

# 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

**Frequent dry spells (particularly in The Bahamas, Cayman Islands and Cuba) are likely to increase wildfire potential and decrease water levels in surface reservoirs and ponds.**

**By contrast, a few wet spells may help prevent water levels from rapidly falling in the ABC Islands and the Lesser Antilles.**

**No concerns for short-term drought by the end of March 2021. However, concerns may exist for long-term drought across Grand Cayman and St. Kitts and possibly Belize, French Guiana and Antigua (by the end of May 2021).**

**Wet conditions expected at least until February in the northern parts of the Guianas, with high potential for flooding and associated hazards.**

## NOVEMBER IN REVIEW

The islands of the eastern Caribbean were predominantly normal to above normal during the month of November. Trinidad ranged from exceptionally wet in the southeast to extremely dry in the northwest; Tobago and Guadeloupe slight to moderately wet; Grenada, St Vincent and St Kitts normal; Barbados normal to slightly wet; Saint Lucia slight to very wet; Martinique moderately wet in the south to slightly dry in the north; Dominica moderately dry to extremely wet; Antigua moderate to very wet; St Maarten and Anguilla slightly dry in the west to normal in the east; St Croix slightly dry to normal; St Thomas moderately wet. In the Guianas, conditions ranged from normal to exceptionally wet in northern Guyana and French Guiana. Aruba was normal and Curacao extreme to moderately wet.

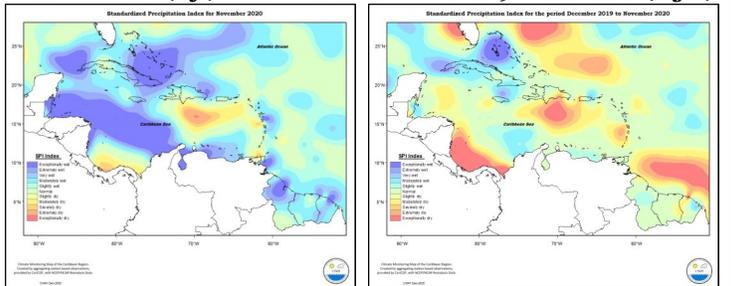
Puerto Rico ranged from normal in the south to moderately wet in the northwest and northeast. Hispaniola ranged from moderately dry in the south to very wet in northwestern Haiti and extremely wet in eastern Dominican Republic. Jamaica was normal to extremely wet. Grand Cayman was very wet. Cuba ranged from slightly dry in west central areas to exceptionally wet in the extreme west and in the east. Northern Bahamas ranged from extremely wet to normal and Belize ranged from moderate to exceptionally wet.

## ABOUT CarISAM

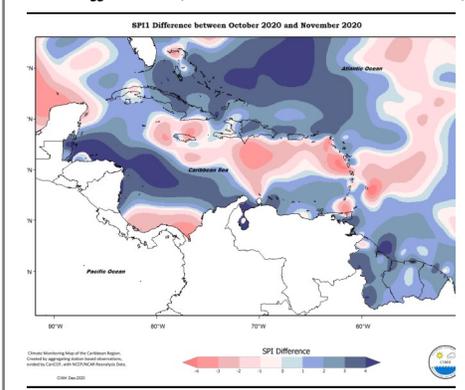
The Caribbean Society for Agricultural Meteorology (CarisAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

The 12-month review of rainfall shows dry conditions have been alleviated across most of the region with the exception of some territories of the Eastern Caribbean, portions of the Dominican Republic, Puerto Rico and the Guianas.

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



### SPI Difference (October and November 2020)



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

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

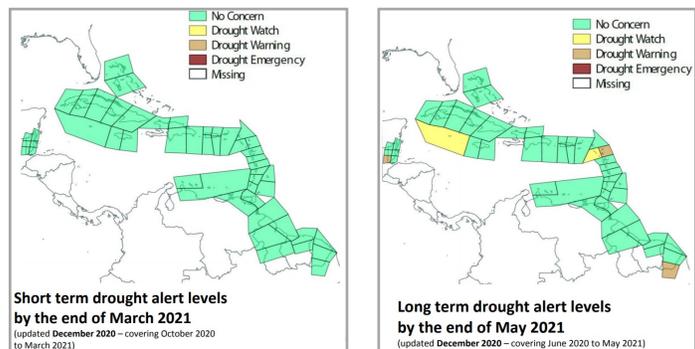
## AGRI-NEWS

Agriculture Ministry to spend \$4.3b on modernisation, flood recovery in Jamaica. Read more <https://www.loopjamaica.com/content/agriculture-ministry-spend-43b-modernisation-flood-recovery>

**REGIONAL OUTLOOKS**

**DROUGHT**

As at the end of November 2020, severe (or worse) shorter term drought has developed in parts of southwestern Guyana. Severe (or worse) long term drought has developed along the southern coast-line of the Dominican Republic, locally along the north coast of French Guiana, and westernmost Puerto Rico.



By the end of March 2021, there should be no concerns over short-term drought.

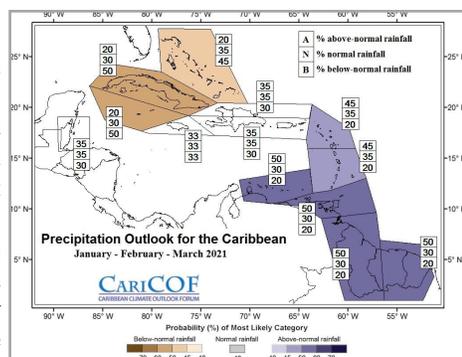
However, concerns for long-term drought (by end of May 2021) could present a challenge in farming, especially where water supply is sourced from larger reservoirs, large rivers or groundwater, across Grand Cayman and St. Kitts and could possibly develop across Antigua, southwest Belize and southern French Guiana.

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

**RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JANUARY—MARCH 2021)**

Rainfall totals from January to March are likely to be at least as high as usual in the ABC Islands, the Guianas and the Lesser Antilles; but likely to be the usual or drier in The Bahamas, the Cayman Islands and Cuba.

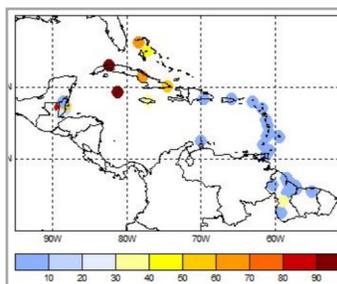
There is likely to be a high potential for flooding, flash floods, land slides/rock fall and soil erosion from very wet and extreme wet spells in the Guianas through February. However, a slight potential is likely across Belize and the islands.



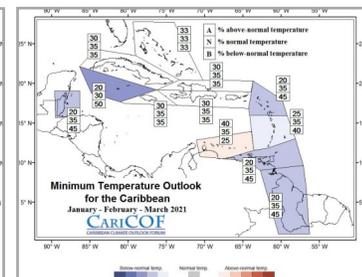
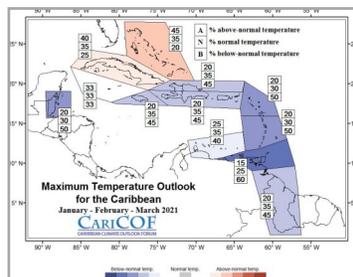
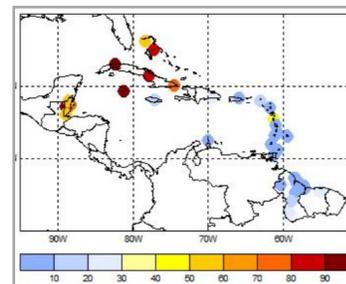
A slower depletion of large water reservoirs is likely in Belize and the islands, except in The Bahamas, Cayman Islands and Cuba, where depletion can be faster. Rapidly increasing wildfire potential exists in The Bahamas and Cuba.

The occurrence of at least three 7-day dry spells and at least one 15-day dry spell remain highly likely across Cayman Islands, Cuba and northwest Bahamas.

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



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



Night-time (minimum) and day-time (maximum) temperatures are likely to be comfortably cool and at most as warm than usual, except for daytime temperatures in The Bahamas and Cuba. At higher elevations and in Belize, some cold nights are expected through early-March.

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

**CLIMATE-SMART ADVISORIES**

- ◆ Provide adequate warmth for poultry in the event of cooler than usual night-time temperatures.
- ◆ Supplemental irrigation may be necessary for areas likely to be impacted by dry 7-day and 15-day dry spells.
- ◆ 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.

**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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