

# CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM



MARCH 2019 • VOLUME 2 • ISSUE 10

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

## KEY MESSAGES

**Short term drought, that can impact on surface irrigation resources such as streams, small rivers and ponds is a concern for much of the region until May. Long term drought that can impact ground water supplies and large rivers is evolving in many parts of the region.**

**During the period of March to May the region may see as much as three 7 day dry spells with the possibility of having at least one 15 day dry spell.**

**With water availability a concern across much of the region water conservation measures should be put in place.**

## JANUARY IN REVIEW

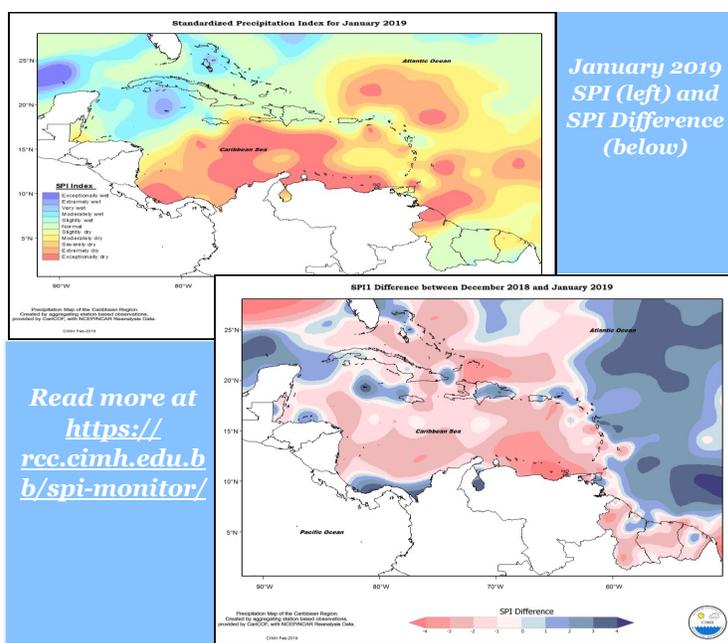
Apart from the northwest parts of the basin and small areas in the southern Guianas, the Caribbean would have experienced normal to below normal rainfall. Trinidad ranged from normal in the southwest to exceptionally dry in the northeast; Tobago moderate to exceptionally dry from east to west; Grenada slightly dry; Barbados severe to exceptionally dry; St. Vincent severely dry; St. Lucia moderate to severely dry; Martinique and St. Kitts moderately dry; Dominica normal to severely dry; Antigua and slight to moderately dry; Guadeloupe, St. Maarten, Anguilla and St. Thomas normal; and St. Croix severe to extremely dry. The Guianas ranged from exceptionally dry in northern Guyana to slightly wet in southern Guyana/Suriname border and southeastern French Guiana, with northern French Guiana slight to moderately dry. Both Aruba and Curacao were exceptionally dry.

Puerto Rico was normal to moderately dry from south to north, while Hispaniola was predominantly normal, but with the southwest Haiti being slight to severely dry, and portions of eastern Dominican Republic being slightly wet. Jamaica ranged from moderately wet in the west to moderately dry in the east, while Grand Cayman was extremely wet. Conditions in Cuba ranged from normal in the east to moderately wet in western areas; while northern Bahamas slight to very wet. Belize ranged from moderately dry in the south to normal in the north.

## 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)

The month of January was relatively drier than December across most of the region with the exception of the Cayman Islands, Dominican Republic, USVI, Saint Maarten, Guadeloupe and Southern Trinidad.



## AGRI-NEWS

Five Overlooked Facts About Caribbean Food Security. Read More <https://www.forbes.com/sites/daphneewingchow/2019/02/20/five-facts-about-caribbean-food-security/#554656915016>

Jamaica Pushes Climate Smart Policies to Secure the Future of its Food Supply. Read more:

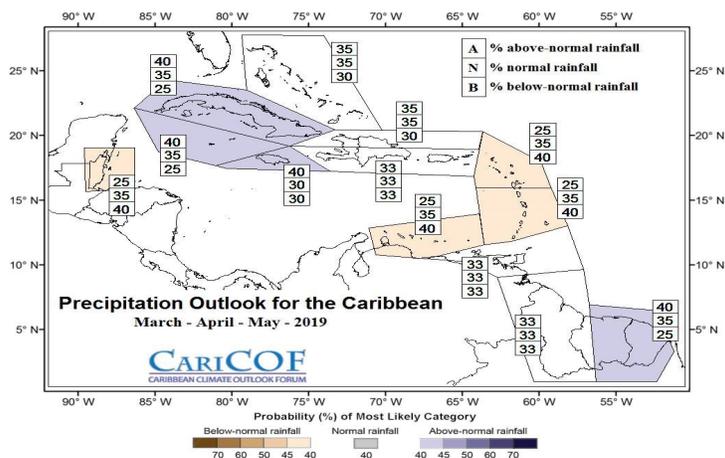
<http://www.caribbean360.com/news/jamaica-pushes-climate-smart-policies-to-secure-the-future-of-its-food-supply>

## REGIONAL OUTLOOKS

### RAINFALL, DRYSPELLS AND TEMPERATURE (MARCH TO MAY)

Rainfall totals from March to May are likely to be at least as dry as usual in the ABC Islands, Belize and the Lesser Antilles, but likely the usual or wetter in Cayman, Cuba and eastern portions of the Guianas.

White areas show where the forecast indicates little information on rainfall totals.

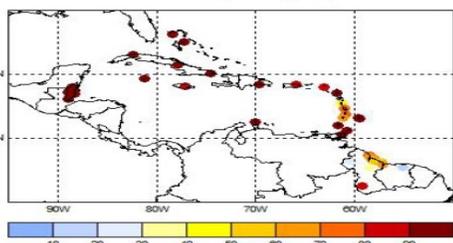


Temperatures are likely to be normal to above normal across most of the region for March to May.

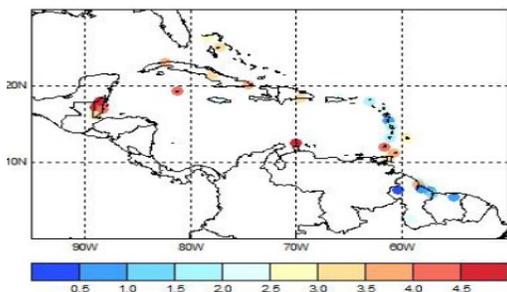
There is a favourable chance of the region receiving at least three 7-day dry spells during March to May with a possibility of many more than three in the northwestern and southeastern sections of the region. The region may receive at least one 15 day dry spell with the possibility of exceeding this in the northwestern and southeastern sections.

**Probability of at least three 7-day dry spells (right) and MAX number of 15-day dry spells (below)**

#### Probability of at least THREE 7-day dry spells

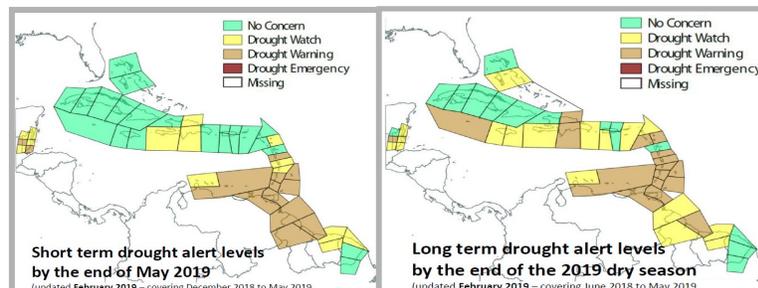


#### MAX number of 15-day dry spells



Read more at:  
[https://rcc.cimh.edu.bb/files/2019/02/Dry\\_spells\\_MAM\\_outlook.pdf](https://rcc.cimh.edu.bb/files/2019/02/Dry_spells_MAM_outlook.pdf)

### DROUGHT



Current drought situation (up to the end of January 2019): Barbados, parts of Belize, much of Hispaniola, much of the Leeward Islands, St. Lucia, St. Vincent and Tobago have seen long term drought developing. Shorter term drought is seen in the ABC Islands, northern Barbados, south-eastern Cuba, much of Hispaniola, St. Vincent, Trinidad and Tobago.

Shorter term drought situation (by the end of May 2019): shorter term drought is evolving in Barbados, west-central and southeast Belize, Dominica, Grenada, Guyana, St. Vincent, Trinidad & Tobago. Shorter term drought might possibly develop in the ABC islands, Antigua, remainder of Belize, northern French Guiana, Hispaniola, Martinique, St. Lucia, Suriname.

Long term drought situation (by the end of May 2019): A weak El Niño is expected to contribute to reduced rainfall up until May. Long term drought is evolving in Antigua, west-central Belize, Cayman, N & S Dominican Republic, NE Guyana, St. Kitts, Trinidad and Tobago, Windward Islands. Long term drought might possibly develop in the ABC islands, NW Bahamas, E & S Belize, E Dominican Republic, remainder of Guyana, S Haiti, Jamaica, N Leeward Islands., SW Puerto Rico, Suriname, United States Virgin Islands

### CLIMATE-SMART ADVISORIES

In those areas likely to experience or are already experiencing low water availability, irrigation systems should be ready or employed along with other water conservation techniques such as mulching. Other methods such as planting drought tolerant varieties and managing planting areas (according to available water supply) should be considered. Farmers should also ensure that adequate water and shade are provided for livestock.



In places where flash flooding might be likely, particularly in the northwestern Caribbean farmers are advised to:

- Maintain drains around crop beds and/or plant crops on raised beds
  - House animals on high ground and/or on raised pens
  - Store fertilizer and pesticides away from moisture and water sources
- Please also 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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