



## BRIEF SUMMARY: December 2018 to June 2019

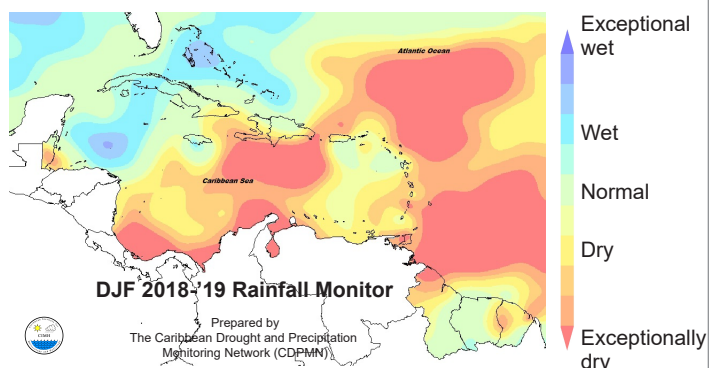
**December 2018 to February 2019:** Shorter term drought has developed across many parts of the Caribbean, while the Bahamas, Cayman and western parts of Cuba have been wetter than usual. Long term drought persisted in parts of Hispaniola and in Tobago, depleting water resources faster this dry season than usual.

**April to June 2019:** With weak El Niño conditions forecast to persist, chances of drought continuation and recurrent dry spells during this transition period between the dry and wet season are increased. Heatwaves will start occurring locally into May. Region-wide, extreme heat is unlikely. The frequency of wet days and wet spells should be initially low, but increase along these months. The chance for extreme wet spells tends to emerge in April or May, with some concern for flash flood and flooding potential arising then, in particular in the Guianas.

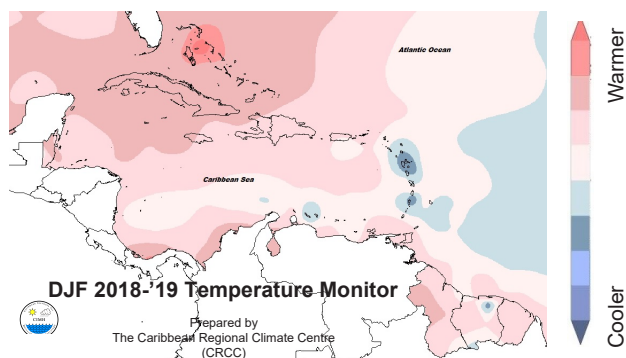
### LOOKING BACK:

#### Dec. 2018 / Jan. - Feb. 2019 (DJF)

##### Observations



- ♦ **RAINFALL:** Antigua, Aruba, Barbados, S Belize, Curaçao, N Guyana, parts of French Guiana, parts of south Hispaniola, Windwards (except Grenada) very dry; NW Bahamas very wet.



- ♦ **TEMPERATURE:** Guadeloupe and Saint Lucia significantly cooler than avg.; Bahamas, Belize, Cayman, Cuba, W Guyana, W Jamaica signif. warmer.

#### Notable Climate Records:

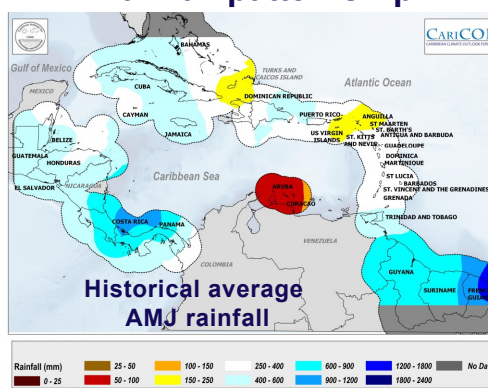
**WET:** DJF: 7 locations in Dom. Republic, 2 in N Belize, 1 in Dominica and 3 in Martinique recorded their highest rainfall totals (165-415% of average)

**DRY:** None.

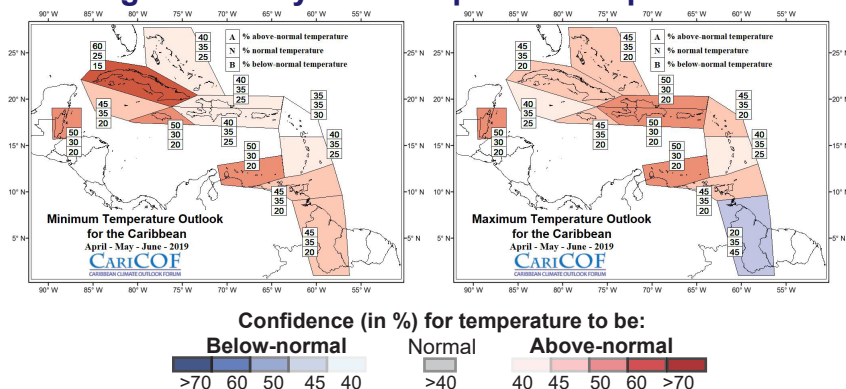
**HOT:** DJF: 1 location in Belize and 1 location in Jamaica recorded their highest minimum temp.

### WHAT NEXT?

#### Rainfall patterns April - May - June (AMJ)



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



AMJ night-time (min.) and day-time (max.) temperatures are likely to be at least as warm as usual across most of the Caribbean, but day-time may be cooler than usual in Guyana.

## Wet days and wet spells up to June

## What usually happens from April to June?

- Number of wet days: roughly 20 to 35, (ABC Is. 5-10; Guianas: 40-55).
- # of wet spells: up to 4 (ABC Is. 1; Guianas: up to 6), of which up to 2 are very wet (ABC Is. 1; Guianas: up to 3).
- # of extreme wet spells: up to 1 in most locations.

## Forecast and Implications:

- **Flash flood and long-term flooding potential** from very wet and extreme spells becoming a concern from late April onwards, in particular in the Guianas.
- **Surface dryness** increasing as usual along the dry season, with relatively few rain disruptions.
- Limited **recharge of large water reservoirs** up until April (Greater Antilles and Guianas) or May due the usual small # of wet spells during the dry season.

## Drought conditions up to June

**Drought situation:**  
(as of March 1)

Severe (or worse) drought has developed in Antigua, Aruba, Barbados, S Belize, Curaçao, N Guyana, parts of French Guiana, south Hispaniola and the Windwards (except Grenada) on the shorter term, and in southern Hispaniola and Tobago on the long term.

**Shorter term outlook:**

Shorter term drought is evolving in the ABC Islands, Grenada and Suriname.

**Long term concern:**

Long term drought is evolving in Antigua, Barbados, west-central Belize, N Dom. Rep., Grenada, NE Guyana, St. Lucia, Tobago.

## BRIEF CLIMATE OUTLOOK - July to September 2019

A potentially drier than usual middle portion of the wet season in many parts of the Antilles, and the dry spells associated to it, may produce warmer temperatures than usual in the peak of the heat season. This implies a build-up of considerable heat discomfort, with the occurrence of heat waves being likely, especially in August and September. Drought relief in affected areas may take several months, especially where less than the usual rainfall will occur. Nevertheless, the occurrence of extreme wet spells is possible in any area during the wet season, with a corresponding rise in flash flood potential. For detailed temperature and precipitation outlooks for JAS 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 around 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 AMJ (with 75-90% confidence) and a majority maintains El Niño through JAS (60-70% 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 surviving beyond April is historically quite uncommon, which brings about quite some uncertainty in this guidance.

## 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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