

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 September to October peak of the **Caribbean Heat Season (May to October)**, is likely to see a marked increase in heatwaves and the associated heat stress in livestock, crops and farm workers particularly in Barbados, the Windward Islands and the Guianas.

Drought impacts in currently affected areas are generally expected to decrease towards November.

The annual peak in very wet and extremely wet spells is expected to raise the concern for flash floods and flooding in Belize and the Islands.

Continue to be hurricane prepared as the region enters the peak of its hurricane season.

JULY IN REVIEW

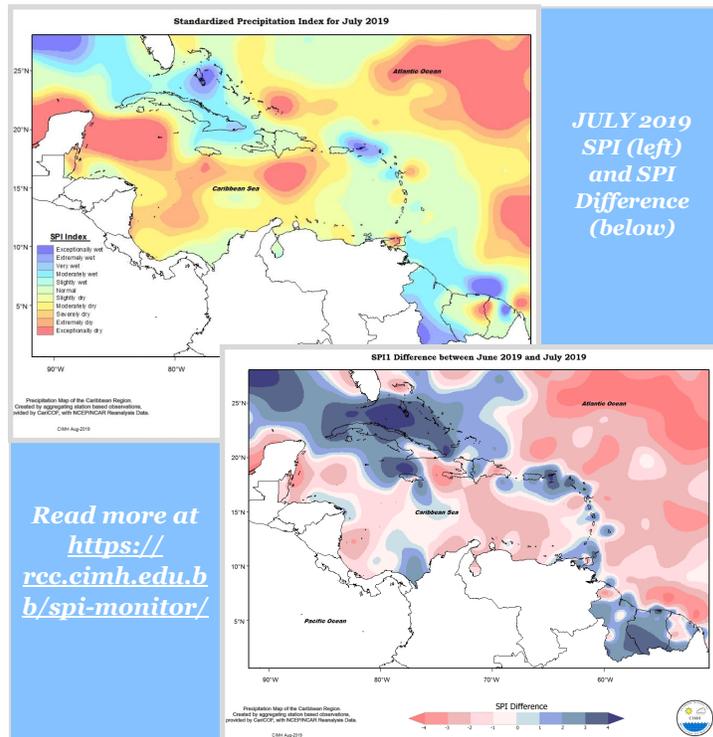
Mixed rainfall conditions were experienced in the islands of the eastern Caribbean for July. Trinidad was exceptionally dry in the west to slightly wet in the east; Tobago normal to moderately wet; Grenada, St. Vincent, Dominica and St. Kitts normal; Barbados and Antigua normal to slightly wet; St. Lucia and Martinique normal to moderately dry; Guadeloupe moderately wet to moderately dry from west to east; St. Maarten and Anguilla very to extremely wet; St. Croix moderate to very wet; and St. Thomas exceptionally wet. Conditions in the Guianas ranged from exceptionally wet in southwest Guyana and northern French Guiana to exceptionally dry around the northern Suriname/French Guiana border. Curacao was moderately dry.

Both Puerto Rico and Hispaniola were predominantly normal, but with Puerto Rico being slightly dry in the southwest to moderately wet in the northeast, and Hispaniola moderately wet in the northwest to severely dry in the east. Jamaica ranged from severely dry in the south to slightly wet in the northwest. Cuba ranged from normal in the south and southwest to moderately wet in the west and north and to very wet in the east, while northern Bahamas ranged from exceptionally wet to moderately dry from south to north. Conditions in Belize ranged from normal in the south to extremely dry in central and eastern areas and to 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

Rainfall totals for July surpassed totals in June for most territories, except particularly Belize.



AGRI-NEWS

Water situation in Barbados is at 'near crisis'. Read more <https://www.nationnews.com/nationnews/news/241332/water-near-crisis>

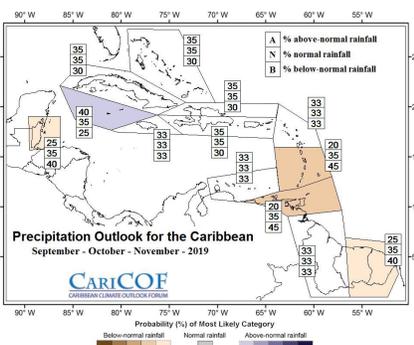
The National Oceanic and Atmospheric Administration (NOAA) has increased the chance for an above normal hurricane season. Read more <https://www.noaa.gov/media-release/noaa-increases-chance-for-above-normal-hurricane-season>

REGIONAL OUTLOOKS

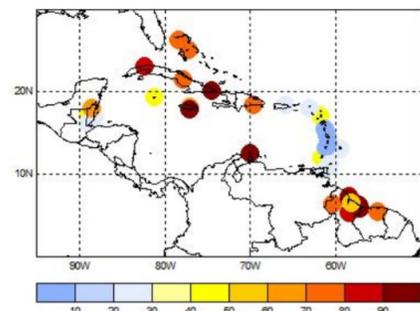
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEAT (SEPTEMBER TO NOVEMBER)

Less reliable rains for agriculture is likely as rainfall totals could be normal to below normal across Barbados, Belize, the eastern Guianas, Trinidad and Tobago, and the Windward Islands. However, rainfall totals are likely to be at least as wet as usual throughout The Cayman Islands.

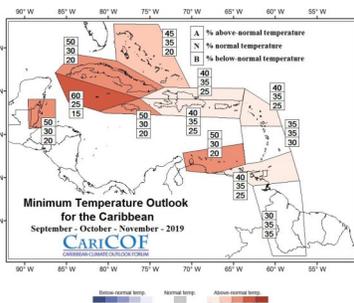
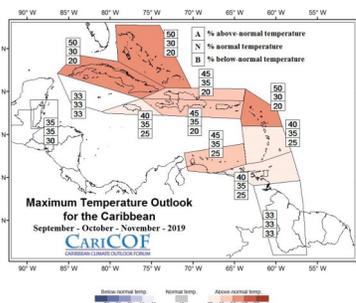
Water reservoir rates could be reduced, especially in the Guianas with the likelihood of fewer than normal wet spells. Long-term flooding and flash flood potential remains a concern in the event of very wet and extreme wet spells.



Probability of at least THREE 7-day dry spells

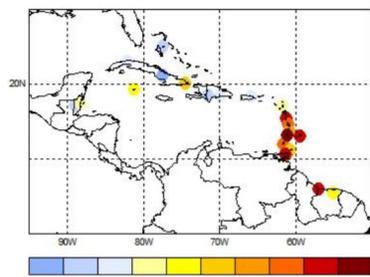
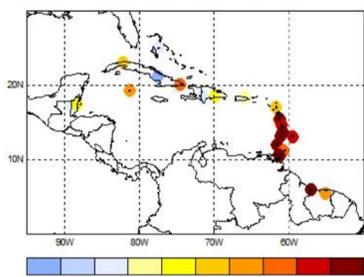


The occurrence of at least three 7-day dry spells is likely, especially across Jamaica, parts of Cuba, Hispaniola, The ABC Islands, northern Bahamas and the Guianas. The occurrence of such within the growing period could affect yields where sources of irrigation are not available.



Day time temperatures are likely to be normal to above normal across most of the region, so too for night time temperatures. The peak of the annual Heat Season lies within this period and could pose a threat to vulnerable individuals, small livestock and poultry. There is favourable chance of the occurrence of at least 7 or even 14 heatwave days across the Eastern Caribbean.

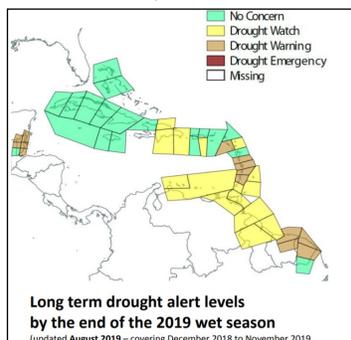
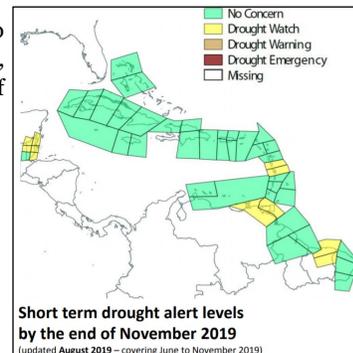
Prob. at least 7 heatwave days between Sep & Nov 2019 Prob. at least 14 heatwave days between Sep & Nov 2019



DROUGHT

At present, severe (or worse) shorter term drought has developed across much of the ABC Islands, Belize, parts of Hispaniola, northwestern Trinidad, Turks and Caicos Islands. Severe (or worse) long term drought has developed in Aruba, southern Belize, easternmost Cuba, southern and easternmost Dominican Republic, parts of French Guiana, Haiti, the northern Leeward Islands, Martinique, northern Trinidad, and the US Caribbean Territories. Large rivers, reservoirs, and underground water supplies may be impacted, thus affecting irrigation.

Shorter term drought may develop across Belize, Dominica, Martinique, Trinidad, and Suriname by the end of November 2019.



Long term drought is evolving across Belize, Dominica, French Guiana, Martinique, St. Kitts, Saint Lucia, St. Vincent, and Suriname.

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

CLIMATE-SMART ADVISORIES

As the region enters the peak of the Caribbean Heat Season farmers should take all necessary precautions against the effects of heat on human health, crops and livestock.

- Ensure that you keep hydrated, wear cool clothing
- Where possible, limit outdoor activity to the coolest time of the day
- Ensure that adequate water and shade are provided for livestock and poultry.

In the event of dry spells farmers could employ mulching and drip irrigation to combat any low water availability. Also, water conservation techniques should be employed for those who could be affected by long-term drought by the end of the wet season.

To minimize the effects of flash flooding farmers are advised to maintain drains around crop beds and/or plant crops on raised beds; house animals on high ground and/or on raised pens; and store fertilizer away from moisture and water sources.

Agricultural pest and diseases may increase after excess periods of precipitation. Monitor and employ recommended treatment as necessary.

Continue to be hurricane prepared as the region enters the peak of its hurricane season!

Please also 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.

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