

Caribbean Climate Outlook Newsletter - June to August 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: February to August 2025

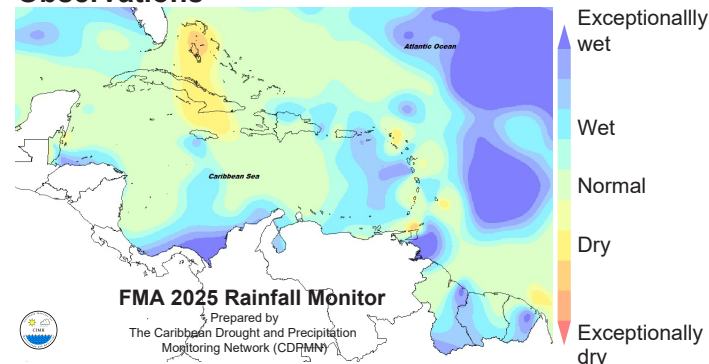
February to April 2025: Tropical North Atlantic ocean temperatures have cooled to below average eastwards of the Caribbean, but remained above average around the region, fuelling above average air temperatures. Apart from northwestern parts of the Bahamas and Central and Eastern Cuba, the Caribbean region observed at least the usual rainfall totals.

June to August 2025: ENSO neutral conditions in the Pacific, combined with unusually warm waters around the Caribbean and, temporarily, cooler waters in the eastern Tropical North Atlantic imply: (i) a Caribbean Heat Season with the *possibility* of heatwaves, gradually ramping up, but *unlikely* to match 2023 and 2024; (ii) rainfall intensity and shower frequency should rise, resulting in *high* to *extremely high* potential for flooding, flash floods, cascading hazards and associated impacts; (iii) an intense first half of the Atlantic Hurricane Season, with a *likely* number of named storm between three and ten in this period. Forecasts of Saharan dust intrusions only show useful skill up to one or two weeks ahead. Historically, such episodes tend to be frequent through August and tend to produce spells of hot and humid conditions with reduced air quality, all the while stifling intense shower and tropical cyclone activity.

LOOKING BACK:

February - March - April (FMA) 2025

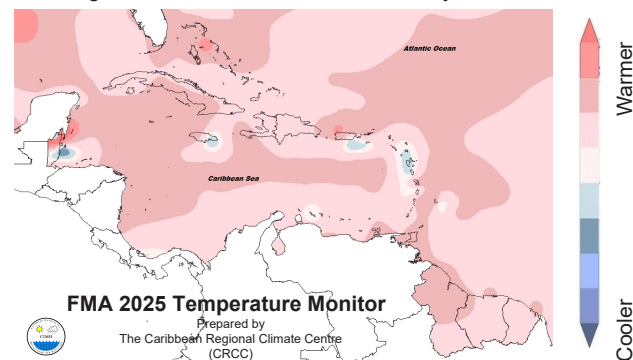
Observations



FMA 2025 Rainfall Monitor

Prepared by
The Caribbean Drought and Precipitation
Monitoring Network (CDPMN)

♦ **RAINFALL:** Parts of the Northwestern Bahamas very dry; Dominica, several parts of the Guianas, eastern Puerto Rico, US Virgin Islands, southern Trinidad very wet.



FMA 2025 Temperature Monitor

Prepared by
The Caribbean Regional Climate Centre
(CRCC)

♦ **TEMPERATURE:** Most locations 0.25-1.5°C warmer than usual, with parts of the Northwestern Bahamas and northern Belize exceeding +1.5°C anomaly; Antigua, the central coast of Belize, Dominica and Guadeloupe slightly cooler than usual.

Notable Climate Records in FMA 2025:

WET: No locations reported record-high rainfall totals for this period.

DRY: No locations reported record-low rainfall totals for this period.

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

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

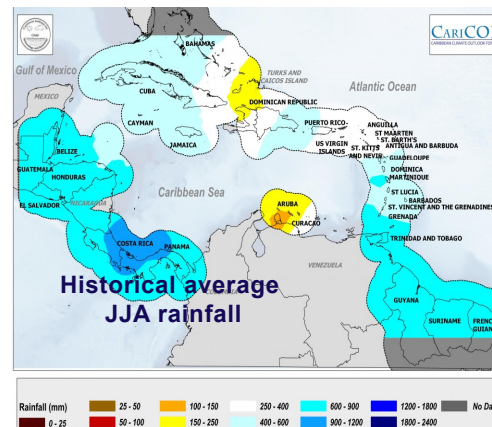
May 2025

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

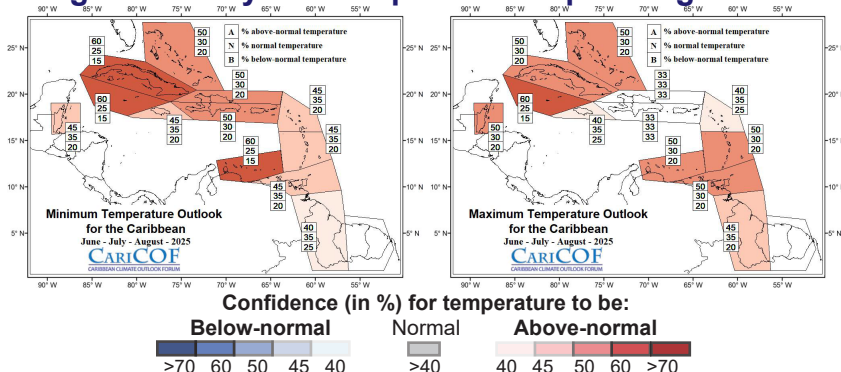
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WHAT NEXT?

Rainfall patterns June-July-August (JJA)



Night- and daytime temperatures up to August



JJA night-time and daytime temperature are forecast to be at least as high as usual (*high confidence*). Spells of hazardous, extreme heat could ramp up into August 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 August

What usually happens from June to August?

- Number of wet days: 30 to 45 in flatter areas of the islands. 50-65 in mountainous areas and Guianas (ABC Is. 5 to 15).
- # of wet spells: 3 to 6 (ABC Islands: up to 3), of which 1 to 3 are very wet (ABC Is: up to 2)
- # of extreme wet spells: up to 1 or 2.

Forecast and Implications:

- The potential for flooding, flash floods and cascading impacts arising from runoff during intense rainfall events will be *high*, particularly in mountainous areas and in the Guianas.
- Soil moisture and recharge rates in water reservoirs will *likely* accelerate during frequent wet spells.
- Fewer wet days than usual in this period translates to fewer rainfall disruptions of outdoor activity, slower decrease in wildfire potential in the Antilles, Belize and coastal Suriname.

Drought conditions

Latest drought situation: *Severe* (or worse) short-term drought has developed in the Northwestern Bahamas; *moderate* (or worse) long-term drought in the Northwestern Bahamas, southwest Belize, northern Dominican Republic, southwest Jamaica, St-Barts, the north coast of Suriname, and northwest Trinidad.

Short-term drought (at the end of Aug. 2025) Short-term drought *might possibly develop* in northwestern Belize.

Long-term drought (at the end of Nov. 2025) Long-term drought *might possibly develop* in the Northern Bahamas.

BRIEF CLIMATE OUTLOOK - September to November 2025

This period marks the annual peak of the Caribbean Wet Season, the second half of the Atlantic Hurricane Season, as well as the peak and tail end of the Heat Season. The tropical North Atlantic Ocean is forecast to remain slightly warmer than average around the Caribbean. Unusually high air temperatures will most likely prevail with significant heat stress to become recurrent. The *risk* of severe weather impacts, including flooding, flash floods, and cascading impacts is expected to be *higher* than usual. Hurricane season activity tends to be higher than average when the waters around the Caribbean are warmer than usual and the possibility of La Niña conditions might exacerbate that activity. The far northern part of the region may enter the dry season by November. *For temperature and precipitation outlooks for SON 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) currently running near average, in other words, ENSO neutral conditions.

Model forecast and guidance: The forecast models forecast ENSO neutral conditions in JJA (~75% confidence), and a chance for remaining neutral through SON (~45-50% confidence), though there is a slightly lower chance that La Niña conditions might return (~30-40% 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 SON and the second half of the Atlantic Hurricane Season Activity would *unlikely* be quiet.

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 in and around the Caribbean Sea run around 0.5°C above average.

Expected conditions: Models are forecasting persistently warm SST anomalies of 0.2-0.5°C above average in JJA and in SON across the Caribbean Sea and the western half of the TNA.

Expected impacts: Warm SSTs in and 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/colest 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.

DISCLAIMER

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