



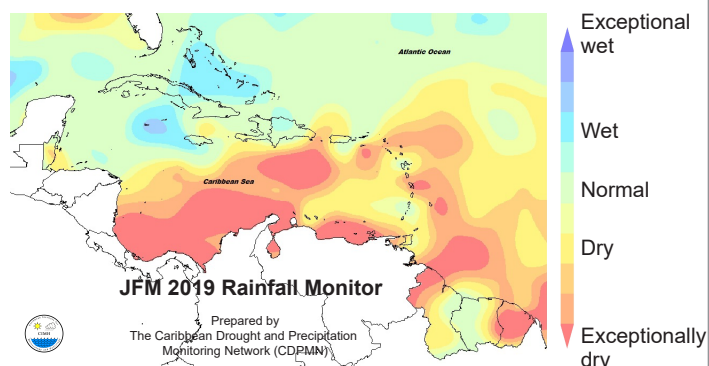
BRIEF SUMMARY: January to July 2019

January to March 2019: Shorter term drought has developed across most parts of the Caribbean, while the Bahamas, Cayman, Central Cuba and western Jamaica have been wetter than usual thus far this year. Long term drought persisted across Hispaniola and developed in Belize and most islands south of Cuba.

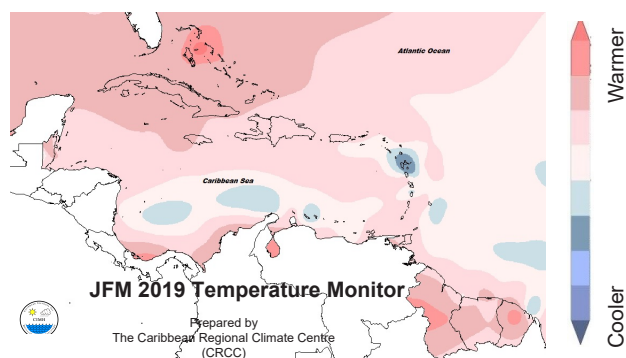
May to July 2019: Drought is expected to continue into the early wet season in areas currently affected, as weak El Niño conditions are forecast to persist. Recurrent dry spells are forecasted, except for the Windward Islands and Guianas. More frequent wet spells are expected throughout the region (except in the ABC Islands). These spells may bring some level of drought relief, but also concern for flooding potential. Heat sensation will increase. Heatwaves may occur from May in Belize and Trinidad & Tobago, and elsewhere from July onwards.

LOOKING BACK:

January - March 2019 (JFM) Observations



- ♦ **RAINFALL:** Antigua, Aruba, Barbados, central Belize, French Guiana, N Guyana, Martinique, Saint Kitts, E Trinidad very dry; Grand Cayman very wet.



- ♦ **TEMPERATURE:** Antigua, Dominica and Guadeloupe signif. cooler than avg.; Bahamas, Belize, Cayman, Cuba, French Guiana, Guyana, W Jamaica and W Suriname signif. warmer.

Notable Climate Records:

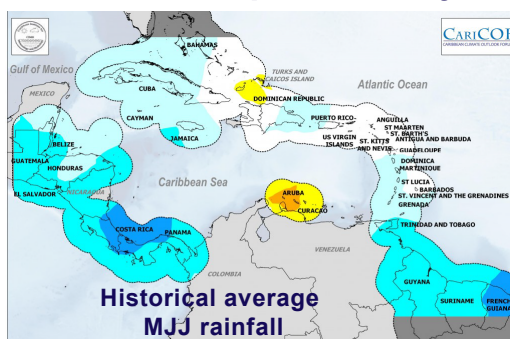
WET: **JFM:** 1 location in Jamaica, 1 in Martinique, and 1 in Suriname recorded their highest rainfall totals (125-295% of average).

DRY: **March:** 3 locations in Guyana, 4 in French Guiana, 2 in Suriname and 1 in Puerto Rico recorded lowest rainfall.

HOT: **JFM:** 1 location in Jamaica recorded their highest maximum temp.

WHAT NEXT?

Rainfall patterns May - June - July (MJJ)



Belize & C'bean Islands north of 16°N:

May & Jun - usually frequent heavy showers.
Jul - wet season, often including a mid-summer dry spell.

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

May - end of dry season.
Limited spatial extent and duration of heavy showers; occasionally very wet.

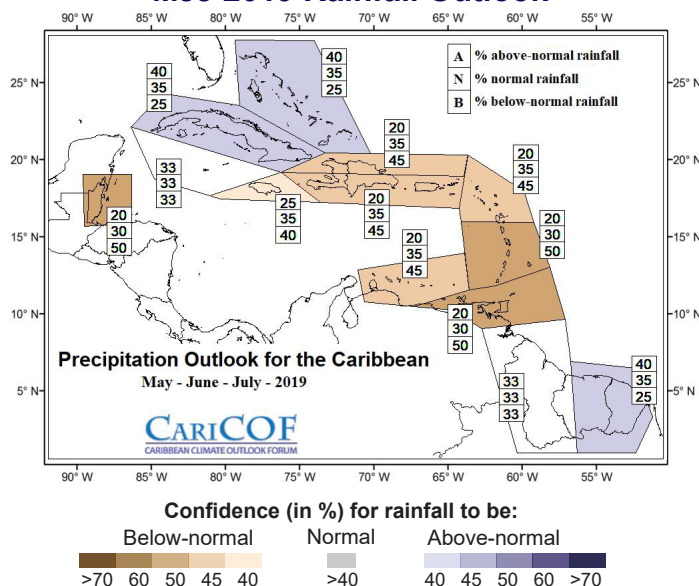
Jun & Jul - early wet season.

Increasingly heavy showers.

ABC Islands: May to Jul - mostly dry.

Guianas: May to Jul - long wet season; heavy showers are frequent.

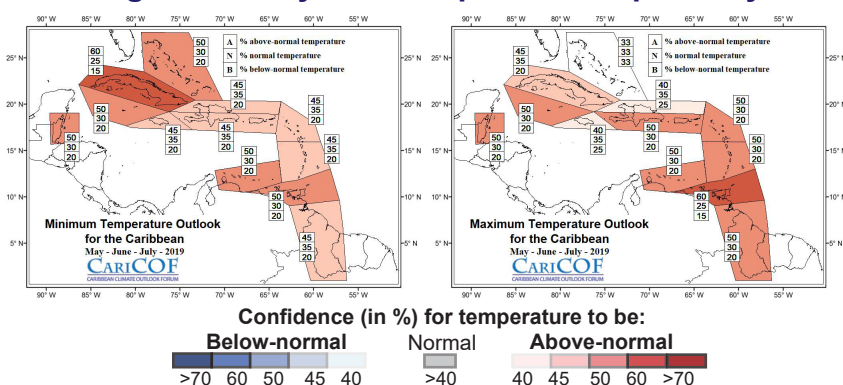
MJJ 2019 Rainfall Outlook



Rainfall totals from May to July are likely to be at most as dry as usual in the ABC Islands, Belize, Hispaniola, Jamaica, US C'bean Territories, and the Lesser Antilles, but likely the usual or wetter elsewhere.

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

Night- and day-time temperatures up to July



MJJ 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 July

What usually happens from May to July?

- Number of wet days: roughly 20 to 40, (ABC Is. 5-15; Guianas: 45-65).
- # of wet spells: 1 to 5 (Guianas: 4 to 7), of which 2 or 3 are very wet (ABC Is. up to 1; Guianas: 1 to 5).
- # of extreme wet spells: up to 1 in most locations.

Forecast and Implications:

- **Flash flood and long-term flooding potential** from very wet and extreme spells becoming a concern, in Belize, Guianas, Jamaica and St. Maarten.
- Increasingly frequent **disruptions of outdoor activities** and relatively slow decrease of **wild fire potential** related to a small increase in the number of wet days.
- Limited **recharge of large water reservoirs** related to a slower than usual onset of the wet season.

Drought conditions up to July

Drought situation: Severe (or worse) drought has developed in Antigua, Aruba, Barbados, central Belize, French Guiana, northern Guyana, Martinique, St. Kitts, and eastern Trinidad on the shorter term, and in southern Hispaniola on the long term.

Shorter term outlook: Shorter term drought is evolving in Barbados, Belize, Dominica, Grenada, Guyana, St. Vincent, Trinidad & Tobago.

Long term concern: Long term drought is evolving in Antigua, west-central Belize, Cayman, Dom. Rep., north-eastern Guyana, St. Kitts, Trinidad & Tobago, Windward Isls.

BRIEF CLIMATE OUTLOOK - August to October 2019

The peak of the C'bean heat season, which runs from May to Oct., usually occurs in Aug. and Sept. While the forecast does not indicate whether rainfall in August to October will deviate from the usual for the late wet season, warmer temperatures than usual are likely. This implies a build-up of considerable heat discomfort, with the occurrence of heat waves being likely, especially in August and September. Drought relief in affected areas may take several months. Nevertheless, the average occurrence of extreme wet spells is highest from late August onwards, with a corresponding peak in flash flood potential. For detailed temperature and precipitation outlooks for ASO 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 been nearly 1°C above average, meaning weak El Niño conditions.

Model forecast and guidance: Most models suggest ENSO conditions to maintain as a weak El Niño during MJJ (with 75-85% confidence) and a majority maintains El Niño through ASO (55-65% confid.).

Expected impacts on rainfall and temperatures: An El Niño tends to tilt the odds to warmer and drier conditions with less shower activity in most parts of the Caribbean. Note, however, that an El Niño maintaining into the summer 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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