

CARIBBEAN AGRO-CLIMATIC BULLETIN OF THE CARISAM



NOVEMBER 2022 • VOLUME 6 • 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

The transition between wet and dry season is forecast to feature frequent wet days and excessive rainfall in the ABC Islands, Belize and the Lesser Antilles until December and the coastal Guianas through January. This results in frequent disruptions of outdoor activities and rising water levels in soils, rivers and reservoirs.

High to extremely high potential for floods and cascading hazards in the ABC Islands, Cayman Islands, coastal Guyana, Dominican Republic, Lesser Antilles, western Jamaica and Suriname, and moderate to high in most other areas.

Strong tropical cyclone activity may still develop until the end of the year, particularly over the Caribbean Sea.

Temperatures return to being comfortable.

SEPTEMBER IN REVIEW

Mixed conditions prevailed during the month of September throughout the eastern Caribbean. Trinidad and St Maarten ranged from normal to very wet; Grenada slightly dry; Barbados slight to exceptionally wet; St Vincent moderate to predominantly slightly dry; Saint Lucia, St Kitts and Antigua normal to moderately wet; Martinique moderately wet to moderately dry; Dominica moderately dry to exceptionally wet; Guadeloupe predominantly exceptional to extremely wet; Anguilla moderate to extremely wet; St Croix extremely wet and St Thomas exceptionally wet. Conditions in the Guianas ranged from extremely wet to moderately dry. Aruba was very wet and Curacao moderate to very wet.

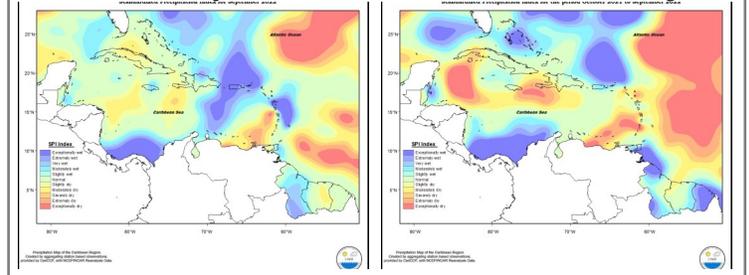
Puerto Rico was predominantly exceptional to extremely wet. The Dominican Republic ranged from normal to extremely wet. Jamaica ranged from very wet in central areas to slightly dry in the west and to normal in the extreme east. Grand Cayman was slightly wet. Cuba ranged from moderately dry in the north to moderately wet in the west and normal in the southeast. Northern Bahamas was slightly dry to slightly wet and Belize was predominantly normal ranging to slightly dry in the south and very wet in the southeast.

ABOUT CariSAM

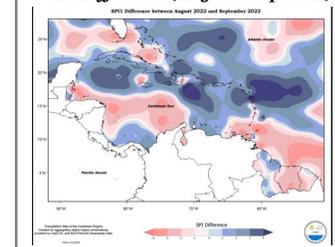
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

A review of the 12-month period (October 2021 to September 2022), showed predominantly normal to below normal conditions across the eastern Caribbean, much of Hispaniola, Cuba and the ABC Islands. Elsewhere experienced normal to above normal conditions.

SEP 2022 SPI (left) and 12-mth SPI OCT 2021–SEP 2022 (right)



SPI Difference (Aug and Sep 2022)



Rainfall totals across the month of September had been predominantly wetter than August across much of the Greater Antilles, The Leeward Islands, and the ABC Islands.

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

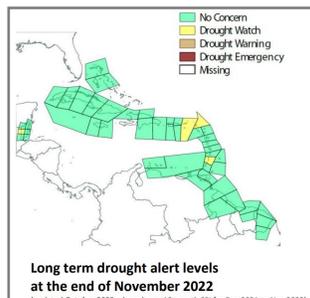
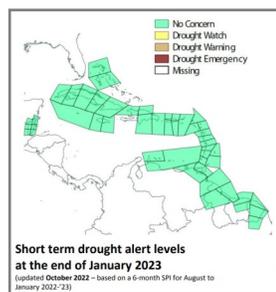
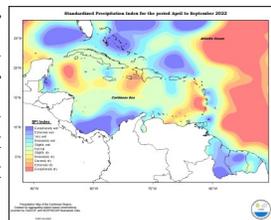
AGRI-NEWS

Belize: \$8 Million in Agricultural Losses Caused by October Floods. Read more <https://edition.channel5belize.com/archives/243266>.

REGIONAL OUTLOOKS

DROUGHT

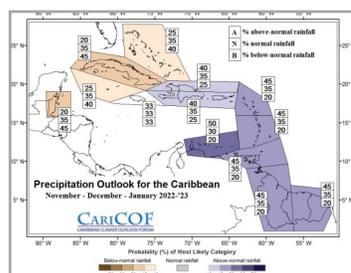
By the end of September, severe (or worse) short term drought had developed in Cuba and Saint Vincent. Severe (or worse) long term drought has developed in Antigua, western Cuba, southwest Haiti, eastern Jamaica, Martinique, Sint Maarten, and St. Vincent.



No concerns for impacts from short-term drought by the end of January 2023.

There is some possibility for long-term drought, that can impact large reservoirs, large rivers or groundwater, to present a challenge in farming by the end of November 2022. Interests in western Belize, Sint Maarten, Saint Martin, St. Vincent, and the U.S. Virgin Islands should continue to monitor their water resources.

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (NOVEMBER 2022—JANUARY 2023)



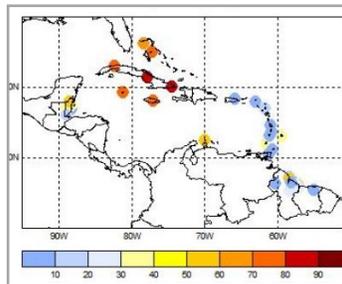
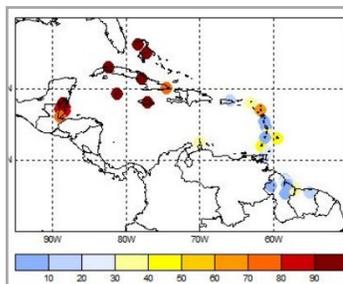
Rainfall totals from November through January could be normal to below normal across Belize, Cayman Islands, Cuba and The Bahamas.

Concerns remain for the potential of flash floods, long-term flooding, landslides, rockfall and widespread soil erosions in Belize and the Islands due to very wet and extreme wet spells.

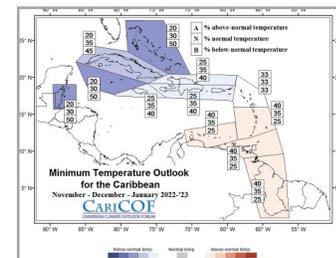
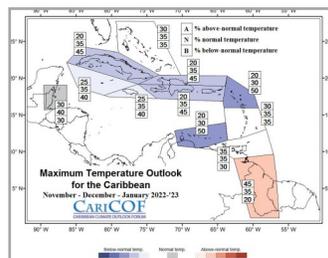
This concern exists for coastal Guianas from late November. Favourable conditions for moisture-related pests and diseases exists.

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

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



The occurrence of at least three 7-day dry spells is likely across Jamaica, Cayman Islands, Cuba, Belize and northwestern Bahamas. The occurrence of at least one 15-day dry spell remains likely across Jamaica, Cayman Islands, Cuba and northwestern Bahamas.



Day-time (maximum) and night-time (minimum) temperatures are expected to be close to the usual or slightly lower in many areas, except for Guyana and, at night, in Antilles south of Guadeloupe. Heat stress should rapidly decrease in the Guianas and, in the remainder of the region, no longer be a regular concern as the region transitions to the cool season.

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

CLIMATE-SMART ADVISORIES

In the event of flooding from very wet and extreme wet spells:

- ◆ Certain pests and diseases, such as phytophthora root rot, could increase during and after extreme wet conditions. Be prepared to apply appropriate disease and pest management practices.
- ◆ Ensure that livestock are housed on high ground; be prepared to evacuate animals in low lying areas and pastures which are prone to flooding and erosion.
- ◆ Secure inventory: Store chemicals, fertilizers, feeds, machinery etc. on high ground away from moisture prone areas and livestock.
- ◆ Maintain drains around crop bed to ensure proper drainage of water. Also, to improve soil drainage, plant crops on raised beds

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

Tropical Cyclone activity is still possible. Remain hurricane prepared.

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