

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 peak of the wet/heat/hurricane season is forecast to bring a notable increase in wet days and wet spells, heat-waves and tropical cyclone activity in the Caribbean Islands and in Belize. This results in rising water levels in soils, rivers and reservoirs. Importantly, the potential for flash floods, long-term flooding and cascading impacts will be high to extremely high.

Heat stress will peak during this season, especially during heat waves, but will likely be less intense than in recent hot years (e.g., 2016, 2020).

The Guianas enter the dry season, though extreme wet spells remain possible.

Existing drought concerns in the region should subside by the end of August.

JUNE IN REVIEW

Mixed conditions prevailed throughout the islands of the eastern Caribbean during the month of June. Trinidad ranged from normal in the extreme southeast to exceptionally wet in the extreme northwest; Tobago moderate to slightly wet; Grenada and Barbados normal; St Vincent slightly dry in the extreme south to predominantly normal; Saint Lucia moderate to very wet; Martinique and Dominica moderately wet to slightly dry; Guadeloupe normal to extremely dry; Antigua and St Croix slight to moderately dry; St Kitts normal to slightly dry; St Maarten severe to exceptionally dry; Anguilla severe to extremely dry and St Thomas moderately dry. In the Guianas conditions ranged from exceptionally wet to extremely dry. Aruba was very wet and Curacao was moderately wet.

Puerto Rico ranged from normal to moderately dry west to east. Hispaniola was predominantly normal ranging to extremely dry in the extreme south of Haiti and to slightly dry in the extreme east of the Dominican Republic.

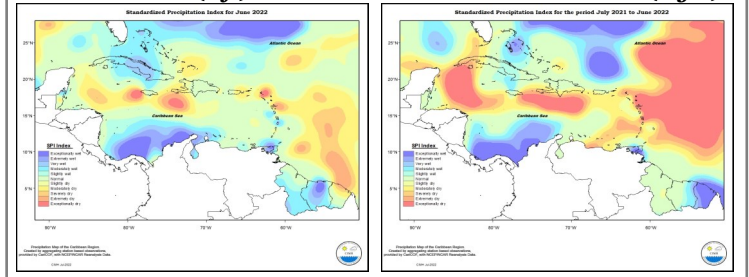
ABOUT CariSAM

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

Jamaica was predominantly normal ranging to exceptionally dry in the extreme west, to moderately dry in the east, to slightly dry in the south and to slightly wet in the north. Grand Cayman was normal. Cuba ranged from very wet in central areas to slightly dry in the west and normal in the east. Northern Bahamas ranged from slight to very wet and Belize ranged from moderately dry in central areas to normal in the south and very wet in the north.

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

JUNE 2022 SPI (left) and 12-mth SPI JUL 2021–JUN 2022 (right)



SPI Difference (May and Jun 2022)



Rainfall totals across the month of June had been predominantly drier than May across much of the Greater Antilles and wetter elsewhere.

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

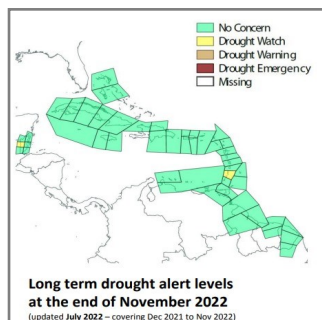
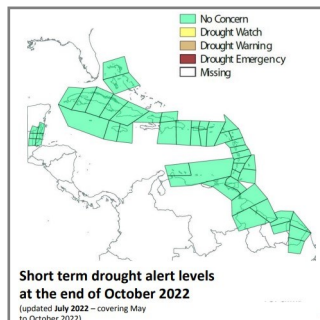
AGRI-NEWS

Guyana: Constant rainfall has been having a negative impact on the availability and price of “greens”. Read more <https://newsroom.gy/2022/07/19/rainfall-affecting-availability-cost-of-greens-mustapha/>

REGIONAL OUTLOOKS

DROUGHT

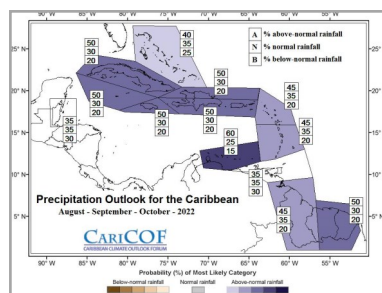
By the end of June, moderate (or worse) short term drought has developed in western Hispaniola, eastern Puerto Rico and the U.S. Virgin Islands, Saint Martin, Antigua, and Guadeloupe. Moderate (or worse) long term drought has developed in western Cuba, southern Hispaniola, eastern Jamaica, the Turks and Caicos, and along all of the Lesser Antilles excluding Trinidad.



No concerns for impacts from short-term drought by the end of October 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) and St. Vincent should continue to monitor their water resources.

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

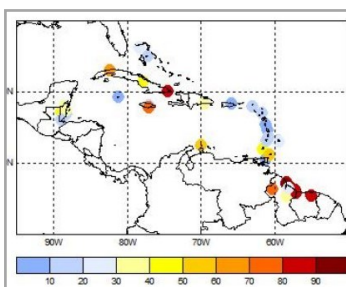


Rainfall totals from August through October could be wetter than normal across the region.

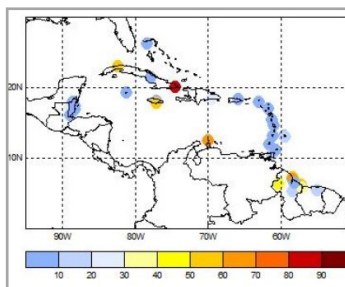
High to extremely high potential for flooding, flash floods, and cascading hazards in most islands and in Belize due to recurrent very wet and extreme wet spells.

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

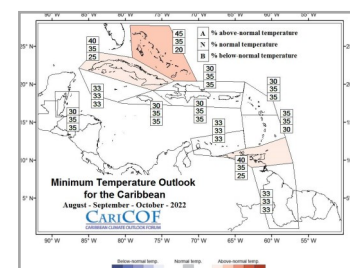
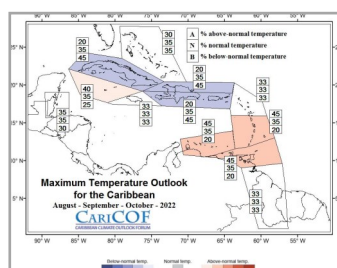
Probability of at least THREE 7-day dry spells in ASO



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



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



Day-time (maximum) and night-time (minimum) temperatures are expected to be warm during the peak of the Heat Season. Heat exposure will be excessive during heatwaves, but likely less than in recent hot years. Daytime temperatures may be slightly cooler than usual in Cuba, Hispaniola, U.S. Territories.

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 blossom end 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 and shading 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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