

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

Areas in long term drought (by end of November) may experience **significantly reduced water levels** in large reservoirs, large rivers and groundwater during the upcoming dry season. Thus water rationing may be (or continue to be) of necessity in some territories.

The final month (October) of the **Caribbean Heat Season, remains favourable for an increase in heatwaves in the Guianas**. This may bring heat stress in livestock, crops and farm workers. Interests in some territories of the Eastern Caribbean should also take precautions.

Flooding and flash flooding still remains a concern.

The hurricane season nears to a close but it is still not over. Continue to be prepared!

AUGUST IN REVIEW

Mixed conditions were seen throughout the islands of the eastern Caribbean in August. Trinidad ranged from normal to exceptionally dry from northwest to southeast; Tobago normal to severely dry; Grenada moderately dry; Barbados slight to extremely dry; St. Vincent, St. Lucia and Martinique normal to slightly dry; Dominica, St. Kitts, St. Maarten and Anguilla normal to moderately wet; Guadeloupe moderately wet to moderately dry from west to east; Antigua and St. Thomas moderately wet; St. Croix was extreme to exceptionally wet.; In the Guiana's, conditions ranged from normal to exceptionally wet -the north eastern portion of Guyana, eastern portions of Suriname, north and southeast French Guiana were normal, whereas the north central areas were exceptionally wet. Curacao was normal.

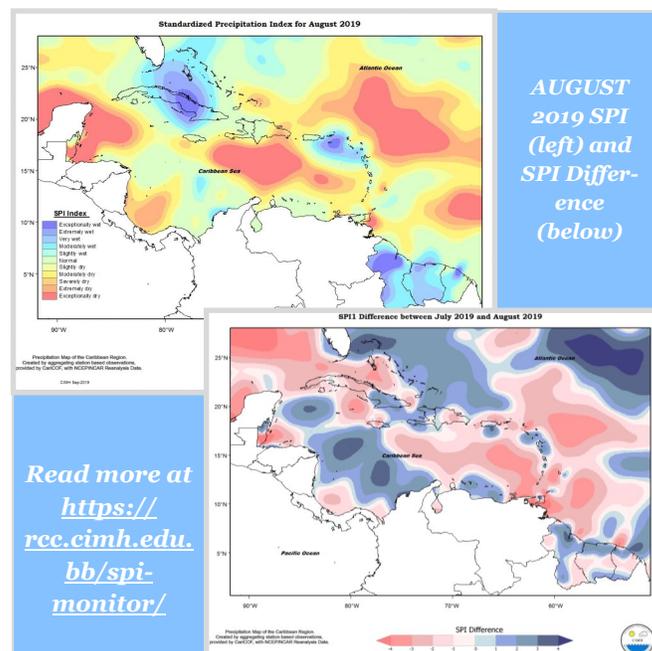
Puerto Rico ranged from moderately wet to slightly dry from south east to North West. Hispaniola ranged from normal in the western Dominican republic and Eastern Haiti to extremely dry, eastern portion of the Dominican Republic, and moderately dry in southwestern areas of Haiti . Jamaica ranged from normal to moderately dry, north to south, and Grand Cayman was predominantly slightly dry. Cuba ranged from normal in the eastern and western areas to exceptionally wet in central areas, while Northern Bahamas ranged from moderate to extremely wet.

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:

Belize ranged from normal in the northern and southern areas to exceptionally dry in central areas.

Rainfall totals for August were predominantly higher than in the previous month across most of the region.



AGRI-NEWS



Belize: As much as fifty million dollars have been lost in produce by farmers due to drought. Sugar, corn and the livestock industries have taken a huge blow ... Read more <https://edition.channel5belize.com/archives/191460>

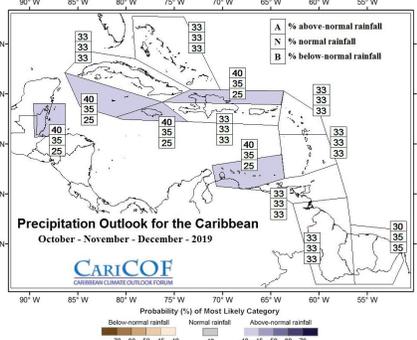
Barbados' sugar cane harvest affected by ongoing drought conditions. Read more <https://www.nationnews.com/nationnews/news/241790/sugar-low>

REGIONAL OUTLOOKS

RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEAT (OCTOBER–DECEMBER)

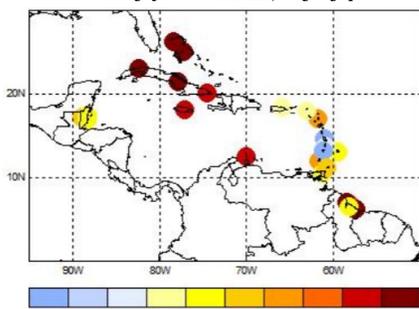
Increasing rainfall totals could alleviate concerns for reliable rains for cropping in the ABC Islands, Belize, Cayman, northern Hispaniola and Jamaica.

Water reservoir recharge 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.

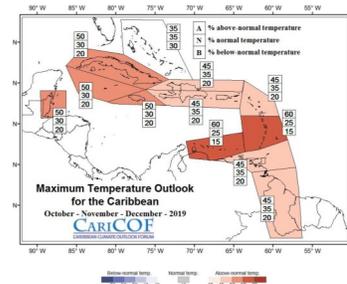


Precipitation Outlook for the Caribbean
October - November - December - 2019

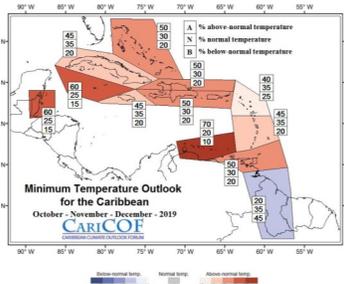
Probability of at least THREE 7-day dry spells



The occurrence of at least three 7-day dry spells (October to December) is very likely across Jamaica, 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.



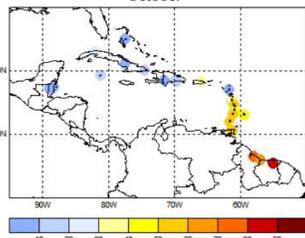
Maximum Temperature Outlook for the Caribbean
October - November - December - 2019



Minimum Temperature Outlook for the Caribbean
October - November - December - 2019

Day and night time temperatures are likely to be normal to above normal across most of the region, with the exception of the Guianas (normal to below normal night time). With October being the last month of the Caribbean Heat Season the chance of heat wave remain favourable across the Guianas and possibly the Eastern Caribbean.

Probability of at least 14 heatwave days in October

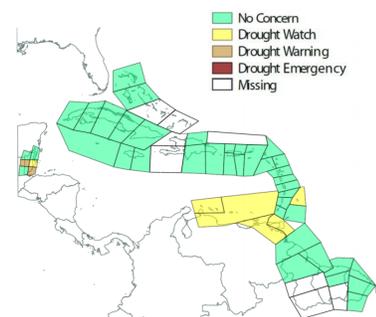


DROUGHT

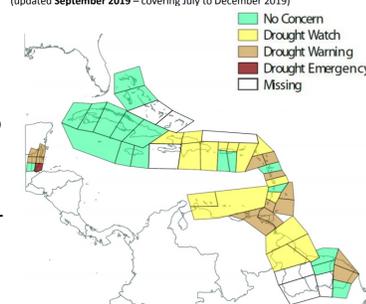
At present, severe (or worse) shorter term drought has developed in Aruba, much of Belize, north-western French Guiana, eastern-most and southernmost Hispaniola, southern-most Jamaica, parts of Martinique, northern Saint Lucia, parts of Trinidad and Tobago, Turks and Caicos. Severe (or worse) long term drought has developed in Aruba, Barbados, eastern and northern Belize, eastern Cuba, southwestern Dominica, southern and eastern Dominican Republic, northwestern and northeastern French Guiana, Haiti, Martinique, much of Puerto Rico, northern Saint Lucia, Trinidad.

By the end of December, shorter term drought may be evolving in west-central and south-eastern Belize and might possibly continue in Aruba, Barbados, other parts of Belize and Trinidad.

By the end of November, long term drought is of immediate concern in south-eastern Belize. Long term drought is evolving in Antigua, Barbados, northern and central Belize, Dominica, French Guiana, Grenada, St. Kitts and Trinidad and Tobago and might possibly continue in Hispaniola and Martinique. Development may also be in northern Puerto Rico, St. Martin, St. Vincent and US Virgin Islands. Water levels may be significantly reduced in large reservoirs, large rivers and groundwater during the upcoming dry season. Thus water rationing may be (or continue to be) of necessity in some territories.



Short term drought alert levels by the end of December 2019
(updated September 2019 – covering July to December 2019)



Long term drought alert levels by the end of November 2019
(updated September 2019 – covering December 2018 to November 2019)

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

CLIMATE-SMART ADVISORIES

Farming community should continue to carry out measures to conserve water, especially in areas where water reservoirs may be severely impacted. Water conservation techniques (e.g. mulching) as well as water management practices (e.g. irrigation) may be employed.

Ensure that adequate water and shade are provided for livestock.

Farmers should also protect themselves from heat exposure during the last month of the region's heat 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 even as the season nears a close!

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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