

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

Increased severe weather activity through early February in the Guianas, resulting in high to extremely high potential for flooding, flash floods, cascading hazards and associated impacts.

Increase in frequency of short dry spells during the core of the 2024-25 Dry Season, particularly in the far northwest of the region.

Short and long-term drought are evolving in southwest Belize and southern Puerto Rico.

Widespread extreme heat is not expected through February, but may occur in parts of Belize and Trinidad during March.

Recurrent incursion of Saharan dust into the Caribbean is possible.

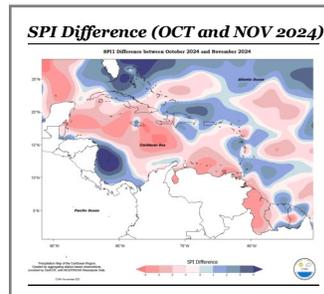
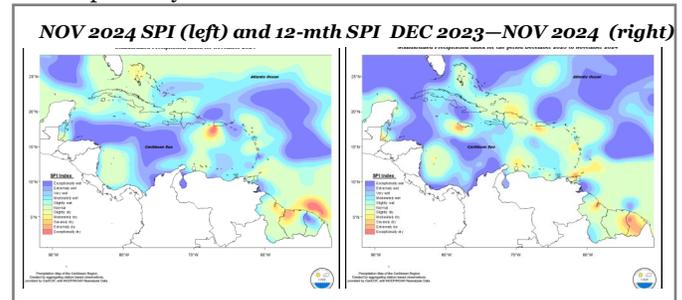
NOVEMBER IN REVIEW

Predominantly normal to above normal conditions were seen throughout the islands of the eastern Caribbean during the month of November. Trinidad was normal to very wet; Grenada moderate to very wet; Grenada slightly wet; Barbados, St Kitts and Anguilla normal to slightly wet; St Vincent moderate to extremely wet; Saint Lucia exceptional to slight to extremely wet; Martinique, Guadeloupe and St Maarten moderately wet to normal; Dominica normal and Antigua moderately wet. In the Guianas conditions were mostly normal ranging to exceptionally wet in northwestern French Guiana and to extremely dry in northwestern Suriname. Aruba was normal and Curacao normal to slightly dry.

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

A mixture of conditions prevailed across the region during the 12-month period (December 2023 to November 2024). However, notably

coastal Guyana and southwestern Trinidad were exceptionally dry while central-northern Bahamas and northern and western Cuba were exceptionally wet.



The month of November brought a mixture of conditions across the region when compared to October. November was drier across central-southeastern Belize, western and eastern Cuba, most of Jamaica, Cayman Islands, most of Belize, southern Haiti, Antigua, Dominica, the ABC Islands and Guyana.

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

AGRI-NEWS

Belize: Initiative to assist cattle farmers affected by flooding due to Tropical Storm Sara. Read more <https://www.pressoffice.gov.bz/usd100000-in-support-for-belizean-farmers-impacted-by-flooding/>

Jamaica: Preliminary estimate of damage to agricultural sector by heavy rains put at \$621m. Read more <https://jis.gov.jm/preliminary-estimate-of-damage-to-agricultural-sector-by-heavy-rains-put-at-621m/>

St. Vincent and the Grenadines: Severe weather events had a severe impact on the agricultural sector in St Vincent and the Grenadines. Read more <https://www.nbcsvg.com/2024/11/28/severe-weather-impacting-agriculture-in-svg-christmas-produce-supply-expected-to-fall/>

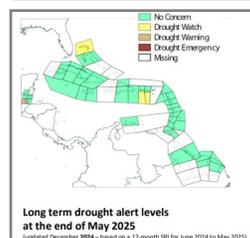
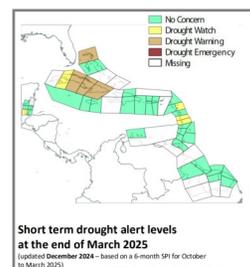
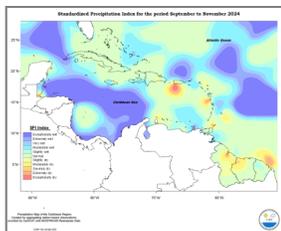
ABOUT CariSAM

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

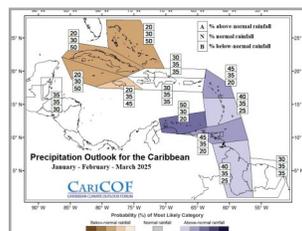
Moderate (or worse) short-term drought has developed in Aruba, southern Belize, Dominica, northern Guyana, and southern Puerto Rico. Moderate (or worse) long-term drought has developed in French Guiana, northern Guyana, Jamaica, southern Puerto Rico, eastern Suriname, and Trinidad.



There is some concern over short term drought that can impact small rivers, streams and ponds by the end of March 2025 across the northern Bahamas and most of Cuba, though Antigua, southwest Belize, western Cuba, Dominica and Martinique should monitor their water resources.

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 May 2025 across southwest Belize. Interests in northern Bahamas and southern Puerto Rico should monitor their water resources for long term drought.

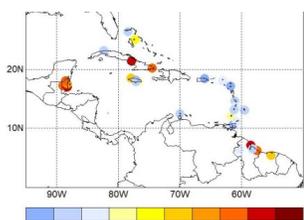
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JAN – MAR 2025)



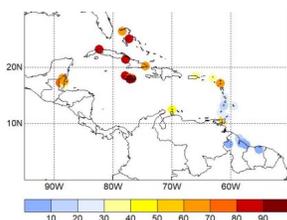
Rainfall totals from January through March are likely to be the usual or higher in the ABC Islands, the Guianas, the Lesser Antilles, but, likely, the usual or less in The Bahamas, Cayman Islands, Cuba and Jamaica. Thus, a slower than usual depletion of large water reservoirs (except for The Bahamas, Cayman Islands, Cuba and Jamaica).

The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells is high across coastal Guiana through February, but slight to moderate elsewhere.

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

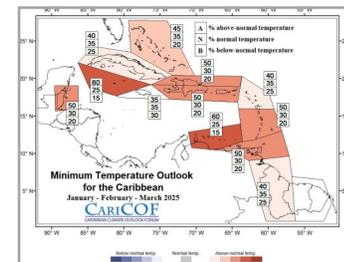
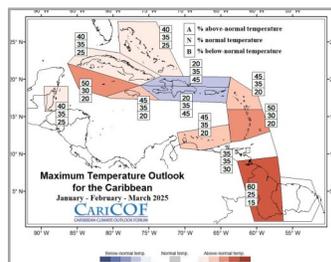


MAXIMUM number of 15-day dry spell in JFM



Moderate to high potential for the occurrence of at least three 7-day dry spells exist across Belize, central and eastern Cuba, and portions of coastal Guianas. High potential for at least one occurrence of a 15-day dry spell across Jamaica, Cuba, The Bahamas and northern Belize.

Day-time (maximum) and night-time (minimum) temperatures, as well as air humidity, will likely be considerably higher than usual in most areas. Episodes of hazardous heat stress across a wide section of the population are not expected during this period, with the possible exception of Belize and Trinidad in March.



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

CLIMATE-SMART ADVISORIES

In the event of drought and dry spells:

- ◆ Schedule irrigation during cooler hours to reduce evaporation losses.
- ◆ Transplant during the cooler hours ensure plants are well-watered before and immediately after transplanting to help establish a good root system.
- ◆ Use temporary shading (e.g., shade cloth) to protect plants from excessive sunlight during the establishment period.
- ◆ Ensure regular weeding to reduce competition and further crop stress.
- ◆ Use mulching to retain soil moisture, and regulate soil temperature.
- ◆ Ensure proper ventilation, shading and adequate water for your animals.
- ◆ Monitor for signs of heat stress in poultry and ruminants (e.g., panting, etc.)

In the event of flooding:

- ◆ Pest & disease increase in wet conditions; implement appropriate management practices.
- ◆ 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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