



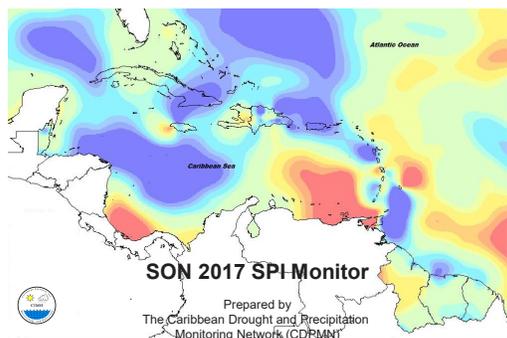
## BRIEF SUMMARY: September 2017 to March 2018

**September to November 2017:** Major hurricane activity has been record high in the Caribbean during Sept. of the 2017 Hurricane Season. This led to destructive wind, extreme wet spell related flash floods and inundations in at least 10 territories. In Sept-Oct-Nov, most areas observed at least the usual, copious rainfall totals, while excessively hot 'feels-like' temperatures have been recorded in Haïti, Lesser Antilles and Guianas through Oct.

**January to March 2018:** With weak La Niña conditions unfolding, precipitation totals are forecast to be high enough to prevent drought from being a major concern in the C'bean during this relatively cool dry season, with the likely exception of south-eastern Haïti and central portions of Cuba. Through January, the wet season in the Guianas is likely to be wetter than usual, with reliable rains, but also flash flood and long-term flooding concerns.

### LOOKING BACK:

#### September-October-November 2017 (SON)



#### Observations

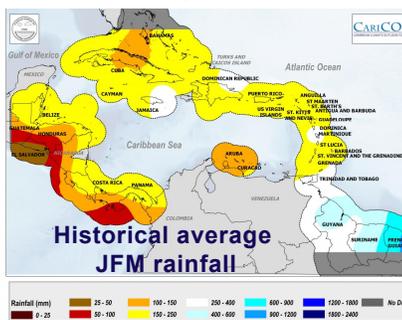
- ♦ **RAINFALL: November:** Antigua & Barbuda, NW Bahamas, SW Dominica, some inland portions of Dominican Rep., N Grenadines, portions of W Guyana, W Martinique, W Trinidad very dry; central & SE Bahamas, SE Cuba, coastal Dominican Rep., Haïti, west-central Jamaica, N Puerto Rico, Turks & Caicos very wet.
- October:** SW Guyana, E Puerto Rico very dry; Barbados, N & S Belize, E Tobago, E Trinidad very wet.
- September:** Central Belize, W Jamaica very dry; Barbados, E Cuba, Dominica, Dominican Rep., Guadeloupe, W Guyana, central Jamaica, St. Kitts and S Suriname very wet.
- ♦ **TEMPERATURES: SON:** warmer than average, especially in central Bahamas & SW Trinidad (>1.5°C above avg.); slightly cooler than average in southern-most parts of the Grenadines, S French Guiana and E Suriname.

#### Notable Climate Records:

- ♦ **WET - SON:** 3 locations in Dom. Rep. (160-270% of avg.), 2 in Puerto Rico (180-200% of avg.). **November:** 1 location in Cuba, 3 in Dominican Rep. 1 in Jamaica.
- ♦ **DRY - November:** 1 location in Martinique, 1 in Trinidad.
- ♦ **HOT - SON:** 2 locations in Guyana recorded their highest minimum temperatures; in Haïti their highest mean; 1 location in French Guiana their highest maximum temperature.

### WHAT NEXT?

#### Rainfall patterns January-February-March (JFM)



#### Guianas:

Jan - wet season. Frequent, heavy showers.

Feb - Mar - dry season; occasional heavy showers and thunderstorms.

#### Belize :

Jan - start of dry season; occasionally still wet. Feb to Mar - dry season. Mostly without heavy rainfall.

#### C'bean Islands north of 16°N:

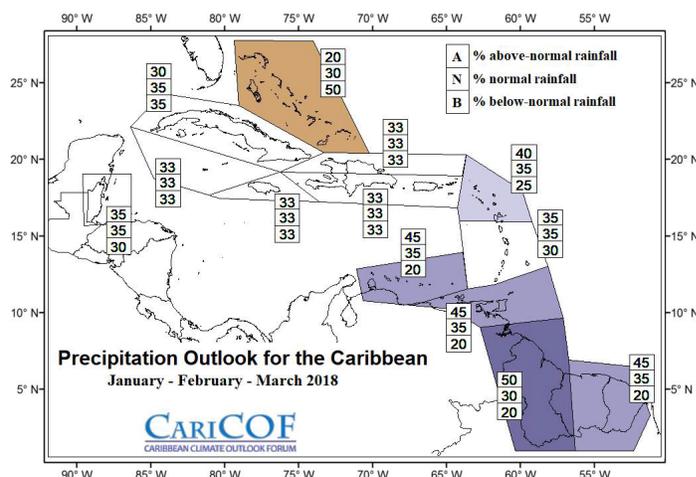
Jan to Mar - sunny days and some days with showers.

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

Jan to Mar - sunny days and some days with showers.

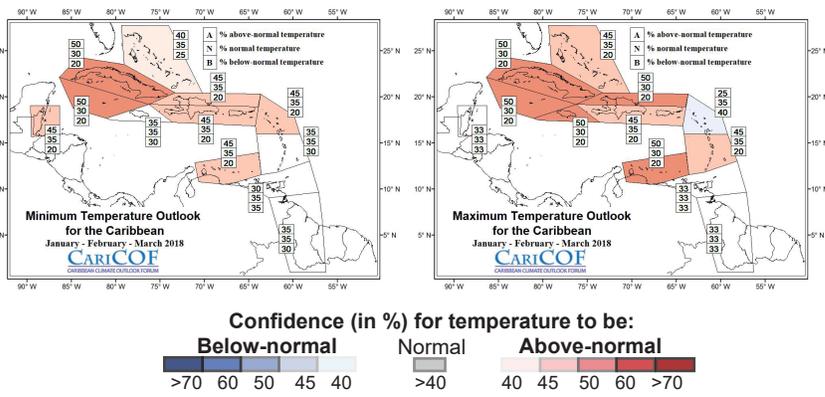
**ABC Islands:** wet season ending in Jan. Feb to Mar generally dry.

#### JFM 2018 Rainfall Outlook



JFM rainfall is likely to be above- to normal in the ABC Islands, Guianas, Leewards and Trinidad & Tobago, but below- to normal in the Bahamas. White areas indicate where the forecast indicates little information on total rainfall.

Night- and day-time temperatures up to March



JFM night-time (minimum) and day-time (maximum) temp. in the Caribbean are likely to be above- to normal, except perhaps Guyana, Trinidad and Tobago and, at night, the Windwards. Temperatures will feel cool enough for most.

Wet days and wet spells up to March

What usually happens from January to March?

- Number of wet days: roughly 20 to 40.
- # of wet spells: up to 3 (ABC Is. & Guianas: up to 4), of which up to 1 are very wet (ABC Is.: up to 2 & Guianas: up to 3).
- # of extreme wet spells: 0 (coastal Guianas: up to 1).

Forecast and Implications:

- **Flash flood and long-term flooding concern** from wet spells remains in coastal Guianas through January.
- Reliable rains in January in Guianas; however, wetter surface makes environmental conditions more conducive to **mosquitoes & moisture related pests**.
- Fewer **rain disruptions** of outdoor activities.
- Limited **recharge of large water reservoirs** related to the usual small # of wet spells during the dry season.

Drought conditions up to March

- Drought situation:** Central parts of The Bahamas and southeastern Haiti are under a long term drought, while short term drought is seen in southeastern Haiti, western-most portions of Jamaica and Martinique.
- Shorter term outlook:** Shorter term drought conditions may remain in southeastern Haiti. Shorter term drought may also develop in northern-most portions of the Dominican Republic, the Leewards (except St. Kitts), Martinique and the US Virgin Islands.
- Long term concern:** Long term drought is evolving in central parts of Cuba and SE Haiti; it may develop in N & S Belize and St. Vincent.

BRIEF CLIMATE OUTLOOK - April to June 2018

The transition period between the dry and wet season is expected to be accompanied by increasing temperatures. This implies a gradual build-up of heat discomfort from April onwards, when heat waves become possible in Belize and Trinidad. The precipitation outlook trends to a usual or a wetter than usual period, though confidence in this forecast is low. Excessive dryness at surface may build up in a few areas until the onset of the wet season. However, long term drought concerns remain restricted mostly to central Cuba and southeastern Haiti up until the wet season starts there. For detailed temperature and precipitation outlooks for MAM 2018, 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:** Cooler than usual sea-surface temperatures (SSTs) of 0.5-1°C below average have been in place in the equatorial eastern Pacific (NINO3.4), meaning weak La Niña conditions are in place.

**Model forecast and guidance:** A majority of models suggest La Niña conditions to be in place for JFM (70-80% confidence), but a likely return to neutral conditions by AMJ (55-70% confidence).

**Expected impacts on rainfall and temperatures:** A weak La Niña state will drive chances of drier conditions slightly upwards in the northwest of the region (in particular The Bahamas), while increasing chances of wetter conditions, with more shower activity in the southeast.

Climate conditions in the Tropical North Atlantic and Caribbean

**Recent observations:** SSTs Tropical North Atlantic (TNA) and Caribbean Sea SSTs have been cooling from 1°C to 2°C above average two in August, to around 0-0.5°C above average in November in most places.

**Expected conditions:** Sustained near-average SSTs east of the Caribbean and warm anomalies to the north of the region are forecast for JFM and AMJ.

**Expected impacts:** Slightly warmer SSTs around the Caribbean may lead to slightly above-average humidity, as well as atmospheric instability in those areas. Those factors tilt the odds very slightly towards a relatively wet dry season and an earlier transition into the wet season in April or May.

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](http://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/coldest third of the historical record

DISCLAIMER

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