



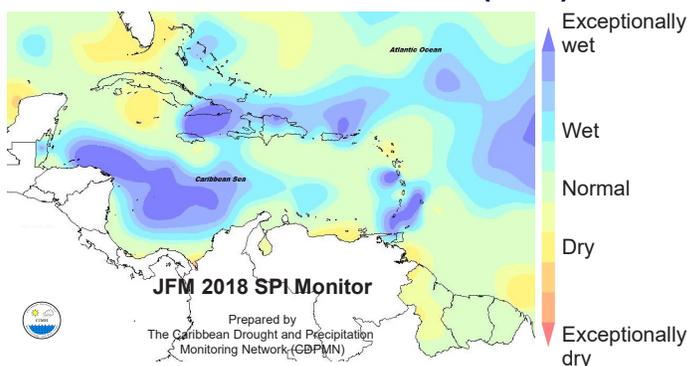
BRIEF SUMMARY: January 2017 to July 2018

January to March 2018: Most areas observed at least the usual rainfall totals, as is common during a La Niña event. Eastern Cuba, Barbados, Dominica, Grenada and northern Hispaniola were extremely wet. Drought is only of concern at few locations. Regionally, this was one of the coolest in recent years.

May to July 2018: After a quickly fading La Niña, the onset of the wet season may be delayed by a few weeks in much of the Caribbean region. By contrast, The Bahamas, Cuba, and French Guiana might be wetter than usual, with extreme wet spells being a potential concern for flooding and flash floods. Heat discomfort, surface wetness and large water reservoir recharge rates related to wet spells may show a slower increase than usual. However, dry spells and episodes of Saharan dust incursion may be frequent in Belize and the islands.

LOOKING BACK:

Jan. - Feb. - Mar 2018 (JFM)



JFM 2018 SPI Monitor
Prepared by
The Caribbean Drought and Precipitation
Monitoring Network (CDPMN)

Observations

♦ **RAINFALL: March:** central Bahamas, Barbados, Grenada, N Jamaica, St. Vincent, W Trinidad very wet; N Bahamas, W Martinique, St. Kitts, SE Trinidad very dry. **February:** Aruba, W Belize, Curacao, Grenada, N Dom. Republic, S Martinique very wet; N Bahamas and S Jamaica very dry. **January:** Much of the Bahamas, Eastern and Central Cuba, Dominica, Dom. Republic, Grenada, Haïti, Tobago very wet.

♦ **TEMPERATURES:**

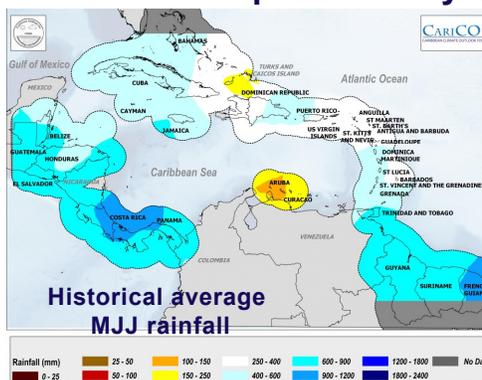
JFM: warmer than average in most places, especially in central Bahamas and E Guyana (>1.5°C above avg.); slightly cooler than average in St. Vincent and the Grenadines.

Notable Climate Records:

- ♦ **WET - DJF:** 2 locations in Belize recorded their highest rainfall totals on record (~160-193% of avg.), 7 in Dom. Republic (~210-415% of avg.), 3 in Martinique (~190-215% of avg.). **February:** 1 in Belize, 1 in Dominica, 4 in Dom. Republic, 2 in Martinique.
- ♦ **DRY - February:** 1 location in Jamaica (~15% of avg.)
- ♦ **HOT - DJF:** 1 location in Belize recorded its highest minimum temperature. Haiti recorded its highest maximum temp. (incl. also a record warmest month of February).

WHAT NEXT?

Rainfall patterns May-June-July (MJJ)

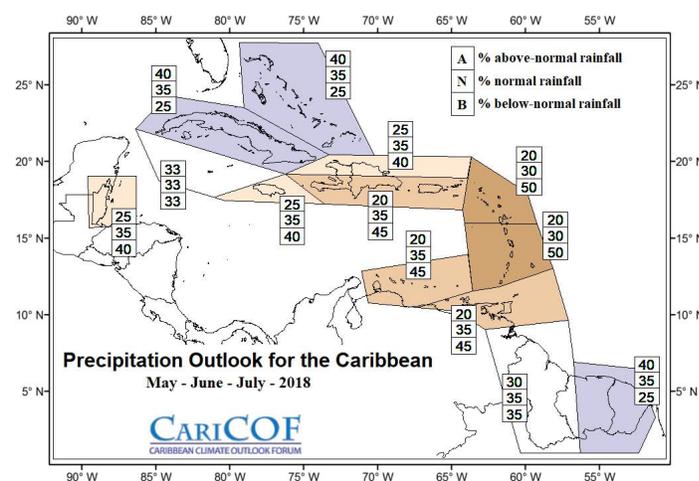


ABC Islands: May to Jul - mostly dry.
Guianas: May to Jul - long wet season; heavy showers are frequent.

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.

MJJ 2018 Rainfall Outlook

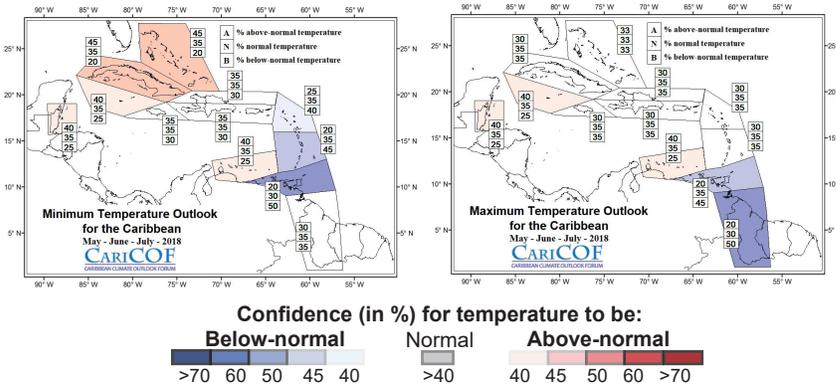


Precipitation Outlook for the Caribbean
May - June - July - 2018



MJJ rainfall is likely to be above- to normal in The Bahamas, Cuba, E Guianas, but below- to normal in Belize and from Jamaica east and southward to Trinidad and Tobago. *White areas indicate where the current forecast indicates little information on total rainfall.*

Night- and day-time temperatures up to July



MJJ night-time (minimum) temp. are likely to be above- to normal in ABC Is. & NW C'bean, but below- to normal in E C'bean; day-time (max.) temp. likely to be below- to normal in S C'bean, but above -to normal in ABC Is, Belize & Cayman.

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: 45-65).
- # 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 (Guianas: up to 2).

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 increase of surface wetness related to a small increase in the number of wet days.
- Limited recharge of large water reservoirs related to a slow onset of the wet season.

Drought conditions up to July

Current Drought situation: SN Haïti, NW Guyana, SW Jamaica is under a long term drought, while short term drought is seen in NW Guyana.

Shorter term outlook: Shorter term drought might possibly develop in Antigua, N Bahamas, SE Belize, W Cuba, French Guiana, Guadeloupe, St. Maarten, St. Kitts, Suriname, Tobago, Virgin Is.

Long term concern: Long term drought is evolving in St. Maarten, Suriname and southeastern Haiti, and may possibly develop in ABC Is., Antigua, N & SE Belize, W Cuba, N French Guiana, N French Guiana and Virgin Is.

BRIEF CLIMATE OUTLOOK - August to October 2018

The period is expected to be accompanied by uncomfortable heat for many, with the likely occurrence of heatwaves across the region. However, first indications are that much of the Greater Antilles may face less extreme summer heat than in previous years.

The precipitation outlook trends to a usual or a drier than usual period in the ABC Islands, the Guianas (which enter their main dry season) and Trinidad & Tobago, but at least as wet as usual in Cayman.

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

What influences the next season?

El Niño Southern Oscillation (ENSO)

Recent observations: Cooler than usual sea-surface temperatures (SSTs) of around 0.5-0.8°C below average have been in place in the equatorial eastern Pacific (NINO3.4), meaning weak La Niña conditions.

Model forecast and guidance: A majority of models suggest a return of ENSO neutral conditions for MJJ (~70-80% confidence), and those neutral conditions could remain for ASO (~45-50% confidence). That said, 35-45% of all models suggest emerging El Niño conditions, but making ENSO forecasts is notoriously hard between March and May.

Expected impacts on rainfall and temperatures: In some years following a La Niña, the wet season in the islands may start late, i.e MJJ can be drier than usual.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: SSTs Tropical North Atlantic (TNA) and Caribbean Sea SSTs have very recently hovered around average in most areas, but warmer still to the north of the islands and, by contrast, cooler than average off the coast of West Africa.

Expected conditions: Most models indicate a continuation of near-average SSTs east of the Caribbean and in the Caribbean Sea, but below average offshore West Africa. However, unusual and persistent warmth to the extreme north of the region is forecast for MJJ and ASO.

Expected impacts: With near average SSTs around the region and below-average SSTs off of West Africa, slightly below-average humidity and atmospheric instability is expected, tilting the odds towards usual or slightly drier conditions, particularly in the Lesser Antilles.

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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