

# 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

**Continued severe weather activity through December (January in the Guianas), resulting in high to extremely high potential for flooding, flash floods, cascading hazards and associated impacts.**

**Short dry spells are set to increase in frequency, particularly in the far northwest of the region. Despite that the Islands and Belize are expected to transition into the 2024 -25 Dry Season several weeks late.**

**Short and long-term drought are evolving in southwest Belize, southeast Puerto Rico and the USVI.**

**Widespread extreme heat is not expected during the Caribbean Cool Season.**

## OCTOBER IN REVIEW

During the month of October, apart from Trinidad that ranged from moderately dry in the southwest to extremely wet in the northeast and Tobago that was extreme to moderately wet, conditions were mostly normal to below normal throughout the eastern Caribbean. Grenada, Martinique, Guadeloupe and St Kitts were normal to slightly dry; Barbados and Saint Lucia severe to moderately dry; St Vincent and St Croix extremely dry; Dominica and St Maarten moderate to slightly dry; Antigua normal; Anguilla slightly dry and St Thomas severely dry. In the Guianas, conditions ranged from exceptionally wet in central Guyana to slightly dry on the northwestern coastline of Suriname and to extremely wet on the northern Suriname/ French Guiana border. Aruba was exceptionally dry and Curacao ranged from exceptional to mostly extremely dry.

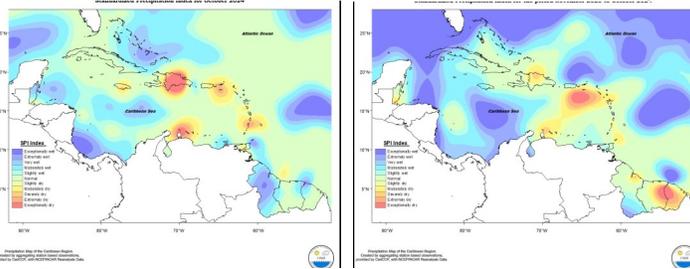
Puerto Rico was normal to severely dry west to east. Hispaniola was predominantly exceptionally dry in the Dominican Republic ranging to slightly wet in northwestern Haiti and to Moderately wet in the extreme east of the Dominican Republic. Jamaica ranged from severely dry in southern areas to normal in the west and to slightly dry in the east. Grand Cayman was normal. Northern Bahamas ranged from moderately wet to normal and Belize was from normal to very wet south to north.

## ABOUT CariSAM

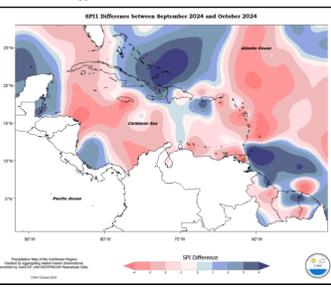
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

Predominantly normal to exceptionally dry conditions prevailed across the region during the 12-month period (November 2023 to October 2024). However, notably Jamaica, Cayman Islands, western Cuba and much of The Bahamas experienced normal to exceptionally wet conditions.

**OCT 2024 SPI (left) and 12-mth SPI NOV 2023–OCT 2024 (right)**



**SPI Difference (AUG and SEP 2024)**



A mixture of conditions prevailed across the region between the months of August and September.

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

## AGRI-NEWS

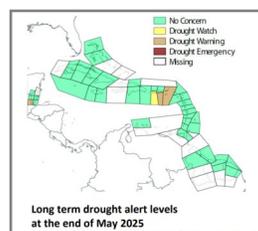
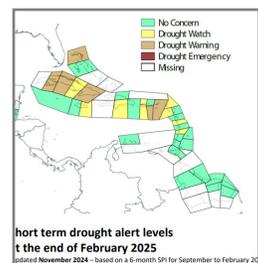
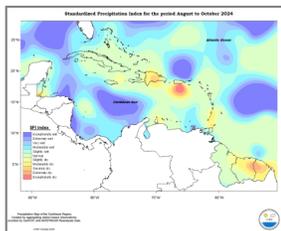
**St. Vincent and the Grenadines:** Severe weather events have had a severe impact on the agricultural sector in Saint Vincent and the Grenadines. This phenomenon is expected to impact the anticipated volume of agricultural produce for the Christmas period. ” Read more [https://agriculture.gov.vc/agriculture/index.php?option=com\\_content&view=article&id=745:severe-weather-impacting-agriculture-in-svg-christmas-produce-supply-expected-to-fall&catid=104&Itemid=93](https://agriculture.gov.vc/agriculture/index.php?option=com_content&view=article&id=745:severe-weather-impacting-agriculture-in-svg-christmas-produce-supply-expected-to-fall&catid=104&Itemid=93)

## REGIONAL OUTLOOKS

### DROUGHT

Moderate (or worse) short-term drought has developed in far southern Belize, the Dominican Republic, French Guiana, far southern Puerto Rico, southern Saint Lucia, St. Vincent, and Suriname.

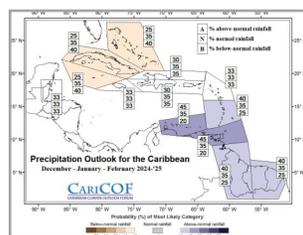
Moderate (or worse) long-term drought has developed in the ABC Islands, far southern Belize, northern and central Dominican Republic, French Guiana, Guadeloupe, central parts of coastal Guyana, St. Croix, St. Kitts, eastern Suriname, Tobago.



There is some concern over short term drought that can impact small rivers, streams and ponds by the end of February 2025 across the extreme northwest Bahamas, SW Belize, most of Cuba, SE Puerto Rico, and the USVI, though central Cuba, Dominica, southern Dominican Republic, eastern Jamaica, western Puerto Rico and Saint Lucia.

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, southeast Puerto Rico and the USVI. Interests in Southwest Puerto Rico should monitor their water resources for long term drought.

### RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (DEC 2024 – FEB 2025)

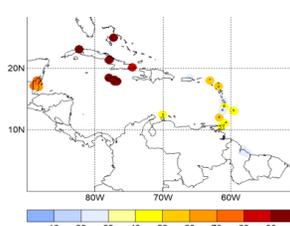


Rainfall totals from December through January are likely to be the usual or higher in the ABC Islands, Barbados, the Guianas, Trinidad & Tobago and Windward Is., but, possibly, the usual or less in the Bahamas, Cayman Islands, Cuba.

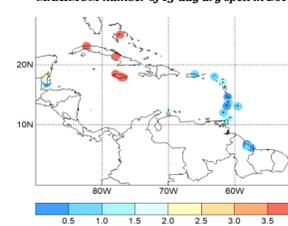
The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells remains high across the Caribbean Islands and Belize decreasing to limited in February (but high potential in The Guianas).

Moderate to high potential for the occurrence of at least three 7-day dry spells exist across Belize, Jamaica, Cuba and the north western portion of The Bahamas. At most three to four 15-day dry spells is expected across Jamaica, Cuba and the north western portion of The Bahamas.

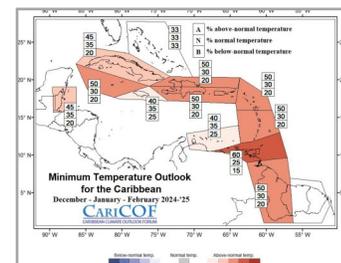
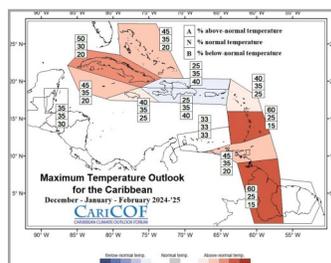
Probability of at least THREE 7-day dry spells in DJF



MAXIMUM number of 15-day dry spell in DJF



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 heat stress across a wide section of the population are not expected now that the record-breaking 2024 Caribbean Heat Season has come to an end. Heat stress should not be a significant hazard.



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:

- ◆ Ensure regular weeding to reduce competition and further stress to crops
- ◆ Be mindful not to over-irrigate your crop to avoid water logging or runoff
- ◆ Avoid transplanting in prolonged dry conditions this may trigger transplant shock, yield reduction and in severe cases death.

#### In the event of flooding:

- ◆ Ensure that livestock are housed on high grounds (where possible); evacuate animals in low lying areas and pastures which are prone to flooding and erosion.
- ◆ Certain pest and diseases such as blossom end rot will increase during and after extreme wet conditions, implement appropriate disease and pest management practices.

**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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