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

Uncomfortable day and night-time temperatures, especially during the peak of the Heat Season, are expected. As humidity and the frequency of Heatwaves increase in August and September, heat-stress is likely to increase.

Little concern for drought, particularly by the end of September, due to above normal wet season rains.

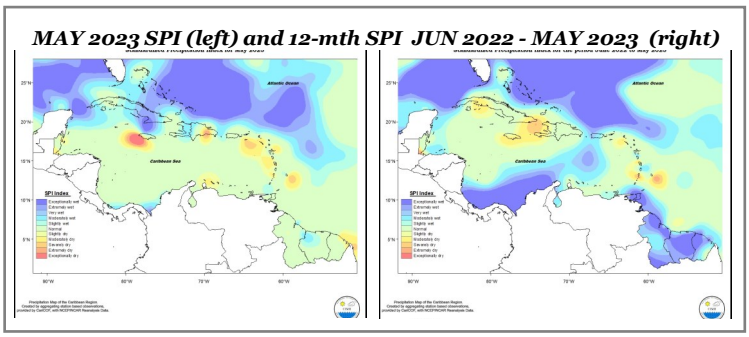
The potential for flooding, flash floods and cascading hazards increases from moderate to high by August. By contrast, the Guianas will potentially be excessively wet in July, with predominantly drier and hotter weather from mid -August.

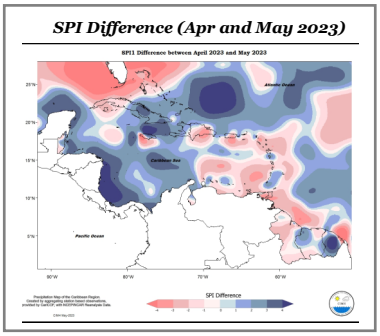
MAY IN REVIEW

Conditions throughout the eastern Caribbean were mixed during the month of April. Trinidad ranged from extremely to moderately wet; Grenada, Martinique and St Thomas normal to slightly dry; Barbados and St Kitts normal; St Vincent moderate to slightly dry; Saint Lucia normal to slightly wet; Dominica extreme to moderately dry; Guadeloupe predominantly normal ranging to moderately dry in the south and to slightly wet in the north; Antigua slight to moderately wet; St Maarten and St Croix moderately dry to normal and Anguilla slightly dry to slightly wet. In the Guianas conditions ranged from very wet in north-eastern Guyana and to extremely dry in south-eastern French Guiana. Aruba was normal and Curacao was slightly dry to normal.

Puerto Rico ranged from exceptionally wet in the southeast to slightly dry in the northwest. Hispaniola ranged from very wet in the vicinity of the southern Haiti/ Dominican Republic border to normal in the eastern and southwestern areas. Jamaica ranged from exceptionally wet in the west to normal in the east and to exceptionally dry in the north. Grand Cayman was normal. Cuba was mostly normal, ranging from exceptionally wet in the west to extremely dry in the extreme southeast. Northern Bahamas ranged from moderate to exceptionally wet and Belize ranged from normal to exceptionally dry.

Mixed conditions prevailed across the region during the 12-month period (June 2022 to May 2023).





For the month of May, the Eastern Caribbean was predominantly drier and the Western Caribbean predominantly wetter than April.

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

AGRI-NEWS

Global: Hottest global temperatures ever recorded. Read more https://edition.cnn.com/2023/07/05/world/hottest-day-world-climate-el-nino-intl

Jamaica: Jamaicans brace for extreme heat. Watch the news clip at https://www.youtube.com/watch?v=UpaRSCAhYlA

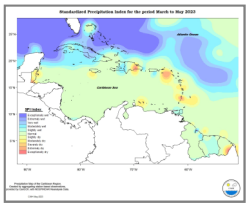
Antigua: Livestock farmers downsizing as drought conditions persist. Read more https://climatetracker.org/livestock-farmers-in-antigua-downsizing-as-drought-conditions-persist/

ABOUT CariSAM

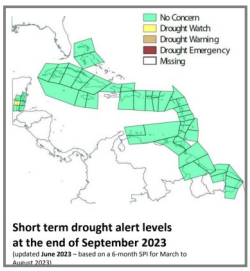
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

REGIONAL OUTLOOKS

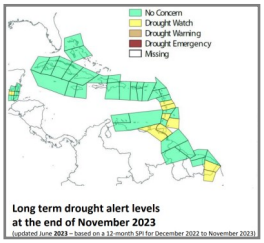
DROUGHT



By the end of May severe (or worse) short-term drought has developed in southern Belize, eastern Dominican Republic, south-eastern French Guiana, and St. Vincent. – Severe (or worse) long term drought has developed in far southern Belize, southeasternmost parts of Cuba, western parts of Haiti, and St. Vincent.



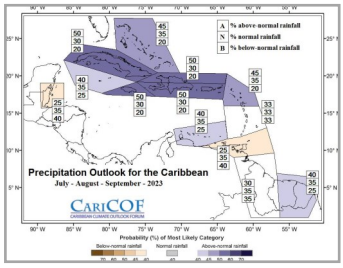
There may be some concern over short-term drought that can impact small rivers, streams and ponds, across parts of western Belize by the end of September. Interests in these areas should monitor their water resources.



There is 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 November 2023 across parts of western Belize, Dominica, central and southern French Guiana, Martinique, St. Vincent and Trinidad and Tobago. Interests in these countries should monitor their water resources.

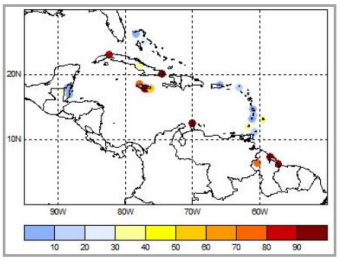
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JULY—SEPTEMBER 2023)

Rainfall totals from July through September are likely to be the usual or higher across the ABC Islands, The Bahamas, the Greater Antilles, eastern parts of the Guianas and the Leeward Islands. By contrast, Belize and Trinidad and Tobago are likely to record the usual rainfall amounts at most.

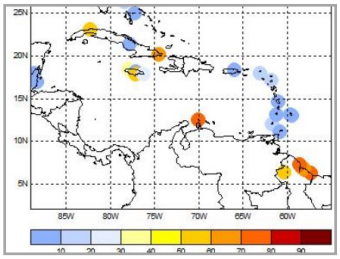


Moderate to high potential for long-term flooding, flash floods and related hazards exists across the region in view of the likelihood of very wet spells and extreme wet spells. A marked decrease of wild fire potential, and conditions more conducive to moisture-related pests due to an increase in the number of wet days is also likely.

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

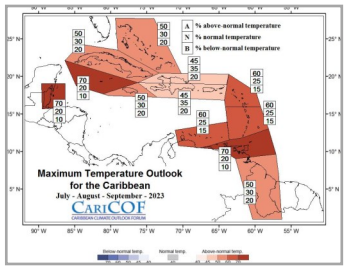


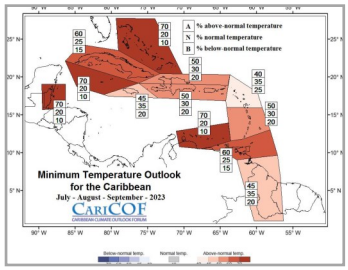
Probability of at least ONE 15-day dry spell in JAS



The occurrence of at least three 7-day dry spells is highly likely across The ABC Islands, Guyana, Jamaica, and western and eastern Cuba. The occurrence of at least 15-day dry spell is favourable across the ABC Islands, Guyana and eastern Cuba.

With the high likelihood of above normal day-time (maximum) and night-time (minimum) temperatures, conditions would likely be often be uncomfortable for many, during what is the peak of the annual Heat Season. Moreover, humidity and the frequency of heat-waves will ramp up by August and September, further increasing heat stress in a summer that may rival that of the record hot years 2010, 2016 and 2020.





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

CLIMATE-SMART ADVISORIES

In the event of dry spells:

- Ensure regular weeding to reduce competition and further stress to crops
- Schedule irrigation
- Utilize irrigation techniques to apply the right amount of water for the crop and to avoid runoff

In the event of heat waves:

- Take heed of signs of heat stress in ruminants (e.g., panting, drooling, sweating) and poultry (e.g., spreading out of wings, panting etc)
- Minimize the transportation of livestock as much as possible during the hottest times of the day. This can increase their body temperature and furthermore heat stress (consider transporting animals at night).
- Keep a reliable, clean, and cool source of water available to poultry and livestock. Monitor and maintain soil moisture during extremely hot and dry conditions to reduce impact of heat stress on crops.
- Farmers should avoid foods that increase dehydration and take breaks in cool, shady areas to reduce body temperature.

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.

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