











Caribbean Climate Outlook Newsletter

February to April 2018

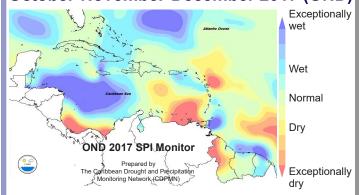
BRIEF SUMMARY: October 2017 to April 2018

October to December 2017: Most areas observed at least the usual rainfall totals, which were copious in the coastal Guianas during December as those areas experienced their secondary wet season. Excessively hot 'feels-like' temperatures were rare after October, with the progressive return to the cool season into December.

February to April 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. Though the coming period forms the core of the dry season across most of the region, a higher than usual number of wet days and wet spells from Dominica southwards should reduce dust haze from local dust sources, as well as reduce fire risk, especially in the Guianas.

LOOKING BACK:

October-November-December 2017 (OND)



Observations

• RAINFALL:

December: W Cuba, Guadeloupe, W Guyana very dry; Dominica, portions of French Guiana, S Jamaica, Martinique, St Lucia, Trinidad, Tobago very wet.

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.

• TEMPERATURES:

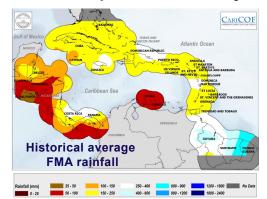
OND: warmer than average, especially in central Bahamas & SW Trinidad (>1.5°C above avg.); slightly cooler than average in southern-most parts of the Grenadines, S French Guiana and E Suriname.

Notable Climate Records:

- WET OND: 2 locations in French Guiana (~185% of avg.).
- DRY OND: 1 location in Guadeloupe (~35% of avg.).
- HOT OND: Haïti their highest maximum temperature.

WHAT NEXT?

Rainfall patterns February-March-April (FMA)



Belize: Feb to Apr - dry season. Mostly without heavy rainfall.

C'bean Islands north of 16°N: Feb to Apr - sunny days and some days with showers.

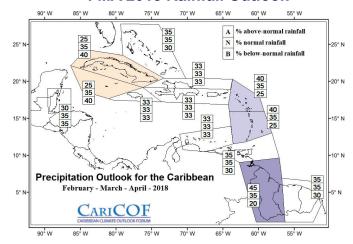
C'bean Islands south of 16°N (except ABC Islands):

Feb to Apr - sunny days and some days with showers.

ABC Islands: Feb to Apr - generally dry.

Guianas: Feb to Apr - End of dry season with occasional heavy showers and thunderstorms.

FMA 2018 Rainfall Outlook



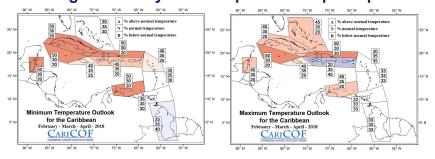
Confidence (in %) for rainfall to be:

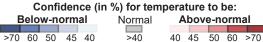
	Below-normal				Normal	Above-normal				
>70	60	50	45	40	>40	40	45	50	60	>70

FMA rainfall is likely to be above- to normal in Guyana, the Leewards and Windwards, but below- to normal in the Caymans and Cuba. White areas indicate where the forecast indicates little information on total rainfall.

More on the climate outlook

Night- and day-time temperatures up to April





FMA night-time (minimum) and day-time (maximum) temp. in the Caribbean are likely to be above- to normal, except day-time S. Hispaniola and U.S. Carib. territories and, at night, Guyana. Temperatures will feel cool enough for most.

February to April 2018

Wet days and wet spells up to April

What usually happens from February to April?

- Number of wet days: roughly 15 to 30 (ABC Is. 5-15 & coastal Guianas: 20-45).
- # of wet spells: up to 3 (coastal Guianas: up to 4), of which up to 1 is very wet (coastal Guianas: up to 2).
- # of extreme wet spells: up to 1 in mountainous areas.

Forecast and Implications:

- Flash flood and long-term flooding from wet spells not a major concern in the upcoming period.
- Surface dryness increasing as usual along the dry season, with relatively few rain disruptions.
- A higher number of wet days in Guianas to limit dust haze and fires.
- Limited recharge of large water reservoirs related to the usual small # of wet spells during the dry season.

Drought conditions up to April

Drought situation: Central parts of The Bahamas and southeastern Haïti are under a long term drought, while short term drought is seen in (as of November 2017)

southeastern Haïti, western-most portions of Jamaica and Martinique.

Shorter term outlook: No shorter term drought conditions present at this time.

Long term drought is evolving in southern Haïti. Long term concern:

BRIEF CLIMATE OUTLOOK - May to July 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, with the possible exception of Barbados, Trinidad & Tobago and the Windwards. Surface dryness will likely build up until May north of 16°N. Finally, with the onset of the wet season in Haïti in April or May, long term drought concerns may ease there into July.

For detailed temperature and precipitation outlooks for MAM 2018, please visit 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 around 0.8°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 FMA (50-60% confidence), but a likely return to ENSO neutral conditions by MJJ (55-65% 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 and Cuba) until April, while slightly increasing chances of wetter conditions in most of the lesser Antillies.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: SSTs Tropical North Atlantic (TNA) and Caribbean Sea SSTs have very recently been up from 0-0.5°C above average in November in most places to 0.5-1°C in December.

Expected conditions: In contrast to the most recent observations, most models indicate near-average SSTs east of the Caribbean (or even below average offshore West Africa) and in the Caribbean Sea. However, unusual warmth to the north of the region is forecast for FMA and MJJ. 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 towards a relatively wet transition between the dry and wet season.

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/coldest third of the historical record

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