

# 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

Increased wet days and wet spells are expected as the wet season commences. Thus resulting in decreasing in dryness, wild fire potential and dust levels, as well as an increase in water levels in soils, rivers and reservoirs.

Potential for flash floods, long-term flooding and cascading impacts will increase from moderate to high by August in the islands, while it will decrease from high to moderate in the Guianas.

Heat discomfort, brought about by high temperatures peaking during recurrent heat waves and increasing humidity in the air, will likewise increase towards August.

Increasing trend in tropical cyclone activity is expected, with a busy Atlantic Hurricane Season on forecast.

No concern for impacts from short-term drought by the end of August 2021.

Long-term drought that can impact large reservoirs, large rivers or groundwater could present a challenge across west-central Belize and St. Vincent and the Grenadines, by the end of May 2021.

## APRIL IN REVIEW

Mixed conditions prevailed throughout the islands of the eastern Caribbean during the month of April. Trinidad ranged from severely dry in the extreme southeast to moderately wet in northern areas; Tobago moderately wet to normal; Grenada, Barbados, Guadeloupe, St Croix normal; Saint Lucia normal to very wet; Martinique and St Maarten normal to moderately dry; Dominica predominantly normal with slightly wet areas in the extreme south; Antigua and St Kitts slight to moderately dry; Anguilla normal to slightly dry and St Thomas slightly wet. Conditions in the Guianas ranged from normal to extremely wet. Aruba and Curacao were normal.

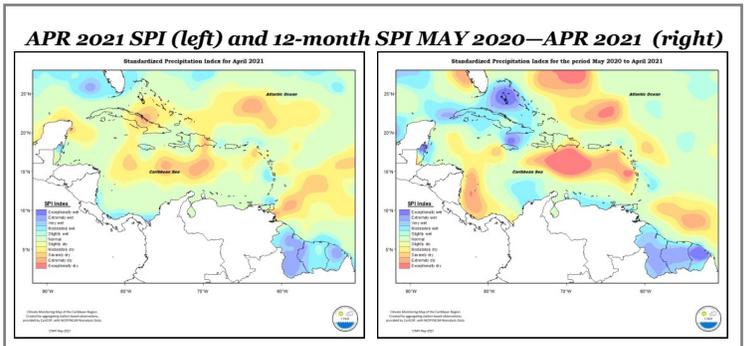
Puerto Rico was predominantly normal with slightly wet areas in the northwest. Hispaniola ranged from slightly wet in south-eastern Haiti to extremely dry in south-eastern Dominican Republic. Jamaica ranged from moderately wet in south central areas to moderately dry in the west and slightly dry in the east. Grand Cayman was normal. Cuba ranged from normal in western and eastern areas to extremely dry in the northeast.

## ABOUT CarISAM

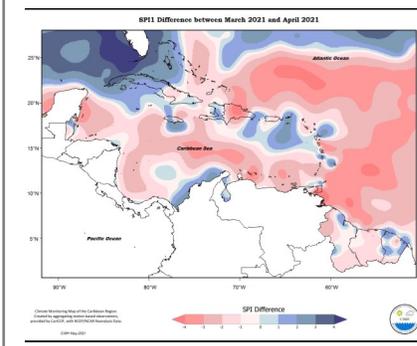
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Northern Bahamas ranged from moderately dry to moderately wet, and Belize ranged from predominantly normal to moderately dry in the west and to very wet in the north.

For the 12-month period rainfall was above normal in the northwestern section of The Bahamas, most of Cuba, northern Belize, Jamaica and the Guianas.



## SPI Difference (March and April 2021)



Relative increases in rainfall was experienced across much of the region, including across northwestern Cuba, The Bahamas, US Virgin Islands and Barbados.

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

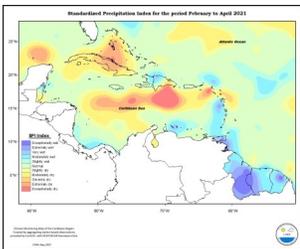
## AGRI-NEWS

**Belize:** Sugar Cane Varieties and Pest Management Validation Project Launched. Read more <https://edition.channel5belize.com/archives/218017>

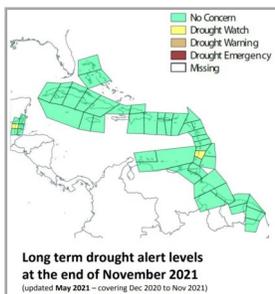
## REGIONAL OUTLOOKS

### DROUGHT

As at the end of April 2021, moderate (or worse) short term drought has developed in Antigua, most parts of The Bahamas, southwest Belize, Cuba, southeastern- and southeastern-most Hispaniola, St. Kitts, Sint Maarten/St. Martin. Moderate (or worse) long term drought has developed in southwest Belize, along the southern coast of Hispaniola, St. Croix, St. Kitts and the west coasts of the Windward Islands.



By the end of August 2021, there should be no concern for impacts from short-term drought.

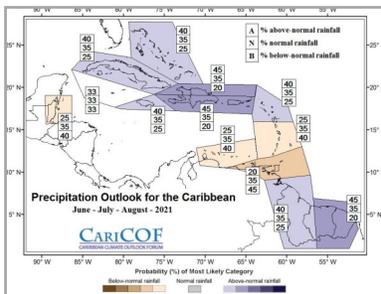


However, long-term drought that can impact large reservoirs, large rivers or groundwater could present a challenge across west-central Belize and St. Vincent and the Grenadines, by the end of May 2021.

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

### RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JUNE–AUGUST 2021)

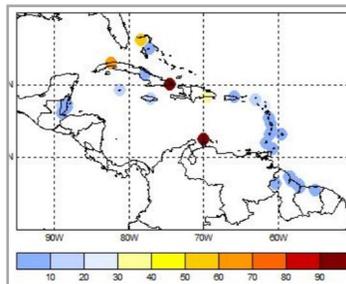
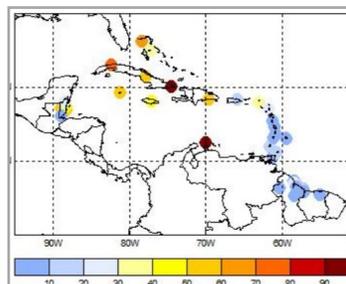
Rainfall totals (from June to August) could possibly be as expected (or less) across the ABC Islands, Trinidad and Tobago, Barbados, the Windward Islands, and Belize. However, rainfall totals could be at least as high as usual across the other territories.



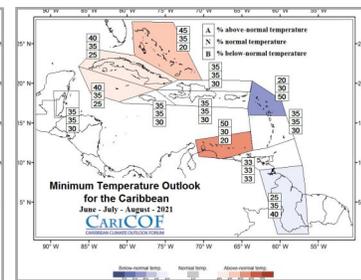
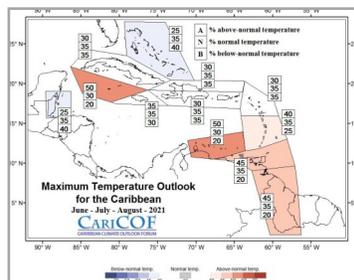
There is a moderate to high potential for long-term flooding, flash floods and related hazards from very wet and extreme wet spells particularly across Belize and the islands (from very wet spells) towards the month of August. The opposite trend is likely across the Guianas.

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

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



The occurrence of at least three 7-day dry spells and at least one 15-day dry spells is highly likely across the ABC Islands and southeastern Cuba.



Day-time (maximum) temperatures are likely to be at least as warm as usual across Cayman Islands, and territories southwest of Guadeloupe. Night-time (minimum) temperatures are likely to be at least as warm as usual across the ABC Islands, The Bahamas, Cayman Islands, and Cuba with the exception of Guyana and the Leeward Islands. Heat-stress is likely to peak during periods of heatwaves.

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

### CLIMATE-SMART ADVISORIES

- ◆ **Hurricane season is here again. Be hurricane ready!** Hurricane preparations should be ongoing or completed. This is predicted to be an active season for tropical cyclone activity.
- ◆ To enhance food security in the event of a tropical cyclone, farmers may want to consider planting more resilient crops (e.g. root crops)
- ◆ Provide shade and ample water for livestock during periods of heatwaves. Farmers should also pay attention to their health and protect from heat-stroke:
  - Consume lots of water
  - Wear appropriate clothing
  - Adjust times of field activities where necessary
- ◆ With the possibility of flood producing rains, particularly in Belize and the islands:
  - 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
- ◆ Pest and diseases may increase in extreme dry and wet conditions. Monitor and employ recommended treatment as necessary.

**Please also keep updated and take into consideration your local weather and climate advisories.**

#### Disclaimer

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