

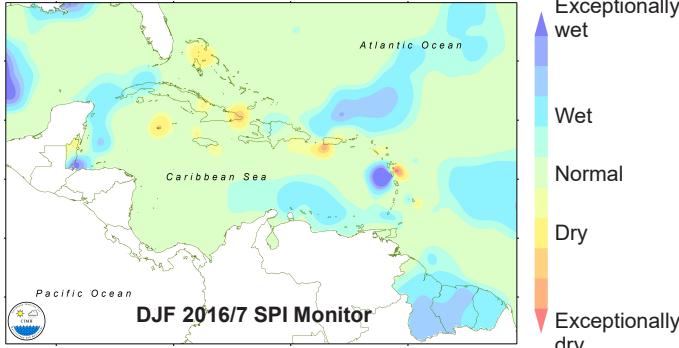
BRIEF SUMMARY: December 2016 to June 2017

Throughout much of the region, weather patterns in December 2016 to February 2017 were quite the usual for the first half of the Caribbean dry season. By contrast, an active wet season in the Guianas made for better conditions for agriculture than last year's. Conversely, Grand Cayman and Tobago are facing long-term drought, impacting agriculture. Although temperatures were warmer than usual, they were generally comfortable.

April to June 2017: We will transition into the wet season by May or June. Rainfall will likely increase and is forecast to offset the impacts of our dry season in the usual way, meaning surface dryness should decrease and water availability for agriculture should increase, including in areas currently in drought. Flash flood potential is increasing after April, as is heat discomfort, possibly including heat waves in Belize and Trinidad.

LOOKING BACK:

December-Jan.-Feb. 2016-'17 (DJF)



Observations

- RAINFALL:** **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; **December:** Cayman, Cuba very dry; SE Belize, Dominica, Grenada, S Guyana very wet.
- TEMPERATURES:** **DJF:** warmer than average in most places, especially in Bahamas.

Notable Climate Records:

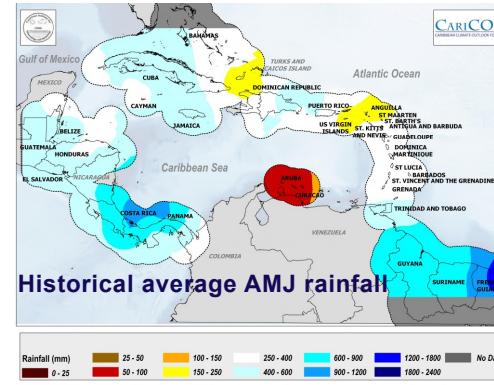
- WET** - none reported at this time
- DRY - DJF:** 1 location in Jamaica (6% of avg.).
- HOT - DJF:** 1 location in Jamaica recording its record highest max. temp. for DJF (incl. a record for February). 2 locations in Bahamas recorded either a highest mean or max. temp.

Notable Impacts

- Persistent long-term drought in Grand Cayman with 13 consec. months of rainfall below average and farmers beginning to suffer as a result.

WHAT NEXT?

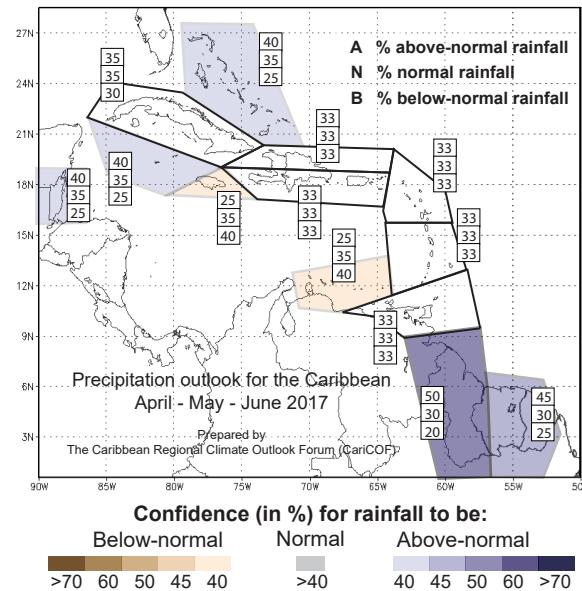
Rainfall patterns April-May-June (AMJ)



ABC Islands: Apr to Jun - mostly dry.

Guianas: Apr to Jun - transition to wet season; heavy showers more and more frequent.

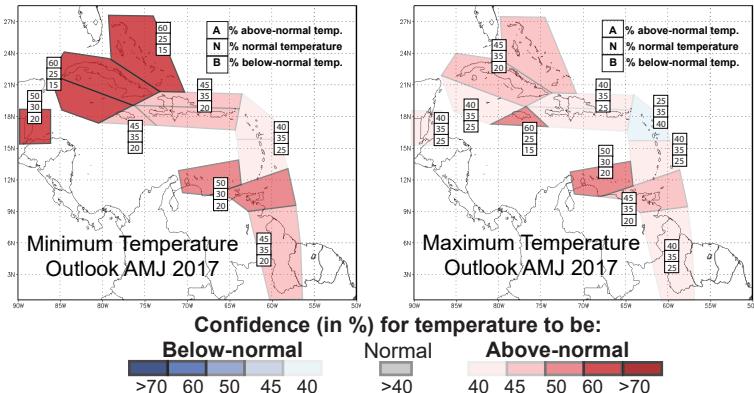
AMJ 2017 Rainfall Outlook



AMJ rainfall is likely to be above- to normal in the Bahamas, Belize, Cayman and the Guianas. In the ABC Islands and Jamaica rainfall is likely to be below-normal. There is low predictability elsewhere at this time.

More on the climate outlook

Min. and max. temperatures up to June



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

April to September 2017

Wet days and wet spells up to June

What usually happens from April to June?

- Number of wet days: roughly 25 to 40 (ABC Is: 10 or less; Guianas: 45 to 60).
- Number of wet spells: 1 to 4 (ABC Is: up to 2; Guianas: 3 to 6), of which 1 or 2 are very wet (ABC Is: up to 1; Guianas: 1 to 4).
- Number of extremely wet spells: up to 1 (Guianas: up to 2).

Forecast and Implications:

- Increasingly frequent disruptions of outdoor activities; decreasing surface dryness.
- Increase in wet spells towards June: recharge of large water reservoirs expected to start in May or June.
- No significant change in extremely wet spells: flash flood concern after April.

Drought conditions up to June

Currently: (as of 28 Feb) Cayman is in a short-term and long-term drought. Long-term drought is also prevalent in N Belize, St. Maarten, Tobago.

Drought warning: SE Puerto Rico. **Drought watch:** N Bahamas, east central Belize, W and central Cuba, Leewards (except Guadeloupe), SW & NE Puerto Rico, Windwards (except Grenada).

Long-term Concern: **Drought emergency:** Cayman. **Drought warning:** SE Puerto Rico, Tobago. **Drought watch:** N Bahamas, N Belize, W Cuba, N French Guiana, Grenada, Jamaica, NW Puerto Rico, Trinidad.

BRIEF CLIMATE OUTLOOK - July to September 2017

Temperatures across the Caribbean are forecast to become more uncomfortable throughout the period. Heat discomfort will probably grow more slowly in the Leewards. As the region enters the wet season, indications are that July to September may be drier (*low confidence*) and hotter (*medium confid.*) than normal across the region as chances are real that a new El Niño event will appear by summer. Finally, at times when Saharan dust is blowing across the Atlantic, we can expect to see a number of drier spells even in the first half of our wet/hurricane season.

For detailed temperature and precipitation outlooks for JAS 2017, please visit rcc.cimh.edu.bb/long-range-forecasts/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 by AMJ (65% *confid.*) and, possibly, El Niño conditions by JAS (50% *confid.*).

Expected impacts on rainfall and temperatures: With ENSO conditions currently being neutral, little effect on rainfall or temperatures is expected. However, if El Niño manifests by JAS, odds are in favour of drier weather with less extreme rainfall than usual for that part of the wet season.

Climate conditions in the Tropical North Atlantic and Caribbean

Recent observations: SSTs up to 0.5°C above-average in the eastern part of the C'bean Sea. Although recently cooling, SSTs in the far northwest of the region remain above average. Elsewhere, SSTs have been close to avg. 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 at least until July, but they are hardly predictable at this time.

Expected impacts: Positive SST anomalies tend to increase humidity and can therefore produce a slight probability shift towards above- to normal rainfall is expected for AMJ in areas close to the US.

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/coldest third of the historical record |

DISCLAIMER

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