

Caribbean Climate Outlook Newsletter - February to April 2022

For climate information specific to your country, please consult with your national meteorological service.
CariCOF outlooks speak to recent and expected seasonal climate trends across the Caribbean in general.

BRIEF SUMMARY: October 2021 to April 2022

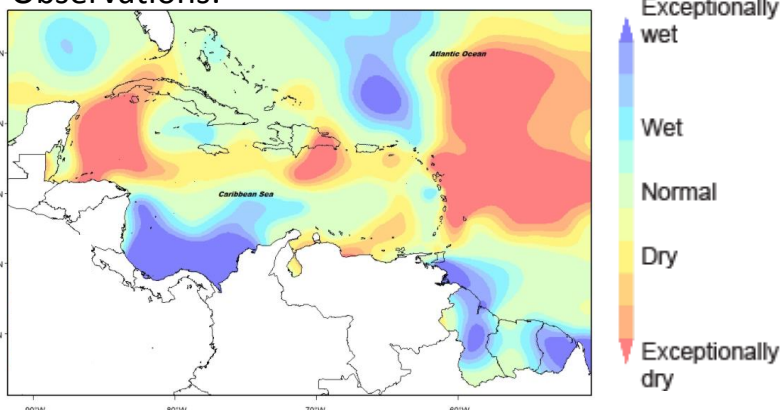
October to December 2021: The end of 2021 stood out in terms of a quiet cessation to the hurricane season along with dry seasonal rainfall anomalies for much of the eastern Caribbean. Heat discomfort progressively decreased along the three-month period as the Caribbean transitioned out of the 2021 Heat Season.

February to April 2022: A persistent La Nina pattern is expected to continue during the core of the dry season, which should drive increasing dry spells across the northwest section of the region in addition to the ABC islands and Belize where seasonal rainfall is expected to be the usual or drier. A higher frequency of wet days and wet spells is forecast for the eastern Caribbean where rainfall is expected to be at least as wet as or wetter than the usual, which should taper the chances of wildfire and promote water reservoir capacity. Extreme wet spells for the region are not expected to feature prominently during the upcoming season.

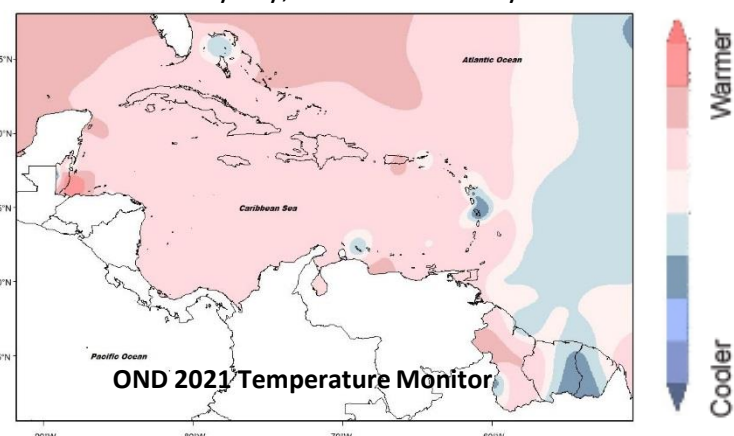
LOOKING BACK:

Rainfall Oct. – Nov. - Dec. (OND) 2021

Observations:



RAINFALL: Western Cuba, eastern Dom. Rep., most of the Lesser Antilles very dry; The Guianas very wet.



TEMPERATURE: Near average temperatures in much of the Caribbean, but NW sections of The Bahamas, western French Guiana, Martinique, and eastern Suriname were cooler than normal.

Notable Climate Records:

WET: OND: 8 locations in Guianas seasonal record

DRY: OND: 6 locations (Antigua, Barbados, Dom. Rep., Jamaica, and Martinique, St. Vincent ; 28-77% of average)

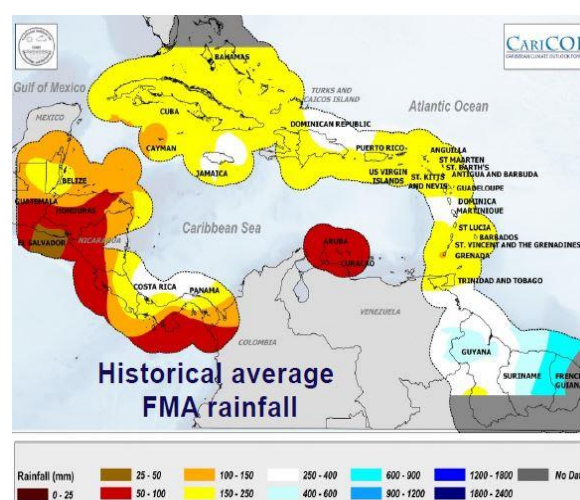
HOT: December: Jamaica all time high (Sangster 32.4C)

January 2022

find out more by using the clickable images and headings or visit rcc.cimh.edu.bb

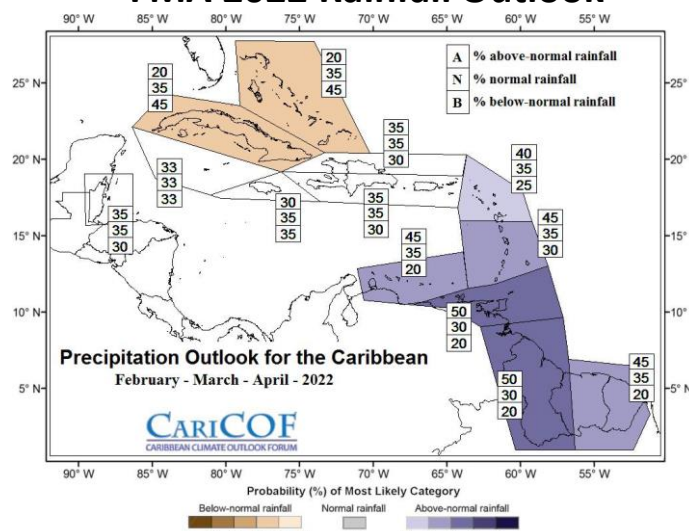
WHAT NEXT?

Rainfall patterns January - February - March



Belize : Feb to Apr - dry season. Mostly without heavy rainfall.
C'bean Islands north of 16°N: Feb to Apr - sunny days and some days with showers.
C'bean Islands south of 16°N (except ABC Islands): Feb to Apr - sunny days and some days with showers.
ABC Islands: Feb to Apr - generally dry.
Guianas: Feb to Apr - End of dry season with occasional heavy showers and thunderstorms.

FMA 2022 Rainfall Outlook

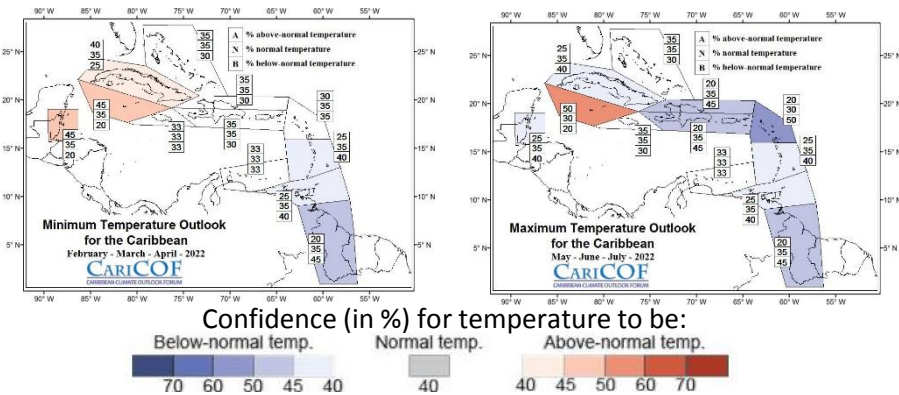


Rainfall totals from February to April are likely to be at least as high as usual in the ABC islands, Lesser Antilles, and the Guianas; but likely the usual or drier in the Bahamas and Cuba.

White areas represent areas of low forecast predictability for this season.

e-mail caricof@cimh.edu.bb

Night/Day – time temperatures up to April



FMA night-time (min.) and day-time (max.) temperatures will progressively warm into April, but may remain comfortably cooler than usual throughout much of the Lesser Antilles. Overnight temperatures may be warmer than usual for Belize, Cayman Is., and Cuba.

Wet days and wet spells up to April

What usually happens from February to April?

Number of wet days: roughly 15 to 30 (ABC Is.: 5 to 15; northern Guianas: 20 to 45).
 # of wet spells: up to 2 or 3, of which up to 1 is very wet (northern Guianas: up to 2).
 # of extreme wet spells: up to 1 or two in the northern Guianas and mountainous areas. Virtually none elsewhere.

Forecast and Implications for FMA 2022:

- High potential for surface dryness and wildfire along the NW part of the region.
- Slower depletion of large water reservoirs and above normal soil moisture along the eastern Caribbean.
- Marginal increase in flooding and soil erosion potential along Guyana through April in view of wet spells.

Drought conditions

Lastest drought situation (as of January 1st) : Moderate (or worse) shorter term drought has developed in Antigua, Barbados, western Cuba, Dominican Republic, Haiti, USVI, Guadeloupe, Guyana, Martinique, Saint Lucia, and Saint Vincent.; moderate longer term drought has developed in The Bahamas, Cuba, Dominica, Dominican Republic, throughout the Leeward Islands, Martinique..

Short-term drought (at the end of Feb. 2022) : Short term drought is evolving in Antigua, western Cuba, Guadeloupe, and Martinique and may develop or continue in Barbados, western Belize, Dominica, Dominican Republic, northern Haiti, northern Puerto Rico, Saint Vincent, and the USVI.

Long-term drought (at the end of May 2022) : Long term drought is evolving western Cuba, Dominica, Guadeloupe, Martinique, and USVI and might possibly develop or continue in Antigua, southern Belize, Dominican Republic, western Puerto Rico, Saint Lucia, Saint Vincent, and Sint Martin.

BRIEF CLIMATE OUTLOOK –May to July 2022

An existing moderate La Nina may phase into neutral conditions upon entering the wet season with near normal sea surface temperatures across the Caribbean. Neutral ENSO conditions provide little seasonal rainfall forecast information, thus, there is low forecast confidence with the exception of the Guianas, which are expected to be at least as wet as usual or wetter. Wet spells are expected to increase into July during the wet season across the islands. Maximum temperatures may be cooler than normal for most of the region. For temperature and precipitation outlooks for MJJ 2022, please visit rcc.cimh.edu.bb/caricof-climate-outlooks.

What influences the next season?

El Niño Southern Oscillation (ENSO)

Recent observations: Sea Surface Temperatures (SSTs) in the eastern Pacific remain below normal -0.75°C; La Niña conditions have maintained to the end of this year.

Model forecast and guidance: The models forecast indicate La Niña conditions in FMA (70-75% confidence), which may phase into ENSO neutral into MJJ (60-65% confid.).

Expected impacts on rainfall and temperatures: La Niña tilts the odds to more rainfall activity in FMA and MJJ, except in the northern Caribbean where it tilts the odds to less rainfall. ENSO neutral offers little contribution to seasonal rainfall or temperature prediction in the Caribbean.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: warmer than usual SSTs persisted to 1°C above average around most of the Caribbean Sea and in the sub-tropical portions of the North Atlantic in December.

Expected conditions: Models are forecasting SST to maintain anomalously warm (0.5-1°C above average) around the Caribbean and in the sub-tropical North Atlantic.

Expected impacts: Warm SSTs in and around the Caribbean tend to contribute to higher air temperatures with above-average humidity, seasonal rainfall totals and an increased frequency of extreme rainfall.

Climate outlooks - background

The Caribbean Climate Outlooks are prepared by the Caribbean Climate Outlook Forum (CariCOF). The Caribbean Institute for Meteorology and Hydrology, in its role as WMO Regional Climate Centre, coordinates the CariCOF process. Contributors to the Outlooks are the Meteorological Services from the region.

The Precipitation and Temperature Outlooks are issued in the form of a map, which shows regions where the forecast rainfall or temperatures have the same probabilities to be:

Above-normal (A) - within the wettest/hottest third of the historical record

Near-normal (N) - within the middle third of the historical record, i.e. a range called the 'usual'

Below-normal (B) - within the driest/coldest third of the historical record

CariCOF Outlooks offer consensus-based information averaged across multiple territories. In some cases, individual national results may differ from region wide results. To get information on your specific country context, please consult your National Meteorological and Hydrological Services and/or any national level bulletins they may provide.

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