

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

Concerns over long-term drought exists. By the end of May drought conditions may be of concern across Eastern Caribbean islands from Barbados northward to U.S. Virgin Islands, the ABC Islands, most of Belize and western Cuba. Interests in the southern portion of the eastern chain and northern Bahamas should monitor their water resources for long-term drought that can impact ground water, large rivers and reservoirs. The southern half of the eastern Caribbean and western Cuba should also monitor its streams, small rivers and ponds at least until end of July.

Drier than normal rainfall is expected across the ABC Islands, Belize, the Lesser Antilles, Hispaniola, Puerto Rico, and the U.S. Virgin Islands. Normal to above normal rainfall is expected elsewhere.

Possible delay in the onset of the wet season along the Antilles.

With few wet days, wild fire potential is expected to peak in May.

Day and night time temperatures will progressively warm towards May, which marks the start of the Caribbean Heat Season.

MARCH IN REVIEW

Predominantly normal to above normal conditions prevailed throughout the islands of the eastern Caribbean during the month of March. Trinidad ranged from very to slightly wet southwest to northeast; Tobago, Grenada, Barbados and St Vincent normal; Saint Lucia, Martinique, St Maarten and Anguilla normal to slightly wet; Dominica and Guadeloupe exceptionally wet to normal; Antigua moderately wet to normal; St Kitts extreme to slightly wet; St Croix slightly dry to normal and St Thomas moderate to very wet. Conditions in the Guianas ranged from exceptionally wet to severely dry. Aruba was slightly wet and Curacao was moderately wet.

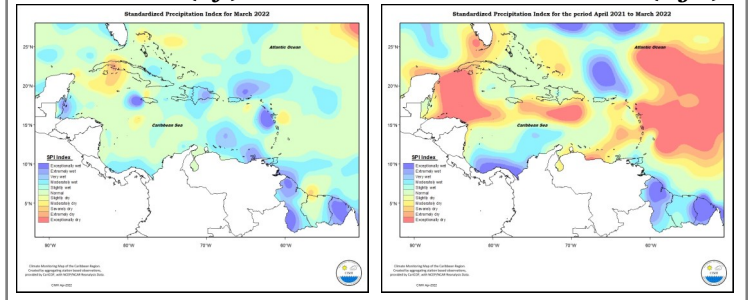
ABOUT CariSAM

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

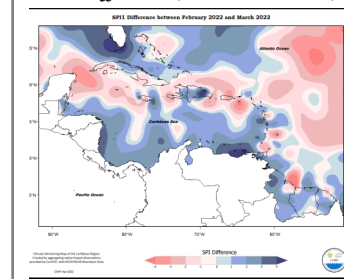
Puerto Rico ranged from slight to very wet. Hispaniola ranged from extremely wet in central Dominican Republic to slightly wet in western Haiti and to normal in eastern Dominican Republic. Jamaica ranged from predominantly normal to exceptionally wet in the west, slightly wet in the east and to moderately dry in the extreme north-west. Grand Cayman ranged from moderate to slightly dry. Cuba ranged from extremely dry in west central areas to moderately wet in the northeast. Northern Bahamas ranged from normal to moderately dry and Belize ranged from normal in the west to extremely wet in the east.

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

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



SPI Difference (Feb and Mar 2022)

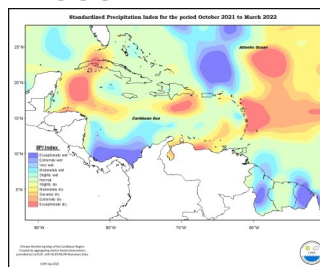


Rainfall totals across the month of March had been mixed. However, territories to the north of the region (except The Bahamas and Cuba) had been relatively drier predominantly in March than February.

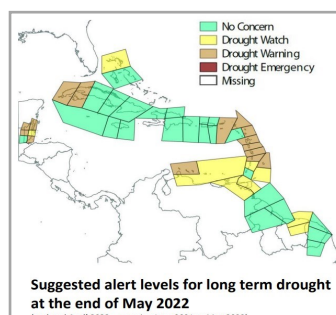
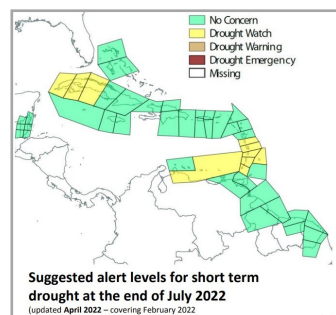
Read more at <https://rec.cimh.edu.bb/spi-monitor/>

REGIONAL OUTLOOKS

DROUGHT



Moderate (or worse) shorter term drought has developed in northeast Guadeloupe, Martinique, and Saint Vincent. Moderate (or worse) long term drought has developed in the ABC Islands, Antigua, the northernmost and southeastern Bahamas, Barbados, southeast Belize, western Cuba, Dominica, eastern Dominican Republic, Guadeloupe, southwest Haiti, eastern Jamaica, Martinique, Saint Kitts, Saint Lucia, St. Vincent and the Grenadines, and the U.S. Virgin Islands.

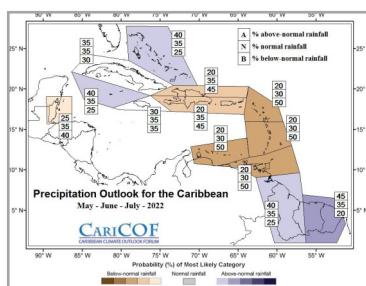


By the end of July 2022, there is some chance of impacts from short-term drought across Barbados, Western Cuba, Dominica, Grenada, Martinique, Saint Lucia, and Saint Vincent. *These conditions should be closely monitored.* Long-term drought that can impact large reservoirs, large rivers or groundwater would likely present a challenge in farming across the ABC Islands, Barbados, most of Belize, western Cuba, Dominica, Guadeloupe, Martinique, Saint Kitts, Saint Lucia, Saint Martin, and the U.S. Virgin Islands (and possibly develop or continue in the northern Bahamas, parts of eastern Belize, Saint Vincent, Trinidad and Tobago, and northern Suriname) by the end of May 2022.

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

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (MAY—JULY 2022)

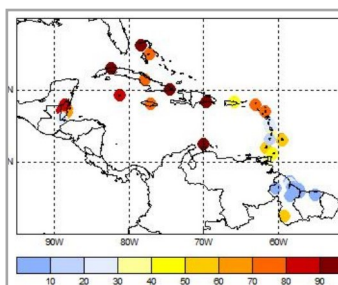
Rainfall totals from May through July could be drier than normal across the ABC Islands, Belize, the Lesser Antilles, Hispaniola, Puerto Rico, and the U.S. Virgin Islands. Normal to above normal rainfall is expected elsewhere.



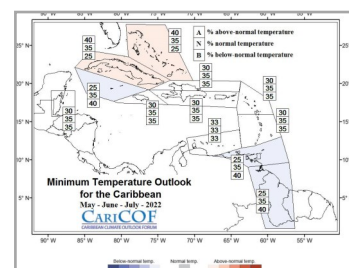
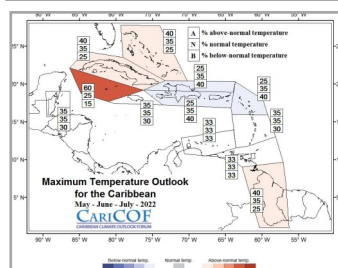
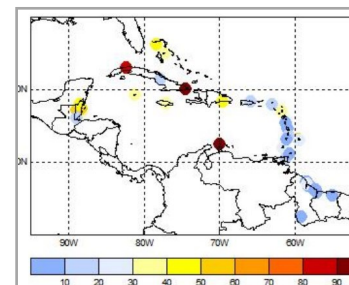
There could be a possible delay in the onset of the wet season along the Antilles due to the higher probability of below normal rainfall coupled with a low frequency of wet days. With few wet days, wild fire potential is expected to peak in May.

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

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



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



Night-time (minimum) and day-time (maximum) temperatures will progressively warm into May, which marks the start of the Caribbean Heat Season. Moreover, day and night-time temperatures may be warmer than usual for The Bahamas and Cuba (and Cayman Islands during the day).

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

CLIMATE-SMART ADVISORIES

As we enter the Heat Season 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. 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 wilting and even death.

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

June is soon here. **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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