

# CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM



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A joint bulletin of the Caribbean Agricultural Research and Development Institute (CARDI) and the Caribbean Institute for Meteorology and Hydrology (CIMH).

## KEY MESSAGES

**Recurrent excessive humid heat, culminating in heat-waves as the Caribbean Heat Season peaks in August and September.**

**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.**

**Increasing Atlantic Hurricane Season activity towards September and, potentially, also during July and August whenever intrusions of the dusty Saharan Air Layer are few east of the Caribbean.**

**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.**

## MAY IN REVIEW

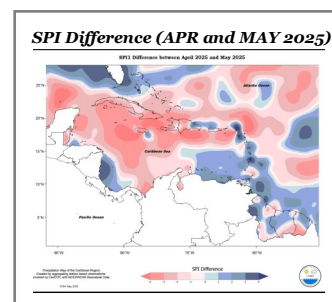
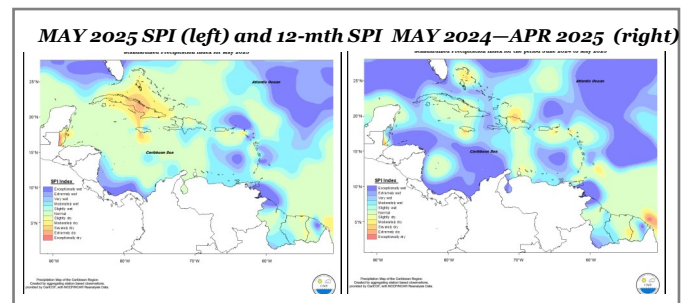
Apart from St Maarten that was moderately dry to very wet, rainfall throughout the eastern Caribbean during the month of May was predominantly normal to above normal. Trinidad, Anguilla and Saint Lucia were exceptional to moderately wet; Tobago and Grenada slightly wet to normal; Barbados and Antigua moderate to extremely wet; St Vincent, Dominica and Guadeloupe normal to very wet; Martinique moderate to slightly wet; St Kitts exceptionally wet to normal; and St Thomas moderately wet. In the Guianas, conditions ranged from slightly dry to exceptionally wet. Aruba was normal and Curacao slightly wet to normal.

Puerto Rico was slightly dry to moderately wet. The Dominican Republic was moderately wet in the south to slightly dry in the north. Jamaica ranged from extremely dry to very wet. Cuba ranged from normal to extremely dry. Northern Bahamas was moderately dry to slightly wet and Belize exceptionally dry to normal.

## ABOUT CariSAM

The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises, and more. Visit us at: [www.carisam.cimh.edu.bb](http://www.carisam.cimh.edu.bb)

During the 12-month period (May 2024 to April 2025), a mixture of conditions prevailed across much of the region. Belize was extremely dry in the south, graduating to exceptionally wet towards the north. Eastern and western Cuba was extremely wet. Central Bahamas was also extremely wet. Several territories experienced normal to slightly or moderately dry conditions.



The month of May was relatively drier than April across most of the western and northern Caribbean. The eastern portion and The Guianas was predominantly wetter in May than April.

Read more at <https://rec.cimh.edu.bb/spi-monitor/>

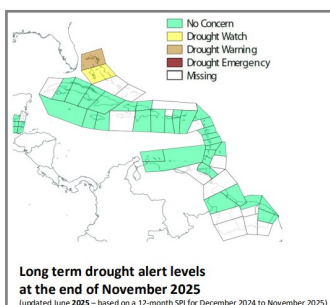
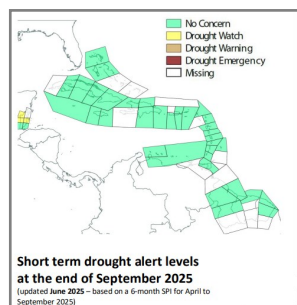
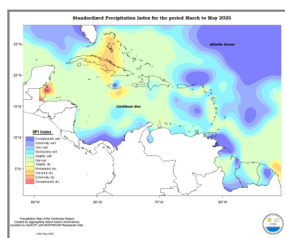
## AGRI-NEWS

**Jamaica:** The Rural Agricultural Development Authority (RADA) is actively assisting farmers to secure their crops and livestock during the 2025 hurricane season. Read more <https://jis.gov.jm/rada-helping-farmers-protect-crops-livestock-during-hurricane-season/>.

## REGIONAL OUTLOOKS

### DROUGHT

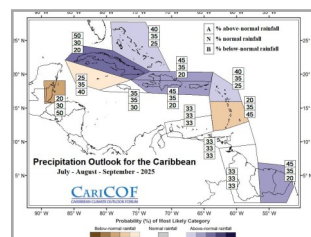
Severe (or worse) short-term drought has developed for Belize, The Bahamas, and Cuba. Severe (or worse) long term drought has developed in southwest Belize, The Bahamas, the northern Dominican Republic, and southwest Jamaica.



There may be some concern over short term drought that can impact small rivers, streams and ponds by the end of September 2025 across central and northwestern Belize.

There is some concern for long-term drought, that can impact large reservoirs, large rivers or groundwater, to present a challenge in farming by the end of November 2025 across northern Bahamas and possibly across northwestern Bahamas. Interests in these territories should monitor their water resources.

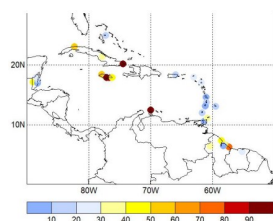
### RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JULY – SEPTEMBER 2025)



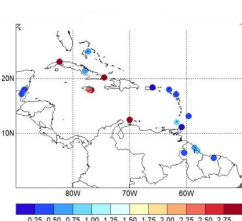
Rainfall totals from July through September are likely to be usual or higher in The Bahamas, Cuba, eastern parts of the Guianas, Hispaniola, Puerto Rico and the Leeward Islands, but the usual or less in Barbados, Belize, the Cayman Islands, and the Windward Islands.

The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells will be high. Soil moisture and water levels in rivers and water reservoirs will be high. Increasing surface wetness is likely to make environmental conditions more conducive to moisture-related pests but inhibits wildfires.

Probability of at least THREE 7-day dry spells in JAS

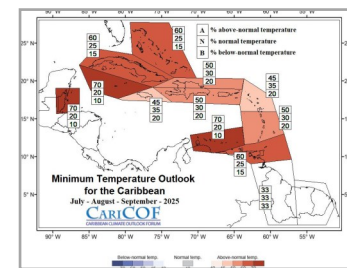
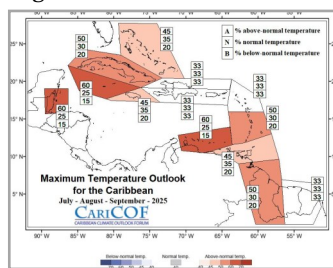


MAXIMUM number of 15-day dry spell in JAS



Moderate to high potential for the occurrence of at least three 7-day dry spells across the ABC Islands, Jamaica and Cuba.

Day-time (maximum) and night-time (minimum) temperatures will likely be the usual or higher. 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.



Visit <http://rcc.cimh.edu.bb/climate-outlooks/> to access the latest climate outlooks.

### CLIMATE-SMART ADVISORIES

#### Drought (Central/Northwestern Belize, Bahamas, Cuba, Southwest Jamaica, and Northern Dominican Republic)

- ◆ Monitor and manage water use with drip or micro-irrigation, based on crop needs and weather forecasts.
- ◆ Control weeds aggressively, as they compete for limited water.
- ◆ Avoid transplanting during extended dry periods to reduce transplant shock

#### Humid conditions and heat stress (ABC Islands, Bahamas, Belize and the Greater Antilles):

- ◆ Irrigate during cooler hours to reduce evaporation.
- ◆ Apply mulch to retain soil moisture and stabilize temperature.
- ◆ Use biostimulants (e.g., Bio-Forge®) to boost crop resilience to heat stress
- ◆ Ensure adequate water and shade for livestock and sensitive crops using trees, nets, or shelter structures

#### Above-normal rainfall and flooding risks

- ◆ Clear and maintain drainage to prevent waterlogging.
- ◆ Use raised beds and contour planting on slopes to limit erosion and runoff.
- ◆ Avoid fertilizing before heavy rain; and monitor for pest and disease outbreaks after wet spells.
- ◆ Tag and move livestock to higher ground in flood-prone areas for easier recovery.
- ◆ Store farm inputs (e.g., feed, fertilizer) off the ground in sealed, water-tight containers

#### Ensure your farm emergency preparation plan is up to date.

#### Maintain records of inputs, crops, and livestock to aid post-disaster recovery.

#### Consider insurance for crops, livestock, and farm infrastructure.

*Please also keep updated and take into consideration your local weather and climate advisories.*

#### Disclaimer

The information contained herein is provided with the understanding that the CARDI, and the CIMH make no warranties, either expressed or implied concerning the accuracy, completeness, reliability or suitability of said information. This bulletin provides a broad overview of climate conditions up to 6 months in advance. It is recommended that stakeholders should use this information in combination with nearer term weather forecasts to guide operational decision making. The bulletin may be freely used by the public with appropriate acknowledgement of its source but shall not be modified in

### CONTACT US:

**Adrian Trotman**  
Agro-meteorologist/ Chief of Applied Meteorology and Climatology, CIMH  
Email: [atrotman@cimh.edu.bb](mailto:atrotman@cimh.edu.bb)

**Shontelle Stoute**  
Technical Officer, CIMH  
Email: [sstoute@cimh.edu.bb](mailto:ssoute@cimh.edu.bb)

**Gem Thomas Barry**  
Agronomist, CARDI  
Email: [gthomas-barry@cardi.org](mailto:gthomas-barry@cardi.org)