

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

The cool season features more comfortable temperatures and humidity. This period also marks the early dry season in the Caribbean Islands and Belize and the long dry season in the far interior of the Guianas, with fewer wet days and spells of heavy showers by February.

There is a concern for at least moderate drought in areas with ongoing rainfall deficits and short dry spells should become more frequent, particularly in northwest Belize.

The potential for flooding and cascading hazards will be mostly moderate through December, but high in mountainous areas. In the coastal Guianas, the secondary wet season may end up drier than usual, but flood potential remains high through January.

OCTOBER IN REVIEW

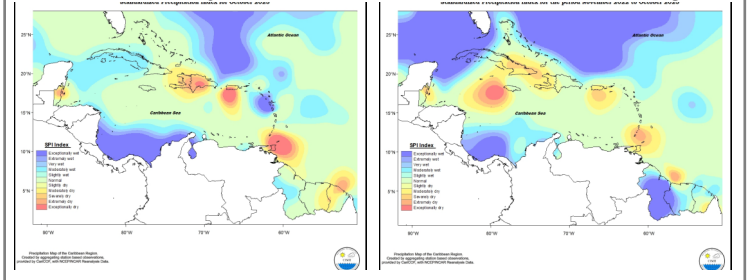
Mixed conditions were seen throughout the islands of the eastern Caribbean during the month of October, with normal to above normal rainfall in the north of the chain and normal to below normal rainfall in the south. Trinidad was moderate to exceptionally dry; Tobago exceptionally dry; Grenada extreme to severely dry; Barbados, Martinique, St Maarten, Anguilla and St Thomas normal; St Vincent slightly dry in the south to predominantly normal; Saint Lucia and St Croix normal to slightly wet; Dominica extreme to predominantly exceptionally wet; Guadeloupe exceptional to slightly wet; Antigua extremely wet and St Kitts exceptional to moderately wet. In the Guianas, conditions ranged from moderately wet in western areas of Guyana to extremely dry in northern French Guiana. Aruba was slightly wet and Curacao was normal.

Puerto Rico ranged from exceptionally dry in the south to normal in the northwest and eastern areas. Hispaniola ranged from exceptionally dry in central areas of the Dominican Republic to moderately dry in western areas of Haiti to moderately wet in the extreme east of the Dominican Republic.

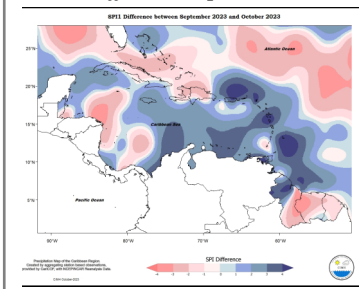
Jamaica was normal. Grand Cayman was slightly wet. Cuba ranged from moderately wet in western areas to moderately dry in the extreme east. Northern Bahamas was predominantly normal ranging to slightly wet and Belize was normal in the south ranging to extremely dry in northern areas.

Predominantly normal to severely dry conditions prevailed across the Caribbean Islands during the 12-month period (November 2022 to October 2023) with the exception of the Guianas, and The Bahamas, which were normal to exceptionally wet.

OCT 2023 SPI (left) and 12-mth SPI NOV 2022 - OCT 2023 (right)



SPI Difference (Sep and Oct 2023)



Predominantly wetter conditions were observed across the region in the month of October compared to September, with the exception of Cuba, Hispaniola, most of the Bahamas and the Guianas.

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

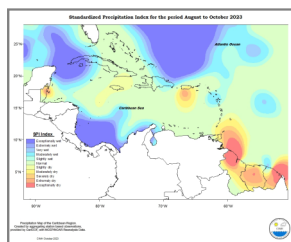
ABOUT CariSAM

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

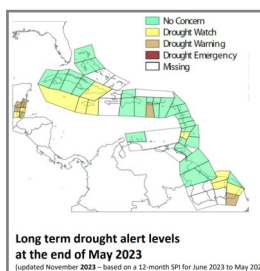
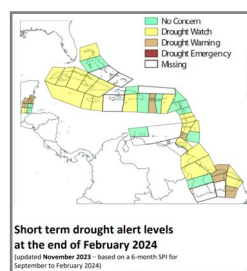
REGIONAL OUTLOOKS

DROUGHT

Severe (or worse) short-term drought has developed in Belize, French Guiana, Guyana, and Suriname. Severe (or worse) long-term drought has developed in parts of eastern Cuba, Grenada, Saint Vincent, and Tobago.



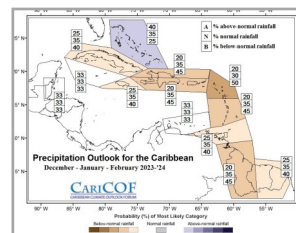
There is some concern over short-term drought that can impact small rivers, streams and ponds by the end of February across northern Belize, southern French Guiana, Grenada, western Puerto Rico, northern and central Suriname and possibly develop or continue in the Northern Bahamas, Barbados, southwest Belize, Grand Cayman Cuba, Dominica, southern Dominican Republic, northern and central parts of French Guiana and Guyana, Martinique, Saint Lucia, St. Vincent, Trinidad, and the USVI. across southwest Belize, The Bahamas, and southern Guyana. Interests in these territories 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 2024 across much of Belize, southern French Guiana and southwest Puerto Rico and possibly develop or continue in south-west and east-central Belize, Grand Cayman, Eastern Cuba, central French Guiana, Jamaica, St. Vincent, northern Suriname. Interests in these countries should monitor their water resources.

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (DECEMBER 2023—FEBRUARY 2024)

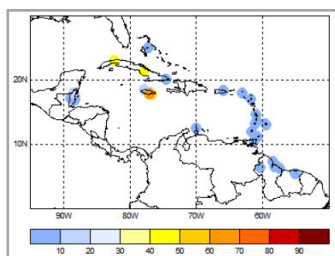
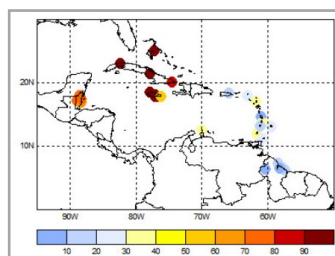


Rainfall totals from December through February are likely to be the usual or higher across The Bahamas. By contrast, nearly all other areas are likely to record the usual rainfall amounts or less.

Moderate potential for long-term flooding, flash floods and related hazards exist in most areas. High potential exists in mountainous areas through December and in the coastal Guianas through January.

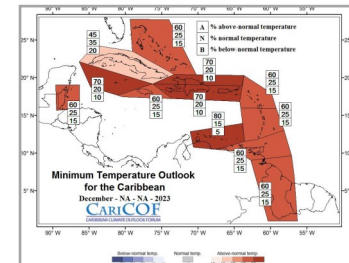
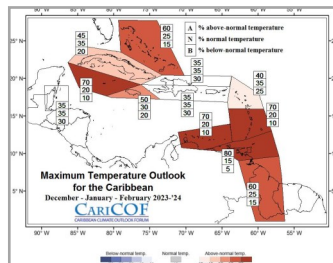
Probability of at least THREE 7-day dry spells in DJF

Probability of at least ONE 15-day dry spell in DJF



The occurrence of at least three 7-day dry spells is highly favourable across Belize, Cuba, Jamaica and northern Belize.

Day-time (maximum) and night-time (minimum) temperatures are forecast to be higher than usual in many areas. However, no significant episodes of heat stress are expected during the core of the Caribbean Cool Season.



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

CLIMATE-SMART ADVISORIES

In the event of short-term drought (across most of the region), implement drought management plans by employing water management practices to enhance conservation and efficient use of water, some of these may include:

- ◆ Irrigation scheduling (irrigating early mornings and late afternoons to reduce evaporation and transpiration rates)
- ◆ Applying mulch for moisture conservation in the soil.

Farmers in areas with significant rainfall deficits going into the dry season may want to make sure they have adequate irrigation for their fields at least for the first half of the season. If not, farmers may want to consider reducing their planting area.

In the event of dry spells:

- ◆ Ensure regular weeding to reduce competition and further stress to crops
- ◆ Schedule irrigation
- ◆ Utilize irrigation techniques to apply the right amount of water for the crop and to avoid runoff

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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