd, bringing 5 to 10 inches of snow to many areas, including some beaches. **Mobile, AL** recorded 7.5 inches, breaking its previous record set back in 1881, while **Pensacola, FL** saw 8.9 inches, smashing its old record of 2.3 inches. There were multiple reports of 10 inches near Pensacola, which, if verified, would far surpass the state record of 4 inches set in 1954. **Tallahassee, FL** recorded 1.5 inches, its second snowiest day, and **Jacksonville, FL** saw measurable snow for the first time in nearly 35 years. **Albany, GA** reported 7.5 inches, breaking its previous record set in 1973. The **Outer Banks** recorded over 8 inches, the most in a decade, and parts of southeastern NC saw their biggest snowstorm in 35 years. Another major winter storm on February 19th and 20th dumped over 10 inches in Virginia Beach and northeastern North Carolina, marking their biggest snowstorm in several decades.

Severe Weather

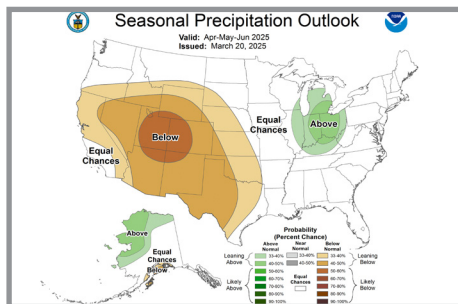
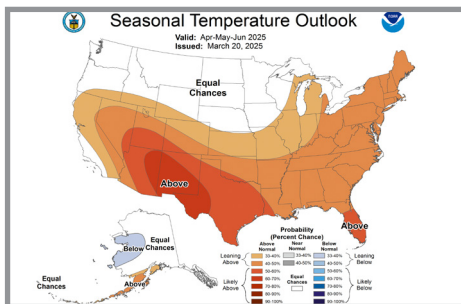
There were **515 reports of severe weather** this past winter, which is nearly double the median frequency observed between 2000 and 2023 (181 percent of normal). There were **63 confirmed tornadoes** (33 EF-0s, 28 EF-1s, 2 EF-2s), which is more than double the median winter frequency. Most of these occurred as part of a **severe weather outbreak on the 28th and 29th of December** that stretched from southern AL to central NC. Several injuries were reported, including three in the Atlanta metro area. For the season, there were **444 reports of high winds**, which is more than three times the median winter frequency (315 percent of normal). There were also eight hail reports, which is below the median winter frequency (57 percent of normal). The largest hailstones were **1.75 inches (golf ball-sized)** near Columbia, SC and Raleigh, NC on the 18th and 31st of December, respectively.

Agriculture and Livestock

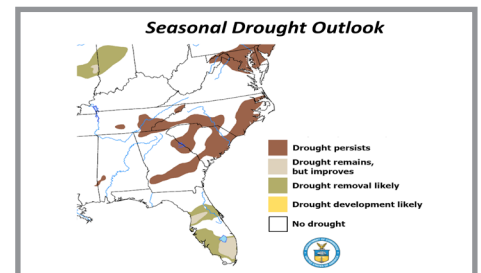
Unseasonably cold temperatures and winter precipitation caused **widespread agricultural damage** across the Southeast. **Snow and ice** delayed fieldwork, damaged trees, and stunted ryegrass and winter wheat in parts of AL, GA, and SC. Farmers relied heavily on supplemental feed due to **poor pasture conditions**, causing shortages. Citrus, strawberries, and leafy greens suffered **freeze damage**, while snow and ice **collapsed nurseries** along the FL Panhandle. Despite some moisture from melting snow, drought persisted in many areas, keeping **farm pond levels low** and **increasing the need for irrigation**. Early blooms worried growers about the **risk of a spring freeze**, while **winter wheat and grazing conditions improved** with rainfall. Vegetable harvests continued despite freeze losses, and farmers **began spring planting** where the weather allowed. Field preparations ramped up for **corn planting**, which was already underway in some areas.

Regional Climate Outlook for Spring 2025

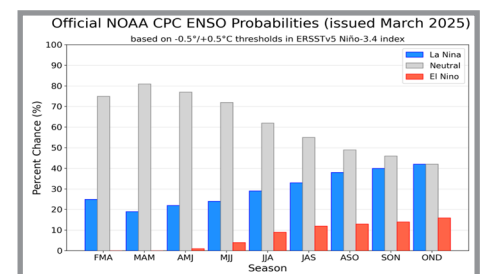
Temperature and Precipitation



Drought



Drought is expected to **persist** across the middle of the region, as well as eastern portions of the Carolinas and northern VA. **Improvements** are expected across the FL Peninsula. The **risk of rapid onset drought** will be monitored over the coming months.



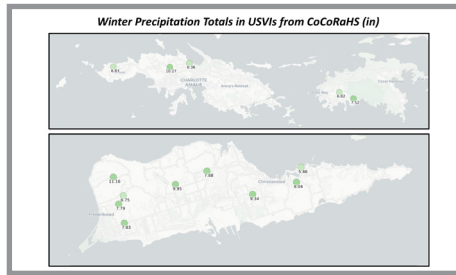
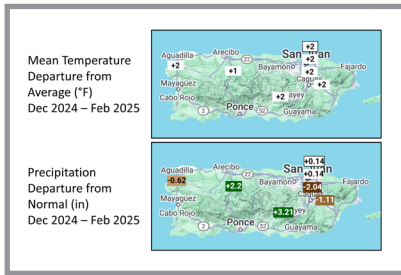
ENSO Forecast

According to the [latest ENSO update](#) issued by the CPC on March 13th, oceanic and atmospheric conditions indicate a **weakening La Niña**, with a **transition to ENSO-neutral** expected within the next month. ENSO-neutral conditions are projected to **persist through the summer**, with a greater than 60% chance, while the likelihood of **La Niña returning in the fall** remains below 50%.



Caribbean Climate Overview and Impacts for Winter 2024-2025

Temperature and Precipitation Anomalies

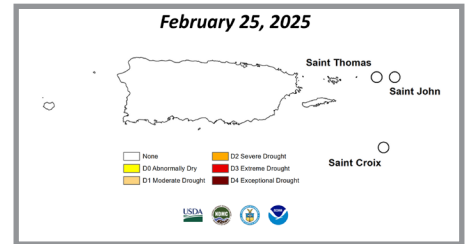
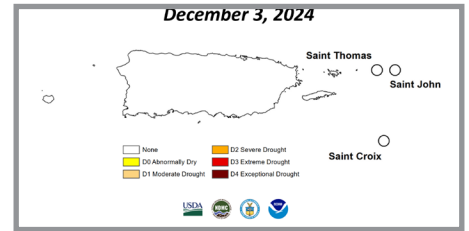


Temperatures were **above average** across PR and the USVIs this winter. After recording its warmest summer and autumn on record, **San Juan, PR tied 2019-2020 for its warmest winter on record** (since 1898). Several other locations, including Aibonito, Dos Bocas, Juncos, Coloso, and Trujillo Alto experienced **one of their warmest winters on record**, while Saint Thomas recorded **one of its 10 warmest winters on record**. Precipitation was **variable** across PR, with above average totals across the interior and eastern portion of the island, and below average totals across the south coastal region and northwest slopes. Precipitation was **near to above average** across the USVIs.

Agriculture and Water Resources

Generally wet conditions significantly impacted agricultural activities and crops. Farmers **struggled to access fields** for essential tasks like weeding and pruning. Excess moisture **increased disease pressures**, including fungal infections and root rot, resulting in crop losses. **Landslides and soil erosion** damaged grazing areas; however, some **non-irrigated crops**, like bananas, grasses, and hay, **benefited from the moisture**. Meanwhile, dry conditions across the southern slopes **heightened fire risk**, with high winds drying out vegetation and cracking soils. Western portions of PR also faced **drought stress**, which impacted bananas, citrus, and cacao, and forced producers to **rely on irrigation**. In the USVIs, rainfall helped **raise groundwater levels**, especially on Saint Thomas and Saint Croix. Reservoirs on PR remained at **optimal levels**, except in the northwest. Wells across the southern slopes also dropped **below optimal levels**.

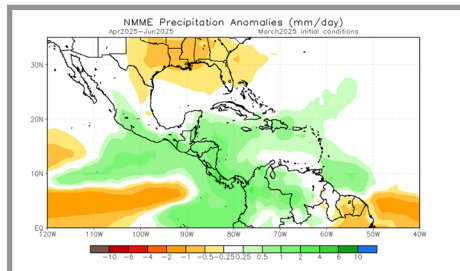
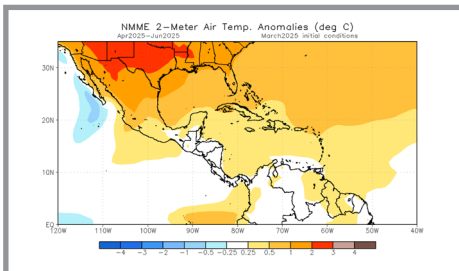
Drought



The Caribbean **remained free of drought this winter**, continuing a streak that began in PR last April and in the USVIs last February. This marks the **longest such streak in PR in nearly six years**, and the longest such streak in the USVIs since the U.S. Drought Monitor was introduced on the islands in 2019.

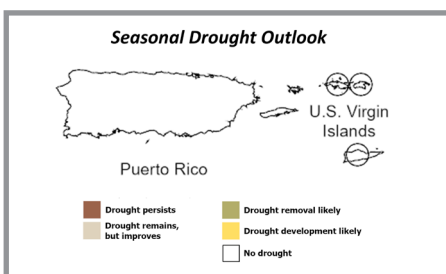
Caribbean Climate Outlook for Spring 2025

Temperature and Precipitation



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

Drought



According to the CPC, **no new drought development is expected** across PR and the USVIs through spring and into early summer. However, the [Caribbean Climate Outlook Forum](#) has issued **short-term drought alerts** for the USVIs and portions of PR that experienced moisture deficits during the dry season.

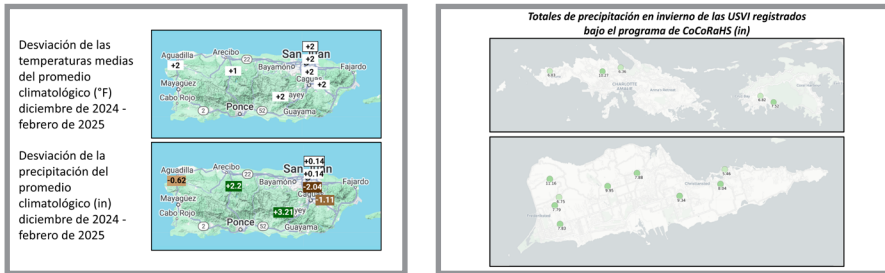
Southeast Region Partners

- [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](#)



Perspectiva general del clima e impactos en el Caribe durante el invierno de 2024-2025

Anomalías de temperatura y precipitación



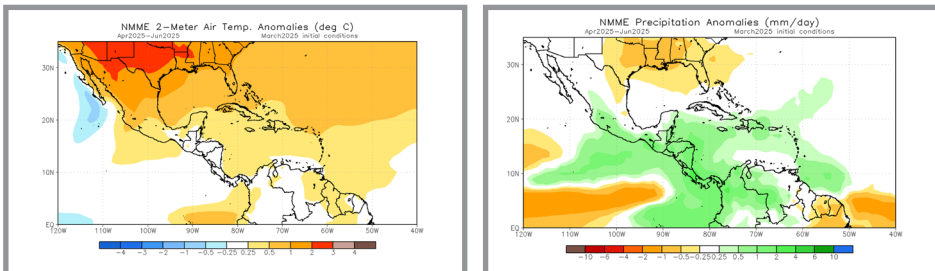
Las temperaturas estuvieron por encima del promedio en Puerto Rico (PR) y las Islas Vírgenes Americanas (USVI, por sus siglas en inglés) este pasado invierno. Luego de registrar su verano y otoño más cálido en récord, este invierno empató los registros con el invierno de 2019-2020 en San Juan, PR como el más cálido (registros desde 1898). En otros lugares, tales como Aibonito, Dos Bocas, Juncos, Coloso y Trujillo Alto, tuvieron uno de los inviernos más cálidos en su historia, mientras que St. Thomas tuvo uno de los 10 inviernos más cálidos en su historia. Las cantidades de precipitación fueron variables a través de PR, con totales por encima del promedio en el interior y este de la isla, y por debajo del promedio en la región costera sur y las laderas del noroeste. En las USVI, la precipitación estuvo entre cercana a por encima del promedio.

Agricultura y recursos hidrológicos

Las condiciones generalmente húmedas afectaron significativamente las actividades agrícolas y los cultivos. Los agricultores presentaron dificultades para acceder a los campos para realizar tareas esenciales como la poda y el deshierbe. El exceso de humedad aumentó la presión de enfermedades, incluyendo las infecciones por hongos y la descomposición de las raíces, lo cual resultó en pérdidas de cultivos. Los deslizamientos de terreno y la erosión del suelo causaron daños a las áreas de pastoreo; sin embargo, algunos cultivos no irrigados, tales como los guineos, los pastos y el heno se vieron beneficiados por la humedad. Mientras tanto, las condiciones secas en las laderas del sur aumentaron el riesgo de incendio, con fuertes vientos que secaron la vegetación y agrietaron el suelo. Las porciones del oeste de PR también enfrentaron estrés por sequía, lo cual impactó los cultivos de guineos, cítricos y cacao, y obligaron a los productores a depender de la irrigación. En las USVI, las lluvias contribuyeron a elevar los niveles de agua subterránea, especialmente en St. Thomas y St. Croix. Los embalses de PR se mantuvieron en niveles óptimos, excepto en el noroeste. Los pozos de las laderas del sur también cayeron por debajo de sus niveles óptimos.

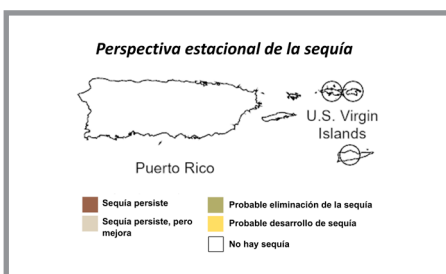
Perspectiva del clima en el Caribe para la primavera de 2025

Temperatura y precipitación



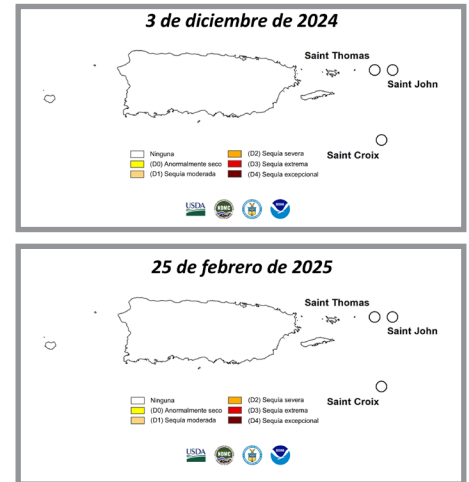
Según el conjunto multi-modelo norteamericano (NMME, por sus siglas en inglés), se esperan temperaturas y precipitación por encima del promedio a través del Caribe durante el periodo de abril a junio.

Sequía



Según el Centro de Predicciones Climáticas (CPC, por sus siglas en inglés), no se espera que se desarrollen condiciones de sequía en PR y las USVI durante la primavera o hasta principios del verano. Sin embargo, el Foro de Perspectiva del Clima en el Caribe ha emitido unas alertas a corto plazo para las USVI y porciones de PR que han experimentado déficits de humedad durante la temporada seca.

Sequía



El Caribe permaneció libre de sequías este invierno, continuando una racha que comenzó en abril del año pasado en PR y en febrero en las USVI. Esto marca la racha más extensa sin sequía en casi 6 años para PR, y desde que se introdujo el Monitor de Sequía de los Estados Unidos en el 2019 para las USVI.

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