

# 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

**Heatwaves occurring as early as April and gradually ramping up is possible, but unlikely to match 2023 and 2024.**

**In April, high evaporation rates, frequent short dry spells and buildup of any ongoing drought may increase wildfire potential.**

**Except for the mostly dry ABC Islands, rainfall intensity and shower frequency should increase towards May (the Bahamas, Guianas and Greater Antilles) or June (Belize and the Lesser Antilles), resulting in high to extremely high potential for flooding, flash floods, cascading hazards and associated impacts.**

**Episodes of Saharan dust intrusion will likely be frequent (up until July/August); the more frequent these are, the more dryness and heat, and the more erratic the occurrence of severe weather.**

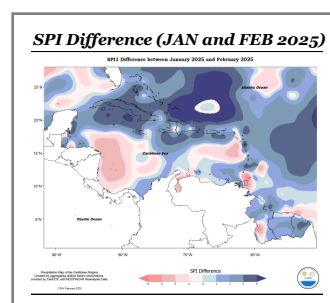
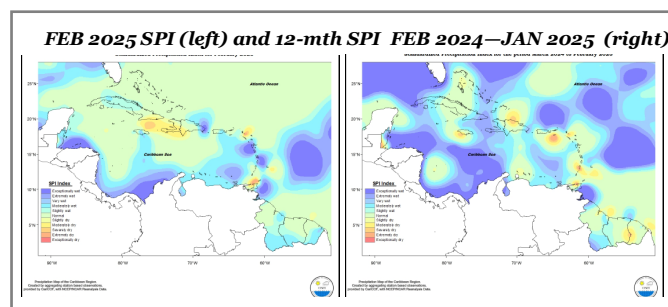
## FEBRUARY IN REVIEW

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

Puerto Rico ranged from normal to moderately wet. Hispaniola ranged from moderately dry in southern areas to exceptionally wet in the extreme east of the Dominican Republic. Jamaica ranged from very wet in the south and central areas to slightly wet in the west and to moderately dry in the northeast. Grand Cayman was normal.

Cuba ranged from moderately wet in west central areas to moderately dry in the extreme east. Northern Bahamas was normal and Belize was normal in the west ranging to extremely wet in south-eastern areas and to moderately wet in the north.

During the 12-month period (February 2024 to January 2025), normal conditions prevailed across much of the region.



The month of February was relatively wetter than December across most of the region.

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

## AGRI-NEWS

**Jamaica:** RADA encourages farmers to plan for drought during periods of rain. Read more <https://jis.gov.jm/rada-encourages-farmers-to-plan-for-drought-during-periods-of-rain/>.

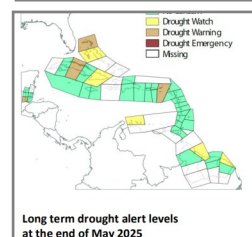
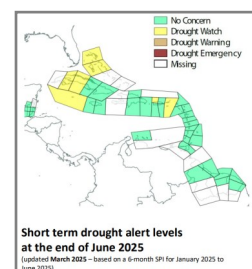
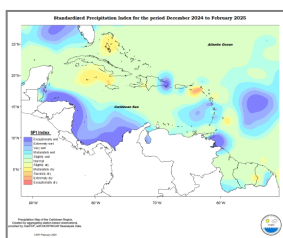
## ABOUT CariSAM

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)

## REGIONAL OUTLOOKS

## DROUGHT

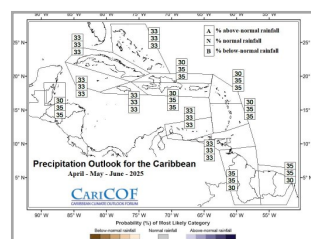
Moderate (or worse) short-term drought has developed in the central and northern Bahamas, the Cayman Islands, parts of St. Croix, Sint Maarten and St. Bart's. Moderate (or worse) long-term drought has developed in southern Belize, northern Dominican Republic, southwest Jamaica, St. Bart's, St. Vincent, southeast Suriname, northwest Trinidad.



There is some concern over short term drought that can impact small rivers, streams and ponds by the end of June 2025 across The Bahamas, Grand Cayman, Western Cuba, northwest Puerto Rico and the U.S. Virgin Islands.

There is immediate concern for long-term drought, that can impact large reservoirs, large rivers or groundwater, to present a challenge in farming by the end of May 2025 across the northern Bahamas, southwest Belize, parts of Central Cuba and the U.S. Virgin Islands. Interests in the ABC islands, the central Bahamas, parts of Eastern Cuba, northern French Guiana and coastal Guyana.

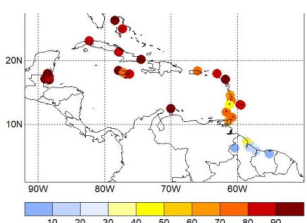
## RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (APR – JUN 2025)



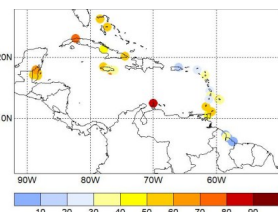
Rainfall totals from April through June show very little indication of distinct shifts across the region. The potential for flooding, flash floods and related hazards arising from runoff during intense rainfall events will be high, particularly in mountainous areas and in the Guianas.

Thus, water recharge rates in surface reservoirs and rivers will likely rapidly accelerate, particularly in the Guianas.

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

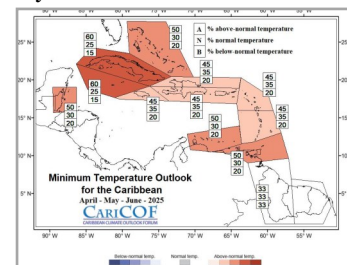
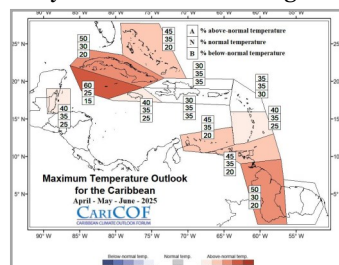


MAXIMUM number of 15-day dry spell in AMJ



High potential for the occurrence of at least three 7-day dry spells across the region (except The Guianas). Moderate to high potential for at least one occurrence of a 15-day dry spell across The ABC Islands, Belize and Cuba.

Day-time (maximum) and night-time (minimum) temperatures will likely be higher than usual in most areas. Episodes of hazardous, extreme heat with—possibly reoccurring—heatwaves could occur as early as April and ramping up into May. There is increased risk in areas that are wind-sheltered and/or in drought, particularly when dusty air combines with high humidity.



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

## CLIMATE-SMART ADVISORIES

### Where there is the greater likelihood of drought and dry spells and heatwaves:

- ◆ Schedule irrigation during cooler hours to reduce evaporation losses.
- ◆ Use mulching and drip irrigation to conserve water, retain soil moisture, and regulate soil temperature.
- ◆ Incorporate biochar and compost to improve water retention.
- ◆ Ensure proper ventilation, shading and adequate water for your animals.
- ◆ Monitor poultry for signs of heat stress (e.g., spreading out of wings, panting etc) and in ruminants (e.g., panting, drooling, sweating)
- ◆ Farmers should avoid foods that increase dehydration and take breaks in cool, shady areas to reduce body temperature.
- ◆ Farmers should wear protective, loose fitting and light-coloured clothing

### Where there is the greater likelihood of flooding:

- ◆ Pest and disease increase in wet conditions; maintain and clean drains or ditches, use contour farming and install raised planting beds
- ◆ House livestock on high ground if possible, and evacuate animals from low-lying/flood prone areas.

**Maintain proper records** of inputs and the crop under cultivation and/or livestock being reared.

*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 content and then presented as original material.

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