

# Caribbean Climate Outlook Newsletter - November 2019 to January 2020

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.

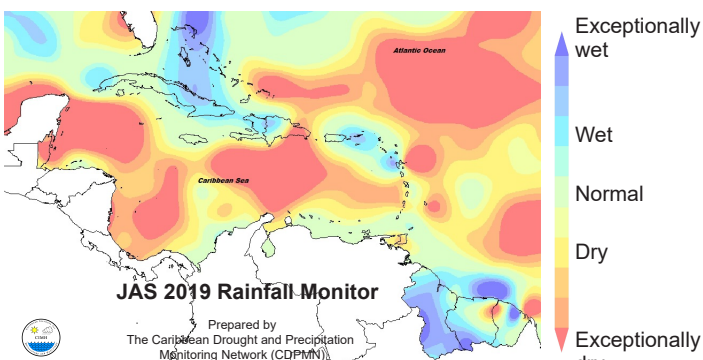
## BRIEF SUMMARY: July to January 2020

**July to September 2019:** Shorter term drought and long term drought have developed in many areas in the Caribbean. Seasonal temperatures were mostly above average, with an all-time record broken in September in Guadeloupe, and a build-up of excessive heat, especially during several heat waves in most locations.

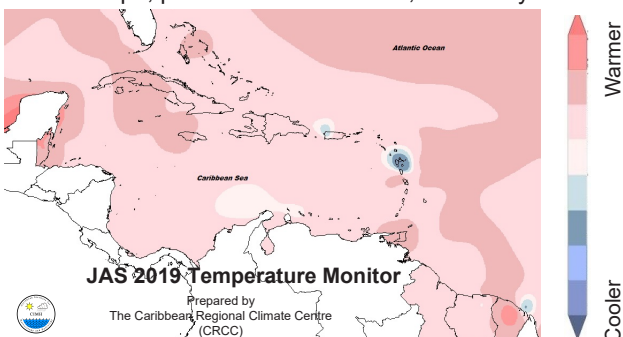
**November 2019 to January 2020:** The transition from the wet season into the early dry season in Belize and the Caribbean islands will bring cooler conditions. Frequent wet spells lead to concerns of flood and flash flood potential through December in Belize and the islands, throughout the period in the coastal Guianas. Long term severe drought is imminent in Belize and evolving or possible in much of the region, sparking concerns for fresh-water availability. Recurrent dry spells may affect crop growth in the ABC Islands, Belize and the Greater Antilles.

## LOOKING BACK:

### July - August - September 2019 (JAS) Observations



- ♦ **RAINFALL:** Aruba, Barbados, Belize, NW & NE French Guiana, E Dom. Rep., Martinique, parts of Trinidad, Turks & Caicos very dry; NW Bahamas, Central & Eastern Cuba, NW Hispaniola, Guadeloupe, portions of the Guianas, USVI very wet.



- ♦ **TEMPERATURE:** Guadeloupe signif. cooler than avg.; NW Bahamas, Belize, Cayman, W & Central Cuba, French Guiana, W Jamaica, Martinique, Trinidad & Tobago signif. warmer.

### Notable Climate Records:

- WET: JAS:** 3 locations in Dom. Rep., 1 in Guadeloupe recorded their highest rainfall totals for this period (160-280% of avg.).
- DRY: JAS:** 1 location in Barbados, 1 in Fr. Guiana, 1 in Jamaica recorded their lowest rainfall for this period (30-60% of avg.).
- HOT: JAS:** 4 locations in Guyana, 1 in Dominica recorded their highest max. temp.; 1 loc. in Guyana, 1 in Saint Lucia their highest min. temp.; 3 loc. in Guyana, 1 in Bahamas, 1 in Fr. Guiana, 1 in Saint Lucia, Trinidad their highest mean temp.

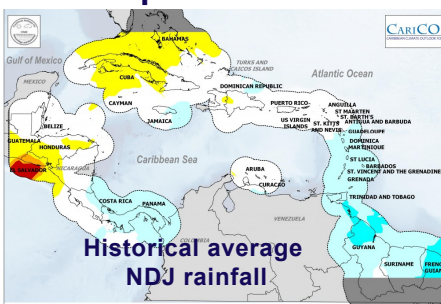
October 2019

find out more by using the clickable images and headings or visit [rcc.cimh.edu.bb](http://rcc.cimh.edu.bb)

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## WHAT NEXT?

### Rainfall patterns November-December-January (NDJ)



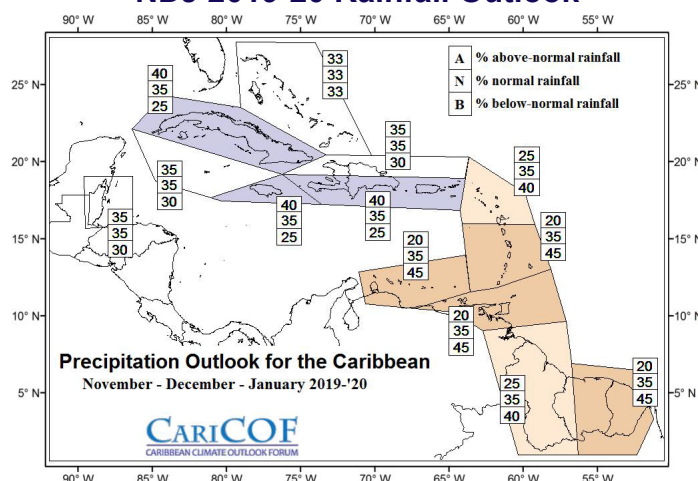
**Guianas:**  
Nov to Jan - wet season. Frequent, heavy showers

**Belize:**  
Nov to Dec - wet season. Frequent heavy showers.  
January - dry season. Few heavy showers in some years.

**C'bean Islands north of 16°N:**  
Nov to Dec - transition to dry season. Decreasing shower frequency & intensity. January - sunny days and some days with showers.

**C'bean Islands south of 16°N (except ABC Islands):**  
Nov - wet season. Frequent heavy showers.  
Dec to Jan - transition to dry season. Decreasing shower frequency & intensity.

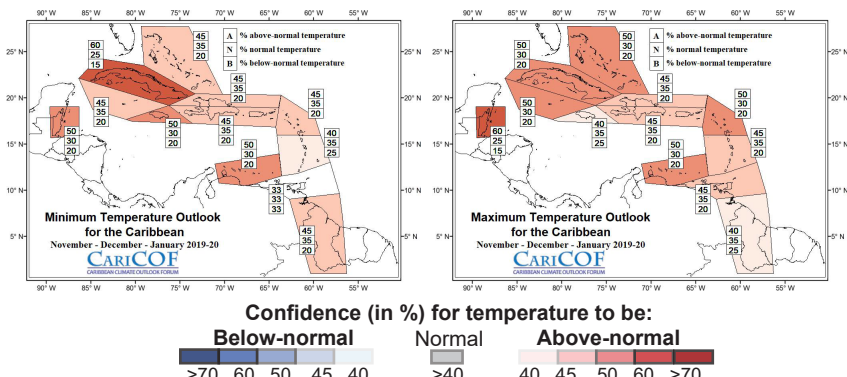
### NDJ 2019-20 Rainfall Outlook



**Confidence (in %) for rainfall to be:**  
Below-normal: >70, 60, 50, 45, 40  
Normal: >40  
Above-normal: 40, 45, 50, 60, >70

Rainfall totals from November to January are likely to be at least the usual across Cuba, southern Hispaniola, Jamaica and the US C'bean Territories, but at best as wet as usual or drier in the ABC Islands, the Guianas and the Lesser Antilles. White areas show where the forecast indicates little information on rainfall totals.

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



NDJ night-time (min.) and day-time (max.) temperatures are likely to be at least as warm as usual across the Caribbean during this period, while still returning to comfortable levels as November progresses.

## Drought conditions up to January

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

Severe (or worse) drought has developed in Aruba, Barbados, Belize, NW & NE French Guiana, E Dom. Rep., Martinique, parts of Trinidad and the Turks & Caicos Islands on the shorter term; Aruba, Barbados, Cayman, E. Cuba, parts of French Guiana, E.-, S.- & W.-most Hispaniola, Martinique, W Puerto Rico, St-Barth, St. Thomas, Trinidad are in long term drought.

**Shorter term outlook:**

Shorter term drought is evolving in the Cayman Isls. and west-central Belize.

**Long term concern:**

Long term drought is of immediate concern in NW Belize; is evolving in Barbados, eastern Belize, Dominica, French Guiana, Saint Kitts, and Suriname; and is possible in ABC islands, Antigua, Dom. Repub., Jamaica, Martinique, N Guyana, Saint Lucia, Sint Maarten/St-Martin, Trinidad and the USVI.

## BRIEF CLIMATE OUTLOOK - February to April 2020

Indications are that the peak of the 2019-20 dry season may end up drier than usual in the western parts of the Greater Antilles. The occurrence of dry spells should be monitored in the northern part of the region. While temperatures should still feel comfortable through March, they tend to increase in April. At this time, the temperature forecasts suggest possibly cooler than usual in the Bahamas and parts of Cuba, but possibly warmer than usual throughout most of the region.

For detailed temperature and precipitation outlooks for FMA 2020, 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:** SSTs in the east-central Pacific maintained ENSO-neutral levels during September and early October, despite some warming in October with SST anomalies about 0.5°C above average.

**Model forecast and guidance:** Most models favor ENSO neutral conditions to persist during NDJ (with 65% confidence) and possibly maintain ENSO neutral through FMA (60-70% confidence).

**Expected impacts on rainfall and temperatures:** The ENSO neutral phase offers little contribution to seasonal rainfall or temperature prediction in any part of the Caribbean. Thus, seasonal forecast skill for the Caribbean region tends to be diminished during ENSO neutral conditions. Chances for equal chances of below, normal, and above conditions are increased.

## 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/colest 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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## Wet days and wet spells up to January

What usually happens from November to January?

- Number of wet days: roughly 35 to 50 (ABC Is: 20 to 45; coastal Guianas: 30 to 50).
- # of wet spells: 2 to 5, of which 1 to 3 are very wet (coastal Guianas: up to 2).
- # of extreme wet spells: up to 2 (Belize & Greater Antilles: up to 1)..

## Forecast and Implications:

- Flash flood concern from possible extreme wet spells through December (January in coastal Guianas).
- Significant flood potential in coastal Guianas throughout the period, and elsewhere through December.
- Decreasing surface wetness in the islands makes environmental conditions progressively less conducive to mosquitoes & moisture related pests.