# **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). As of May 2017, the previous monthly CAMI bulletin transitions into the Caribbean Agro-Climatic Bulletin of the CariSAM.

#### We apologize for the absence of last month's issue of the CariSAM bulletin!!!

#### **KEY MESSAGES**

Rainfall totals could be normal to below normal during this peak of the wet season, with the possibility of fewer wet days than usual (except across the ABC Islands and the Guianas). A number of short dry spells is likely in most areas except Belize and the Lesser Antilles. However, there is still a potential for flooding and flash floods across the region.

Short term drought concern (by the end of October) is possible especially for northern Belize. Moreover, long term drought concerns may arise by the end of the wet season for Antigua and St. Kitts.

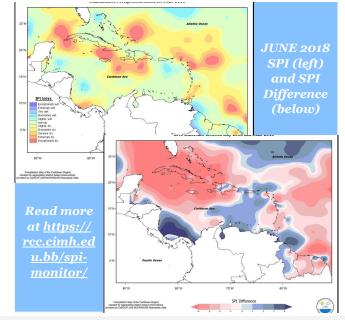
Cooler day and night time temperatures during August to October, could reduce the number of heat waves thus decreasing the chance of heat stress.

## **JULY IN REVIEW**

Normal to below normal rainfall was experienced in the islands of the eastern Caribbean for June. Trinidad was normal to severely dry; Tobago moderate to severely dry; Grenada, Barbados, St. Vincent moderately dry; St. Lucia and Dominica normal to moderately dry; Martinique, St. Kitts and Anguilla normal; Guadeloupe normal to extremely dry; Antigua severe to extremely dry; and St. Maarten extremely dry. Conditions in Guyana ranged from extremely wet in parts of western Guyana to severely dry in north central French Guiana. Aruba and Curacao were normal, but Puerto Rico normal to slightly dry.

Conditions in Hispaniola ranged from extremely dry in southern Dominican Republic to normal in the north and slightly wet in the east. Jamaica ranged from slightly dry in the southwest to exceptionally dry in the north, but Grand Cayman was moderately dry. Cuba ranged from normal in central areas to exceptionally dry in the west and southeast, while northern Bahamas was normal to moderately wet. Belize was normal to moderately dry from south to north.

Even though the region has entered into its wet season decreasing wetness has been observed across most of the region in June as compared to May.



## **AGRI-NEWS**

Antigua and Barbuda is currently facing drought conditions which could possible worsen over the next few weeks, and possibly lasting up to 6 months. *Read more at <u>https://</u>antiguaobserver.com/drought-conditions-affecting-the-island/* 

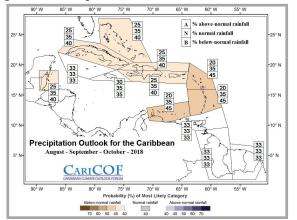
## **ABOUT CariSAM**

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: <u>www.carisam.cimh.edu.bb</u>

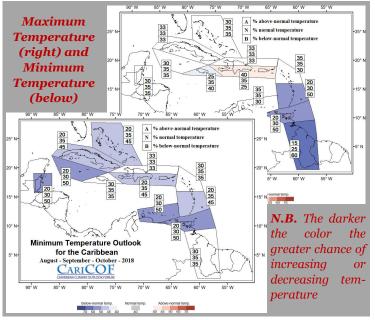
# **REGIONAL OUTLOOKS**

## RAINFALL AND TEMPERATURE (AUGUST TO OCTOBER)

Rainfall totals are likely to be normal to below normal for most of the region reducing the amount of reliable rainfall for agriculture. However, the chance for floods and flash flood remains possible as the region enters the peaks of the wet season.



Both day and night time temperatures are expected to be lower than normal with the exception of Hispaniola and the U.S. territories during the day. This could give rise to reduced heat stress on agriculture.



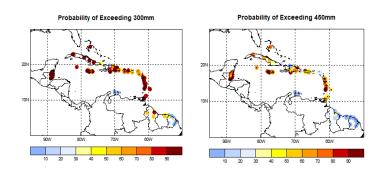
There is favourable chance of parts of the Guianas experiencing at least seven heatwave days between August to October. However, with the possibility of lower day and nght time temperatures it is less favourable to experience a higher number of heatwave days across the region.

# DROUGHT

Short-term drought may be a concern by the end of October Barbados, northern French Guiana, Grenada, Haiti, St. Vincent, Suriname but **more so for northern Belize**. Also, there may be concerns for long-term drought by the end of the wet season for northwestern Belize, Cayman Islands, eastern Jamaica, southeastern Puerto Rico **but more so for Antigua and St. Kitts**. *Visit* <u>https://rcc.cimh.edu.bb/long-range-forecasts/caricof-climateoutlooks/</u>

# Probability of Exceedence (Experimental)

The chance of receiving enough rainfall to satisfy cropping would be very useful information. Rainfall totals between 300mm and 450mm, would adequately satisfy most crops over the three month period without the need for irrigation. In most of the Caribbean, despite the high chance for below normal rainfall, achieving this would be very likely, particularly 300mm.



# CLIMATE-SMART ADVISORIES

- With the possibility of decreasing rainfall totals across the region some crop water requirements for crops may not be met. Information on the Probability of Exceedence could help with decision making (*contact the CIMH for further information*).
- Continue to be mindful of the necessary procedures you need to take to avoid/minimize damage or loss in the event of floods or flash floods.
- Cooler night-time temperatures may favour pollen viability and would also give rise to increased crop production. However, in regions where higher day-time temperatures could be a reality, this could given rise to heat stress for crops and livestock. Therefore the farmer should take necessary measures against heat stress.

## 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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