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

This part of the wet/heat/hurricane season is forecast to bring an increase in rainfall totals, wet days and wet spells, and tropical cyclone activity in the Caribbean Islands and in Belize.

The potential for flash floods, long-term flooding and cascading impacts will increase from moderate in July to high in August and September. Moreover, drought concerns are expected to be alleviated by August across the region.

The Guianas will enter their dry season in August and floods should then recede in affected areas, but the improvements may be slow in view of forecasted higher numbers of wet spells than usual.

Though to a lesser degree than in recent hot years (e.g. 2020), heat stress will also increase due to higher humidity levels and reduced winds after July.

MAY IN REVIEW

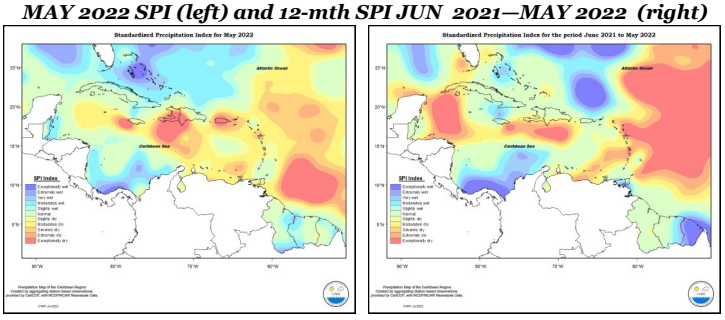
Conditions throughout the eastern Caribbean were normal to below normal during the month of May. Trinidad was moderately dry to normal; Tobago and Grenada normal; Barbados slightly dry; St. Vincent normal in the extreme south to predominantly slightly dry; saint Lucia and Anguilla moderately dry; Martinique, Dominica, St Kitts and St Maarten slight to moderately dry; Guadeloupe moderate to extremely dry; Antigua severe in the extreme south to predominantly moderately dry; St Croix and St Thomas extremely dry. In the Guianas, conditions ranged from exceptionally wet in the extreme south of Guyana to slightly dry at the south-central Suriname/French Guiana border, and to moderately dry in coastal areas of Guyana. Aruba was moderately dry and Curacao was slightly dry.

Puerto Rico was predominantly exceptionally dry to extremely dry in eastern areas.

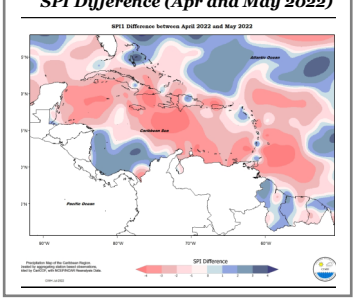
Hispaniola ranged from exceptionally dry in western and southwestern areas ranging to normal in northern and eastern areas of the Dominican Republic. Jamaica ranged from exceptionally dry in the extreme west to slightly dry in the east, with slightly wet conditions in the extreme northwest. Grand Cayman was moderately dry. Cuba ranged from normal in western areas to moderately wet in extreme northern, north eastern and south-eastern areas. Northern Bahamas ranged from exceptionally wet to slightly dry and Belize ranged from moderately dry in the west to moderately wet in eastern and southern areas.

A review of the 12-month period (June 2021 to May 2022), showed predominantly normal to exceptionally dry conditions across the region (except the Guianas, parts of Cuba, The Bahamas and Puerto Rico).

MAY 2022 SPI (left) and 12-mth SPI JUN 2021—MAY 2022 (right)



SPI Difference (Apr and May 2022)



Rainfall totals across the month of May had been predominantly drier than April across the region.

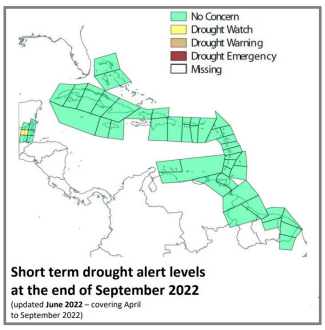
Read more at https://rcc.cimh.edu.bb/spi-monitor/

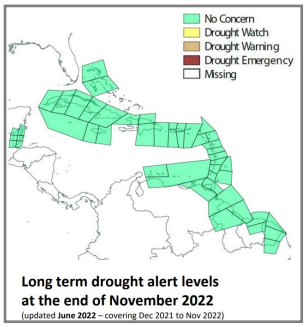
ABOUT CariSAM

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

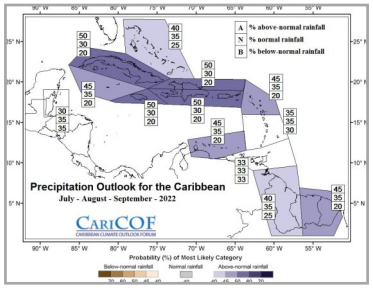




No concerns for impacts from short-term drought (except west-central Belize) by the end of September 2022. Long-term drought should be of no concern by the end of November 2022.

Interests across the region should still continue to monitor their water resources and look out for the next update.

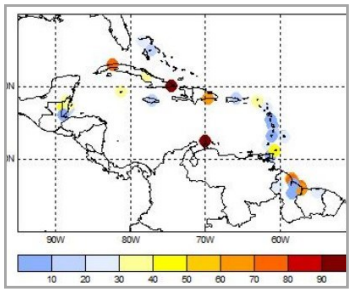
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JULY—SEPTEMBER 2022)



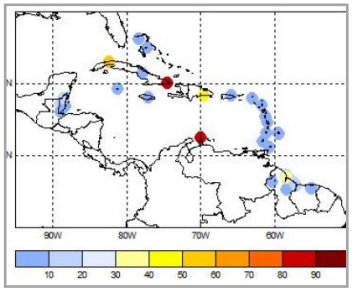
Rainfall totals from July through September could be wetter than normal across most of the region.

Moderate to high potential for long-term flooding and flash floods across the region from very wet and extreme wet spells. This is expected to be reversed after July across the Guianas

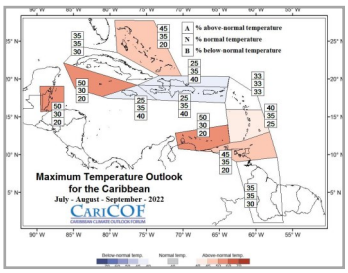
Probability of at least THREE 7-day dry spells in JAS

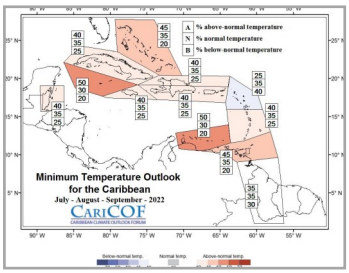


Probability of at least ONE 15-day dry spell in JAS



The occurrence of at least three 7-day dry spells is favourable across The ABC Islands, Cuba, Dominican Republic, and parts of the Guianas. The occurrence of at least one 15-day dry spell remains favourable across the ABC Islands, and eastern and north western Cuba.





Day-time (maximum) and night-time (minimum) temperatures are expected to be as warm as usual. However, day-time temperatures may be cooler than usual for Jamaica, Hispaniola, and the U.S. Territories. Heat stress will increase after July due to slower wind speeds and higher humidity on most days, especially during heatwaves, but to a lesser extent than in recent hot years (e.g., 2016, 2020).

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:

- Ensure that livestock are housed on high ground; evacuate animals in low lying area and pastures which are prone to flooding and erosion.
- Certain pests and diseases, such as blossom end rot, will increase during and after extreme wet conditions. Implement appropriate disease and pest management practices.
- Maintain drains around crop bed to ensure proper drainage of water.

Though not expected to be as warm as in recent years, as we advance into the Heat Season, livestock farmers should provide adequate ventilation and shading for livestock (especially poultry).

Consider on-farm drought management plans especially where dry spells are expected. These may include:

- Identifying alternate water sources for irrigation and other on-farm activities; employing water management techniques such as irrigation scheduling and mulching; installing water-saving devices (e.g. drip lines & timers).
- Avoid transplanting in extreme hot conditions this may cause wilting and even death.

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

Remain hurricane prepared!

Please also keep updated and take into consideration your local weather and climate advisories.

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