

CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM



OCTOBER 2022 • VOLUME 6 • ISSUE 5

A joint bulletin of the Caribbean Agricultural Research and Development Institute (CARDI) and the Caribbean Institute for Meteorology and Hydrology (CIMH).

KEY MESSAGES

The transition between the wet and dry season is forecast to feature frequent wet days, excessive rainfall and above-average tropical cyclone activity across the Caribbean region. This results in rising water levels in soils, rivers and reservoirs.

The potential for floods and cascading hazards is forecast to be extremely high across the Lesser Antilles, high elsewhere across the Caribbean Islands and in Belize, and moderate in the coastal Guianas (from November).

In October, high humidity and temperatures at times may increase heat stress south of Guadeloupe.

AUGUST IN REVIEW

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

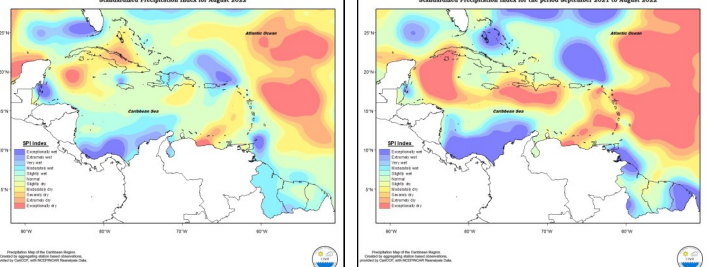
Puerto Rico ranged from normal in the extreme west to extremely wet in the northeast. Hispaniola ranged from normal in the west to very wet on the north and to moderately dry in the east. Jamaica ranged from predominantly normal to extremely wet in northwestern areas. Grand Cayman was slightly dry. Cuba ranged from exceptionally dry in the north to normal in the east and west, and to slightly wet in the extreme southeast. Northern Bahamas ranged from severely dry to normal and Belize ranged from moderately dry in the south to exceptionally wet in northeastern areas.

ABOUT CariSAM

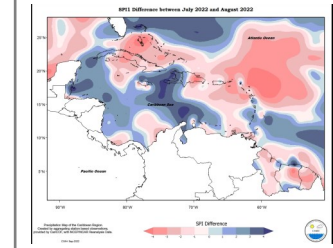
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

A review of the 12-month period (September 2021 to August 2022), showed predominantly normal to below normal conditions across the much Caribbean, with the exception of the Guianas, Trinidad and Tobago, Anguilla, northwestern Bahamas, and Belize.

AUG 2022 SPI (left) and 12-mth SPI SEP 2021—AUG 2022 (right)



SPI Difference (Jul and Aug 2022)



Rainfall totals across the month of August had been predominantly drier than July across much of the Greater Antilles, The Leeward Islands, Trinidad and Tobago and the Guianas.

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

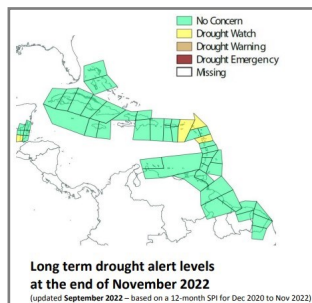
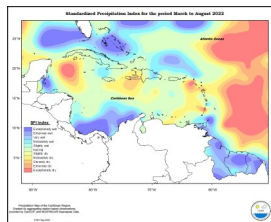
AGRI-NEWS

Jamaica: Damage to the agricultural sector by flooding caused by Tropical Storm Ian is more than \$200 million. Read more <https://www.moa.gov.jm/content/200-million-damage-agricultural-sector>.

REGIONAL OUTLOOKS

DROUGHT

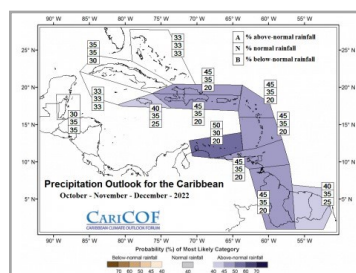
By the end of August, severe (or worse) short term drought has developed in the northwestern Bahamas, northwest Martinique and St. Barts. Severe (or worse) long term drought has developed in Antigua, Western Cuba, Guadeloupe, southwest Haiti, eastern Jamaica, Martinique, St. Barts, Sint Maarten, and St. Vincent.



No concerns for impacts from short-term drought by the end of December 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 southwest), Guadeloupe, St. Maarten/Sint Martin, and the US Virgin Islands should continue to monitor their water resources.

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (OCTOBER–DECEMBER 2022)

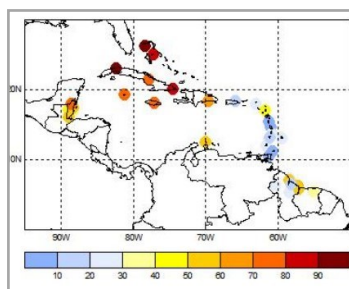


Rainfall totals from October through December could be higher than normal across the region.

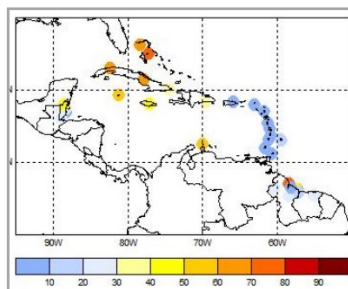
Concerns remain for the potential of flash floods, long-term flooding, landslides and widespread soil erosions in most islands and in Belize due to very

wet and extreme wet spells. This concern exists for coastal Guianas from late November. Favourable conditions for moisture-related pests and diseases exists.

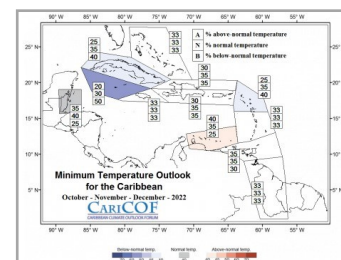
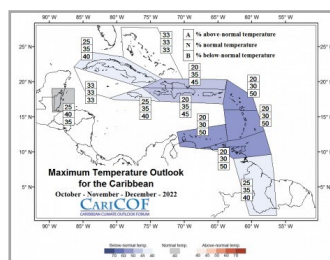
Probability of at least THREE 7-day dry spells in OND



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



The occurrence of at least three 7-day dry spells is favourable across Jamaica, Cayman Islands, Cuba, Jamaica, Belize and northwestern Bahamas. The occurrence of at least one 15-day dry spell remains favourable across Cuba, northwestern Bahamas.



Day-time (maximum) and night-time (minimum) temperatures are expected to be close to the usual (or slightly lower) in many areas, except for night-time temperatures in the ABC Islands. Heat stress should decrease from October. However, it should peak in the Guianas and, in the event of a heatwave, still be high in Barbados and the Windward Islands towards November.

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; when necessary, evacuate animals in low lying areas and pastures which are prone to flooding and erosion.
- ◆ Secure inventory: Store chemicals, fertilizers, feeds, machinery etc. on high ground away from moisture prone areas and livestock.
- ◆ Maintain drains around crop bed to ensure proper drainage of water. Also, to improve soil drainage, plant crops on raised beds

In the event of heat stress in the Guianas and Barbados, 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)

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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