

# 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

Heat discomfort and rising water levels in soils, rivers and reservoirs is likely as the region progresses through the late portion of the wet/heat/hurricane season in the Caribbean Islands and in Belize with forecasts of more frequent tropical cyclone activity, heatwaves, wet days and wet spells, and high air humidity than earlier in the season.

The potential for flooding and cascading impacts will be high to extremely high.

Heat stress will peak in September, but likely less than in recent hot years (e.g., 2020).

Ongoing drought concerns should progressively subside.

## JULY IN REVIEW

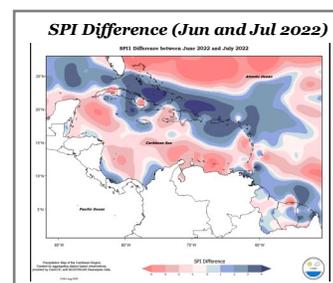
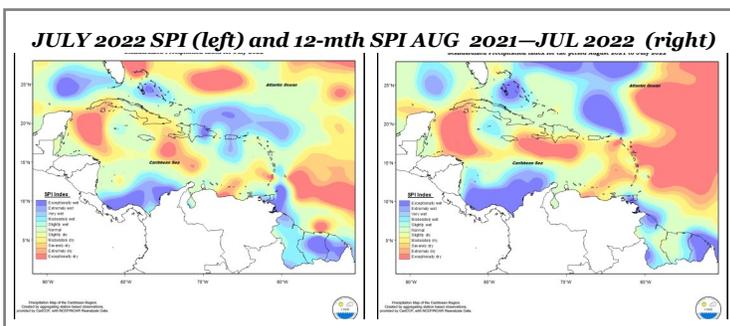
Mixed conditions prevailed throughout the islands of the eastern Caribbean during the month of July. Trinidad was extremely wet to normal; Tobago normal to exceptionally wet; Grenada, Dominica, Guadeloupe, Antigua, St Kitts and St Maarten normal; Barbados moderately dry to normal; St Vincent exceptional to moderately dry; Saint Lucia normal to moderately wet; Martinique, Anguilla and St Croix slightly wet to normal and St Thomas moderately wet. In the Guianas, conditions ranged from exceptionally wet to exceptionally dry. Aruba and Curacao slightly wet to normal.

Puerto Rico ranged from moderately wet in the extreme west and east to extremely wet in central areas. Hispaniola ranged from extremely dry in southwestern Haiti to exceptionally wet in central Dominican Republic. Jamaica was predominantly normal ranging to moderately dry in the extreme east. Grand Cayman was slightly wet. Cuba ranged from normal in central areas to extremely dry in west central areas and severely dry in the east. Northern Bahamas ranged from exceptionally wet to exceptionally dry and Belize was predominantly normal ranging to slightly dry in eastern and central areas.

## 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)

A review of the 12-month period (August 2021 to July 2022), showed predominantly extremely dry to exceptionally dry conditions across the eastern Caribbean.



Rainfall totals across the month of July had been predominantly wetter than June across much of the Greater Antilles, The Leeward Islands and across parts of the Guianas.

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

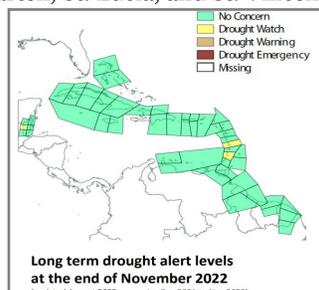
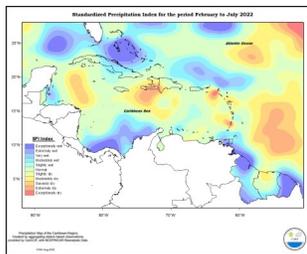
## AGRI-NEWS

**Belize:** Heavy rainfall flooded vegetables. Farmers call for help. Read more <https://www.breakingbelizenews.com/2022/08/19/corozal-farmers-ask-for-help-with-flooded-vegetables/>

## REGIONAL OUTLOOKS

### DROUGHT

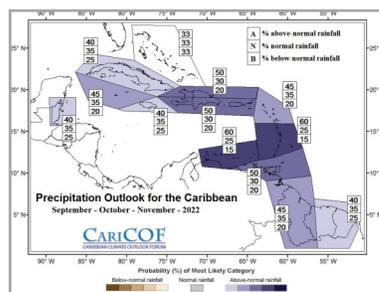
By the end of July, severe (or worse) short term drought has developed in Guadeloupe, southwestern Hispaniola, southernmost Jamaica, St. Barts, St. Croix, Sint Maarten and in St. Vincent. Severe (or worse) long term drought has developed in Antigua, Western Cuba, southwest Haiti, Guadeloupe, eastern Jamaica, Martinique, St. Barts, St. Croix, Sint Maarten, St. Lucia, and St. Vincent.



No concerns for impacts from short-term drought by the end of November 2022.

There is some possibility for long-term drought, that can impact large reservoirs, large rivers or groundwater, to present a challenge in farming by the end of November 2022. Interests in Belize (particularly in the west), Martinique and St. Vincent should continue to monitor their water resources.

### RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (SEPTEMBER—NOVEMBER 2022)



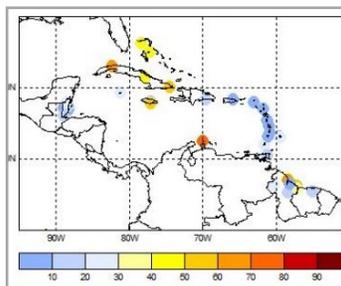
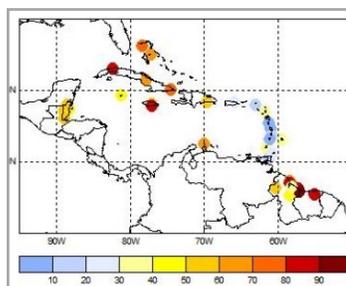
Rainfall totals from September through November could be wetter than normal across the region.

High to extremely high potential for flooding, flash floods, and cascading hazards in most islands and in Belize due to recurrent very wet and extreme wet spells.

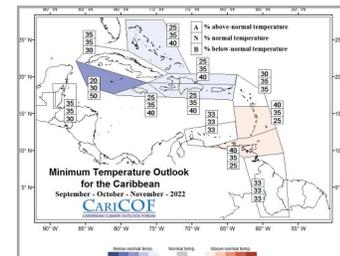
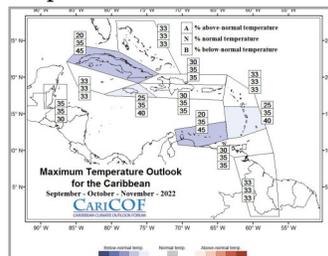
Favourable conditions for moisture-related pests and diseases in Belize and the Islands in view of frequent wet days.

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

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



The occurrence of at least three 7-day dry spells is favourable across the Guianas, Cuba, Jamaica and northwestern Bahamas. The occurrence of at least one 15-day dry spell remains favourable across The ABC Islands, and possibly Cuba, Jamaica, northwestern Bahamas and parts of the Guianas.



Day-time (maximum) and night-time (minimum) temperatures are expected to cool by the end of this season, which coincides with the conclusion of the Caribbean Heat Season. Seasonal average daytime temperatures may be cooler than usual, but recurrent heatwaves are still expected in September and, possibly, in October in the southern half of the region.

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

### CLIMATE-SMART ADVISORIES

**In the event of flooding from very wet and extreme wet spells:**

- ◆ Certain pests and diseases, such as phytophthora root rot, will increase during and after extreme wet conditions. Implement appropriate disease and pest management practices.
- ◆ Ensure that livestock are housed on high ground; evacuate animals in low lying area and pastures which are prone to flooding and erosion.
- ◆ Maintain drains around crop bed to ensure proper drainage of water.

**Though not expected to be as warm as in recent years, as we advance into the Heat Season, livestock farmers should:**

- ◆ Provide adequate ventilation, shading and water for livestock (especially poultry)
- ◆ Take heed of signs of heat stress in ruminants (e.g., panting, drooling, sweating)

**Farmers should pay attention to their health and safety during prolonged hot conditions to protect against the effects of extreme heat. They should:**

- ◆ Drink plenty fluids to reduce chances of dehydration. Avoid foods that may increase dehydration (e.g., alcohol, sugary and salty foods)
- ◆ Take breaks in cool and shaded areas to decrease body temperature
- ◆ Shorten work periods
- ◆ Wear loose fitting and lightweight clothing to protect against sunburn

**Maintain proper records** of inputs and the crop under cultivation and/or livestock being reared.

**Remain hurricane prepared!**

*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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