

# 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

As the wet/heat/hurricane season peaks, an increase in wet days and wet spells, heatwaves and tropical cyclone activity in Belize and the Caribbean Islands is likely. Caution should be taken against rising water levels in soils, rivers and reservoirs; heat morbidity/heat stress; and increasing threat from strong winds and storm surge.

The potential for flash floods, long-term flooding and cascading impacts, as well as, for heat stress will be high to extremely high.

Heat stress will peak during heat waves of which several can occur anywhere throughout the period.

The Guianas enter the dry season, which will help the flood waters to recede in areas still affected. Yet, higher than usual numbers of wet spells will lead to slow improvements.

## JUNE IN REVIEW

Conditions throughout the eastern Caribbean were predominantly normal to above normal for the month of June. Trinidad ranged from normal in the west to moderately dry in the southeast; Tobago moderately wet to normal; Grenada very wet; Barbados normal to very wet; St Vincent, Antigua and St Croix normal; Saint Lucia slightly dry to moderately wet south to north; Martinique very wet in the south to severely dry in the north; Dominica normal to very wet; Guadeloupe moderately wet to normal; St Kitts normal to slightly wet; St Maarten moderate to slightly wet; Anguilla slightly wet and St Thomas moderately wet. Conditions in the Guianas ranged from exceptionally wet to severely dry. Aruba was moderately dry and Curacao was normal.

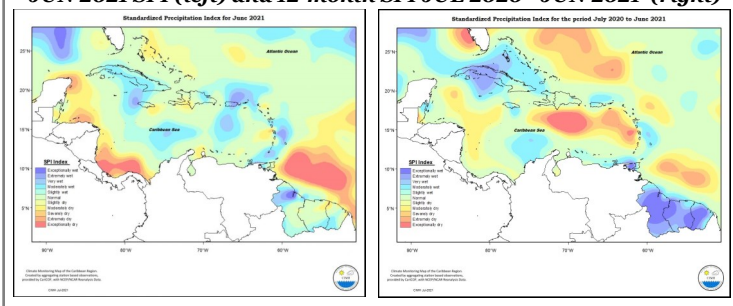
Puerto Rico ranged from slight to extremely wet from west to east. Hispaniola ranged from moderately dry on the southern border to moderately wet in northeast central Dominican Republic. Jamaica ranged from extremely wet in the west to moderately dry in the east. Grand Cayman was normal. Cuba ranged from slightly dry to moderately wet. Northern Bahamas ranged from normal to moderately dry and Belize ranged from moderately dry in central areas to normal in the south and northern areas.

## ABOUT CarISAM

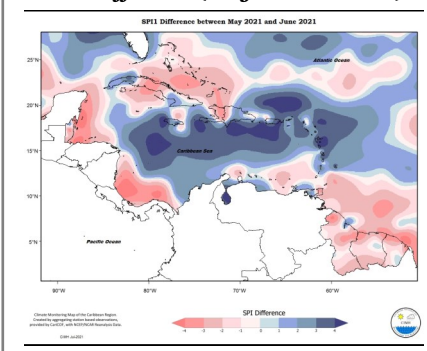
The Caribbean Society for Agricultural Meteorology (CarISAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

For the 12-month period rainfall totals were normal to above normal across most of the region.

### JUN 2021 SPI (left) and 12-month SPI JUL 2020—JUN 2021 (right)



### SPI Difference (May and June 2021)



Mixed conditions were observed across the region between May and June with increased relative drying across Belize, most of Cuba and The Bahamas, Trinidad and Tobago, the ABC Islands and the Guianas.

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

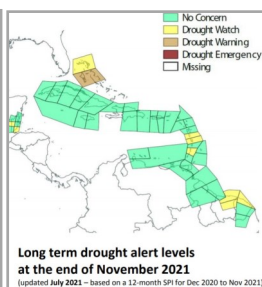
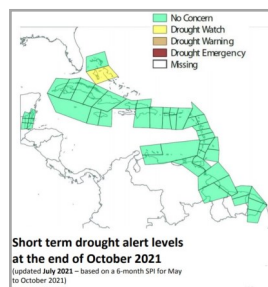
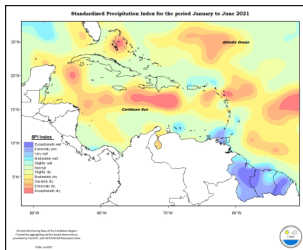
## AGRI-NEWS

**Jamaica:** Minister of Agriculture and Fisheries, Hon. Floyd Green, is encouraging farmers to utilize more climate-smart technology and practices in order to minimize crop loss from more frequent and extreme weather events. Read more <https://jis.gov.jm/minister-green-urges-farmers-to-utilise-climate-smart-technology/>

## REGIONAL OUTLOOKS

### DROUGHT

As at the end of June 2021, severe (or worse) short term drought has developed in Antigua, the northwestern Bahamas, easternmost Jamaica, and northwest Martinique. Severe long term drought has developed in southwest Belize, northwest Martinique and St. Croix.



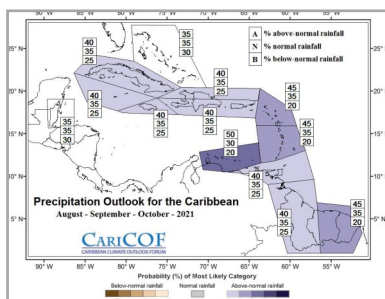
By the end of October 2021, there is some chance for impacts from short-term drought in the northwestern Bahamas.

However, long-term drought that can impact large reservoirs, large rivers or groundwater would likely present a challenge in farming across The Bahamas and possibly across Belize, Dominica, Martinique, and St. Vincent.

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

### RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (AUGUST—OCTOBER 2021)

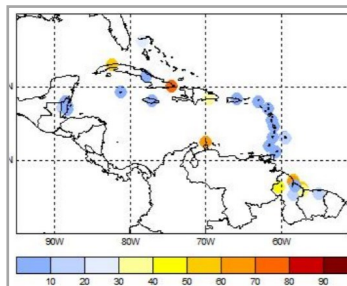
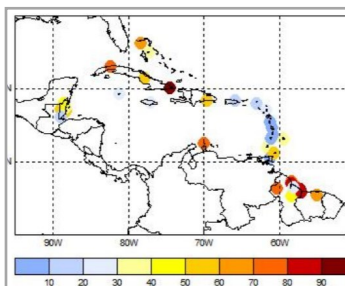
Rainfall totals (from July to September) could possibly be as expected or more across the Antilles and the Guianas.



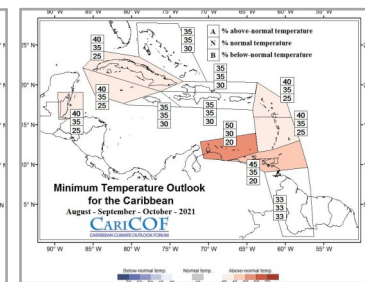
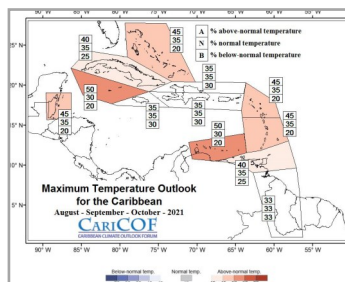
Flash flood and long-term flooding potential will be a significant concern in Belize and the Islands.

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

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



The occurrence of at least three 7-day dry spells is highly favourable across Cuba, northernmost Bahamas, The ABC Islands and the Guianas.



Day-time (maximum) temperatures and night-time temperatures are likely to be at least as warm as usual across Belize and much of the Antilles. Max. temp. are also forecast to be the usual or higher in the Bahamas. Heat stress is expected to peak in August and September (October in the Guianas), especially during heatwaves.

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

### CLIMATE-SMART ADVISORIES

- ◆ **Continue to be hurricane prepared!** The region is entering into the peak of tropical cyclone activity.
- ◆ To enhance food security in the event of a tropical cyclone, farmers may want to consider planting or supplementing with more resilient crops (e.g. root crops)
- ◆ Provide shade and ample water for livestock during periods of heatwaves especially during the peak of the Heat Season (August to September). 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 Caribbean 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 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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