

Caribbean Climate Outlook Newsletter - July to September 2025

For climate information specific to your country, please consult with your national meteorological service.
CariCOF outlooks speak to recent and expected seasonal climate trends across the Caribbean in general.

BRIEF SUMMARY: March to September 2025

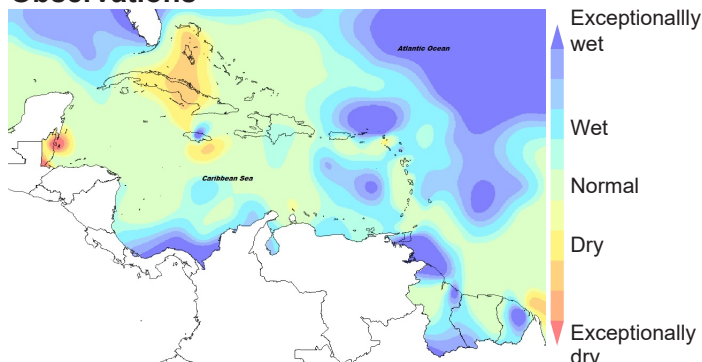
March to May 2025: North Atlantic ocean temperatures have cooled to below average in the Caribbean Sea and further east, but remained above average in the subtropics. This, along with drought, has fueled above average air temperatures in The Bahamas, Belize and parts of Cuba. Apart from the latter areas, and locally in St-Martin, the Caribbean region observed at least the usual rainfall totals.

July to September 2025: The forecast ENSO neutral conditions in the Pacific, a return to near-average sea surface temperatures in the Tropical North Atlantic, and persistent unusual warmth north of the Caribbean imply: (i) recurrent excessive humid heat, culminating in heatwaves as the Caribbean Heat Season peaks in August and September; (ii) rainfall intensity and shower frequency should rise towards September, resulting in *high to extremely high* potential for flooding, flash floods, cascading hazards and associated impacts; (iii) increasing Atlantic Hurricane Season activity towards September and, potentially, also during July and August whenever intrusions of the dusty Saharan Air Layer are few around and east of the Caribbean. By contrast, Saharan dust episodes, combined with slackened winds, produce hot and humid spells with reduced air quality, all the while stifling intense shower and tropical cyclone activity.

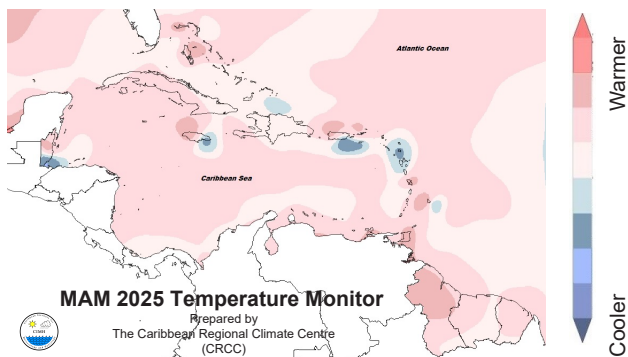
LOOKING BACK:

March - April - May (MAM) 2025

Observations



♦ **RAINFALL:** Parts of the Northwestern Bahamas and Belize, Cuba, St-Martin very dry; Anguilla, several parts of the Guianas, central Jamaica, St. Thomas, southern Trinidad very wet.



♦ **TEMPERATURE:** Most locations 0.25-1.5°C warmer than usual; Antigua, southern portions of Belize, Dominica, Guadeloupe, southeast Jamaica and St. Croix slightly cooler than usual.

Notable Climate Records in MAM 2025:

WET: 2 locations in Guyana and 1 in Trinidad reported record-high rainfall totals (~195% to 245% of avg.) for this period.

DRY: 1 location in Belize and 1 in Cuba reported record-low rainfall totals (~10% to 25% of avg.) for this period.

HOT: 1 location in Belize reported record-high mean temperatures.

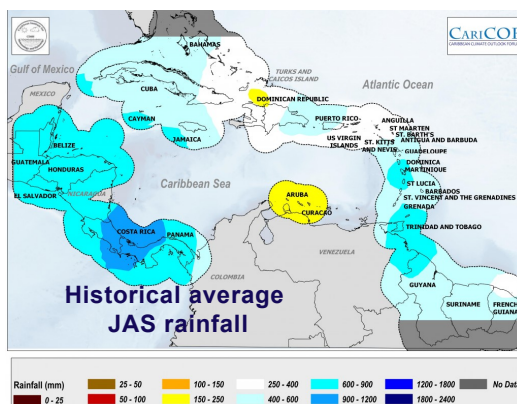
More at <https://carogen.cimh.edu.bb/index.php/component/countrydata/>

June 2025

find out more by using the clickable images and headings or visit rcc.cimh.edu.bb

WHAT NEXT?

Rainfall patterns June-August-September (JAS)



Belize & C'bean Islands north of 16°N:

Jul to Aug - wet season. Often includes a mid-summer dry spell.
Sep - wet season. Usually frequent heavy showers.

C'bean Islands south of 16°N (except ABC Islands):

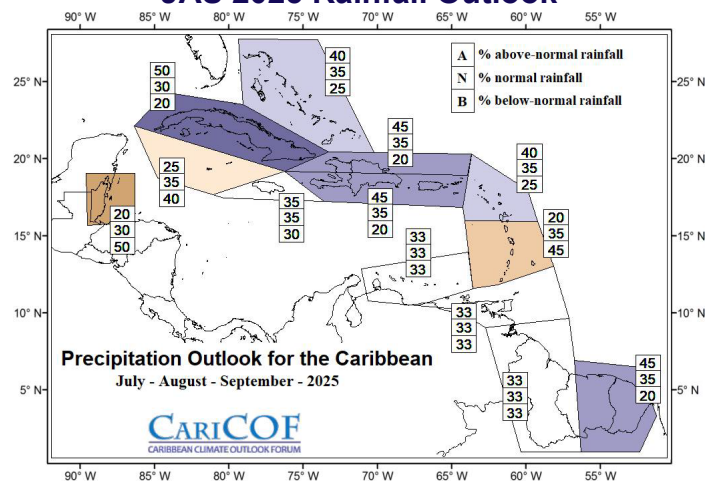
Jul to Sep - wet season. Increasingly frequent heavy showers.

ABC Islands: Mostly dry with occasional wet spells.

Guianas:

Jul to Aug - long wet season. Heavy showers are frequent. Sep - dry season. Heavy showers at times.

JAS 2025 Rainfall Outlook



Precipitation Outlook for the Caribbean July - August - September - 2025

Confidence (in %) for rainfall to be:

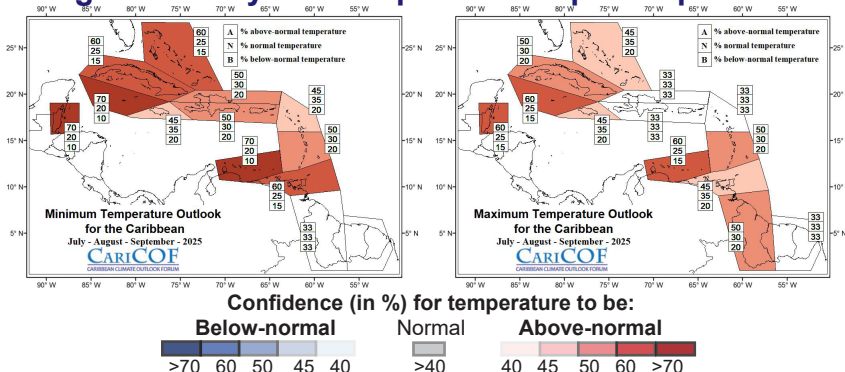


Rainfall totals from July to September are forecast to be the usual or higher in The Bahamas, Cuba, eastern parts of the Guianas, Hispaniola, Puerto Rico and the Leeward Islands, but the usual or less in Barbados, Belize, the Cayman Islands, and the Windward Islands (*medium to high confidence*).

White areas show where the forecast indicates little information on rainfall totals.

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Night- and daytime temperatures up to September



JAS night-time and daytime temperature are forecast to at least as high as usual (*medium to high confidence*). Spells of hazardous, humid heat should ramp up into September in the ABC Islands, the Bahamas, Belize and the Greater Antilles. Wind-exposed areas in the Lesser Antilles and the Guianas might be spared intense heatwaves until early-August.

Wet days and wet spells up to September

What usually happens from July to September?

- Number of wet days: roughly 35 to 50 in flatter areas of the islands, 50 to 65 in mountainous areas and in the Guianas (ABC Is. 5 to 15).
- # of wet spells: 2 to 6 (ABC Islands: 1 to 4), of which 1 to 3 are very wet (ABC Is: up to 2)
- # of extreme wet spells: up to 1 (or 2 in mountainous areas).

Forecast and Implications:

- *High* potential for long-term flooding, flash floods and related hazards from very wet and extreme wet spells.
- Increasingly frequent disruptions of outdoor activities.
- Increasing surface wetness makes environmental conditions more conducive to moisture-related pests but inhibits wildfires.
- Rising water levels in rivers, large water reservoirs and soils.
- Compared to Belize and the islands, opposite trends are expected after July in the Guianas.

Drought conditions

Lastest drought situation: *Severe* (or worse) short-term drought has developed in the Northwestern Bahamas, southwest and northeast Belize, Central Cuba; *severe* (or worse) long-term drought in southwest Belize, The Bahamas, northern Dominican Republic, and southwest Jamaica.

Short-term drought *might possibly develop* in central and northern Belize.

Long-term drought is evolving in the Northern Bahamas and *might possibly develop* in the Northwestern Bahamas.

BRIEF CLIMATE OUTLOOK - October to December 2025

This period marks the transition out of Caribbean Wet Season, the Atlantic Hurricane Season and the Heat Season and into the cooler, early Dry Season in December. The tropical North Atlantic Ocean is forecast to remain slightly warmer than average in and around the north of the Caribbean region and the Guianas. Unusually high air temperatures will most likely prevail with significant heat stress to ease in October and mild temperatures returning in December. The *risk* of severe weather impacts, including flooding, flash floods, and cascading impacts is expected to be *higher* than usual, while rainfall totals might be even higher than usual. Hurricane season activity may be unusually high, particularly in areas north and west of unusually warm waters. *For temperature and precipitation outlooks for OND 2025, please visit rcc.cimh.edu.bb/caricof-climate-outlooks.*

What influences the next season?

El Niño Southern Oscillation (ENSO)

Recent observations: Weak La Niña conditions have subsided in February, with Sea Surface Temperatures (SSTs) in the Eastern Equatorial Pacific running near average, in other words, ENSO neutral conditions.

Model forecast and guidance: The forecast models forecast ENSO neutral conditions in JAS (~70% confidence), and a chance for remaining neutral through OND (~45-50% confidence), though there is a slightly lower chance that La Niña conditions might return (~35-40% confidence).

Expected impacts on rainfall and temperatures: ENSO neutral conditions do not contribute to seasonal forecast skill, whereas a return to La Niña would increase the odds of a wetter OND, except in the northern Caribbean, and Atlantic Hurricane Season activity would *unlikely* be muted.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: SSTs in the Tropical North Atlantic (TNA) are significantly cooler than around the same time in 2024. SSTs currently run 0-0.5°C below average in the eastern TNA, whereas, unseasonably warm SSTs north of the Caribbean Sea run around 0.5-1°C above average.

Expected conditions: Models are forecasting persistently warm SST anomalies of 0.2-0.5°C above average in JAS and in OND around Belize, the Greater Antilles and, especially the Lucayan archipelago.

Expected impacts: Warm SSTs around the Caribbean tend to contribute to higher air temperatures, humidity, rainfall totals, increased frequency of severe weather, incl. tropical cyclones. Spells of extreme heat are expected during the Heat Season, but less than in 2024.

Climate outlooks - background

The Caribbean Climate Outlooks are prepared by the Caribbean Climate Outlook Forum (CariCOF). The Caribbean Institute for Meteorology and Hydrology, in its role as WMO Regional Climate Centre, coordinates the CariCOF process. Contributors to the Outlooks are the Meteorological Services from the region. The Precipitation and Temperature Outlooks are issued in the form of a map, which shows regions where the forecast rainfall or temperatures have the same probabilities to be:

Above-normal (A)	- within the wettest/hottest third of the historical record
Near-normal (N)	- within the middle third of the historical record, i.e. a range called the 'usual'
Below-normal (B)	- within the driest/coldest third of the historical record

CariCOF Outlooks offer consensus-based information averaged across multiple territories. In some cases, individual national results may differ from region wide results. To get information on your specific country context, please consult your National Meteorological and Hydrological Services and/or any national level bulletins they may provide.

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