

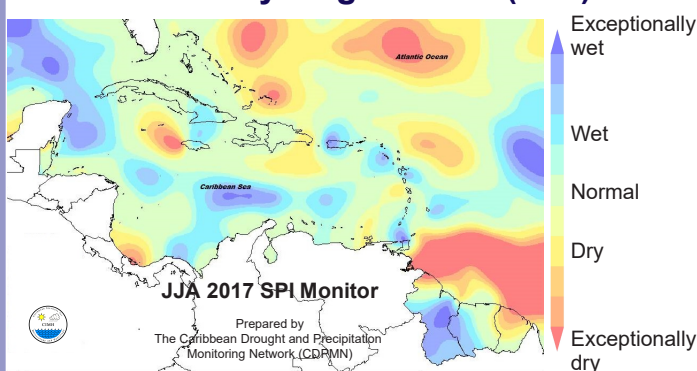
BRIEF SUMMARY: June to December 2017

Throughout much of the region, June to August 2017 marked the first half of the wet and the hurricane season. Temperatures gradually felt more uncomfortable, with heat stress peaking in July-August due to rising humidity. The usual amount of rainfall or more was observed in most places. By contrast, the build up of drought conditions combined with unusually warm sea temperatures prolonged record heat in Haïti that began in April.

October to December 2017: Wet conditions expected during the transition between wet and dry seasons could lessen possible dry season water shortages for agriculture. However, many forecast wet spells mean a high potential for flooding and flash floods. In October, intense heat and humidity are likely to cause heat stress to the vulnerable and enhance environmental conditions for mosquito breeding and moisture related pests.

LOOKING BACK:

June-July-August 2017 (JJA)



Observations

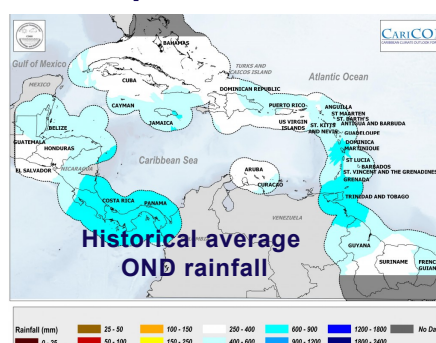
- **RAINFALL: August:** French Guiana very dry; SE Puerto Rico, Tobago very wet. **July:** Parts of Dominica, E Dominican Republic, E Jamaica, parts of coastal Guianas, E Hispaniola, St. Croix, W Tobago, S Trinidad very dry; inland portions of Guyana and W Suriname very wet. **June:** parts of Barbados, W Cuba, N Dominica, Grenada, Guadeloupe, S Jamaica, W Puerto Rico, St. Kitts, NW Suriname and Trinidad very wet.
- **TEMPERATURES: JJA:** warmer than average, especially in Bahamas ($>1.5^{\circ}\text{C}$ above avg.) and, Jamaica and Trinidad ($>0.75^{\circ}\text{C}$ above avg.). Exception is Antigua.

Notable Climate Records:

- **WET - JJA:** 1 location in Guyana (165% of avg.).
- **DRY - JJA:** None.
- **HOT - JJA:** 1 location in Guyana, 1 in St. Lucia recorded their highest minimum; 1 location in Dominica, 1 in Guyana, 1 in Haïti recorded their highest maximum; 1 in Bahamas, 1 in Belize, 1 in French Guiana, 3 in Guyana, 1 in Trinidad and, Tobago recorded their highest mean.
- **August:** 1 location in Guyana recorded its highest minimum; 1 in Dominica, 4 in Guyana, 1 in Haïti recorded their highest maximum; 1 in Bahamas, 4 in Guyana, 1 in Puerto Rico, 1 in Trinidad and, Tobago recorded their highest mean.

WHAT NEXT?

Rainfall patterns October-November-December (OND)



Belize :

Oct to Dec - wet season. Frequent heavy showers.

C'bean Islands north of 16°N:

Oct - wet season. Frequent heavy showers
Nov to Dec - transition to dry season.
Decreasing shower frequency & intensity.

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

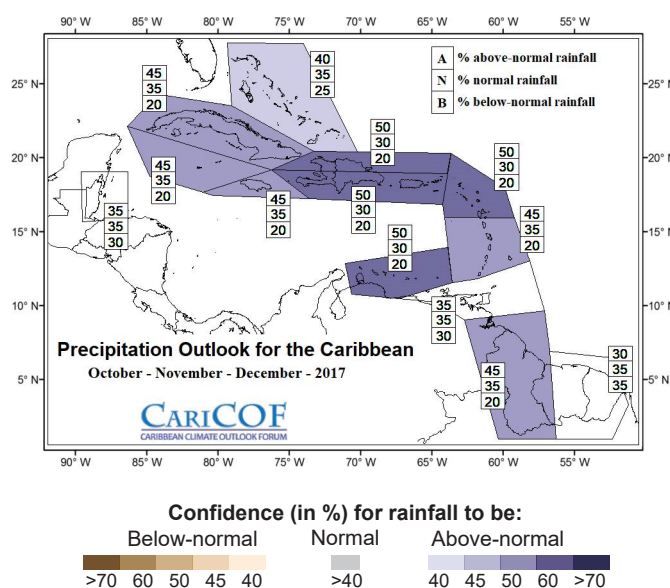
Oct to Nov - wet season. Frequent heavy showers.
Nov to Dec - transition to dry season.
Decreasing shower frequency & intensity.

ABC Islands: frequent showers, occasionally heavy.

Guianas:

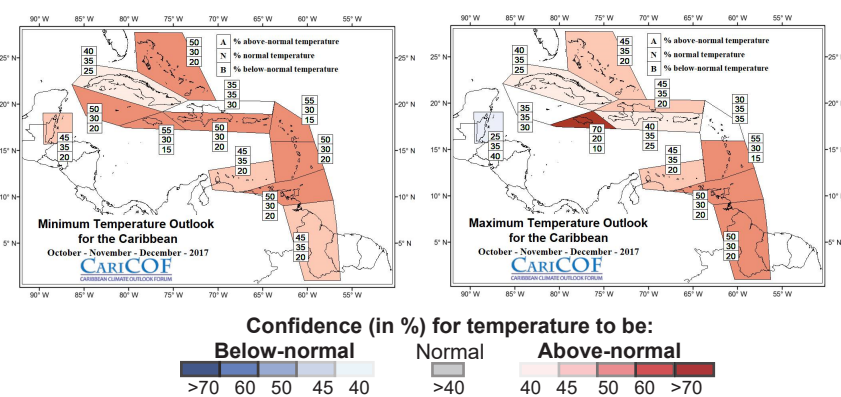
Oct - Dry season with heavy showers at times.
Nov to Dec - transition to wet season. Increase in showers.

OND 2017 Rainfall Outlook



OND rainfall is likely to be above- to normal throughout the region, with the exception of Belize, eastern Guianas, Trinidad and Tobago where the forecast indicates little information.

Night- and day-time temperatures up to December



OND night-time (minimum) and day-time (maximum) temp. in the Caribbean are likely to be above- to normal.

Wet days and wet spells up to December

What usually happens from October to December?

- Number of wet days: roughly 35 to 50 (ABC Is: 15 to 35; coastal Guianas: 20 to 40).
- Number of wet spells: 3 to 6 (coastal Guianas: 1 to 4), of which 1 to 4 are very wet (coastal Guianas: up to 2).
- Number of extremely wet spells: up to 2 (Guianas: up to 1).

Forecast and Implications:

- Flash flood concern from possible extremely wet spells.
- Frequent rain disruptions of outdoor activities.
- Wetter surface makes environmental conditions more conducive to mosquitoes & moisture related pests.
- Recharge of large water reservoirs related to wet spells.
- Guianas experiencing their main dry season until November, after which an extreme wet spell is possible.

Drought conditions up to December

- Drought situation:** Cayman Is. is under a long term drought, while short term drought is seen in Turks and Caicos and in Haïti.
- Shorter term outlook:** Shorter term drought may remain in Haïti and develop in the central parts of The Bahamas by December.
- Long term concern:** Long term drought is evolving in central Bahamas and may continue in Haïti and develop in N Bahamas.

BRIEF CLIMATE OUTLOOK - January to March 2018

Night- and day-time temperatures across the Caribbean are forecast to return to cooler levels by December, making January to March comfortable for most, although perhaps still above normal. Further indications are that January to March - which are part of the dry season in most areas - may be drier than usual in the Bahamas, Cayman and Cuba, and wetter than usual in the ABC Islands, the Guianas and the Lesser Antilles.

For detailed temperature and precipitation outlooks for DJF 2017-'18, please visit 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 become about 0.5°C cooler than average, meaning cold neutral to borderline weak La Niña conditions.

Model forecast and guidance: Most models suggest ENSO conditions to fluctuate around cold neutral to weak La Niña (55-60% and 45-55% confidence for OND and JFM, respectively).

Expected impacts on rainfall and temperatures: A La Niña state will tend to tilt the odds to wetter conditions with more shower activity, except in JFM in the Bahamas, Cayman and Cuba, where drier conditions become more likely.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: SSTs Tropical North Atlantic (TNA) and Caribbean Sea SSTs have been 1°C to 2°C warmer than average.

Expected conditions: Sustained warm SST anomalies in these areas are forecast by JFM.

Expected impacts: Warm SSTs in and around the Caribbean may lead to above-average humidity, as well as atmospheric instability. Those factors tilt the odds towards a wetter end of the year and a prolonged hurricane season. Warmer air temperatures, and more heatwaves, are expected until the end of October, especially during dry spells.

Climate outlooks - background

The Caribbean Climate Outlooks are prepared by the Caribbean Regional Climate Outlook Forum (CariCOF). The Caribbean Institute for Meteorology and Hydrology, in its role as WMO Regional Climate Centre in demonstration phase, coordinates the CariCOF process. Contributors to the Outlooks are the Meteorological Services from the region. For more information on how the outlooks are produced, please visit rcc.cimh.edu.bb.

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 |

DISCLAIMER

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