

# 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

**For the Caribbean Islands and Belize, ocean conditions could imply increased tropical cyclone and severe weather activity through December, resulting in high potential for flooding, flash floods, cascading hazards and associated impacts.**

**Unusual oceanic heat further implies episodes of oppressive humid heat could continue into early-November, particularly in the ABC Islands, the Guianas and the Windward Islands.**

**The Guianas will transition from the hot and dry season into cooler and (much) wetter conditions from late-November, except in the far southwest.**

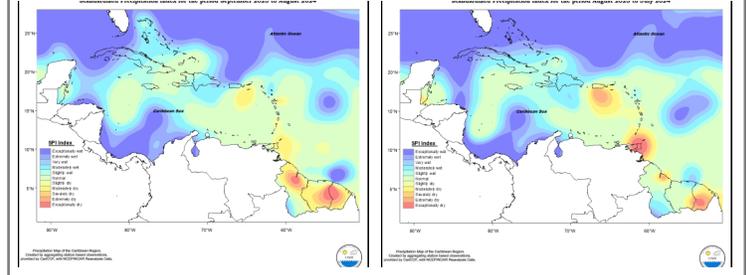
## AUGUST IN REVIEW

Predominantly normal conditions were experienced throughout the eastern Caribbean during the month of August. Trinidad was severely dry to normal; Tobago, Grenada, St Vincent, Saint Lucia, Antigua, St Kitts, St Maarten and St Croix normal; Barbados slight to moderately wet; Martinique, Dominica and Anguilla normal to slightly wet; Guadeloupe normal to moderately wet and St Thomas moderate to extremely wet. Conditions in the Guianas ranged from mostly normal to moderately wet in western Guyana and to moderately dry in central Suriname as well as western and northern French Guiana. Aruba was slightly wet to normal and Curacao was normal.

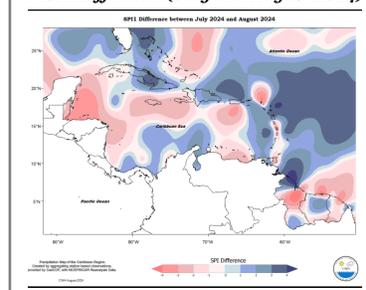
Puerto Rico ranged from moderately dry in southern areas to very wet in the northeast. The Dominican Republic was predominantly normal with slightly wet areas around the northern coastline. Jamaica ranged from slightly wet to slightly dry west to east. Cuba ranged from moderately wet in western areas to normal in the east. Northern Bahamas ranged from moderately wet to moderately dry and Belize from extremely wet in the south to normal in the north.

Predominantly normal conditions prevailed across the eastern Caribbean Islands during the 12-month period (September 2023 to August 2024). However, notably Trinidad and Tobago was exceptionally dry, Puerto Rico was normal to slightly dry and a mixture of conditions prevailed across the Guianas. Also, the northern portion of the region experienced normal to exceptionally wet conditions.

AUG 2024 SPI (left) and 12-mth SPI SEP 2023–AUG 2024 (right)



SPI Difference (July and August 2024)



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

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

## ABOUT CariSAM

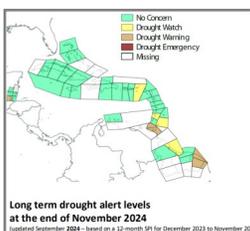
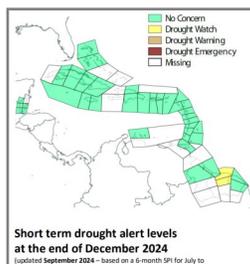
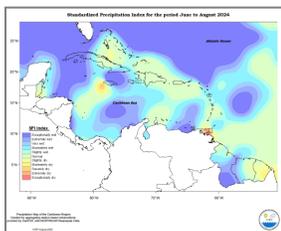
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## REGIONAL OUTLOOKS

### DROUGHT

Severe (or worse) short-term drought has developed in Trinidad.

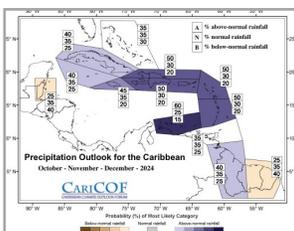
Severe (or worse) long-term drought has developed in French Guiana, Guyana and Suriname.



There is very little concern over short term drought that can impact small rivers, streams and ponds by the end of December, though Suriname 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 November 2024 across southwest Belize, French Guiana, and Trinidad. Coastal Guyana, U.S. Virgin Islands, St. Vincent, and Tobago should monitor their water resources for long term drought.

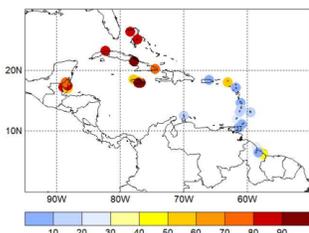
### RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (OCTOBER – DECEMBER 2024)



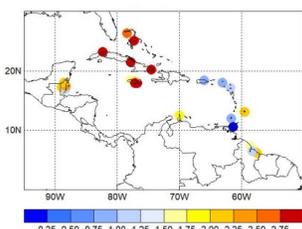
Rainfall totals from October through December are likely to be the usual or higher across the Antilles and western parts of the Guianas, but, possibly, the usual or less in Belize and eastern parts of the Guianas.

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. However, there is a moderate potential in the Guianas, increasing to high by late-November in coastal and northern areas.

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

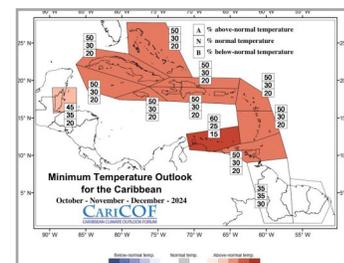
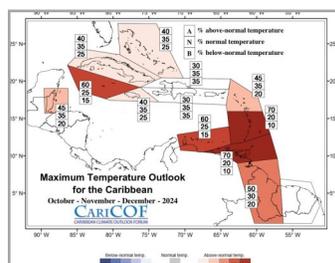


MAXIMUM number of 15-day dry spell in OND



The occurrence of at least three 7-day dry spells is highly favourable across Belize, Jamaica, Cuba and the northern portion of The Bahamas. At most two to three 15-day dry spells is expected across Jamaica, Cuba and the northern portion of The Bahamas.

Day-time (maximum) and night-time (minimum) temperatures, as well as air humidity will likely be considerably higher than usual in most areas. Frequent episodes of heat stress are expected and the region is likely to continue to be in a record Heat Season through October. Heat stress may further ramp up where dry spells are more frequent than usual.



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

### CLIMATE-SMART ADVISORIES

**Be hurricane prepared!!!**

#### In the event of drought and heatwaves:

- ◆ 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.
- ◆ Avoid planting in extreme hot conditions, this may affect germination rate and percentage. However, if planting, take into consideration water resource availability.
- ◆ 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

#### 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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