

CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM



NOVEMBER 2024 • VOLUME 8 • ISSUE 6

A joint bulletin of the Caribbean Agricultural Research and Development Institute (CARDI) and the Caribbean Institute for Meteorology and Hydrology (CIMH).

KEY MESSAGES

Episodes of uncomfortable humid heat fading more slowly than in most years, with the odd heatwave still a possibility in November, particularly in the ABC Islands, the Guianas and the Windward Islands.

Increased severe weather activity through December (January in the Guianas), resulting in high to extremely high potential for flooding, flash floods, cascading hazards and associated impacts

Short dry spells are set to increase in frequency, particularly in the far northwest of the region. Despite that the Islands and Belize are expected to transition into the 2024-25 Dry Season several weeks late.

SEPTEMBER IN REVIEW

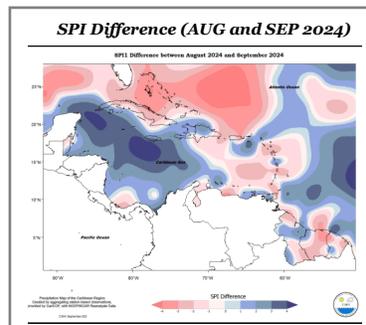
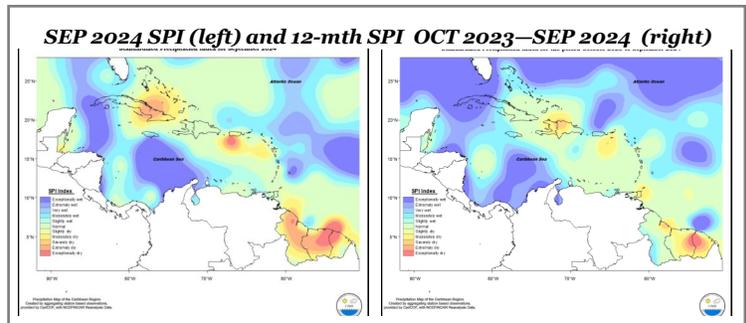
Mixed conditions were experienced throughout the eastern Caribbean during the month of September. Trinidad and Antigua were slightly wet to normal; Tobago, Saint Lucia, Dominica and St Kitts slightly dry to normal; Grenada, St Vincent, St Croix and St Thomas normal; Barbados extreme to exceptionally wet; Martinique slight to very wet; Guadeloupe slightly dry to slightly wet; St Maarten slight to moderately wet and Anguilla moderately wet. Rainfall in the Guianas was largely below normal and ranged from exceptionally dry to moderately wet. Aruba was very wet and Curacao was moderately wet.

Puerto Rico ranged from exceptionally dry in the south to normal in the north. Hispaniola was predominantly normal ranging to slightly dry in northwestern Haiti. Jamaica ranged from exceptionally wet in the extreme south to normal in the west. Grand Cayman was moderate to slightly wet. Cuba ranged from exceptionally wet in the west to exceptionally dry in east central areas. Northern Bahamas ranged from moderately dry to moderately wet and Belize from moderately dry in the south to normal 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 exceptionally wet conditions prevailed across the region during the 12-month period (October 2023 to September 2024). However, notably Trinidad and Tobago eastern Puerto Rico and Hispaniola experienced normal to moderately dry conditions. Much of the Guianas was normal to exceptionally dry.



A mixture of conditions prevailed across the region between the months of July and August.

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

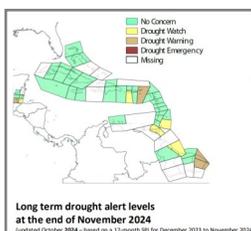
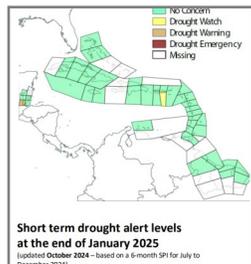
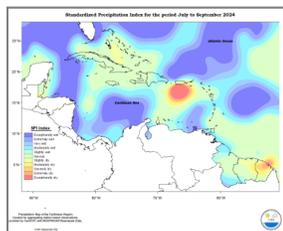
AGRI-NEWS

Jamaica: Ministry of Agriculture meeting regularly with farmers and other stakeholders to evaluate hurricane efforts after the passing of Beryl. The Minister states “Clearly, climate change remains a pressing concern, and we must address the challenges it poses to our agricultural practices,” Read more <https://jis.gov.jm/agriculture-ministry-officials-to-meet-regularly-with-farmers-to-evaluate-recovery-efforts/>

REGIONAL OUTLOOKS

DROUGHT

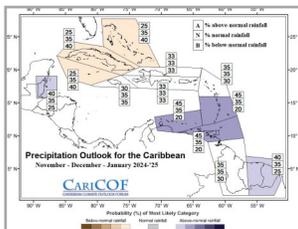
Severe (or worse) short-term drought has developed in French Guiana and Puerto Rico. Severe (or worse) long-term drought has developed along the north coast of the Dominican Republic, in coastal Guyana, western French Guiana, and eastern Suriname.



There is some concern over short term drought that can impact small rivers, streams and ponds by the end of January 2025 across southwest Belize, though Puerto Rico 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 2024 across southwest Belize, French Guiana, and the USVI. Southeast Belize, coastal Guyana, southwest Puerto Rico, and Trinidad and Tobago should monitor their water resources for long term drought.

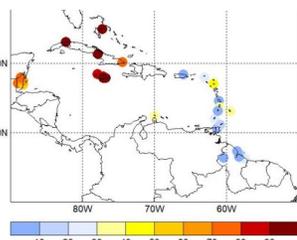
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (NOVEMBER 2024 – JANUARY 2025)



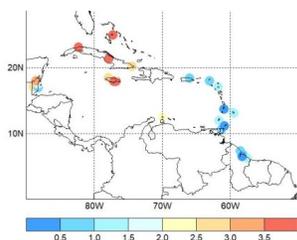
Rainfall totals from October through December are likely to be the usual or higher across the ABC Islands, Barbados, Belize, eastern parts of the Guianas, Trinidad and Tobago and The Windward Islands, but, possibly, the usual or less in Belize and eastern parts of the Guianas.

The potential for long-term flooding, flash floods and related hazards arising from very wet and extremely wet spells remains high across the Caribbean Islands, Belize and the Guianas through December.

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

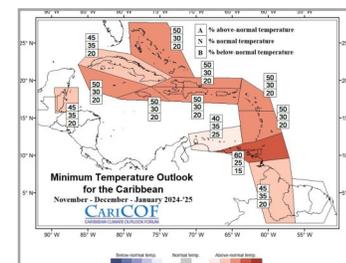
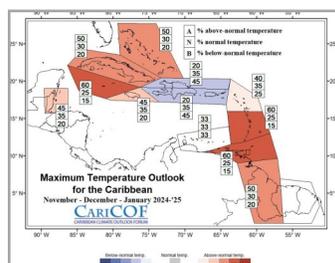


MAXIMUM number of 15-day dry spell in NDJ



The occurrence of at least three 7-day dry spells is highly favourable across Belize, Jamaica, Cuba and the northern portion of The Bahamas. At most three to four 15-day dry spells is expected across Jamaica, northern Belize, Cuba and the northern portion of The Bahamas.

Day-time (maximum) and night-time (minimum) temperatures, as well as air humidity will likely be considerably higher than usual in most areas. Episodes of heat stress are expected to steadily decrease through November now that the record-breaking 2024 Heat Season has come to an end. Heat stress should no longer be a significant hazard after November.



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

CLIMATE-SMART ADVISORIES

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)
- ◆ Farmers should avoid foods that increase dehydration and take breaks in cool, shady areas to reduce body temperature.
- ◆ Farmers should wear protective, loose fitting and light-coloured clothing

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.

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.

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](mailto:ssoute@cimh.edu.bb)

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