



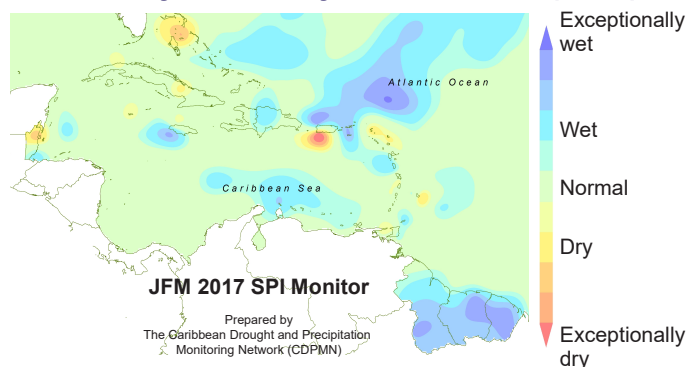
BRIEF SUMMARY: January to July 2017

Throughout much of the region, weather patterns in January to March 2017 were quite the usual in the islands for the Caribbean dry season. By contrast, the period was wetter than usual in the Guianas, making for better conditions for agriculture than last year's. Conversely, Grand Cayman, parts of Puerto Rico, St. Maarten and Tobago are facing long-term drought, impacting agriculture. Temperatures were generally comfortable.

May to July 2017: As we transition into the wet season rainfall will likely increase and is forecast to offset the impacts of our dry season in the usual way. Therefore, water availability for agriculture should increase and environmental conditions should improve for mosquitoes and moisture related pests. Flash flood potential is a concern, as is heat discomfort, possibly including heat waves in Belize and Trinidad in May during dry spells.

LOOKING BACK:

January-February-March 2017 (JFM)



Observations

- ♦ **RAINFALL: March:** Dominica, N Dominican Rep., interior of Guianas, NE Puerto Rico, Tobago and US Virgin Islands very wet. **February:** Antigua, NE Dominica, St. Lucia, St. Vincent very dry; interior Guianas very wet. **January:** SE Barbados, N Martinique very dry; S Guyana, SW Suriname very wet.
- ♦ **TEMPERATURES: JFM:** warmer than average in most places, especially in Bahamas, W Cuba and Guadeloupe (>0.75C above average). Exceptions are Curaçao, interior of Guyana and W Suriname, and USVI.

Notable Climate Records:

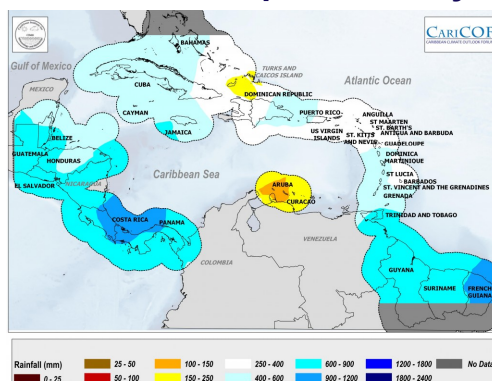
- ♦ **WET - JFM:** 1 location in Jamaica (303% of average), 1 in Martinique (192% of avg.), 1 in Suriname (171% of avg.) **March:** 2 locations in Dominican Rep., 1 in Jamaica, 2 in Martinique, 1 in Puerto Rico, 1 in St. Croix.
- ♦ **DRY -** none reported at this time
- ♦ **HOT - JFM:** 1 location in Jamaica recording its record highest maximum temp. **March:** 1 location in Haiti.

Notable Impacts

- ♦ Persistent long-term drought in Grand Cayman with record low rainfall in 2016 and little rain since end of October 2016. Farmers have begun to suffer as a result.

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.

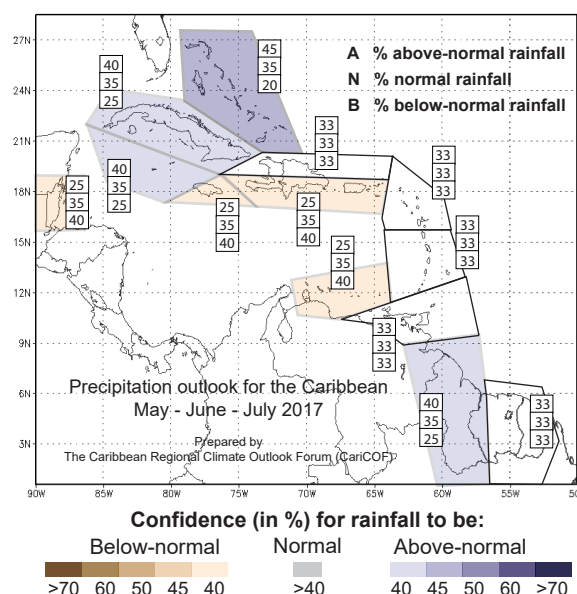
C'bean Islands south of 16°N (except ABC Islands):

May - end of dry season.
Limited number & extent of heavy showers; occasionally very wet.
Jun & Jul - early wet season.
Increasingly heavy showers.

ABC Islands: May to Jul - mostly dry.

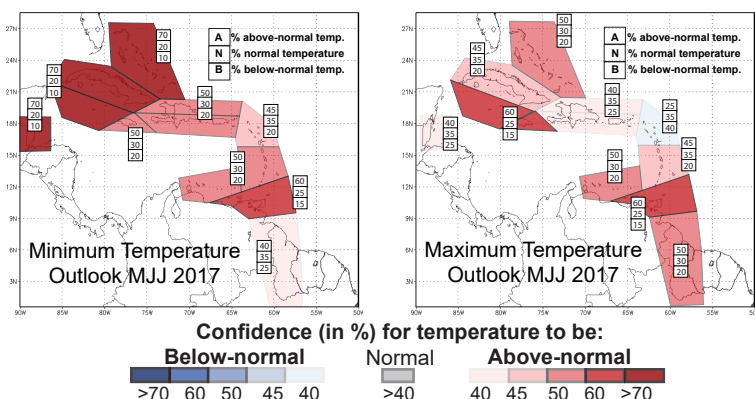
Guianas: May to Jul - long wet season; heavy showers are frequent.

MJJ 2017 Rainfall Outlook



MJJ rainfall is likely to be above- to normal in Bahamas, Belize, Cayman, Cuba and the Guianas, but below- to normal in ABC Islands, Belize, S Hispaniola and US C'bean Territories. There is low predictability elsewhere at this time.

Min. and max. temperatures up to July



MJJ min. & max. temp. in the Caribbean are likely to be above- to normal, with the possible exception of max. temp. in the Leeward Isl.

Wet days and wet spells up to July

What usually happens from May to July?

- Number of wet days: roughly 25 to 40 (ABC Is: 5 to 15; Guianas: 45 to 65).
- Number 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).
- Number of extremely wet spells: up to 1 (Guianas: up to 2).

Forecast and Implications:

- Several rain disruptions of outdoor activities.
- Increasing surface wetness improves environmental conditions for mosquitoes & moisture related pests.
- Increase in wet spells: recharge of large water reservoirs related to the onset of the wet season.
- No significant change in extremely wet spells: flash flood becoming a concern, especially in the Guianas.

Drought conditions up to July

Currently: (as of 31 Mar)

Alert levels:

Long-term Concern:

Cayman is still in a long-term drought. Long-term drought is prevalent in N Belize, SE Puerto Rico, St. Maarten, Tobago.

Drought watch: N Bahamas, Barbados, the NW half of Belize, west and central Cuba, Leewards, S Puerto Rico, and Windwards (except Dominica and Martinique).

Drought emergency: Cayman. **Drought warning:** N Belize, SE Puerto Rico, St. Maarten and Tobago.

Drought watch: N Bahamas, E Cuba, Grenada, Jamaica, W Puerto Rico and Trinidad.

BRIEF CLIMATE OUTLOOK - August to October 2017

Night- and day-time temperatures across the Caribbean are forecast to be uncomfortably hot for many, with high humidity and a high chance for heat waves. Indications are that August to October may be drier in Jamaica, S Hispaniola, US C'bean Terr. and all locations southward of Guadeloupe (*low to medium confidence*), but wetter in the rest of the Antilles and Belize (*low confid.*) and The Bahamas (*medium confid.*).

NOTE: This scenario becomes more likely and heat more severe if a moderate or strong El Niño manifests by August.

For detailed temperature and precipitation outlooks for ASO 2017, 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) warmed to slightly above average.

Model forecast and guidance: A majority of models suggest warm-neutral ENSO conditions during MJJ (55% *confid.*) and, possibly, El Niño conditions by ASO (70% *confid.*). Note: ENSO models have a notoriously hard time predicting ENSO at this time (i.e. the 'spring predictability barrier').

Expected impacts on rainfall and temperatures: With current neutral ENSO conditions, little effect on rainfall or temperatures is expected. However, if El Niño manifests by ASO, odds are in favour of hotter conditions and less hurricane activity than usual, as well as drier weather with less extreme rainfall (except in northern-most parts of the region).

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/colest third of the historical record |

DISCLAIMER

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Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: SSTs Tropical North Atlantic SSTs are now near to slightly above average (0-0.5°C) in most places, but remain above average north of the islands. Current anomalies or a slight anomalous warming are expected to persist throughout MJJ and ASO. Trade winds have been slightly stronger than usual over the Tropical North Atlantic.

Expected conditions: SSTs are expected to warm until September, but the warm anomalies are forecast to be less extreme than in previous years. Note also that episodes of Saharan dust blowing into the region are likely until September, but they are hardly predictable at this time.

Expected impacts: Positive SST anomalies tend to increase humidity and can therefore produce a probability shift towards above- to normal rainfall is expected for MJJ and ASO in northern portions of the region.