

CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARI SAM



MAY 2020 • VOLUME 3 • ISSUE 12

A joint bulletin of the Caribbean Agricultural Research and Development Institute (CARDI) and the Caribbean Institute for Meteorology and Hydrology (CIMH).

KEY MESSAGES

Long term drought persisted in many areas in the Caribbean, and short term drought developed in the northwest and southeast of the Caribbean, despite very wet conditions in March in some territories.

As the region enters the Caribbean wet season, the Bahamas, Cayman, Cuba and Guianas are likely to see wetter than usual conditions. Other islands and Belize may remain drier than usual and continue to face reduced water availability due to persisting long term drought.

An increasing frequency of wet spells may increase flooding potential throughout the region.

The first half of the Caribbean heat season (May to July) could be as hot as usual or hotter, with heat stress peaking during heat waves in Belize and the islands.

MARCH IN REVIEW

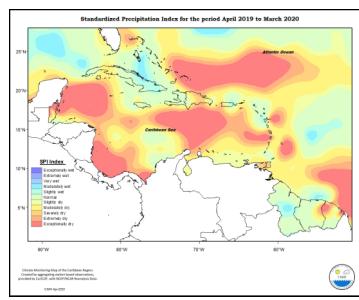
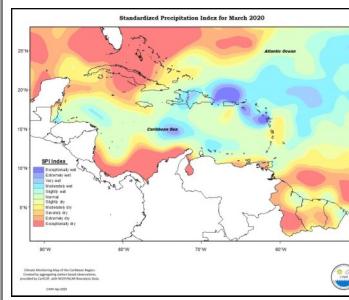
Mixed conditions prevailed throughout the islands of the eastern Caribbean during the month of March. Trinidad was severely dry in the west to slightly wet in the northeast; Tobago and Grenada normal; Barbados and St Vincent normal to slightly dry from south to north; Saint Lucia slight to moderately dry; Martinique moderately dry; Dominica normal in the south to moderately wet in the north; Guadeloupe exceptionally wet in the west to normal in the east; Antigua very wet in the south to moderately wet in the north; St Kitts moderate to slightly wet south to north; Anguilla and St Maarten moderately wet; St Croix extreme to exceptionally wet west to east; and St Thomas moderately wet. Conditions in the Guianas ranged from slightly wet in the northeast of Guyana and French Guyana to exceptionally dry in southern Guyana. Curacao was moderately wet.

Puerto Rico ranged from normal in the south to exceptionally wet in the north east. Hispaniola ranged from very wet in western Dominican Republic to normal in northwest and southwest Haiti and to extremely wet in the east and slightly dry in the southeast. Jamaica ranged from severely dry to normal from west to east. Grand Cayman was severely dry and Cuba ranged from exceptionally dry in central areas to slightly dry in the west and normal in the east. Northern Bahamas was predominantly exceptionally dry and Belize ranged from slightly wet in the southeast to exceptionally dry in the north.

ABOUT CARI SAM

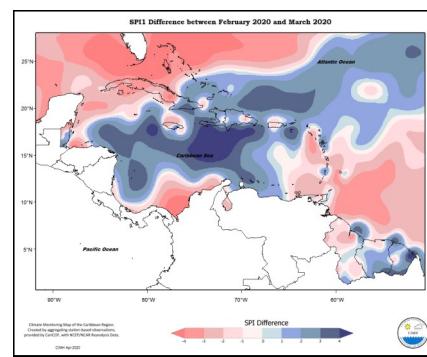
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

MARCH 2020 SPI (left) and 12-month SPI APRIL 2019 TO MARCH 2020 (right)



A 12-month review of rainfall across the region shows severely to exceptionally dry conditions across Barbados, Dominica, south eastern Bahamas, portions of Belize and the Guianas.

SPI Difference (February and March 2020)



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

Mixed conditions in March gave rise to relatively wetter (and drier) conditions than the previous month for some territories.

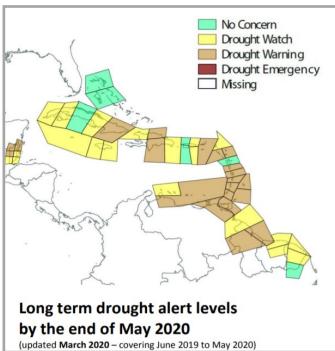
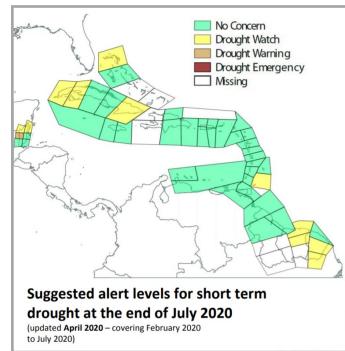
AGRI-NEWS

Belize: Assistance for farmers on the way as the government had been prompted to roll out a financial aid package in light of the 2019 extreme drought. Read more <https://edition.channel5belize.com/archives/202038>

REGIONAL OUTLOOKS

DROUGHT

As at the end of March 2020, moderate (or worse) shorter term drought has developed across the Bahamas, Cayman Islands, much of Cuba, most of the Guianas, westernmost Jamaica, Martinique, Saint Lucia, St. Vincent and the Grenadines, and southwestern Trinidad. Moderate (or worse) long term drought has developed in the northernmost and southeastern Bahamas, Barbados, Belize, Cayman Islands, western Cuba, central Dominican Republic, parts of French Guiana, Martinique, western Puerto Rico, Saint Lucia, St. Vincent and the Grenadines, Trinidad, and the US Virgin Islands.

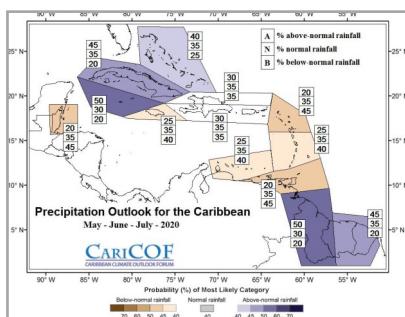


At the end of July 2020, surface soil wetness, and stream and river flow is likely to be less than normal for this time of year particularly across west-central Belize. These conditions could also possibly develop (or continue) across northernmost Bahamas, northern Belize, Western and Eastern Cuba, inland French Guiana, Suriname, and Tobago.

By the end of the 2020 dry season concerns for long-term drought could present a challenge in farming especially where water supply is sourced from larger reservoirs, large rivers or groundwater, affecting Belize (particularly west-central) and possibly in the ABC Islands, Barbados, Grand Cayman, French Guiana, Suriname, Trinidad and the Windward Islands (except Grenada). Interests of Western Cuba, Dominican Republic, Grenada, northernmost Guyana, Jamaica, the Leeward Islands and Tobago should also pay attention to this long-term drought situation.

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

RAINFALL, WET/DRY SPELLS and TEMPERATURE (MAY–JULY 2020)

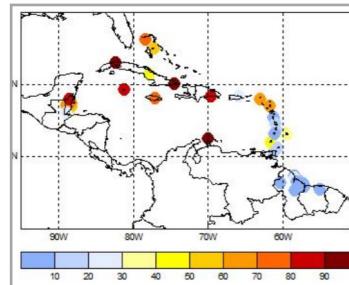


Rainfall totals from May to July are likely to be at least as wet as usual in the Bahamas, Cuba, Cayman Islands and the Guianas, but likely as dry as usual or drier in Belize and the remainder to the Antilles.

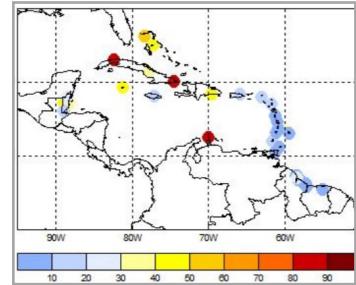
With the growing possibility of extreme wet spells and very wet spells, there are concerns over flash flooding across the region.

The occurrence of at least three 7-day dry spells is highly favourable across Belize, Cayman Islands, Jamaica, Cuba, northern tip of The Bahamas, Dominican Republic, and the ABC Islands. The occurrence of at least one 15-day dry spell remains highly favourable across eastern and western Cuba and the ABC Islands.

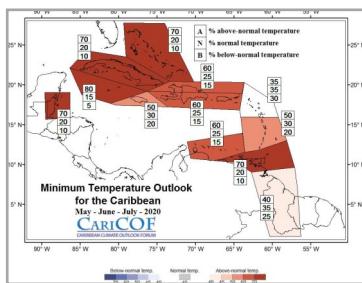
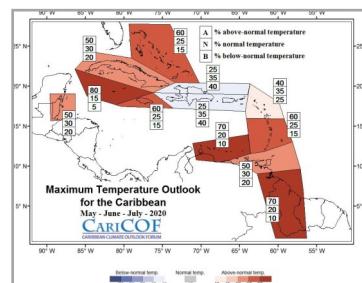
Probability of at least THREE 7-day dry spells in MJJ



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



Day (maximum) and night (minimum) time temperatures are likely to be as warm as usual (with the exception of Hispaniola and the US Caribbean Territories during the day) across the region and, at times, are likely to be uncomfortably hot, especially during heat waves.



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

CLIMATE-SMART ADVISORIES

- ◆ Continue to employ water conservation measures, especially in drought-impacted areas. Water conservation techniques such as mulching and (drip) irrigation are known to increase crop yields by close to 10% compared to crops that are not mulched or irrigated.
- ◆ Provide shade and ample water for livestock as the region enters into its heat season. Farmers should also pay attention to their health and protect from heat-stroke.
- ◆ With the possibility of flood producing rains, particularly in the ABC Islands and the Guianas farmers should:
 - ⇒ 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
- ◆ **Be hurricane ready!!**

Please also 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.

CONTACT US:

Adrian Trotman

Agro-meteorologist/ Chief of Applied Meteorology and Climatology, CIMH
Email: atrotman@cimh.edu.bb

Shontelle Stoute

Technical Officer, CIMH
Email: sstoute@cimh.edu.bb

Kistian Flemming

Climate Change Development Specialist, CARDI
Email: kflemming@cardi.org