

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

Likely less intense peak of the Dry Season in the Lesser Antilles and Guianas, though the potential for flooding, flash floods, cascading hazards and associated impacts will be moderate to high.

By contrast, some areas in the northwestern Caribbean may well face a harsher peak of the Dry Season.

The frequency of dry spells and wildfire weather would likely increase across the region.

A transition out of the Cool Season in March or April is likely.

The incursion of Saharan dust into the Caribbean may well be frequent.

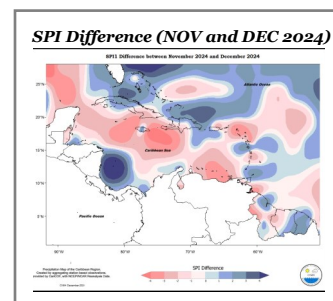
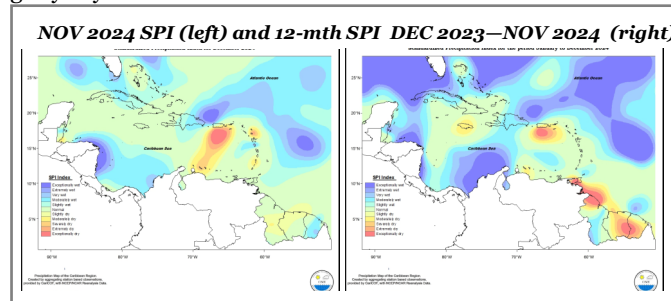
DECEMBER IN REVIEW

Predominantly normal to below normal conditions were experienced throughout the eastern Caribbean during the month of December. Trinidad, Tobago, Barbados, Martinique, St Kitts, St Maarten and Anguilla were normal; Grenada slightly dry; St Vincent moderately dry; Saint Lucia slightly dry to normal; Dominica moderate to very wet; Guadeloupe moderately wet in the south to moderately dry in the north; Antigua severe to extremely dry; St Croix extreme to moderately dry west to east; St Thomas moderate to predominantly slightly dry. Conditions in the Guianas ranged from moderately dry in central Guyana to very wet in southeastern French Guiana. Aruba was moderately dry and Curacao was severely dry.

Puerto Rico ranged from extremely dry in the extreme south to extremely wet in the northwest. Hispaniola ranged from normal in western Haiti to extremely wet in eastern Dominican Republic. Jamaica and Grand Cayman were normal. Northern Bahamas ranged from slightly wet to slightly dry and Belize from moderately dry in southern areas to moderately wet in central areas and to normal in the north.

Predominantly normal conditions prevailed across the region during the 12-month period (January to December 2024). However, notably

portions of the Guianas and Trinidad were exceptionally dry. Southernmost Puerto Rico was severely dry and Jamaica was slightly dry.



The month of December brought a mixture of conditions across the region when compared to November. December was wetter across central Jamaica, most of Cuba, The Bahamas, northern and easternmost Hispaniola, Dominica, Grenada, most of Trinidad, Tobago and much of the Guianas.

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

AGRI-NEWS

Jamaica: Agriculture ministry allocates \$134m for drought relief to farmers. Read more <https://jis.gov.jm/agriculture-ministry-allocates-134m-for-drought-relief-to-farmers/>

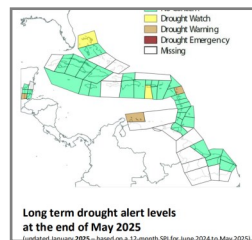
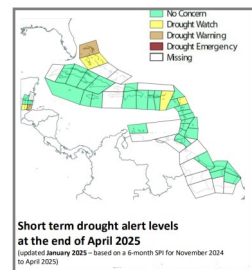
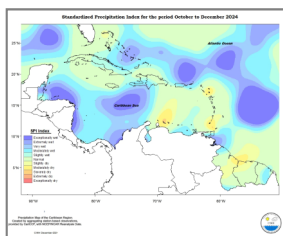
ABOUT CariSAM

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

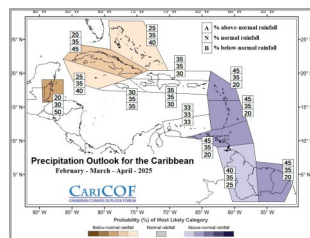
Moderate (or worse) short-term drought has developed in the ABC islands, Antigua, Grenada, northeast Guyana, Saint Vincent, and northern Suriname. Moderate (or worse) long-term drought has developed in the ABC islands, French Guiana, northern Guyana, Jamaica, southern Puerto Rico, Suriname and Tobago.



There is some concern over short term drought that can impact small rivers, streams and ponds by the end of April 2025 across the northwestern Bahamas and southeast Belize, though Antigua, central Bahamas, southwest Belize and U.S. Virgin Islands 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 the ABC Islands, Antigua and southwest Belize. Interests in northern Bahamas and southwest Puerto Rico should monitor their water resources for long term drought.

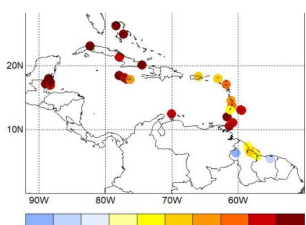
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (FEB – APR 2025)



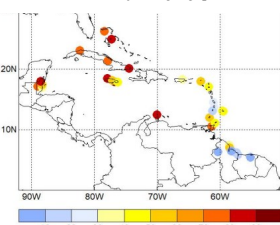
Rainfall totals from February through April are likely to be the usual or higher in the Lesser Antilles and the Guianas but, likely, the usual or less in The Bahamas, Belize, Cayman Islands, and Cuba. Thus, a slower than usual depletion of large water reservoirs across the Lesser Antilles.

The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells increase from moderate in most areas in February and March, to high in April.

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

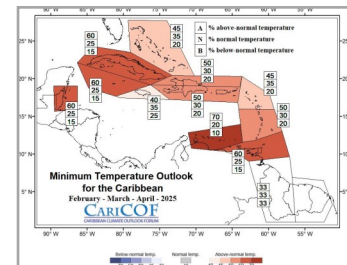
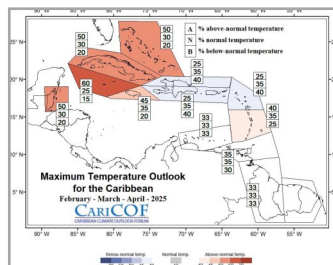


MAXIMUM number of 15-day dry spell in FMA



Moderate to high potential for the occurrence of at least three 7-day dry spells across most of the region. Moderate potential for at least one occurrence of a 15-day dry spell across The ABC Islands, Belize, Jamaica, Cuba, and northwestern Bahamas.

Night-time (minimum) temperatures, as well as air humidity, will likely be higher than usual in most areas. In addition, daytime (maximum) temperatures will likely be higher than usual in the northwest of the region. Episodes of hazardous heat stress across a wide section of the population are not expected until March in Belize and Trinidad and April elsewhere.



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:

- ◆ 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 for signs of heat stress and ensure adequate hydration.

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-laying/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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