

# 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

**More frequent wet days and wet spells and ample tropical cyclone activity during the second half of the wet season across the region resulting in frequent disruptions of outdoor activities and rising water levels in soils, rivers and reservoirs.**

**The potential for flooding, including flash floods, and cascading impacts is high across most of Hispaniola and northwestern portions of The Bahamas.**

**Through September in The Bahamas and the Greater Antilles, and through October in the Lesser Antilles, heat stress will be peaking during heat waves. By contrast, this period marks the hot, dry season in the Guianas. Yet, higher than usual numbers of wet spells may lead to slow regression of any flood waters**

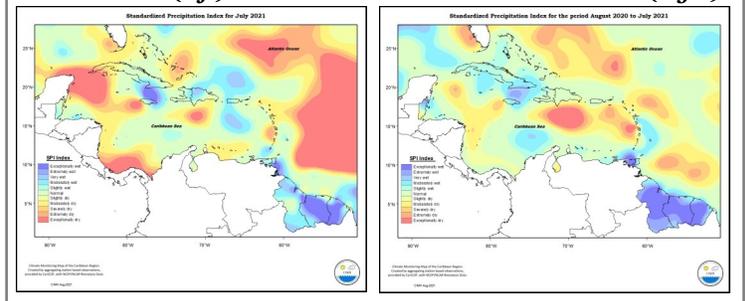
## JULY IN REVIEW

Mixed conditions prevailed throughout the eastern Caribbean during the month of July. Trinidad ranged from exceptionally wet in the southeast to normal in the northwest; Tobago, St Croix and St Thomas normal; Grenada extreme to slightly wet south to north; Barbados normal to slightly wet; St Vincent severe to moderately dry; Saint Lucia normal to extremely dry; Martinique normal to severely dry; Dominica, Guadeloupe and Antigua slight to moderately dry; St Kitts normal to slightly dry and St Maarten moderately dry. Conditions in the Guianas ranged from slightly dry to exceptionally wet. Aruba was slightly dry and Curacao was moderately dry.

Puerto Rico ranged from moderately wet in the west to normal in the east. Hispaniola ranged from very wet in north-western Dominican Republic to normal in western areas of Haiti and to slightly dry in the southern areas of the Dominican Republic. Jamaica ranged from severely dry in the west to exceptionally wet in the northeast. Grand Cayman ranged from slightly dry to normal. Cuba ranged from exceptionally dry in the west to exceptionally wet in the extreme southeast. Northern Bahamas ranged from normal to moderately dry and Belize was moderately wet in the west to slightly dry in the northeast.

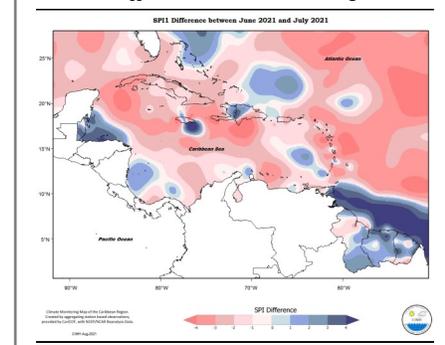
Mixed conditions over the 12-month period were observed across the region.

### JUL 2021 SPI (left) and 12-month SPI AUG 2020–JUL 2021 (right)



Predominantly drier conditions in July were observed across most of the region. However, the month of July was wetter than June for the Guianas, Belize, most of Hispaniola and northwestern portion of The Bahamas.

### SPI Difference (June and July 2021)



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

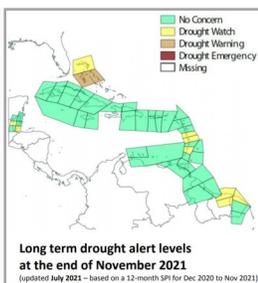
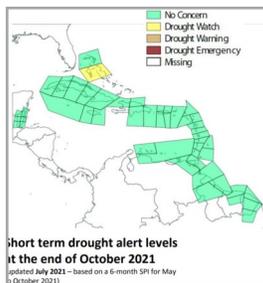
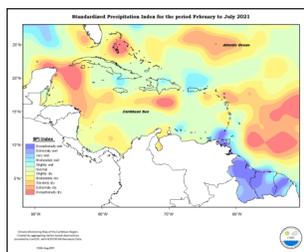
## ABOUT CarISAM

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)

**REGIONAL OUTLOOKS**

**DROUGHT**

As at the end of July 2021, severe (or worse) short term drought has developed in Antigua, the northern Bahamas and northwest Martinique. Severe long term drought has developed in northwest Martinique and St. Croix.



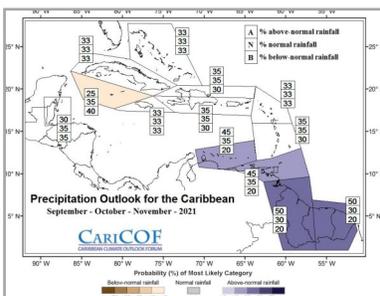
By the end of November 2021, there is some chance for impacts from short-term drought in the northern Bahamas, southeast Belize and Dominica.

However, long-term drought that can impact large reservoirs, large rivers or groundwater would likely present a challenge in farming across The Bahamas.

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

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

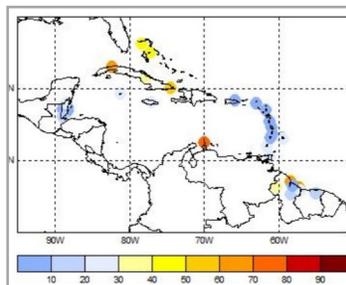
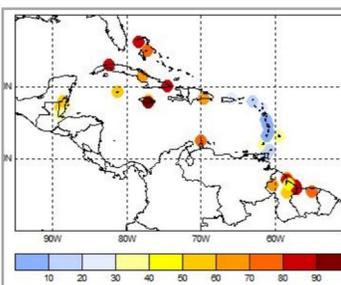
Rainfall totals (from September to November) could possibly be as expected or more across the ABC Islands, Trinidad and Tobago, and the Guianas but the usual or less across the Cayman Islands.



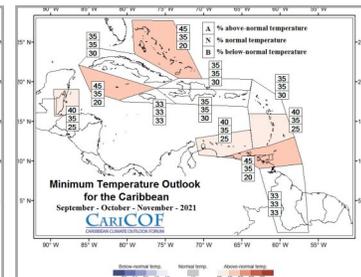
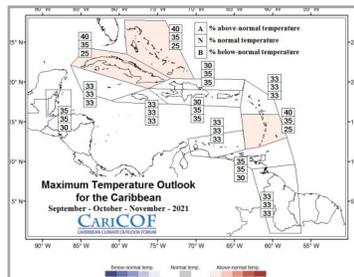
Flash flood and long-term flooding potential as well as landslide and soil erosion will be a significant concern in Belize and the Islands due to recurrent very wet and some extreme wet spells.

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

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



The occurrence of at least three 7-day dry spells is highly favourable across Cuba, Jamaica, northernmost Bahamas, eastern Dominica Republic, The ABC Islands and the Guianas. At least one 15-day dry spell is favourable across The ABC Islands and possibly across Cuba, northern Bahamas and portions of the Guianas.



Day-time (maximum) temperatures and night-time (minimum) temperatures are likely to be at least as warm as usual. Max. temp. are also forecast to be the usual or higher in the Bahamas. Heat stress is expected to peak in 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!** Tropical cyclone activity peaks in September.
- ◆ 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 in September (October in the Guianas). Farmers should also pay attention to their health and protect from heat-stroke:
  - Consume lots of water
  - Wear appropriate clothing (i.e. long-sleeves, broad-rimmed hats)
  - 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*

**Disclaimer**

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