

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

Wetter than normal seasonal rainfall is expected from Jamaica across to Puerto Rico and throughout the Guianas; flash flood potential will remain high across Guyana. However, normal to drier than normal seasonal rainfall is expected elsewhere, but an increase in very wet and extreme wet spells is expected predominantly along the Lesser Antilles. Moreover, a wetter than usual second half of the season (September to November) is expected across the region (except The Bahamas and the Cayman Islands).

Nighttime temperatures are expected to be close to normal across the region with a slight increase in day time temperatures expected in Cayman Islands and Trinidad and Tobago.

Incursions of Saharan dust should feature during this season as well as the potential formation of tropical cyclones.

No concerns for impacts from short-term drought (except Martinique) by the end of August 2022.

No concerns for impacts from long-term drought by the end of November 2022.

APRIL IN REVIEW

Mixed conditions prevailed throughout the islands of the eastern Caribbean during the month of April. Trinidad and Grenada moderately wet to normal; Tobago normal; Barbados very to slightly wet; St Vincent severe to moderately dry; Saint Lucia slightly dry to normal; Martinique and Antigua moderately dry to normal; Dominica normal to moderately wet; Guadeloupe extremely dry in the west to moderately wet in the east; St Kitts moderate to extremely dry; St Maarten severely dry to normal; Anguilla and St Thomas normal to slightly wet and St Croix moderate to slightly dry. In the Guianas, conditions ranged from extremely wet to moderately dry. Aruba was normal and Curacao very to moderately wet.

Puerto Rico moderately wet in the extreme west to predominantly normal. The Dominican Republic ranged from severely dry to very wet west to east.

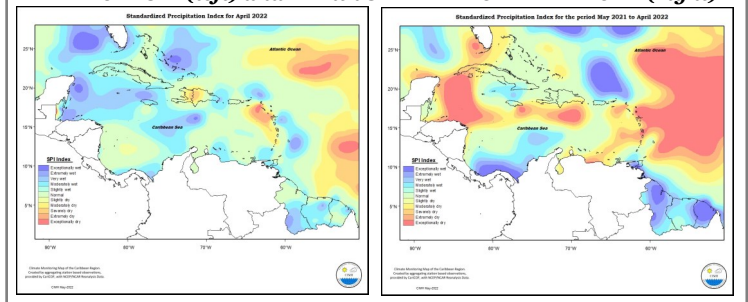
ABOUT CarISAM

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

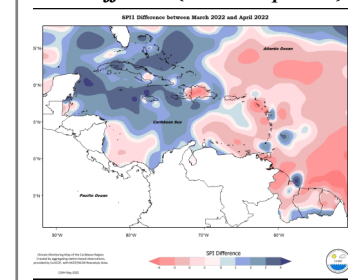
Jamaica ranged from normal in the extreme south to extremely wet in the northwest. Grand Cayman was very wet. Cuba ranged from normal in east central areas to moderately wet in the west and to very wet in the extreme southeast. Northern Bahamas ranged from normal to very wet and Belize ranged from extremely dry in the west to extremely wet in a small area in the east.

A review of the 12-month period (May 2021 to April 2022), showed predominantly normal to exceptionally dry conditions across the region (except the Guianas).

APR 2022 SPI (left) and 12-mth SPI MAY 2021–APR 2022 (right)



SPI Difference (Mar and Apr 2022)

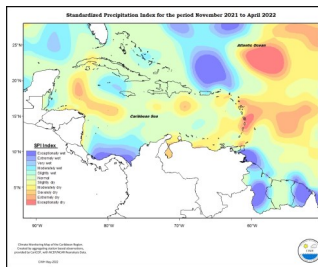


Rainfall totals across the month of April had been generally drier than March from the Guianas northward to Puerto Rico and including Belize, but wetter elsewhere.

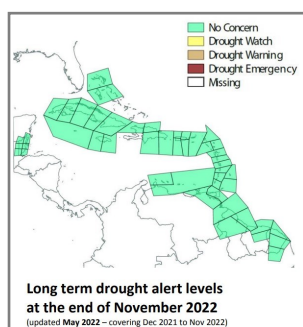
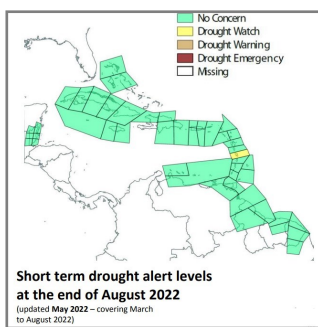
Read more at <https://rcc.cimh.edu.bb/spi-monitor/>

REGIONAL OUTLOOKS

DROUGHT



Moderate (or worse) short term drought has developed in western Cuba, St. Vincent, Saint Lucia, Martinique, Guadeloupe and Antigua. Moderate (or worse) long term drought has developed in Antigua, along the northern Bahamas, western Cuba, Dominica, southern coast of Hispaniola, Guadeloupe, eastern Jamaica, Martinique, St. Croix, St. Kitts, St. Lucia, and St. Vincent.

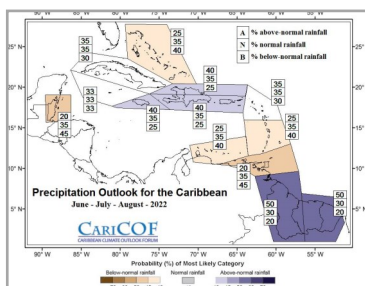


No concerns for impacts from short-term drought (except Martinique) by the end of August 2022. Long-term drought should be of no concern by the end of November 2022.

Interests across the region should still continue to monitor their water resources and look out for the next update.

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JUNE–AUGUST 2022)

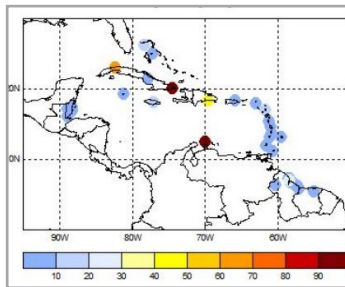
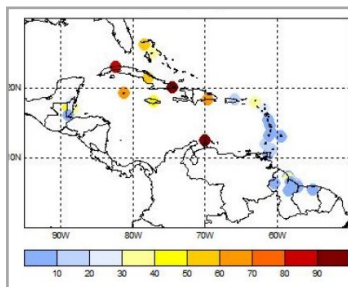
Rainfall totals from June through August could be drier than normal across the ABC Islands, Belize, The Bahamas and The Windward Islands. Normal to above normal rainfall is expected across Jamaica, Hispaniola, Puerto Rico, the Virgin Islands and the Guianas.



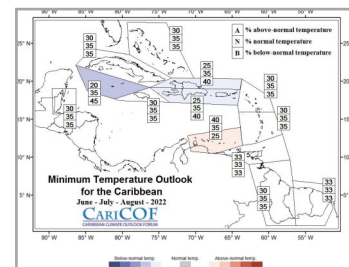
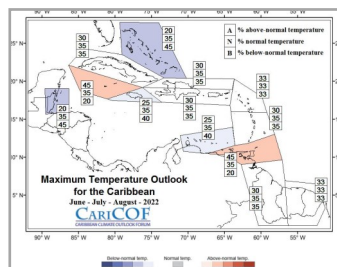
Flash flood and long-term flooding potential will increase from moderate to high by August in the islands, but should remain high in the Guianas.

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 is favourable across The ABC Islands, the Cayman Islands, Jamaica, Cuba, northwestern Bahamas, and the eastern portion of the Dominican Republic. The occurrence of at least one 15-day dry spell is also favourable across the ABC Islands, and eastern and north western Cuba.



Day-time (maximum) and night-time (minimum) temperatures are expected to warm throughout the season, which coincides with the Caribbean Heat Season. Nighttime temperatures are expected to be close to normal across the region with a slight increase in day time temperatures expected in Cayman Islands and Trinidad and Tobago.

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

CLIMATE-SMART ADVISORIES

Though not expected to be as warm as in recent years, we are still entering the Heat Season so, livestock farmers should provide adequate ventilation and shading for livestock (especially poultry).

Consider on-farm drought management plans in the event of a likely occurrence of dry spells and drought conditions, particularly in the early part of the June to August period. These may include:

- ◆ Consider plots sizes that their limited water resources would irrigate/satisfy in the event of frequent dry spells/drought.
- ◆ Selecting drought tolerant crops and varieties and planting them with careful thought of the availability of water resources.
- ◆ Identifying alternate water sources for irrigation and other on-farm activities; employing water management techniques such as irrigation scheduling and mulching; installing water-saving devices (e.g. drip lines & timers).
- ◆ Avoid transplanting in extreme hot conditions this may cause wilt and even death.

Maintain proper records of inputs and the crop under cultivation and/or livestock being reared.

Be hurricane prepared!

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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