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

An intense peak of the 2024 Atlantic Hurricane Season, the Caribbean Wet Season and Heat Season, imply frequent and intense (i) episodes of oppressive humid heat; (ii) tropical cyclones and severe weather. The latter results in high potential for flooding, flash floods, cascading hazards and associated impacts.

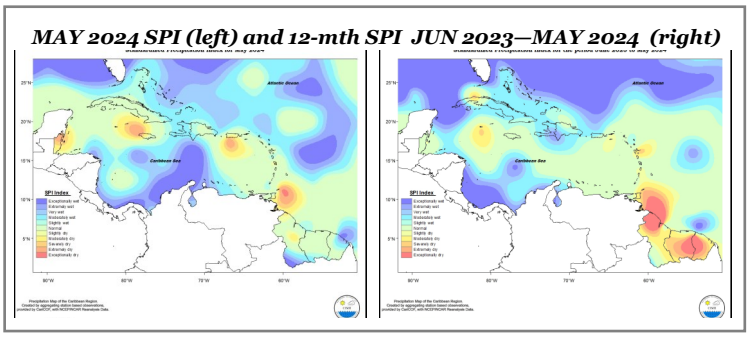
Should the intrusion of dry Saharan air (which usually peak through July) be more frequent than usual, storm and shower activity may be more erratic, while heat will remain in record territory, in particular in the Lesser Antilles.

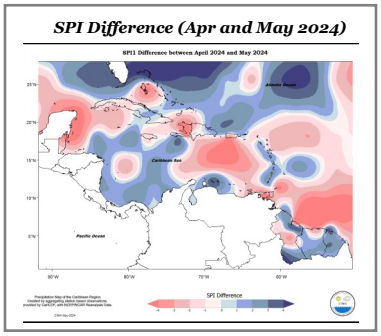
MAY IN REVIEW

Mixed conditions were experienced throughout the islands of the eastern Caribbean during the month of May. Trinidad was normal to moderately dry west to east; Tobago normal to extremely dry; Grenada, Guadeloupe and Dominica slightly wet to normal; Barbados, St Vincent, Saint Lucia, St Kitts, St Croix and St Thomas normal; Martinique slightly dry; Antigua, St Maarten and Anguilla slight to moderately wet. In the Guianas, conditions were mostly normal ranging to moderately dry in northern and central Guyana and to exceptionally wet in southern Guyana and the extreme north of French Guiana. Aruba was extremely wet and Curacao was very wet.

Puerto Rico ranged from severely dry in the south to normal in the north. Hispaniola ranged from normal in central areas of the Dominican Republic to very wet in the extreme south and to moderately wet in most of Haiti and eastern areas of the Dominican Republic. Jamaica ranged from extremely dry to normal west to east. Grand Cayman was mostly slight to moderately dry. Cuba was predominantly normal ranging to slightly wet in the northwest and to moderately wet in the northeast with moderately dry areas in the extreme southeast. Northern Bahamas was slight to moderately wet and Belize slightly dry in the south ranging to extremely dry in northern areas.

Predominantly normal conditions prevailed across the eastern Caribbean Islands during the 12-month period (June 2023 to May 2024). However, notably The Bahamas and Haiti were extremely wet and parts of The Guianas were exceptionally dry.





A mixture of conditions were observed across the region between April and May.

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

AGRI-NEWS

Jamaica: Rural Agricultural Development Authority (RADA) is recommending that farmers use systemic pesticides, in anticipation of increases in moisture and rainfall. Read more *https://jis.gov.jm/category/agriculture/*

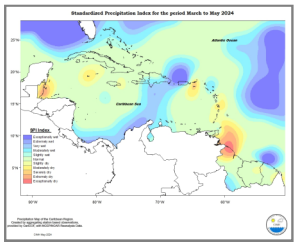
ABOUT CariSAM

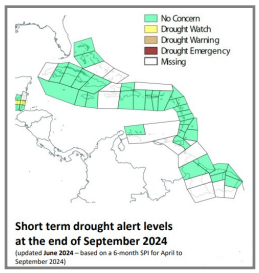
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

REGIONAL OUTLOOKS

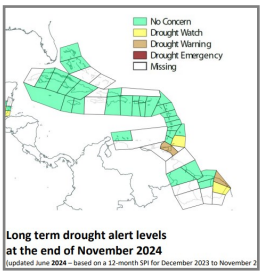
DROUGHT

Severe (or worse) short-term drought has developed for Belize, northern Guyana, and the U.S. Virgin Islands. Severe (or worse) long term drought has developed in parts of Western Cuba, French Guiana, easternmost parts of Guadeloupe, northern Guyana, and Suriname.



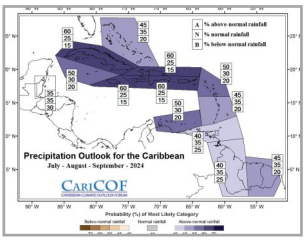


There may be some concern over short-term drought that can impact small rivers, streams and ponds by the end of September in central Belize. ***Interests in these regions should monitor their water resources.***



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 November 2024 across northern French Guiana and Trinidad and possibly develop or continue in parts of Belize, central French Guiana, and Tobago. ***Interests in these countries should closely monitor their water resources.***

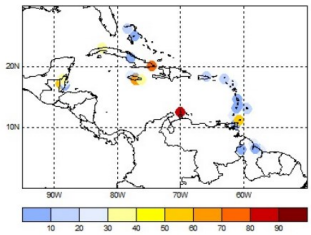
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JULY — SEPTEMBER 2024)



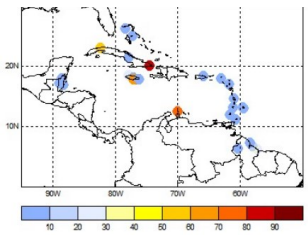
Rainfall totals from June through August are likely to be the usual or higher across most of the region.

The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells could be high to extremely high.

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

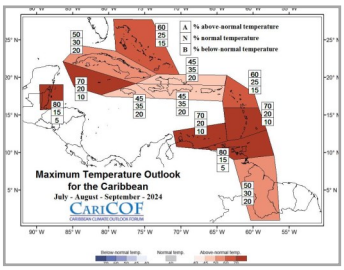


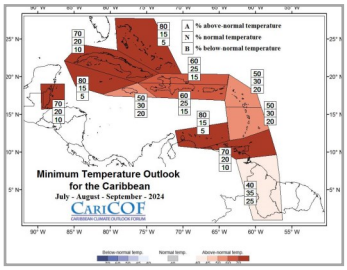
MAXIMUM number of 15-day dry spell in JJA



The occurrence of at least three 7-day dry spells remain favourable across the ABC Islands, Jamaica, and Cuba.

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

- Ensure regular weeding to reduce competition and further stress to crops
- Be mindful not to over-irrigate your crop 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 for your animals.
- 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 (where possible); 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.

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