

Caribbean Climate Outlook Newsletter – May to July 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: January 2022 to July 2022

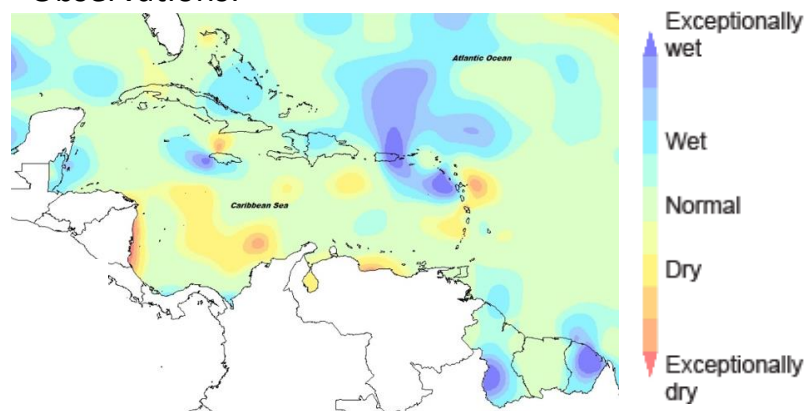
January to March 2022: Slight to moderately dry conditions were reported across parts of the eastern Caribbean resulting in lingering seasonal dryness. On the other hand, seasonal rainfall in Guyana, Suriname, and French Guiana produced moderate to extremely wet conditions. Temperatures were warmer than usual across most of the region, but were generally cooler in areas where conditions were moderately wet.

May to July 2022: Drier than normal seasonal rainfall and fewer than normal wet days and wet spells is expected across most of the region, which could delay the onset of the rain season. However, wetter than normal seasonal rainfall and an increase in wet spells is expected along The Guianas, Cayman Is., and The Bahamas, where marginal flash flood and soil erosion potential may develop. Extreme wet spells are not expected to feature more than usual for the region. In general, temperatures are expected to be close to normal across the region with an expected reduction in dry spells. Incursions of Saharan dust typically peak in frequency at this time.

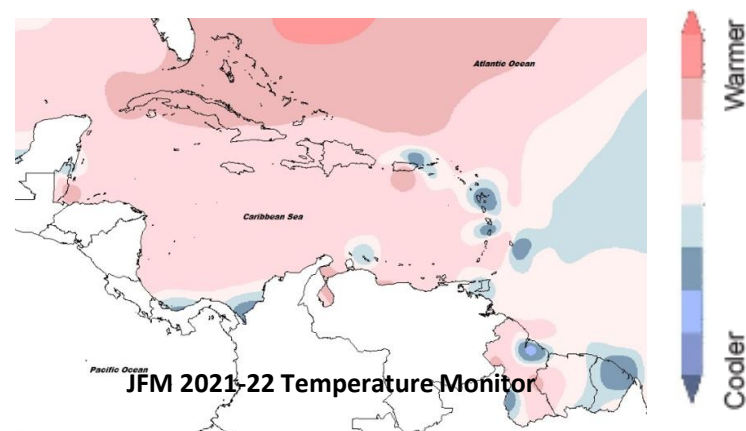
LOOKING BACK:

Rainfall Jan. – Feb. – Mar. (JFM) 2022

Observations:



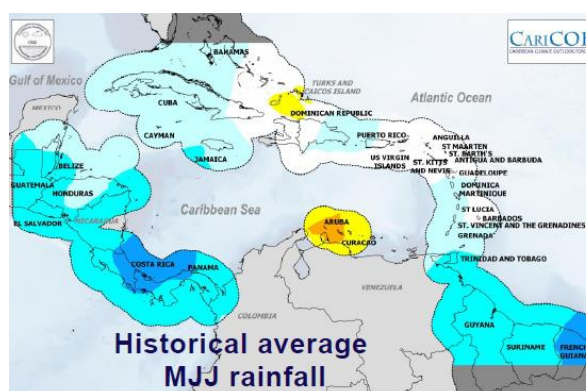
RAINFALL: Guadeloupe, Martinique, and Saint Vincent very dry; parts of the Guianas and Puerto Rico very wet.



TEMPERATURE: Slightly warmer temperatures in much of the Caribbean, but Aruba, Dominica, Guadeloupe, coastal Guyana, and Suriname were cooler than normal.

WHAT NEXT?

Rainfall patterns May – June – July



Belize & C'bean Islands north of 16°N:

May & Jun – usually frequent heavy showers.
Jul – wet season, often including a mid-summer dry spell

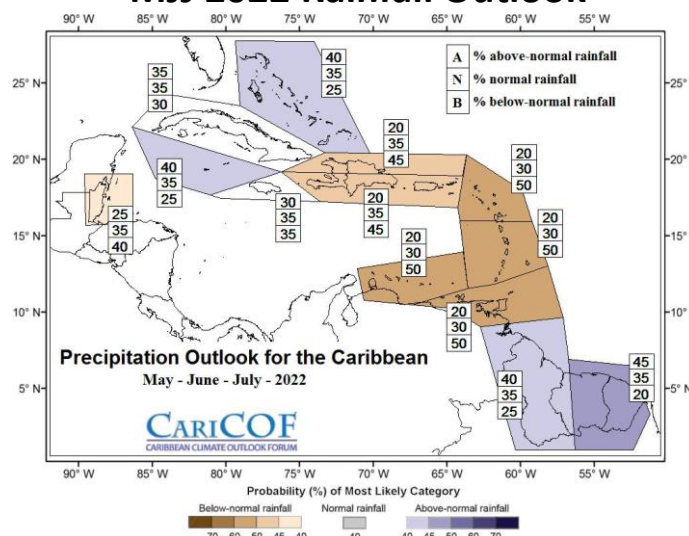
C'bean Islands south of 16°N (except ABC Islands):

May - end of dry season. Limited spatial extent and duration of heavy showers; occasionally very wet.
Jun - Jul - early wet season. Increasingly heavy showers.

ABC Islands: May to Jul- mostly dry.

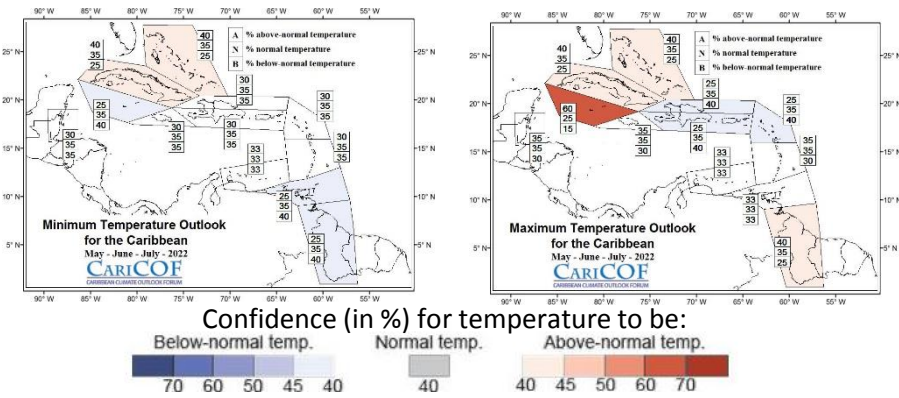
Guianas: May to Jul – long wet season; heavy showers are frequent.

MJJ 2022 Rainfall Outlook



The forecast for drier than normal rainfall is present across the ABC islands, Belize, the Lesser Antilles, Hispaniola, Puerto Rico, and the USVI. Normal to above normal seasonal rainfall is expected elsewhere.

Night/Day – time temperatures up to July



MJJ night-time (min.) and day-time (max.) temperatures will progressively warm into May, which marks the start of the Caribbean Heat Season. Overnight and daytime temperatures may be warmer than usual for The Bahamas and Cuba.

Wet days and wet spells up to June

What usually happens from April to June?

- Number of wet days: roughly 25 to 40, (ABC Is. 5-15; Guianas: 45-65).
- # of wet spells: up to 5 (ABC Is. up to 1; Guianas: up to 5), of which up to 3 are very wet (ABC Is. up to 1; Guianas: up to 5).
- # of extreme wet spells: up to 1 (Guianas: up to 2).

Forecast and Implications for MJJ 2022:

- Possible delay in wet season onset along the Antilles due to the higher probability of below normal rainfall coupled with a low frequency of wet days
- With few wet days, wild fire potential is expected to peak in May.

Drought conditions

Lastest drought situation (as of April 1st): Moderate (or worse) shorter term drought has developed in northeast Guadeloupe, Martinique, and Saint Vincent.; moderate longer term drought has developed in the ABC islands, Antigua, the northernmost and southeastern Bahamas, Barbados, southeast Belize, western Cuba, Dominica, eastern Dom. Rep., Guadeloupe, southwest Haiti, eastern Jamaica, Martinique, Saint Kitts, Saint Lucia, St. Vincent and the Grenadines, and the USVI.

Short-term drought (at the end of July 2022): Short term drought may develop or continue in Barbados, Western Cuba, Dominica, Grenada, Martinique, Saint Lucia, and Saint Vincent.

Long-term drought (at the end of May 2022): Long term drought is evolving in the ABC Islands, Barbados, most of Belize, western Cuba, Dominica, Guadeloupe, Martinique, Saint Kitts, Saint Lucia, Saint Martin, and the USVI and might possibly develop or continue the northern Bahamas, parts of eastern Belize, Saint Vincent, Trinidad and Tobago, and northern Suriname.

BRIEF CLIMATE OUTLOOK –August to October 2022

An existing weak La Nina will likely persist into late summer with slightly above normal sea surface temperatures across the Caribbean. Warmer sea surface temperatures across the region should provide moderate seasonal forecast confidence. The majority of the region is expected to be at least as wet as usual or wetter. Wet spells are expected to increase into the late-summer during the wet season across the islands along with a peak in humid heat. Maximum temperatures may be warmer than normal for Cayman Island and most of the southeast part of the region. For temperature and precipitation outlooks for ASO 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 -1.0°C; La Niña conditions have maintained into the middle of 2022.

Model forecast and guidance: The models forecast indicate La Niña conditions in MJJ (70-60% confidence), which may maintain into ASO (50-45% confidence).

Expected impacts on rainfall and temperatures: La Niña tilts the odds to more rainfall activity in MJJ and ASO, except in the northern Caribbean where it tilts the odds to less rainfall. However, current statistical and dynamical models suggest the opposite for MJJ.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: Warmer than usual SSTs persisted to 1°C above average around the northern section of the Caribbean Sea and in the sub-tropical portions of the North Atlantic in March. Elsewhere in the Caribbean SSTs were near normal.

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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