

BRIEF SUMMARY: November 2018 to May 2019

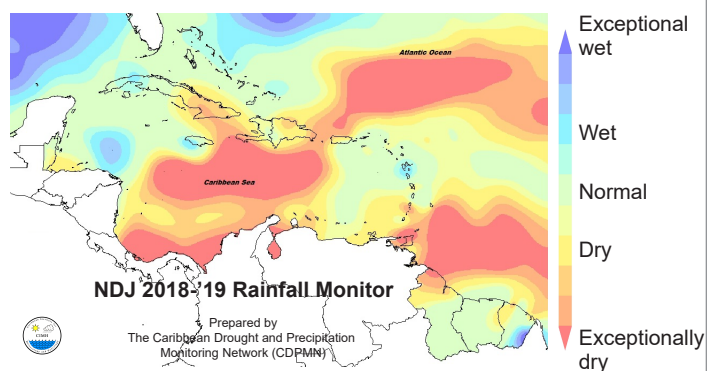
November 2018 to January 2019: Severe shorter term drought has developed in portions of Barbados, Cuba, Hispaniola, St. Vincent and Trinidad & Tobago. Severe long term drought is seen in southern Hispaniola, but with many other territories recording moderate drought, depleting water resources faster this dry season than usual.

March to May 2019: With weak El Niño conditions forecast to persist, chances of drought and recurrent dry spells in the second half of the dry season are increased, and heatwaves will start occurring locally into May. That said, region-wide, extreme drought and extreme heat are unlikely. The frequency of wet days and wet spells should be low during March and April, but increase towards the end of May; the chance for extreme wet spells tends to re-emerge in April or May, with some concern for flash flood and flooding potential arising then.

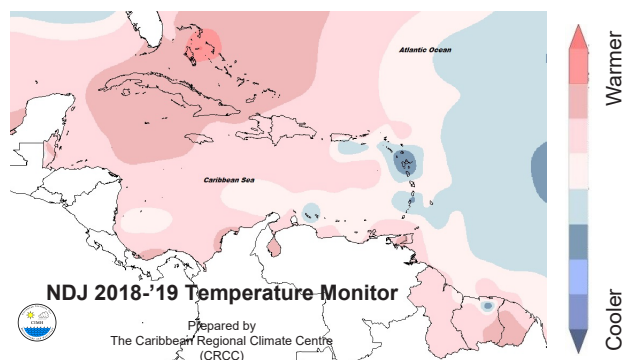
LOOKING BACK:

Nov. - Dec. 2018 / Jan. 2019 (NDJ)

Observations



- **RAINFALL:** Barbados, SE Cuba, parts of Hispaniola, St. Vincent, Trinidad & Tobago very dry; SE French Guiana very wet.



- **TEMPERATURE:** Antigua significantly cooler than avg.; Bahamas, Cuba, SE Guianas, W Jamaica, Trinidad sign. warmer.

Notable Climate Records:

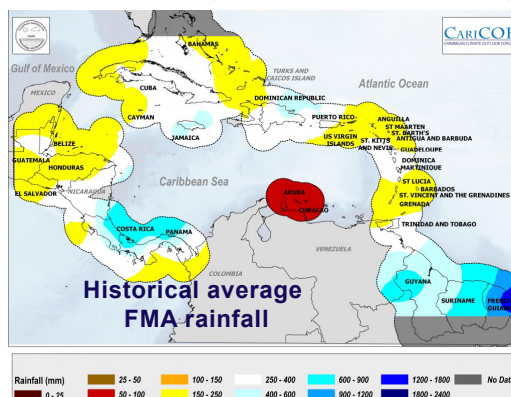
WET: NDJ: 7 locations in Dom. Republic, 2 locations in Jamaica, and 1 location in Cuba recorded their highest rainfall totals (120-375% of average)

DRY: None.

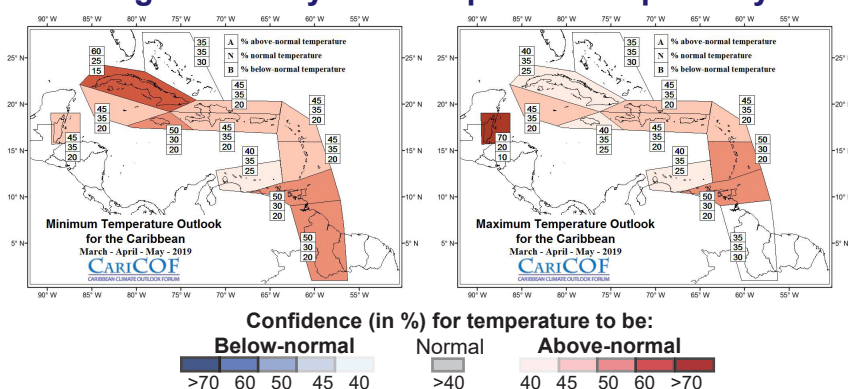
HOT: NDJ: Tobago recorded their highest mean temp.; 1 location in Puerto Rico recorded their highest min. temp.

WHAT NEXT?

Rainfall patterns March - April - May (MAM)



Night- and day-time temperatures up to May



MAM night-time (min.) and day-time (max.) temperatures are likely to be at least as warm as usual across most of the Caribbean,

Wet days and wet spells up to May

What usually happens from March to May?

- Number of wet days: roughly 15 to 30, but 30 to 50 in mountainous areas (ABC Is. up to 10; Guianas: 30-50).
- # of wet spells: up to 3 (Guianas: up to 5), of which up to 2 are very wet (Guianas: up to 3).
- # of extreme wet spells: up to 1 in most locations (none in ABC Is.).

Forecast and Implications:

- **Flash flood and long-term flooding potential** from very wet and extreme spells becoming a concern after March, and especially towards May in Greater Antilles.
- Surface dryness increasing slightly faster than usual along the dry season, with relatively few rain disruptions and increased potential for wild fires.
- Rising potential for flooding towards May, especially in coastal Guyana.

Drought conditions up to May

- Drought situation:** (as of December 1) Severe shorter term drought has developed in portions of Barbados, Cuba, Hispaniola, St. Vincent and Trinidad & Tobago, while severe (or worse) long term drought has developed in southern Hispaniola.
- Shorter term outlook:** Shorter term drought is evolving in Barbados, parts of Belize, Dominica, Grenada, Guyana, St. Vincent, Trinidad & Tobago.
- Long term concern:** Long term drought is evolving in Antigua, west-central Belize, Cayman, N & S Dominican Rep., NE Guyana, St. Kitts, Trinidad & Tobago, Windward Islands.

BRIEF CLIMATE OUTLOOK - June to August 2019

A potential late start to the wet season (particularly in Belize and the southern-most islands), and the dry spells associated to it, may produce warmer temperatures than usual in a lingering dry season. This implies a build-up of heat discomfort, with the occurrence of a few heat waves becoming likely, especially towards August. Drought relief in affected areas may take several months, especially in the southern-most islands or Belize.

Nevertheless, the occurrence of extreme wet spells is possible in any area during the wet season, with a corresponding rise in flash flood potential.

For detailed temperature and precipitation outlooks for JJA 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 stabilised at 0.5°C above average, meaning borderline El Niño conditions.

Model forecast and guidance: Most models suggest ENSO conditions to maintain as a weak El Niño during MAM (with 55-75% confidence) and a possible shift to ENSO neutral in JJA (40-50% confid.).

Expected impacts on rainfall and temperatures: An El Niño tends to tilt the odds to warmer and drier conditions with less shower activity and a potential late start of the wet season, except in the Bahamas and Cuba. Note, however, that an El Niño surviving beyond April is historically quite uncommon, which brings about quite some uncertainty in this guidance.

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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