

CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM



AUGUST 2025 • VOLUME 9 • ISSUE 3

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 peak in September and October, resulting in high to extremely high potential for flooding, flash floods, cascading hazards and associated impacts

Increasing Atlantic Hurricane Season activity into September. However, 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.

Finally, the Guianas are entering their long dry season, steadily increasing wildfire potential but decreasing flood potential is expected.

JUNE IN REVIEW

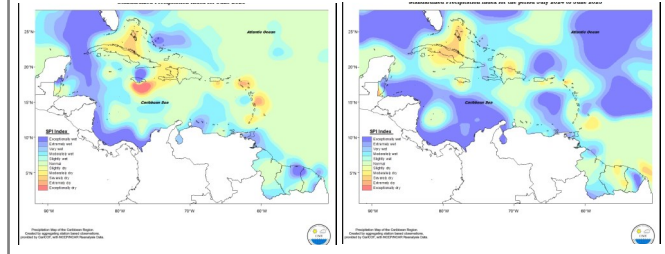
Mixed conditions were experienced throughout the islands of the eastern Caribbean during the month of June. Trinidad was extreme to very wet; Tobago moderate to slightly wet; Grenada moderately dry; Barbados and Anguilla slight to moderately dry; St Vincent moderately dry to normal; Saint Lucia predominantly normal to slightly dry; Martinique moderate to extremely dry; Dominica slightly wet to moderately dry; Guadeloupe slightly wet to slightly dry; Antigua and St Maarten moderate to severely dry; St Kitts moderate to extremely dry; St Croix and St Thomas normal. In the Guianas, conditions varied from normal to exceptionally wet. Curacao was extremely wet.

Puerto Rico was severely dry to mostly normal. The Dominican Republic was moderately dry in the west to normal in the east. Jamaica ranged from extremely dry in the south to exceptionally wet in the north. Grand Cayman was predominantly slightly dry to normal. Cuba ranged from severely dry in northern areas to exceptionally wet in the west and to extremely wet in the east.

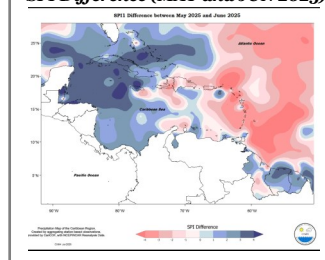
Northern Bahamas ranged from severely dry to slightly wet and Belize ranged from slightly dry in southern areas to exceptionally wet in the north.

During the 12-month period (June 2024 to May 2025), a mixture of conditions prevailed across much of the region. Notably, northern Belize was exceptionally wet and most of Cuba and northern Bahamas experienced normal to severely dry conditions.

JUN 2025 SPI (left) and 12-mth SPI JUN 2024–MAY 2025 (right)



SPI Difference (MAY and JUN 2025)



The month of June was distinctively drier than May across most of the eastern territories, while wetter across western territories as well as the Guianas.

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

AGRI-NEWS

Cuba: There is no water and no forecast. Read more <https://en.cibercuba.com/noticias/2025-07-23-11-135253-s27061-mid307630-hay-agua-hay-pronostico-santiago-cuba-vive-sequia>

Jamaica: Government unveils \$350m plan to mitigate drought conditions across Jamaica. Read more <https://www.jamaicaobserver.com/2025/07/16/govt-unveils-350m-plan-mitigate-drought-conditions-across-jamaica/>

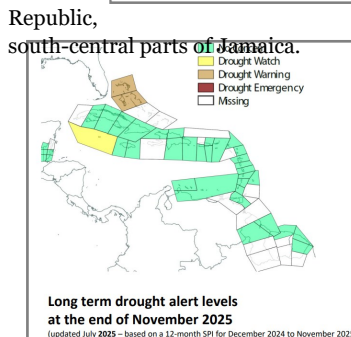
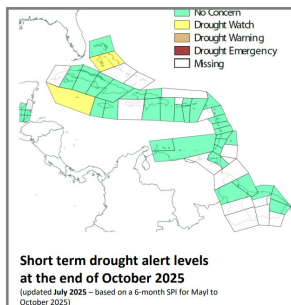
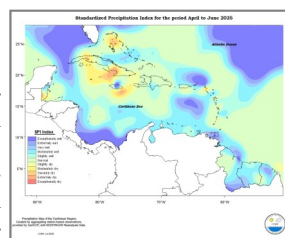
ABOUT CariSAM

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

REGIONAL OUTLOOKS

DROUGHT

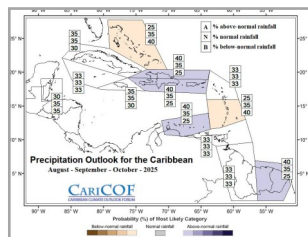
Severe (or worse) short-term drought has developed in southwest Belize, the Northwestern Bahamas, and southern parts of Central Cuba. Severe (or worse) long term drought has developed in southwest Belize, The Northwestern Bahamas, Central Cuba, the northern Dominican Republic, and south-central parts of Jamaica.



There may be some concern over short term drought that can impact small rivers, streams and ponds by the end of October 2025 across the Northwestern Bahamas and in Grand Cayman.

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 and Northwestern Bahamas and possibly across Grand Cayman. Interests in these territories should monitor their water resources.

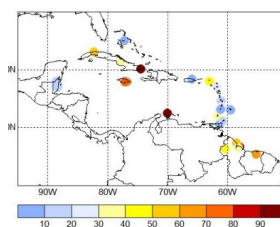
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (AUGUST – OCTOBER 2025)



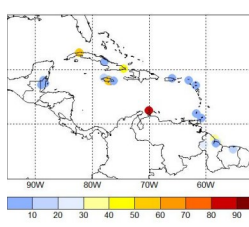
Rainfall totals from August through October are likely to be the usual or higher in the ABC Islands, eastern parts of the Guianas, Hispaniola, Puerto Rico and the USVI, but the usual or less in The Bahamas, Barbados, and the Windward Islands.

The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells will be high to extremely high. Surface wetness makes environmental conditions more conducive to moisture-related pests, but prevents wildfires. In the Guianas, lower rainfall frequency along the dry season will likely lead to opposite trend in implications.

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

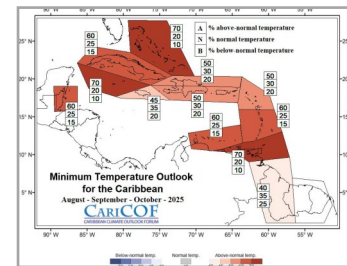
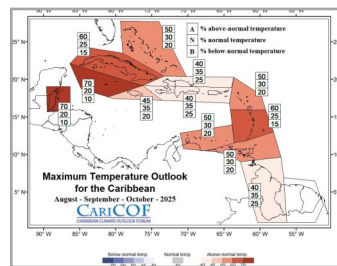


MAXIMUM number of 15-day dry spell in ASO



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, Barbados, the Windward Islands and the Guianas. However, the intensity of the peak of the 2025 Heat Season is not forecast to match that of 2023 and 2024.



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

CLIMATE-SMART ADVISORIES

Peak heat, dust, and hurricane activity in August–September:

- ◆ Encourage hydration, and schedule farming for cooler hours
- ◆ Use mulch to stabilize soil temperature, and plant biostimulants to reduce heat stress.
- ◆ Consider heat tolerant varieties, use shade net, and intercropping systems to create cooler microclimates
- ◆ Prepare for hurricanes by clearing drains, secure infrastructure and have emergency supplies
- ◆ Reduce animal stocking density, and ensure shade to alleviate heat-related stress

Above-to-normal rainfall and flooding risks (ABC Islands, eastern Guianas, Hispaniola, Puerto Rico, USVI)

- ◆ Improve farm drainage, use raised beds, and contour planting on slopes
- ◆ Avoid fertilizing before heavy rain and harvest early if floods are expected
- ◆ Monitor for fungal infections and ensure timely fungicide application
- ◆ Tag and move livestock to higher ground in flood-prone areas for easier recovery
- ◆ Store farm inputs off the ground in sealed, water-tight containers

Short term -to long term Drought (Parts in Belize, Bahamas, Cuba, northern Dominican Republic and Grand Cayman)

- ◆ Monitor and manage water use with drip or micro-irrigation, based on crop needs and weather forecasts
- ◆ Use mulching, compost, and cover crops to retain soil moisture
- ◆ Provide adequate water and shade for livestock and adjust feeding to cooler hours

Maintain records of inputs, crops, & livestock to aid post-disaster recovery

Review insurance & disaster plans.

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

Shontelle Stoute

Technical Officer, CIMH
Email: [sstoute@cimh.edu.bb](mailto:ssstoute@cimh.edu.bb)

Gem Thomas Barry

Agronmist, CARDI
Email: gthomas-barry@cardi.org