

# 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

Cool and less intense early dry season in the Caribbean Islands, except the Bahamas and Cuba.

In Belize and the Islands, flooding, flash flood, landslide/rockfall and soil erosion potential will decrease from moderate in December to slight by January. In the Guianas, this potential will be high with an intense wet season.

Increasingly frequent, short dry spells are forecast - especially from Hispaniola westward, impacting rainfed farming and increasing wild fire potential.

## OCTOBER IN REVIEW

The islands of the eastern Caribbean were predominantly normal to above normal during the month of October. Trinidad ranged from normal in the southeast to very wet in the northwest; Tobago slightly wet; Grenada and St Vincent normal to slightly wet; Barbados extremely wet in the south to slightly wet in the north; Saint Lucia moderately wet; Martinique and Dominica moderate to very wet; Guadeloupe moderately wet to normal; Antigua, St Kitts, St Croix and St Thomas normal; and St Maarten moderate to exceptionally wet. In the Guianas, conditions ranged from exceptionally dry in southwestern Guyana and from severely dry in northern Suriname, to exceptionally wet in northeastern Guyana and very wet on the southern Suriname/ French Guiana border. Aruba was moderately wet and Curacao normal.

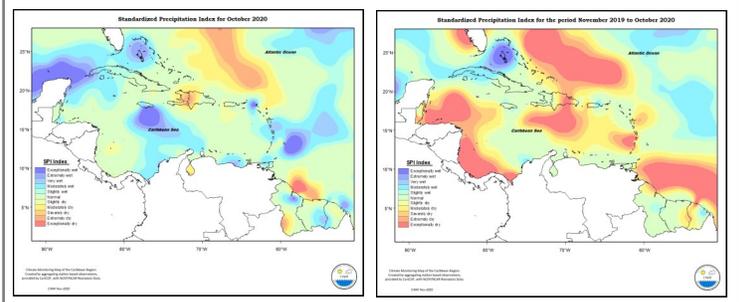
Puerto Rico ranged from slightly dry in the west to normal in the east. Hispaniola ranged from extremely dry on the central border of Haiti and the Dominican Republic to normal in eastern areas and in the extreme southwest. Jamaica ranged from exceptionally wet in the extreme south to normal in the extreme west and northeastern areas. Grand Cayman was moderately wet. Cuba ranged from exceptionally wet in the extreme west to slightly dry in the southeast. Northern Bahamas ranged from moderate to extremely wet. Belize was predominantly normal with slightly wet areas in the southeast and extreme north.

## ABOUT CariSAM

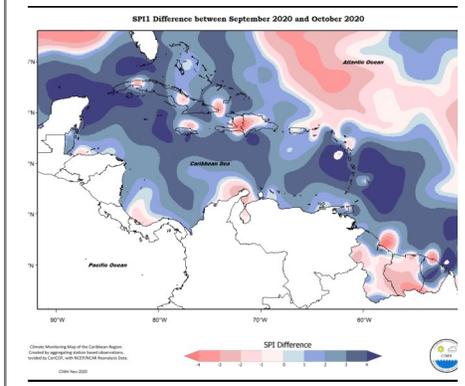
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

The 12-month review of rainfall across the region shows severely to exceptionally dry conditions relieved across some territories.

### OCT 2020 SPI (left) and 12-month SPI NOV 2019 - OCT 2020 (right)



### SPI Difference (September and October 2020)



The month of October was predominantly relatively wetter than September across most of the region.

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

## AGRI-NEWS

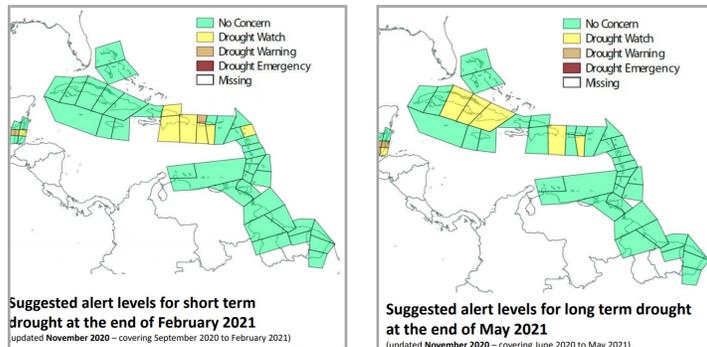
Farming community reeling from the impacts of the flooding in rural Belize. Read more <https://edition.channel5belize.com/archives/211725>

Farmers Suffer Losses Estimated at \$2 Billion due to heavy rains in Jamaica. Read more <https://jis.gov.jm/farmers-suffer-losses-estimated-at-2-billion/>

**REGIONAL OUTLOOKS**

**DROUGHT**

As at the end of October 2020, severe (or worse) shorter term drought has developed in western Puerto Rico. Severe (or worse) long term drought has developed in southern and easternmost Belize, central parts of the Dominican Republic, easternmost Guadeloupe, western and northern French Guiana, northernmost Guyana, Saint Lucia, St. Vincent, and parts of eastern Suriname.



By the end of February 2021, there may be concern for surface soil wetness, and stream and river flow across portions of western Belize and northern Puerto Rico. Concern may possibly develop across Antigua, parts of eastern Belize, the Dominican Republic, and southern Puerto Rico.

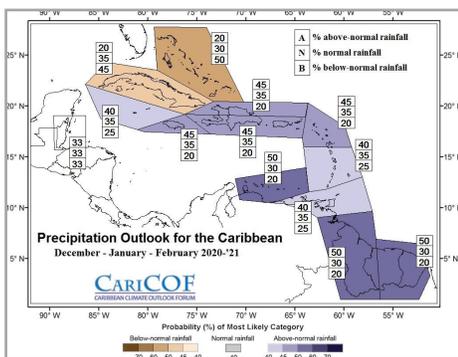
However, concerns for long-term drought (by end of May 2021) could present a challenge in farming, especially where water supply is sourced from larger reservoirs, large rivers or groundwater, across Belize, northwest Puerto Rico and possibly eastern Cuba, eastern Dominican Republic, and southeast Puerto Rico.

**Interests across the region should continue to monitor their water status.**

**RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (DECEMBER 2020—FEBRUARY 2021)**

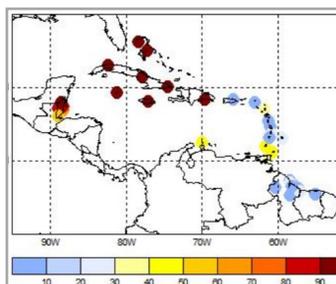
Rainfall totals from December to February are likely to be at least as high as usual in the Guianas and most of the Antilles; but likely the usual or drier in the Bahamas and Cuba.

High flash flood and long-term flooding potential, as well as, land slide, rock-fall and widespread soil erosion could be a significant concern in the Guianas. Flood potential decreasing from moderate to slight in Belize and the islands after December.

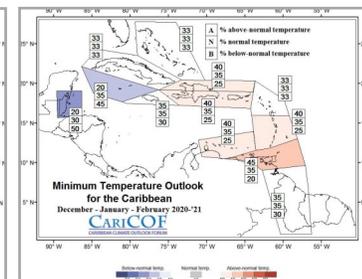
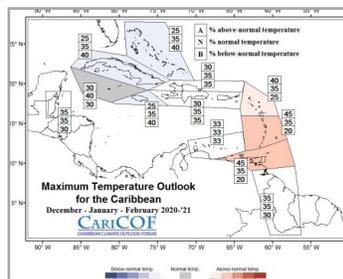
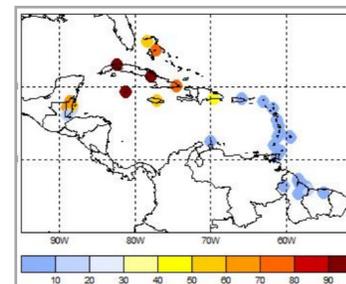


The occurrence of at least three 7-day dry spells remain highly likely across northern Belize, Cayman Islands, Jamaica, Cuba, northwest Bahamas, and eastern Dominican Republic.

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



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



Night-time (minimum) and day-time (maximum) temperatures are very likely to be comfortably cool, as this period marks the core of the Caribbean’s cool season. In Belize and at higher elevations throughout the region, there is the potential for a number of cold nights.

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

**CLIMATE-SMART ADVISORIES**

- ◆ With the possibility of flood producing rains, particularly in the Guianas (and the islands early in the season):
  - ⇒ Maintain drains around crop beds and/or plant crops on raised beds
  - ⇒ House animals on high ground and/or on raised pens
  - ⇒ Store fertilizer away from moisture and water sources
- ◆ Agricultural pest and diseases may increase after excess periods of precipitation. Monitor and employ recommended treatment as necessary.
- ◆ Alternate sources of irrigation may be required for territories being affected by short dry spells, and increasingly so across the region during the second half of the season.

**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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