



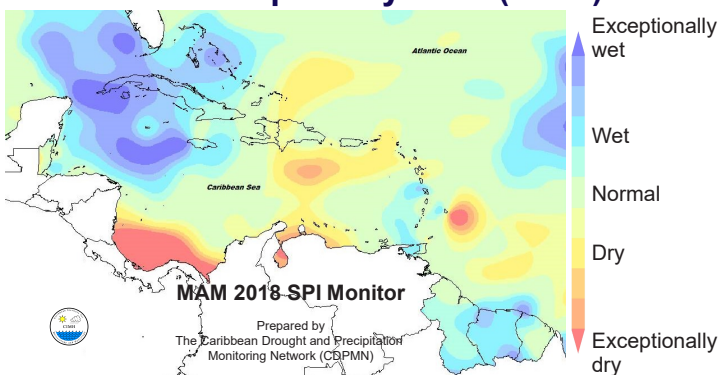
BRIEF SUMMARY: March to September 2018

March to May 2018: Most areas observed at least the usual rainfall totals, as is common during a La Niña event. Barbados, Belize, Dominica, Grenada and north-western Puerto Rico were particularly wet. Drought is not a primary concern at this time, although short term drought has appeared in a few locations as of late.

July to September 2018: Compared to recent years, this summer is not forecast to be as excessively hot, although a few heat waves are likely to temporarily increase heat stress in vulnerable sections of the population. Rainfall totals are forecast to be lower than usual or similar to the usual; a number of short dry spells is expected in the ABC Islands, Greater Antilles, and the Leewards along with fewer wet spells than usual. The latter reduces the potential for flooding and associated hazards somewhat, but a concern for flash flooding remains in any area.

LOOKING BACK:

Mar. - Apr. -May 2018 (MAM)



Observations

- ♦ **RAINFALL: May:** Bahamas, W Cuba, and pockets of Suriname very wet.
- April:** Barbados, N Belize, SW Dominica, Grenada and NW Puerto Rico very wet. **March:** central Bahamas, Barbados, Grenada, N Jamaica, St. Vincent, W Trinidad very wet; N Bahamas, W Martinique, St. Kitts, SE Trinidad very dry.

♦ **TEMPERATURES:**

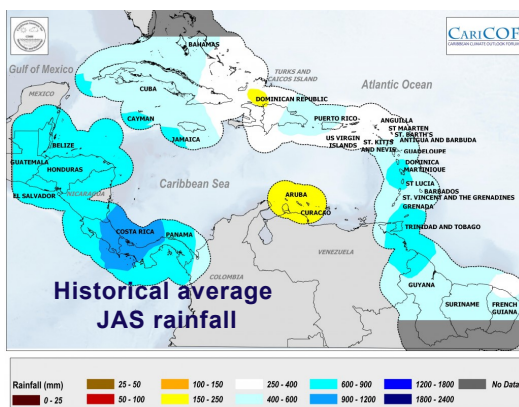
MAM: slightly warmer than average in most places; slightly cooler than avg. in ABC Is., Barbados, Dominica, Grenada, Guadeloupe, Puerto Rico, St. Lucia, St. Vincent & the Grenadines, NE Suriname and Trinidad & Tobago.

Notable Climate Records:

- ♦ **WET - MAM:** 1 location in French Guiana recorded its highest rainfall totals on record (~135% of avg.), 3 in Jamaica (~250-340% of avg.).
May: 1 location in Cuba, 1 in Dom. Republic.
- ♦ **DRY - MAM:** Anguilla recorded its lowest three-month rainfall total on record for any period (~15% of avg.)
May: Anguilla and 1 location in Dom. Republic.
- ♦ **HOT - MAM:** 1 location in Guyana recorded its highest minimum and maximum temperature. Haiti recorded its warmest month of May.

WHAT NEXT?

Rainfall patterns July-August-September (JAS)



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

Jul to Aug - wet season. Often includes a mid-summer dry spell.
Sep - wet season. Usually frequent heavy showers.

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

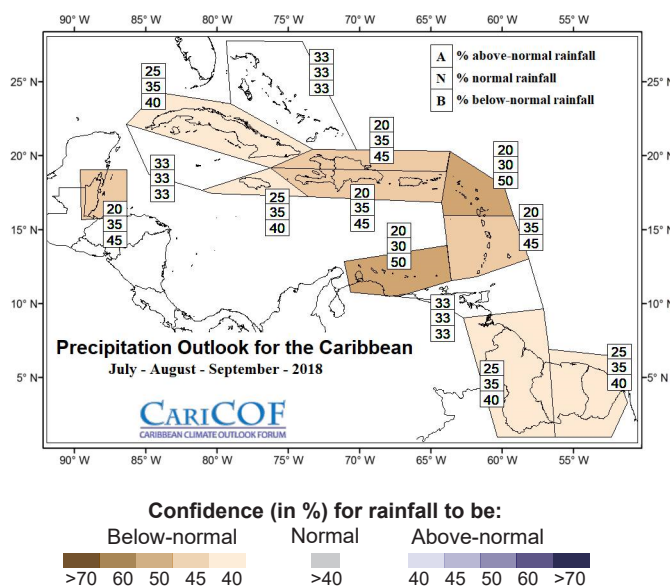
Jul to Sep - wet season. Increasingly frequent heavy showers.

ABC Islands: Mostly dry with occasional wet spells.

Guianas:

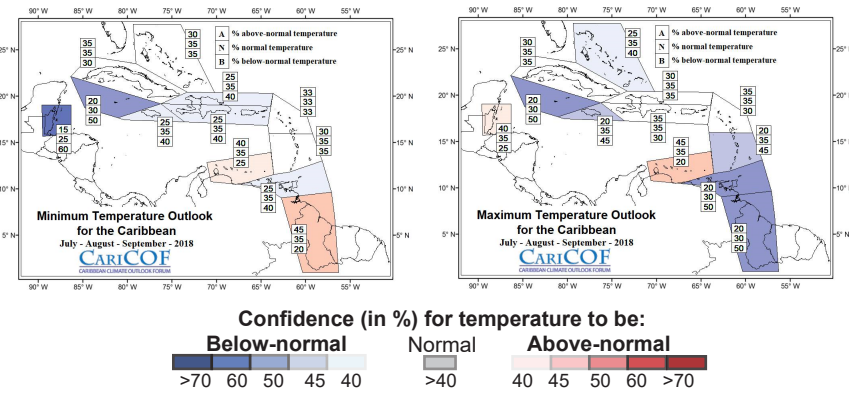
Jul to Aug - long wet season. Heavy showers are frequent. Sep - dry season. Heavy showers at times.

JAS 2018 Rainfall Outlook



Rainfall totals from July to September are likely to be the usual or drier across the region.

Night- and day-time temperatures up to September



JAS night-time (minimum) and day-time (maximum) temp. in the Caribbean are likely to be cooler than in most recent years, except in Guyana at night and ABC Isl. during both day and night.

Wet days and wet spells up to September

What usually happens from July to September?

- Number of wet days: roughly 35 to 50 in flatter areas of the islands, and 50 to 65 in mountainous areas and in the Guianas (ABC Is. 5 to 15;).
- # of wet spells: 2 to 6 (ABC Islands: 1 to 4), of which 1 to 3 are very wet (ABC Is: up to 2)
- # of extreme wet spells: up to 1 or 2.

Forecast and Implications:

- **Flash flood potential** a concern in most areas in the event of extreme wet spells.
- **Slightly reduced long-term flooding potential and recharge rates** of large water reservoirs associated w/ slightly fewer wet spells than usual.
- **Less reliable rains for agriculture and slower increase in surface wetness** across the region.

Drought conditions up to September

Current Drought situation: Short term drought is seen in Anguilla.

Shorter term outlook: Shorter term drought might possibly develop in Barbados, north-western Belize, Grenada and the northern Leewards.

Long term concern: Long term drought may possibly develop in Cayman and the northern Leewards. (by 30 Nov., 2018)

BRIEF CLIMATE OUTLOOK - October to December 2018

Because indications are that the period is unlikely to be warmer than in most recent years, heat discomfort should rapidly decrease and heat waves should become very unlikely after September in the Bahamas, October in Belize and the Antilles and November in the Guianas. Precipitation should peak towards October/November in Belize and the Antilles, while the Guianas are expected to remain in their dry season through (part of) November.

For detailed temperature and precipitation outlooks for OND 2018, please visit rcc.cimh.edu.bb/climate-outlooks/

What influences the next season?

El Niño Southern Oscillation (ENSO)

Recent observations: The cool SST anomalies between -0.5°C and -1°C in the Niño3.4 region of the Pacific associated with a weak La Niña since August have faded, marking an end to the La Niña event in April.

Model forecast and guidance: A majority of models forecast continued warming of the Niño3.4 region in JAS and OND, with ~55% suggesting neutral ENSO conditions for JAS, while 60-65% suggest El Niño conditions by OND.

Expected impacts on rainfall and temperatures: While neutral, ENSO will exert minimal influence on Caribbean rainfall and temperature. If El Niño manifests by OND, an enhanced sub-tropical jet would tend to increase precipitation in the north, while increased wind shear further south would reduce precipitation there, as well as potentially decrease late-season hurricane activity.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: Tropical North Atlantic (TNA) have recently cooled from around average (anomalies of -0.5°C to +0.5°C) to below average (-0.5°C to -2°C) in the Caribbean Sea and further east, while remaining above average (+0.5 to +1°C) further north.

Expected conditions: Most models indicate sustained positive anomalies to the north of the region by OND. They also suggest below-average temperatures to dominate the TNA during JAS, while the negative anomalies are forecast to lessen by OND.

Expected impacts: With below-average SSTs in and eastward of the region, below-average humidity and atmospheric instability is expected in JAS, tilting the odds towards cooler air temperatures (especially at night) and towards drier conditions across the Caribbean.

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, 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/coldest third of the historical record

DISCLAIMER

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