

Caribbean Climate Outlook Newsletter – June to August 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: February 2022 to August 2022

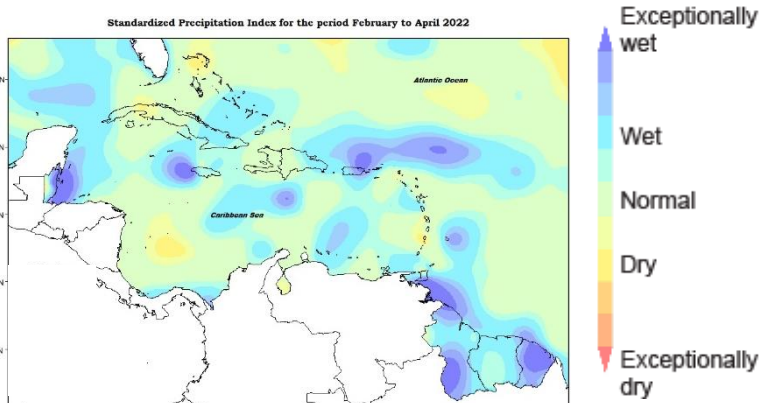
February to April 2022: Normal to very wet conditions were observed across most of the Caribbean and the Guianas, except in the northern Bahamas, western Cuba, and in Saint Vincent where conditions were reported to be moderately dry. Areas experiencing wet conditions tended to also be cooler than normal with warmer than normal temperatures reported elsewhere.

June to August 2022: Wetter than normal seasonal rainfall is expected from Jamaica across to Puerto Rico and throughout the Guianas; flash flood potential will remain high across Guyana. However, normal to drier than normal seasonal rainfall is expected elsewhere, but an increase in very wet and extreme spells is expected predominantly along the Lesser Antilles. In general, nighttime temperatures are expected to be close to normal across the region with a slight increase in day time temperatures expected in Cayman Islands and Trinidad and Tobago. Incursions of Saharan dust should feature during this season as well as the potential formation of tropical storms.

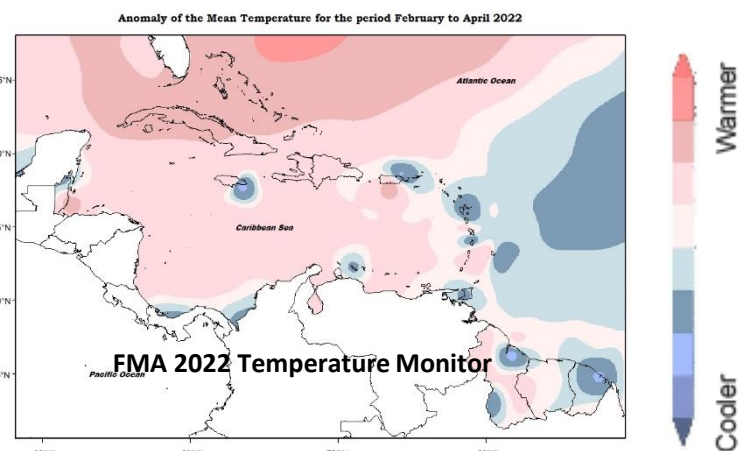
LOOKING BACK:

Rainfall Feb. – Mar. – Apr. (FMA) 2022

Observations:



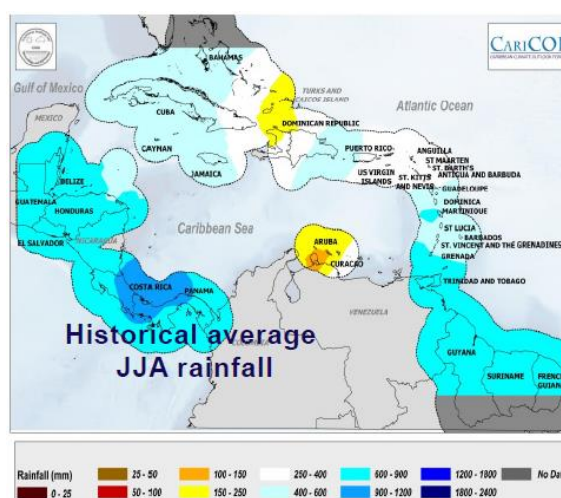
RAINFALL: northern Bahamas, western Cuba, and St. Vincent moderately dry; Barbados, coastal Belize, parts of the Guianas, western Jamaica, Puerto Rico, Trinidad, were very wet.



TEMPERATURE: Slightly warmer temperatures in much of the Caribbean, but Suriname, Trinidad, Aruba, and the majority of the Leeward Islands were cooler than normal.

WHAT NEXT?

Rainfall patterns June – July - August



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

Jun - wet season. Usually frequent heavy showers.
Jul to Aug - wet season. Often includes a mid-summer dry spell.

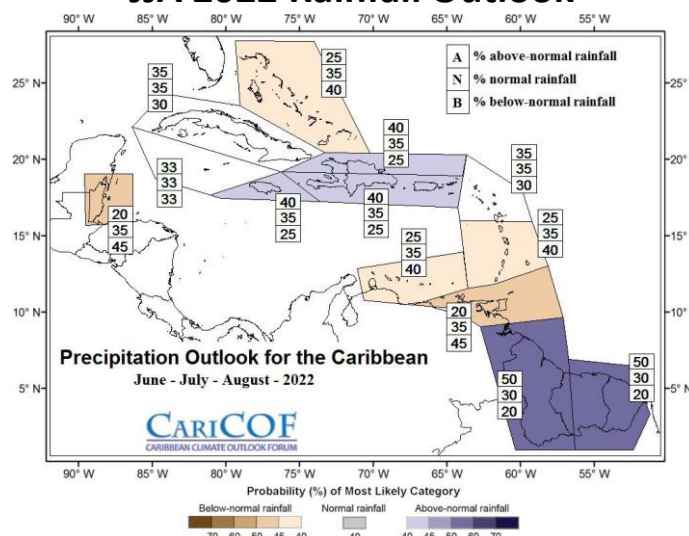
C'bean Islands south of 16°N (except ABC Islands):

Jun to Aug - first half of wet season. Increasingly heavy showers.

ABC Islands: mostly dry.

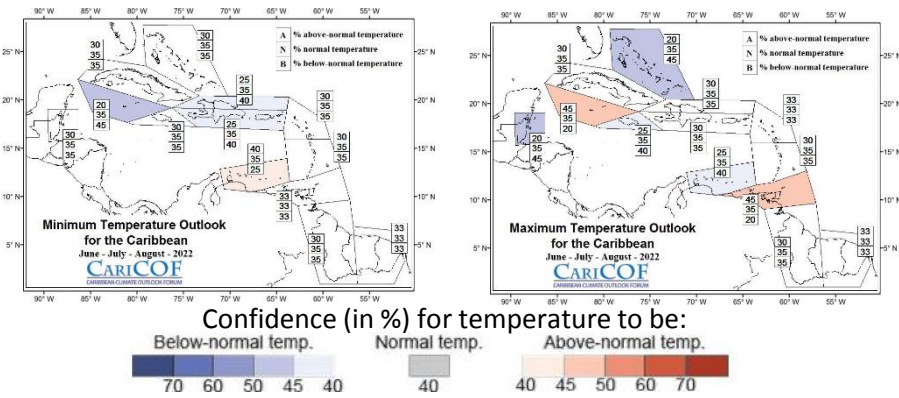
Guianas: May to Jul – long wet season; heavy showers are frequent.

JJA 2022 Rainfall Outlook



The forecast for drier than normal rainfall is present across the ABC islands, The Bahamas, Belize, and the windward islands. Wetter than normal seasonal rainfall is expected across Jamaica, the Guianas, and Hispaniola.

Night/Day – time temperatures up to August



JJA night-time (min.) and day-time (max.) temperatures are expected to warm throughout the season, which coincides with the Caribbean Heat Season. However, daytime temperatures may be warmer than usual for Cayman Island and Trinidad and Tobago.

Wet days and wet spells up to August

What usually happens from June to August?

- Number of wet days: 30 to 45 in flatter areas of the islands. 50-65 in mountainous areas and Guianas (ABC Is. 5 to 15).
- # of wet spells: 3 to 6 (ABC Is. up to 3), of which 1 to 3 are very wet (ABC Is. Up to 2)
- # of extreme wet spells: up to 1 or 2.

Forecast and Implications for JJA 2022:

- Flash flood and long-term flooding potential will increase from moderate to high by August in the islands, but should remain high in the Guianas.

Drought conditions

Lastest drought situation (as of May 1st) : Moderate (or worse) shorter term drought has developed in the northern Bahamas, western Cuba, and in Saint Vincent.; moderate longer term drought has developed Antigua, along the northern Bahamas, western Cuba, Dominica, southern coast of Hispaniola, Guadeloupe, eastern Jamaica, Martinique, St. Croix, St. Kitts, St. Lucia, and St. Vincent.

Short-term drought (at the end of August 2022) : Short-term drought may possibly develop in Martinique.

There is no concern for long-term drought at this time by the end of November 2022:

BRIEF CLIMATE OUTLOOK –September to November 2022

A long lasting weak La Nina will likely persist into late summer with slightly above normal sea surface temperatures across the Caribbean. An increase in Atlantic tropical storm frequency may also be consistent with the presence of La Nina. Warmer sea surface temperatures across the region should provide moderate seasonal forecast confidence. Rainfall patterns across the region are expected to be influenced by La Nina as well with a drier than normal signal along the northwest section and wetter than normal patterns setting up elsewhere. A peak in humid heat typically occurs during the first two months of the season and will coincide with the peak of the Atlantic hurricane season. 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 JJA (70-55% confidence), which may maintain into SON (60-55% confidence).

Expected impacts on rainfall and temperatures: La Niña tilts the odds to more rainfall activity in JJA and SON, except in the northern Caribbean where it tilts the odds to less rainfall. La Niña also tilts the odds for higher tropical storm frequency in the Atlantic Basin.

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 April. 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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