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

Increase in wet days and wet spells, heatwaves and tropical cyclone activity in Belize and the Caribbean Islands.

The potential for flash floods, long-term flooding and cascading impacts, as well as, for heat stress will increase from moderate in July to high in August and September.

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

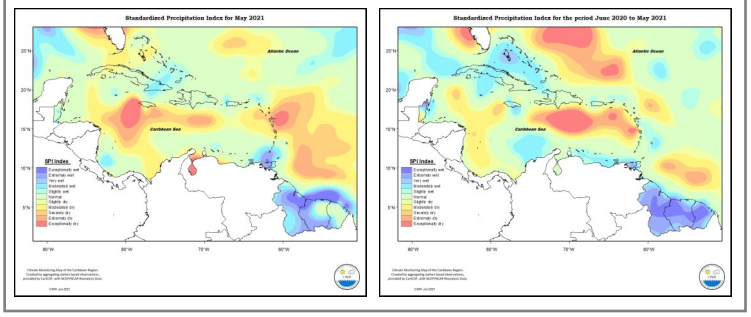
MAY IN REVIEW

Mixed conditions were seen throughout the islands of the eastern Caribbean during the month of May. Trinidad extremely wet to normal west to east; Tobago slight to moderately wet; Grenada extreme to very wet; Barbados, St Maarten and St Croix normal to slightly dry; St Vincent, and St Thomas normal; Saint Lucia slight to moderately dry; Martinique moderate to extremely dry; Dominica severe to extremely dry; Guadeloupe severe to exceptionally dry west to east; Antigua severely dry; St Kitts moderately dry and Anguilla normal to slightly wet. Conditions in the Guianas ranged from slightly dry in northeastern Suriname to exceptionally wet in northern areas of Guyana, Suriname and French Guiana. Aruba and curacao were normal.

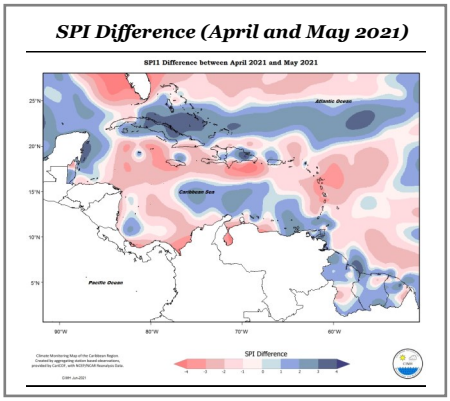
Puerto Rico ranged from moderately wet to normal. Hispaniola was predominantly normal with slightly dry conditions in extreme southern areas and slightly wet conditions in east central Dominican Republic. Jamaica ranged from normal in central areas to exceptionally dry in the west and to severely dry in the extreme southeast. Grand Cayman was slightly wet. Cuba ranged from moderately dry in west central areas to moderately wet in the east. Northern Bahamas ranged from normal to moderately dry. Belize was predominantly normal ranging to moderately wet in southern and eastern areas, and to slightly dry in the north.

For the 12-month period rainfall was above normal in the Guianas, northwestern section of The Bahamas, central Cuba, northern Belize and Barbados.

MAY 2021 SPI (left) and 12-month SPI JUN 2020—MAY 2021 (right)



SPI Difference (April and May 2021)



Mixed conditions were seen across the region between April and May with marked increases in rainfall (in May) observed across most of The Bahamas, Cuba and the Dominican Republic.

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

AGRI-NEWS

Guyana: Devastating flooding in Kwakwani. Overflowing Berbice River submerges houses, farms and vehicles. Read more https://newsroom.gy/2021/06/05/flooding-in-kwakwani-is-devastating-but-people-are-resilient/

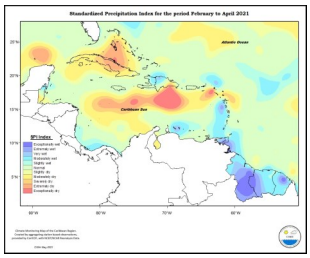
ABOUT CariSAM

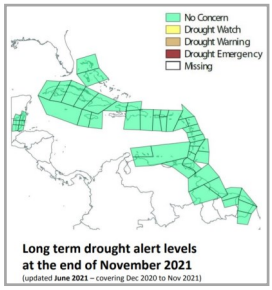
The Caribbean Society for Agricultural Meteorology (CariSAM) is an online platform that hosts forums, provided online weather and climate information for agro-meteorologists, and much more. Agricultural interests can register and access relevant information and be a part of future capacity building exercises,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

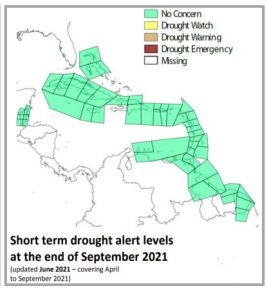
REGIONAL OUTLOOKS

DROUGHT

As at the end of May 2021, moderate (or worse) short term drought has developed in Antigua, the northwestern Bahamas, the western half of Cuba, easternmost Guadeloupe, western- and easternmost Jamaica, eastern Martinique, St. Kitts and Sint Maarten. Moderate long term drought has developed in southwest Belize, in southwest Dominica, westernmost Jamaica, northwest Martinique and St. Kitts.



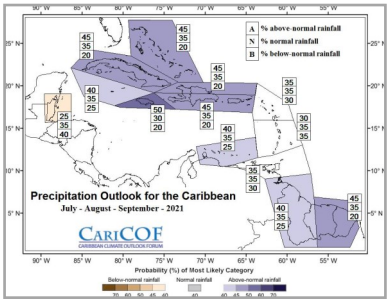




There should be no concern for impacts from short-term drought (by the end of September) and long-term drought (by the end of November).

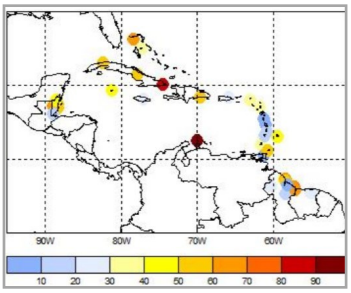
RAINFALL, WET/DRY SPELLS, TEMPERATURE and HEATWAVE DAYS (JULY—SEPTEMBER 2021)

Rainfall totals (from July to September) could possibly be as expected (or more) across most of the region with the exception of Belize.

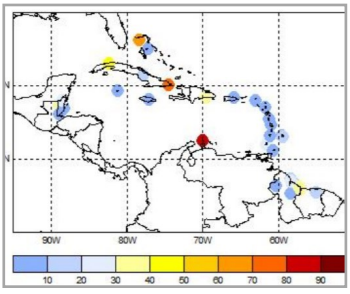


There is a moderate to high potential for long-term flooding, flash floods and related hazards from very wet and extreme wet spells (with the exception of the Guianas after July). As we progress towards the peak of the wet season, an increased number of wet days could possibly decrease wild fire potential.

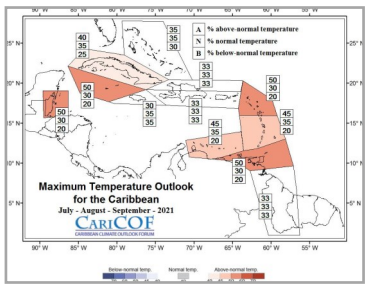
Probability of at least THREE 7-day dry spells in JAS

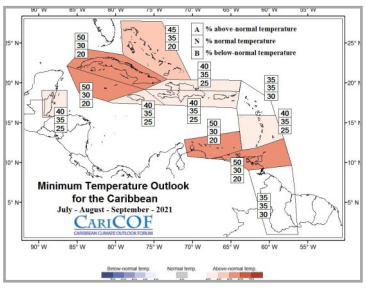


Probability of at least ONE 15-day dry spell in JAS



The occurrence of at least three 7-day dry spells and at least one 15-day dry spells is highly likely across the ABC Islands and portions of Cuba.





Day-time (maximum) temperatures and night-time temperatures are likely to be at least as warm as usual across The Bahamas, Belize, and much of the Antilles. Heat stress is expected to peak in August and September (October in the Guianas) especially during heatwaves.

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

CLIMATE-SMART ADVISORIES

- ***Hurricane season is here again. Be hurricane ready!*** Hurricane preparations should be ongoing or completed. This is predicted to be an active season for tropical cyclone activity.
- To enhance food security in the event of a tropical cyclone, farmers may want to consider planting or supplementing with more resilient crops (e.g. root crops)
- Provide shade and ample water for livestock during periods of heatwaves especially during the peak of the Heat Season (August to September). Farmers should also pay attention to their health and protect from heat-stroke:
  - *Consume lots of water*
  - *Wear appropriate clothing*
  - *Adjust times of field activities where necessary*
- With the possibility of flood producing rains, particularly in Belize and the islands:
  - *Maintain drains around crop beds and/or plant crops on raised beds*
  - *House animals on high ground and/or on raised pens*
  - *Store fertilizer away from moisture and water sources*
- Pest and diseases may increase in extreme wet conditions. Monitor and employ recommended treatment as necessary.

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.

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