



BRIEF SUMMARY: August 2018 to February 2019

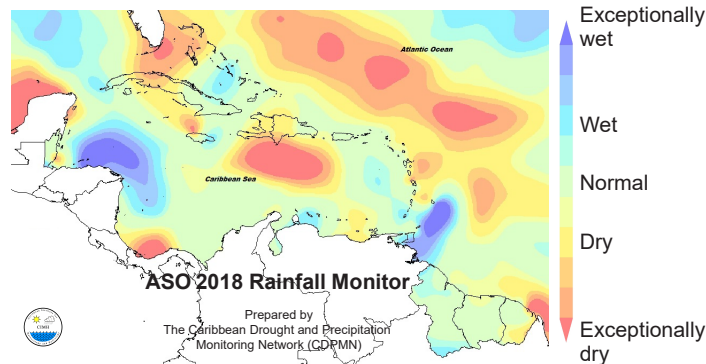
August to October 2018: Parts of the region observed less than the usual rainfall, leading to short term drought in parts of The Bahamas, Cuba, Dominica, Hispaniola and Martinique, and continued long term drought in Antigua, N Belize and S Hispaniola. Temperatures were mostly close to average in the last months of the hotter half-year.

December 2018 to February 2019: With an El Niño on forecast, chances of drought and recurrent dry spells during the early dry season are increased, except in The Bahamas, Cayman and Cuba. Region-wide, severe drought is unlikely. Wet days and wet spells are expected to become less frequent towards February. Extreme wet spells remain possible through December in Belize and the islands, and throughout the period in the coastal Guianas, leading to concerns of flash flood potential. Temperatures will be seasonably comfortable.

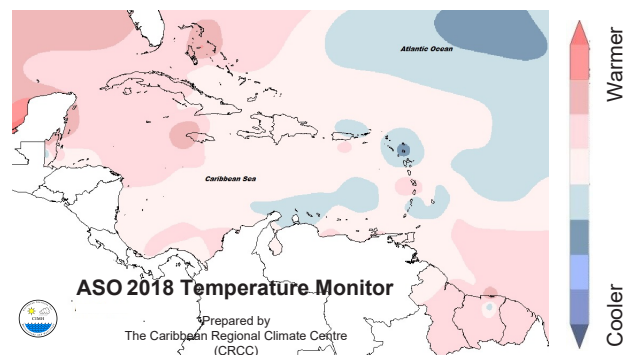
LOOKING BACK:

Aug. - Sep. - Oct. 2018 (ASO)

Observations



- **RAINFALL:** NW Bahamas, N Cuba, parts of Dominica, S Hispaniola, N Martinique very dry; S Trinidad very wet.



- **TEMPERATURES:** Antigua significantly cooler than avg.; NW Bahamas, W Jamaica sign. warmer than avg.

Notable Climate Records:

WET: ASO: 3 locations in Dom. Republic, 1 in Guadeloupe, 1 in Puerto Rico recorded their highest rainfall totals (175-230% of avg.).

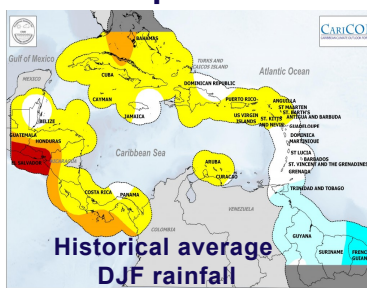
DRY: ASO: 1 location in French Guiana recorded their lowest rainfall totals (20% of avg.)

September: 1 location in Dom. Republic.

HOT: ASO: 1 location in Bahamas, 1 in French Guiana, 2 in Guyana, 1 in St. Lucia had their highest mean temp.

WHAT NEXT?

Rainfall patterns December-January-February (DJF)



Belize :
Dec to Jan - transition to dry season. Heavy showers becoming less frequent.
February - dry season. Few heavy showers.

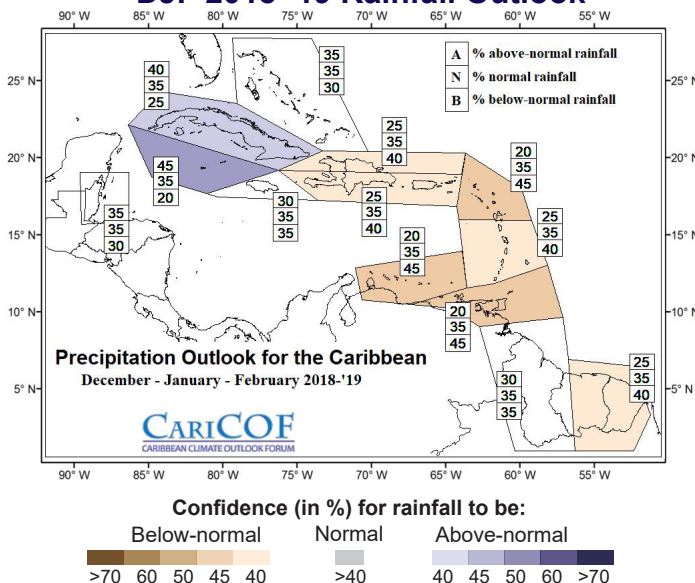
C'bean Islands north of 16°N:
December - early dry season. Decreasing shower frequency & intensity.
Jan to Feb - mostly sunny, some days with showers.

C'bean Islands south of 16°N (except ABC Islands):
Dec to Jan - transition to dry season. Decreasing shower frequency & intensity.
February - peak of dry season. Often sunny, mostly light morning or evening showers on some days.

Guianas:
Dec to Jan - wet season. Frequent, heavy showers.
February - dry season. Heavy showers on some days.

ABC Islands: transition from to dry season in Feb. Frequent heavy showers December in most years.

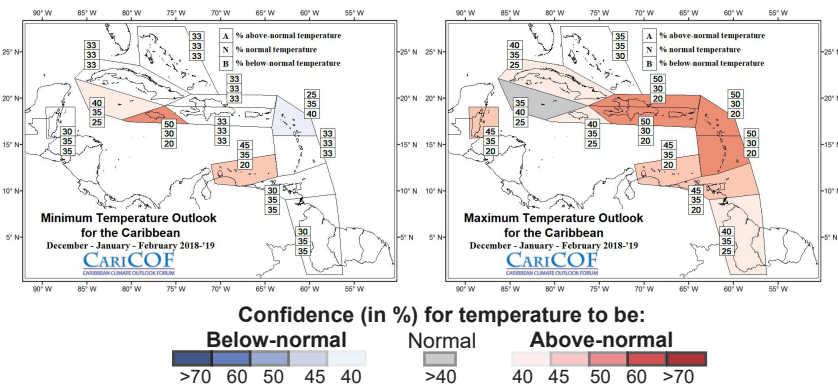
DJF 2018-'19 Rainfall Outlook



Rainfall totals from December to February are likely to be the usual or drier in the ABC Islands, eastern Guianas, Hispaniola, Lesser Antilles, US C'bean Territories, but at least as wet as usual in Cayman and Cuba.

White areas show where the forecast indicates little information on rainfall totals.

Night- and day-time temperatures up to February



DJF day-time (max.) temp. in the Caribbean are likely to be at least as warm as usual across the region, as will nighttime (min.) temp. in ABC Isls., Cayman and Jamaica. Nights may be slightly cooler than usual in the Leewards.

Wet days and wet spells up to February

What usually happens from November to February?

- Number of wet days: roughly 25 to 40 (ABC Is: 10 to 35; coastal Guianas: 30 to 50).
- # of wet spells: 1 to 3 (ABC Is.: 2 to 6; Guianas: 1 to 5), of which 1 or 2 are very wet (ABC Is & Guianas: up to 3).
- # of extreme wet spells: up to 1 in Belize & some islands (coastal Guianas: up to 2).

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.
- Potentially slightly faster depletion of large water reservoirs in the eastern and southern Caribbean than usual during the early dry season.

Drought conditions up to February

- Drought situation:** Short term drought in parts of The Bahamas, Cuba, Dominica, Hispaniola and Martinique. Continued long term drought in Antigua, N Belize and S Hispaniola.
- Shorter term outlook:** Shorter term drought is evolving in ABC Islands, Antigua, northern parts of The Bahamas, Dominica, Guadeloupe.
- Long term concern:** Long term drought is evolving in ABC Islands, western Cuba, Cayman, and Dominica.

BRIEF CLIMATE OUTLOOK - March to May 2019

March to May marks the late dry season in most areas. Dry spells are common, but the chance of heavy rainfall increases over time. It is the time of the year during which temperatures gradually increase from comfortable in March to, at times, uncomfortably hot for vulnerable portions of the population. Moreover, forecasts are suggesting warmer than usual temperatures in most of the region, with the possibility of heat waves in May, particularly in Belize and Trinidad. In view of a pending drought in some areas, deficient rainfall and heat may prolong drought concerns at least until the end of the dry season. For detailed temperature and precipitation outlooks for FMA 2019, 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 increased to around 0.75°C above average, meaning warm weak ENSO conditions.

Model forecast and guidance: Most models suggest ENSO conditions to evolve into a moderate El Niño (with 80-95% and 55-85% confidence for DJF and MAM, respectively).

Expected impacts on rainfall and temperatures: An El Niño state will tend to tilt the odds to drier conditions with less shower activity, except in the Bahamas and parts of the Greater Antilles (particularly Cuba), where wetter conditions become more likely. Note, however, that these effects tend to be more dominant with stronger El Niño signals.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: SSTs Tropical North Atlantic (TNA) and Caribbean Sea SSTs have warmed to around the seasonal average. The subtropical areas of the North Atlantic have remained 1°C above average.

Expected conditions: Sustained warm SST anomalies north of the Caribbean are forecast to remain in place, while TNA and Caribbean Sea SSTs are expected to increase to slightly above avg.

Expected impacts: Warm SSTs north of the Caribbean may lead to above-average humidity and atmospheric instability there. Those factors tilt the odds towards a wetter and warmer end of the year in the north. Meanwhile, near normal SSTs in the eastern will tend to have little influence on rainfall in the eastern C'bean.

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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