

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

The region enters an intense Heat Season with recurrent heatwaves, and a possibly early start to an intense wet season.

Shower intensity and frequency are likely to sharply rise, resulting in high potential for flooding, flash floods, cascading hazards and associated impacts in most places, except the ABC Islands.

Unknown is how frequent incursions of dry, dust-laden Saharan air into the Caribbean will be. If very frequent, the period will further be characterised by erratic shower activity -- but frequent dry spells -- and further buildup of ongoing drought, increasing heat and wildfire potential in May.

MARCH IN REVIEW

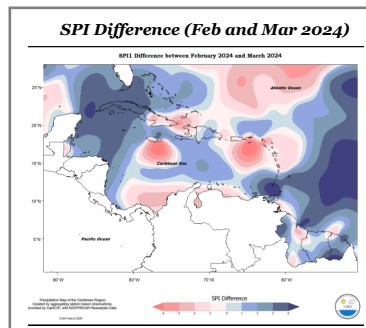
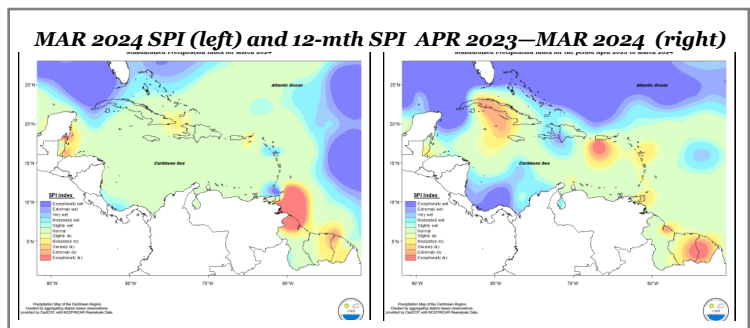
Conditions throughout the eastern Caribbean were mixed during the month of March. Trinidad ranged from extremely dry in the south to extremely wet in the north; Tobago extremely wet to severely dry; Grenada extreme to moderately wet; Barbados, St Vincent, Saint Lucia, Martinique, St Maarten and Anguilla normal; Dominica slightly dry to normal; Guadeloupe normal to very wet; Antigua slightly wet to normal; St Kitts moderate to slightly wet; St Croix moderate to slightly dry and St Thomas slightly dry. In the Guianas, conditions ranged from moderately wet in southwestern Guyana to exceptionally dry in northern Guyana and extremely dry in the vicinity of the northern Suriname/French Guiana border. Aruba and Curacao were normal.

Puerto Rico was predominantly normal ranging to slightly dry in the east. The Dominican Republic, Jamaica and Grand Cayman were normal. Cuba ranged from exceptionally wet in the west to moderately dry in the extreme east. Northern Bahamas ranged from slight to extremely wet and Belize from normal in central areas to extremely dry on the southeastern coastal areas and to exceptionally dry in the north.

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

Predominantly normal to severely dry conditions prevailed across the Caribbean Islands during the 12-month period (April 2023 to March 2024) with the exceptions of Haiti and The Bahamas being normal to exceptionally wet.



Predominantly relatively wetter conditions in March than February were observed across most of the region.

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

AGRI-NEWS

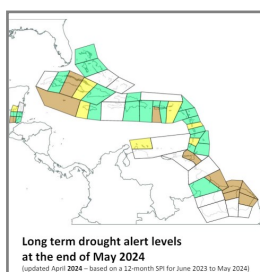
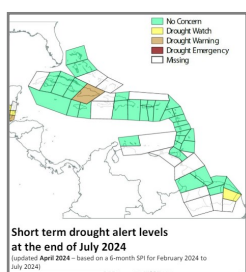
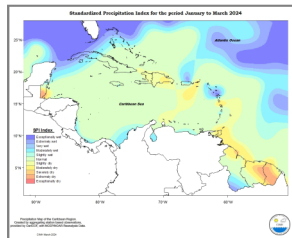
Jamaica: Farmers in St. Elizabeth receive assistance as drought conditions prevailed. Read more <https://www.moa.gov.jm/content/agriculture-ministry-provides-two-water-trucks-aid-farmers-impacted-drought-st-elizabeth>

REGIONAL OUTLOOKS

DROUGHT

Moderate (or worse) short-term drought has developed in Aruba, central and southern Belize, Dominica, the Dominican Republic, French Guiana, northern Guyana, Haiti, Martinique, Suriname, Trinidad and Tobago, and the USVI. Moderate (or worse) long-term drought has developed in Antigua, southern Belize, Cuba, Dominica, Guadeloupe, French Guiana, western Jamaica, southern Puerto Rico, St. Vincent, Suriname, Trinidad and Tobago.

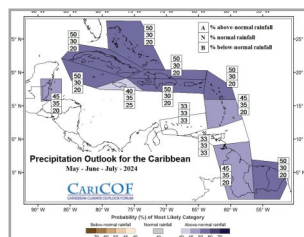
There is some concern over short-term drought that can impact small rivers, streams and ponds by the end of July in Belize (western and southeastern) and eastern Cuba and possibly develop or continue in Belize (eastern and northwestern) and central French Guiana. **Interests in these territories should monitor their water resources.**



There could possibly be some concern for long-term drought, that can impact large reservoirs, large rivers or groundwater, to present a challenge in farming

by the end of May 2024 across southwest Belize, Grand Cayman, Central Cuba, central and northern French Guiana, northern Guyana, southwest Puerto Rico, Suriname, and Trinidad and possibly develop or continue across the ABC islands, northern Belize, Dominica, western Jamaica, Saint Vincent, and the USVI. **Interests in these countries should monitor their water resources.**

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (MAY – JULY 2024)

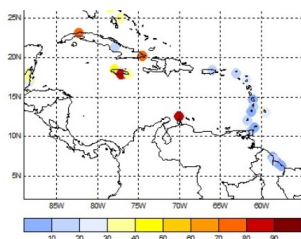
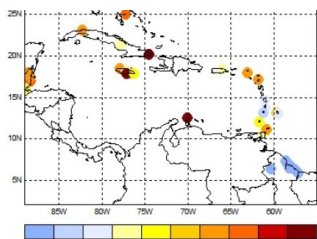


Rainfall totals from May through July are likely to be the usual or higher across most of the region.

The potential for flooding, including flash floods and cascading impacts arising from runoff during intense rainfall events could be high particularly in mountainous areas and in the Guianas.

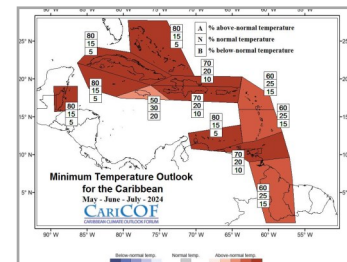
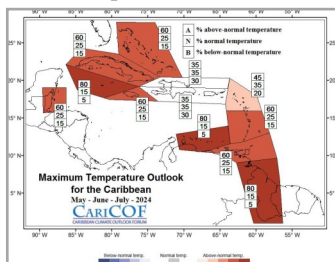
Probability of at least THREE 7-day dry spells in MJJ

MAXIMUM number of 15-day dry spell in MJJ



The occurrence of at least three 7-day dry spells is highly favourable across the ABC Islands, Jamaica, Belize, eastern and western Cuba and northern portion of The Bahamas. At least two to three 15-day

Day-time (maximum) and night-time (minimum) temperatures, as well as humidity, will likely be considerably higher than usual in most areas. Frequent episodes of heat stress are expected as the region is in a potentially record Heat Season. Heat stress may ramp up even more in areas with ongoing drought, or if incursions of Saharan air are frequent.



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

CLIMATE-SMART ADVISORIES

Be hurricane prepared!!!

In the event of frequent dry spells and heatwaves:

- ◆ Ensure regular weeding to reduce competition and further stress to crops
- ◆ Utilize irrigation techniques to apply the right amount of water for the crop and to avoid water logging or runoff
- ◆ Avoid transplanting in prolonged dry conditions this may trigger transplant shock, yield reduction and in severe cases death.
- ◆ Avoid planting in extreme hot conditions, this may affect germination rate and percentage. However, if planting, take into consideration water resource availability.
- ◆ Ensure proper ventilation, shading and adequate water
- ◆ Monitor poultry for signs of heat stress (e.g., spreading out of wings, panting etc) and in ruminants (e.g., panting, drooling, sweating)

In the event of flooding:

- ◆ Ensure that livestock are housed on high grounds; evacuate animals in low lying areas and pastures which are prone to flooding and erosion.
- ◆ Certain pest and diseases such as blossom end rot will increase during and after extreme wet conditions, implement appropriate disease and pest management practices.

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

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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