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 is set to enter an intense Heat Season with recurrent heatwaves, as well as an 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.

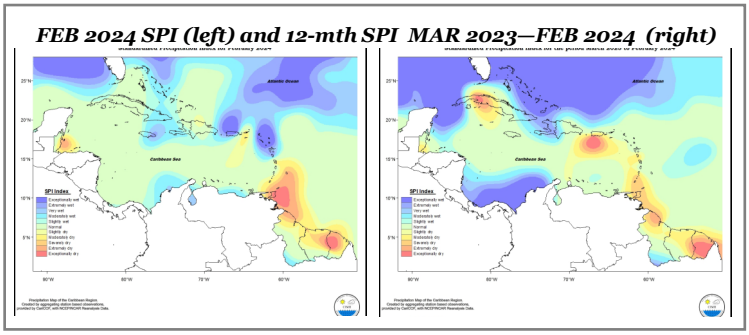
Unknown is how frequent incursions of dry, dust-laden Saharan air into the Caribbean will be. If very frequent, the period will further be characterised by erratic shower activity, interspersed with frequent dry spells, and further buildup of ongoing drought, record-breaking heat and wildfire potential.

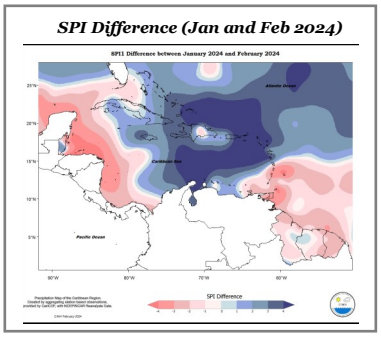
FEBRUARY IN REVIEW

Mixed conditions were seen throughout the eastern Caribbean during the month of January. Trinidad was moderately wet to normal; Grenada, Antigua, St Maarten and Anguilla normal; Tobago and Dominica slightly dry to normal; Barbados moderately dry to normal; St Vincent slight to moderately wet; Saint Lucia very wet in the south to moderately wet in the north; Martinique slightly wet to slightly dry; Guadeloupe normal to slightly wet; St Kitts moderate to slightly dry; St Croix severely dry and St Thomas moderately dry. In the Guianas, conditions varied from moderately wet in southern areas of Guyana to severely dry in northern Suriname/French Guiana border. Aruba was slightly dry and Curacao was normal.

Puerto Rico was normal to moderately dry from west to east. The Dominican Republic was mostly exceptionally dry ranging to extremely dry in the west and to Normal in the extreme east. Jamaica was moderately dry. Grand cayman was normal. Cuba ranged from exceptionally wet in the west to slightly dry in the east. Northern Bahamas ranged from slightly dry to very wet and Belize ranged from extremely dry in southern areas to extremely wet in the north.

Predominantly normal to severely dry conditions prevailed across the Caribbean Islands during the 12-month period (March 2023 to February 2024) with eastern Cuba, The Bahamas and Haiti exceptionally wet.





Predominantly relatively drier conditions in February than January were observed across the Guianas and northward to Saint Lucia, northernmost portion of Belize, but wetter elsewhere.

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

AGRI-NEWS

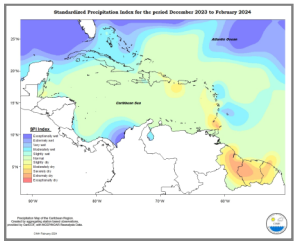
Jamaica: Gov't Making Significant Investments in Irrigation Storage and Connectivity for Farmers to safeguard against the threats of climate change. Read more https://jis.gov.jm/govt-making-significant-investments-in-irrigation-storage-and-connectivity-for-farmers/

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*

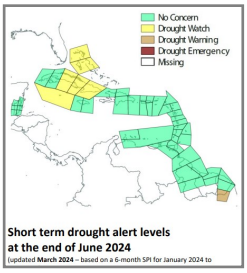
REGIONAL OUTLOOKS

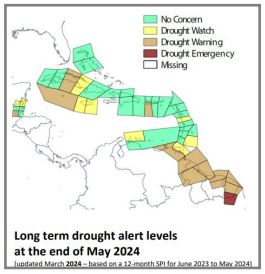
DROUGHT



Moderate (or worse) short-term drought has developed in French Guiana, Grenada, Guyana, Martinique, southwest Puerto Rico, Suriname, and Tobago. – Moderate (or worse) long-term drought has developed in southern Belize, northern Cuba, Dominica, Grenada, southern Puerto Rico, St. Vincent, eastern and northern Suriname, Trinidad and Tobago.

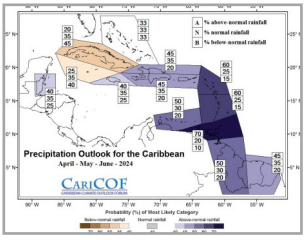
There is some concern over short-term drought that can impact small rivers, streams and ponds by the end of June in southern French Guiana and possibly develop or continue in southwest Belize, Grand Cayman, parts of Central Cuba, central and northern French Guiana, northeastern and inland portions of Guyana, southwest Puerto Rico, Suriname. ***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 ABC islands, northern Belize, parts of Central Cuba, Dominica, Jamaica, and Trinidad and Tobago. ***Interests in these countries should monitor their water resources.***

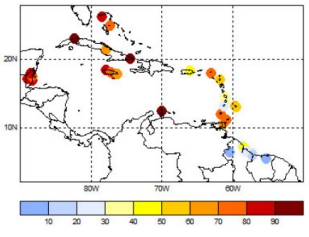
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (APRIL — JUNE 2024)



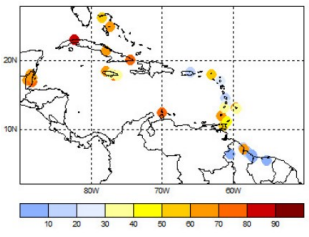
Rainfall totals from April through June are likely to be the usual or even less in the Cayman Islands and Cuba, but the usual or higher in the ABC Islands, Belize Hispaniola, Jamaica, the US Caribbean Territories, Lesser Antilles and Guianas.

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 AMJ

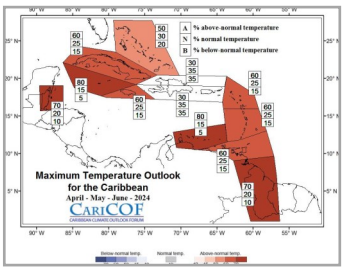


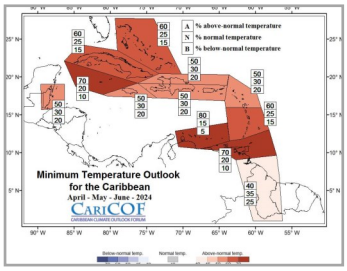
MAXIMUM number of 15-day dry spell in AMJ



The occurrence of at least three 7-day dry spells is highly favourable across the region. At least two to three 15-day dry spells are expected across the region.

Day-time (maximum) and night-time (minimum) temperatures are forecast to be higher than usual in most areas. Significant episodes of heat stress may, therefore, appear after the end of the Caribbean Cool Season in March. However, heatwaves might well be recorded this March, notably where soil moisture content is even lower than usual.





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)

With the likelihood for an increase in wildfires:

- Keep farm clean and free from trash and combustible material
- Never leave a fire unattended
- Never burn in windy conditions

In the event of flooding towards the end of the Dry Season:

- 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.

CONTACT US:

Adrian Trotman
Agro-meteorologist/ Chief of Applied Meteorology and Climatology, CIMH
Email: atrotman@cimh.edu.bb

Shontelle Stoute
Technical Officer, CIMH
Email: sstoute@cimh.edu.bb

Kistian Flemming
Climate Change Development Specialist, CARDI
Email: kflemming@cardi.org