

# Caribbean Climate Outlook Newsletter - June to August 2019

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

## BRIEF SUMMARY: February to August 2019

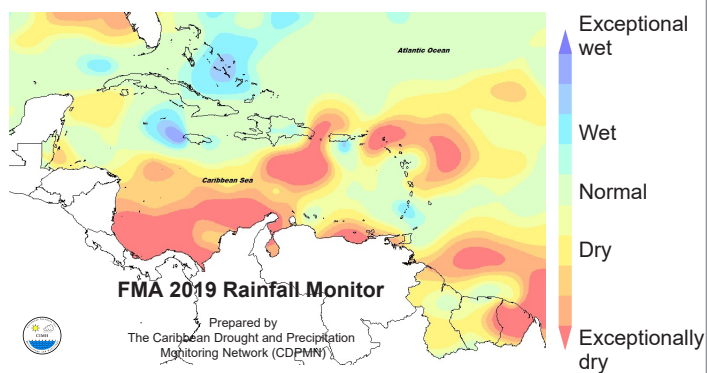
**February to April 2019:** Shorter term drought has developed across Aruba, French Guiana, northern Leewards Martinique while the southeastern Belize, southernmost Cuba, much of Hispaniola and the Lesser Antilles are in long term drought. Seasonal temperatures exceeded 1.5°C above average in The Bahamas and the Guianas.

**June to August 2019:** Drought is expected to continue into the wet season in areas currently affected, as weak El Niño conditions and less than the usual rainfall are forecast to persist throughout the season. More wet spells are expected throughout the region (except in the ABC Islands), however possibly fewer than in most wet seasons. These spells may bring some level of drought relief, but also concern for flooding. Peak heat stress will most likely start in August with heatwaves in most countries. Episodes of Saharan dust incursion are expected.

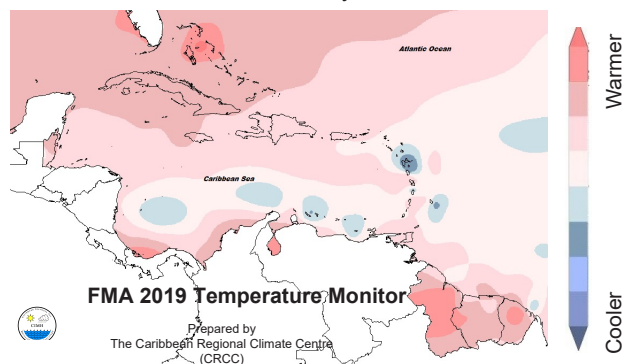
## LOOKING BACK:

### February - April 2019 (FMA)

#### Observations



- ♦ **RAINFALL:** Aruba, French Guiana, the northern Leewards, parts of Martinique very dry; central parts of the Bahamas and westernmost Jamaica very wet.



- ♦ **TEMPERATURE:** Guadeloupe signif. cooler than avg.; north-western Bahamas, northern Belize, Cayman, Cuba, much of the Guianas, western Jamaica signif. warmer.

#### Notable Climate Records:

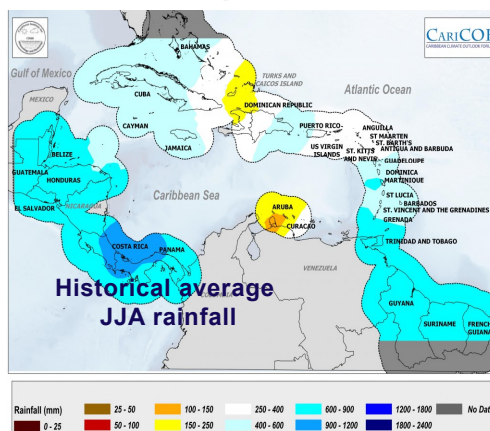
**WET:** **FMA:** 2 locations in Dominica, 2 in Jamaica, 1 in Puerto Rico, and 1 in USVI recorded their highest rainfall totals (210-355% of average).

**DRY:** **April:** Anguilla recorded its lowest rainfall totals on record.

**HOT:** **FMA:** 3 locations in Guyana recorded their highest maximum temp. 3 locations in Jamaica, Grenada and 1 location in Guyana recorded their highest minimum temp.

## WHAT NEXT?

### Rainfall patterns June - July - August (JJA)



#### 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.

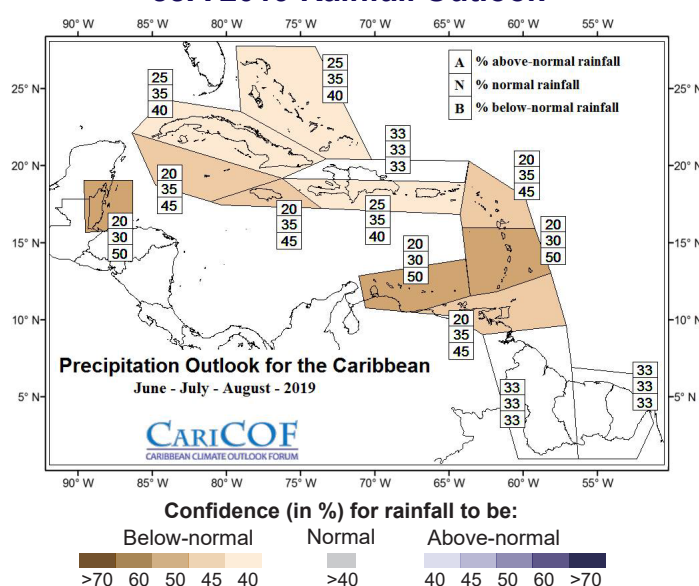
#### C'bean Islands south of 16°N (except ABC Islands):

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

#### ABC Islands: Mostly dry

**Guianas:** Jun to Jul - long wet season; Frequent heavy showers. Aug - transition to dry season. Heavy showers become less frequent.

### JJA 2019 Rainfall Outlook



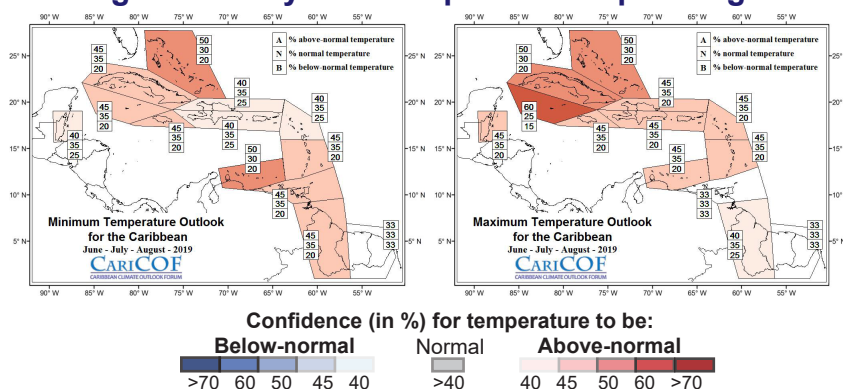
#### Confidence (in %) for rainfall to be:



Rainfall totals from June to August are likely to be at most as dry as usual across Belize and the Caribbean Islands, with the possible exception of northern Hispaniola.

*White areas show where the forecast indicates little information on rainfall totals.*

## Night- and day-time temperatures up to August



JJA night-time (min.) and day-time (max.) temperatures are likely to be at least as warm as usual across most of the Caribbean, with a build up of heat stress towards August.

## 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 Islands: 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:

- **Flash flood potential** a concern in most areas in the event of extreme wet spells.
- **Slightly reduced long-term flooding potential** and **reduced recharge rates** of large water reservoirs associated with slightly fewer wet spells than usual.
- **Less reliable rains for agriculture** and **slower increase in surface wetness** in Belize and the islands.
- **Wild fire potential** decreasing slower than usual.

## Drought conditions up to August

*Drought situation:*  
(as of April 1)

Severe (or worse) drought has developed in Aruba, French Guiana, the northern Leewards, parts of Martinique on the shorter term, and in Barbados, southeastern Belize, southernmost Cuba, much of Hispaniola, northern French Guiana, central coast of Guyana, northern Leewards, Martinique, St. Lucia and Tobago on the long term.

*Shorter term outlook:*

Shorter term drought is evolving in Martinique, and possible in Belize and many countries from Dom. Rep. southwards.

*Long term concern:*

Long term drought is evolving in Suriname and northern French Guiana, and possible in western Belize and from the USVI east- and southward.

## BRIEF CLIMATE OUTLOOK - September to November 2019

The peak of the C'bean wet season may be wetter than usual in the ABC Islands, Bahamas, Belize, the Greater Antilles and the Leewards, but possibly drier than usual elsewhere. Drought in the southeastern Caribbean may therefore persist, while it may ease up in other affected areas. Nevertheless, the average occurrence of extreme wet spells and corresponding flash flood potential peaks in this season. Heat stress will likely peak in September and markedly decrease after October, with warmer temperatures forecast throughout the season and heatwaves probably occurring in many countries. For detailed temperature and precipitation outlooks for ASO 2019, please visit [rcc.cimh.edu.bb/caricof-climate-outlooks/](http://rcc.cimh.edu.bb/caricof-climate-outlooks/)

## What influences the next season?

## El Niño Southern Oscillation (ENSO)

*Recent observations:* In recent months, sea-surface temperatures (SSTs) in the equatorial eastern Pacific (NINO3.4) have been 0.5-1°C above average, meaning weak El Niño conditions.

*Model forecast and guidance:* Most models suggest ENSO conditions to maintain as a weak El Niño during JJA (with 65-70% confidence) and a majority maintains El Niño through SON (55-60% confid.).

*Expected impacts on rainfall and temperatures:* An El Niño tends to tilt the odds to warmer and drier conditions with less shower activity in most parts of the Caribbean. Note, however, that an El Niño maintaining into November could lessen these impacts during the later part of the season in the northwestern part of the region.

## 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          |
| 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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