

# 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

**High flooding, flash flood, landslide and rock-fall and soil erosion potential across Belize and the Caribbean Islands until December (despite transitioning from the wet season into the typical dry season) and, from late-November, in the coastal Guianas.**

**With the transition into the dry season in Belize and the islands, frequent, short dry spells are expected from Hispaniola westward, potentially impacting crops without irrigation.**

**With the intense 2020 Heat Season ending in October, heat stress should quickly subside.**

## SEPTEMBER IN REVIEW

The islands of the eastern Caribbean were predominantly normal to below normal during the month of September. Trinidad ranged from exceptionally dry in the southeast to exceptionally wet in north-eastern areas; Tobago, Barbados, Dominica, St Kitts, Antigua, St Maarten, Anguilla, St Croix and St Thomas normal; Grenada slight to severely dry; St Vincent extreme to severely dry south to north; Saint Lucia slight to moderately dry; Martinique predominantly slightly dry with moderately dry areas in the extreme southwest; Guadeloupe was predominantly normal ranging to slightly wet in the extreme east. Conditions in the Guianas ranged from extremely dry in Southern Guyana and exceptionally dry in northeastern French Guiana to exceptionally wet in a small area in southern Suriname and northern French Guiana. Aruba slightly dry; Curacao normal to slightly dry in the north.

Puerto Rico ranged from slightly dry to normal west to east. Hispaniola ranged from moderately wet to moderately dry in a small area in the north and extreme east of the Dominican Republic. Jamaica was normal in southern and eastern areas ranging to moderately wet in the north and moderately dry in the extreme west. Grand Cayman was moderately dry. Cuba was moderately dry in the west, very wet in the east and exceptionally wet in west central areas.

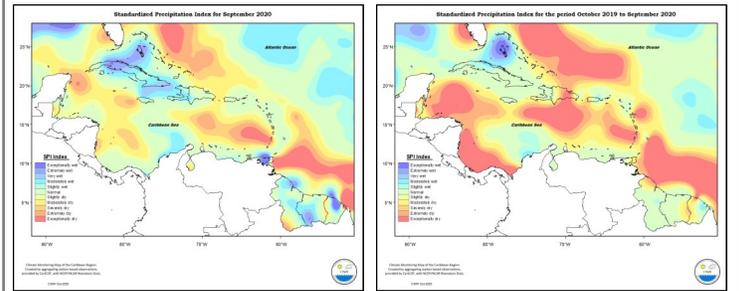
## ABOUT CarISAM

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)

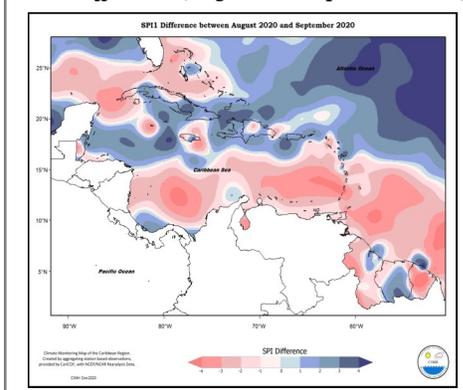
Northern Bahamas ranged from extremely wet to normal. Belize ranged from slightly dry in the south to severely dry in the west and slightly wet in the north.

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

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



### SPI Difference (August and September 2020)



The month of September was predominantly relatively drier than August except for most territories of the Greater Antilles.

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

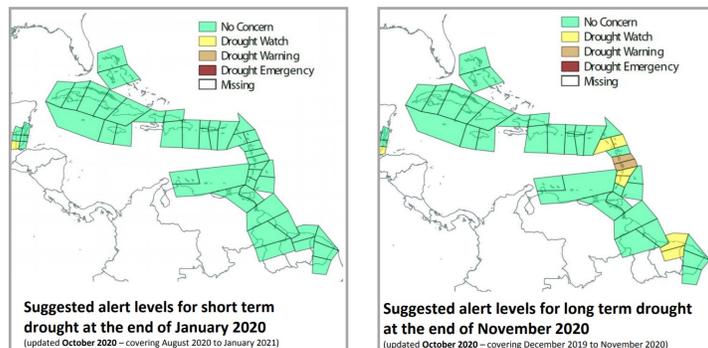
## AGRI-NEWS

Caribbean Communities Building Resilience through Water Harvesting. Read more <https://www.ipsnews.net/2020/10/caribbean-communities-building-resilience-water-harvesting/>

**REGIONAL OUTLOOKS**

**DROUGHT**

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



By the end of December 2020, there is likely to be no concern regarding surface soil wetness, and stream and river flow (though there is some chance over southern Belize).

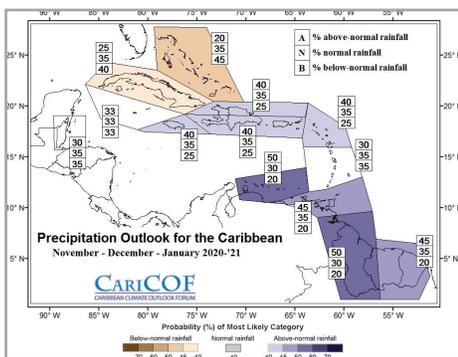
However, concerns for long-term drought (by end of November 2020) could present a challenge in farming, especially where water supply is sourced from larger reservoirs, large rivers or groundwater, across southwest Belize, Dominica, Martinique and possibly Antigua, southwest Belize, St. Kitts, Saint Lucia, St. Vincent, and Suriname.

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

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

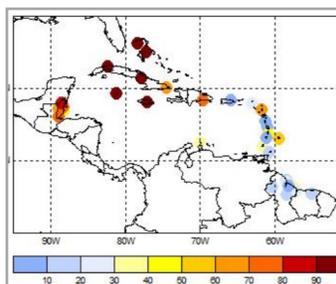
Rainfall totals from November to January are likely to be at least as high as usual in the Guianas and most of the Antilles; but likely the usual or drier in the Bahamas and Cuba.

Flash flood and long-term flooding potential, as well as, land slide, rock-fall and widespread soil erosion could be a significant concern in Belize, the Islands and the coastal Guianas (from late November) due to recurrent very wet and some extreme wet spells.

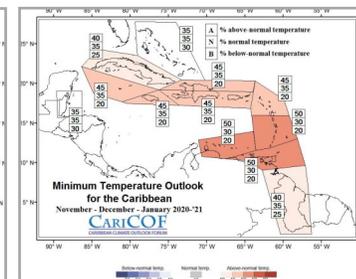
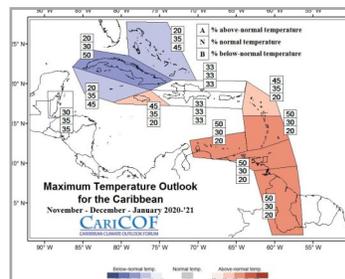
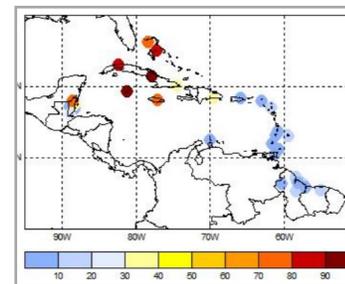


The occurrence of at least three 7-day dry spells and at least one 15-day dry spell remain highly favourable across northwestern Bahamas, Cuba, Jamaica, Cayman Islands and Belize.

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



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



Night-time (minimum) and day-time (maximum) temperatures are likely to be at least as warm as usual across most of the Caribbean, with the possible exception of day-time temperature in the Bahamas, Cayman Islands and Cuba. Any lingering heat discomfort should subside quickly.

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

**CLIMATE-SMART ADVISORIES**

- ◆ With the possibility of flood producing rains:
  - ⇒ 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.
- ◆ Continue to be hurricane prepared—season officially ends in November.

**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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