

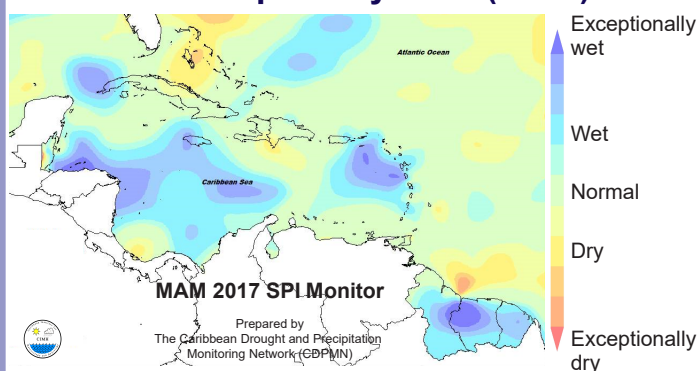
BRIEF SUMMARY: March to September 2017

Throughout much of the region, March to May 2017 marked the usual end of the Caribbean dry season and, for the Greater Antilles and Guianas, the transition into the wet season, with temperatures gradually warming. However, an extreme wet spell in May in Jamaica after a wet month of April led to severe flooding. By contrast, a slight improvement in a longer term drought in Grand Cayman increased water availability for agriculture.

July to September 2017: A wet period is expected for The Bahamas, Belize, Greater Antilles, western Guianas and Leeward Is., including concern for flash flooding due to extreme wet spells. Heat will become intense, incl. recurrent heatwaves in August and September for most, posing a health risk for the vulnerable. Finally, environmental conditions should be favourable for mosquito breeding and moisture related pests.

LOOKING BACK:

March-April-May 2017 (MAM)



Observations

- **RAINFALL: May:** Cayman and W Dominican Republic very dry; NW Suriname very wet. **April:** NW Belize, NE Trinidad, Tobago very dry; east Belize, Cayman, Cuba, Dominican Republic and St. Croix very wet. **March:** Dominica, N Dominican Rep., interior of Guianas, NE Puerto Rico, Tobago and US Virgin Islands very wet.
- **TEMPERATURES: MAM:** warmer than average, especially in Bahamas and Trinidad (>0.75°C above avg.). Exceptions are E Cuba, interior of Guyana, Hispaniola, W Suriname, and USVI.

Notable Climate Records:

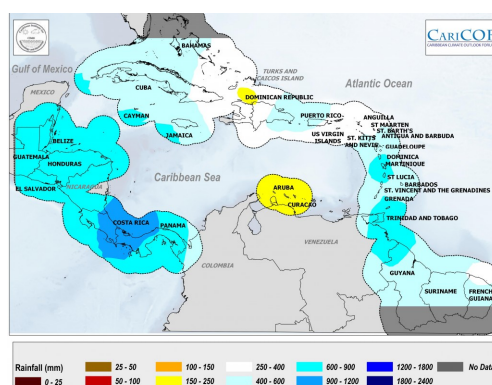
- **WET - MAM:** 1 location in French Guiana (138% of average), 3 in Jamaica (249 - 338% of avg.).
May: 1 location in French Guiana, 1 in Jamaica.
- **DRY - May:** 2 locations in Dominican Rep., 1 in Haiti.
- **HOT - MAM:** 1 location in Guyana recording its record highest maximum, mean and minimum temperatures.
March: 1 location in Guyana.

Notable Impacts

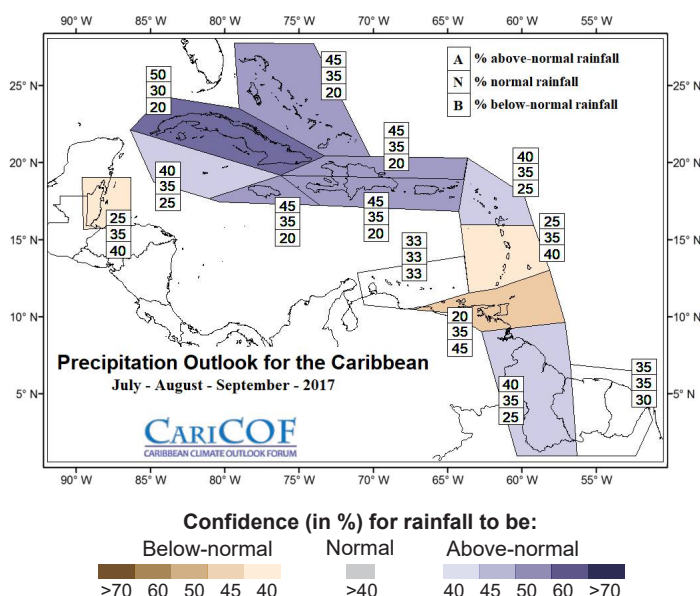
- Severe flooding in Jamaica after a wet April and an extreme wet spell in mid-May, inundating farming communities in Cave Valley and Clarendon, St. Anne. In Clarendon, bridges were washed away, 2 persons needed rescuing from roof-top.

WHAT NEXT?

Rainfall patterns July-August-September (JAS)

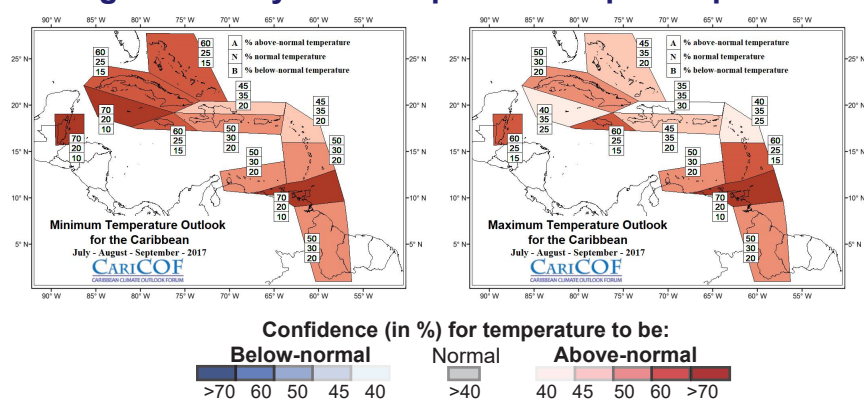


JAS 2017 Rainfall Outlook



JAS rainfall is likely to be above- to normal in The Bahamas, Greater Antilles, western Guianas and Leeward Islands, but below- to normal in Barbados, Belize, Trinidad & Tobago and Windwards. There is low predictability elsewhere at this time.

Night- and day-time temperatures up to September



JAS night-time (minimum) and day-time (maximum) temp. in the Caribbean are likely to be above- to normal.

Wet days and wet spells up to September

What usually happens from July to September?

- Number of wet days: roughly 35 to 50 (ABC Is: 5 to 15; mountainous areas: 50 to 65).
- Number of wet spells: 2 to 6 (ABC Is: 1 to 4), of which 1 to 3 are very wet (ABC Is: up to 2).
- Number of extremely wet spells: up to 1 or 2.

Forecast and Implications:

- Enhanced concern of potential for flooding at this time in the Greater Antilles.
- Flash flood concern from possible extremely wet spells.
- Frequent rain disruptions of outdoor activities.
- Wetter surface makes environmental conditions more conducive to mosquitoes & moisture related pests.
- Recharge of large water reservoirs related to wet spells.

Drought conditions up to September

Drought situation: (as of June 1) Grand Cayman, extreme S Belize and Tobago were in long term drought. N Bahamas and extreme W Belize were in shorter term drought.

Shorter term outlook: Shorter term drought is evolving in Haïti and might develop in Tobago by the end of September.

Long term concern: Long term drought might develop in northern parts of The Bahamas.

BRIEF CLIMATE OUTLOOK - October to December 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 until the end of October. Indications are that October to December may be wetter than usual or usual throughout the Caribbean, except E Guianas - where a drier start to the secondary wet season may occur (*low to medium confidence*).

NOTE: A drier scenario remains a slight possibility for the eastern and southern Caribbean if a moderate or strong El Niño manifests by October.

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 weeks, sea-surface temperatures (SSTs) in the equatorial eastern Pacific (NINO3.4) warmed to borderline El Niño conditions.

Model forecast and guidance: A majority of models suggest warm-neutral ENSO conditions during JAS (60% *confid.*) and neutral or El Niño conditions by OND (40-45% *confid.*).

Expected impacts on rainfall and temperatures: The ongoing ENSO neutral state will have little effect on rainfall or temperatures. However, if El Niño manifests by OND, odds are in favour of hotter conditions and less hurricane activity than usual in the later part of the season, as well as drier weather with less extreme rainfall in the south and east 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 above average (+0.5°C or more), especially near the West African coast. Trade winds have been slightly weaker than usual over the Tropical North Atlantic in May.

Expected conditions: Current anomalies are expected to persist (or slightly weaken near Africa) throughout JAS and OND.

Expected impacts: Positive SST anomalies tend to increase humidity and can therefore produce a probability shift towards above- to normal rainfall for JAS and OND, especially in northern portions of the region.