

Caribbean Climate Outlook Newsletter - September to November 2019

For climate information specific to your country, please consult with your national meteorological service.
CariCOF outlooks speak to recent and expected climate trends across the Caribbean in general.

BRIEF SUMMARY: May to November 2019

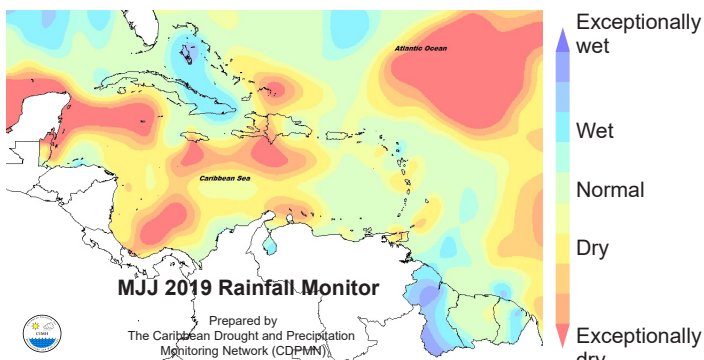
May to July 2019: Shorter term drought has developed in ABC Islands, Belize, parts of Hispaniola, Trinidad, Turks & Caicos. At the same time, many areas in the Caribbean are in long term drought. Seasonal temperatures were mostly above-average, with all-time records broken in June in Cuba and Jamaica.

September to November 2019: The September to October peak of the Caribbean Heat Season, which runs from May to October, is likely to see a marked increase in heatwaves and the associated heat stress in vulnerable sections of the population, as well as livestock in Barbados, the Windwards and Guianas. Drought impacts in currently affected areas are generally expected to decrease towards November. The annual peak in very wet and extremely spells is expected to raise the concern for flash floods and flooding in Belize and the Islands.

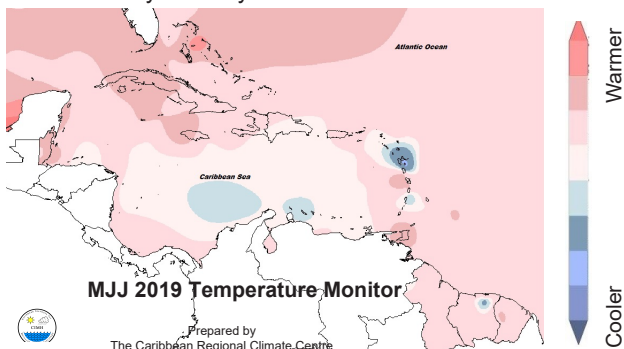
LOOKING BACK:

May - June - July 2019 (MJJ)

Observations



- ♦ **RAINFALL:** ABC Islands, Belize, parts of Hispaniola, Trinidad, Turks & Caicos Islands very dry; northwestern Bahamas, western Guyana very wet.



- ♦ **TEMPERATURE:** Antigua, parts of Dominica, Guadeloupe signif. cooler than avg.; Bahamas, Belize, Cayman, western & central Cuba, western Jamaica, Martinique and Trinidad signif. warmer.

Notable Climate Records:

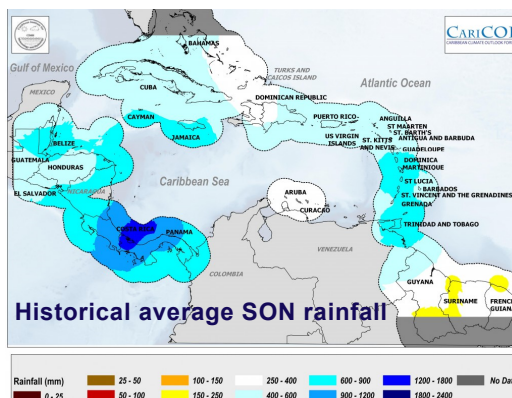
WET: MJJ: 2 locations in Guyana recorded their highest rainfall totals for this period (165-175% of average).

DRY: MJJ: 1 location in Dom. Repub. recorded its lowest rainfall totals for this period.

HOT: MJJ: Trinidad & Tobago and 1 location in Guyana recorded their highest mean temp. for this period, while 1 location in Belize and 1 in Guyana their lowest min. temp.

WHAT NEXT?

Rainfall patterns September-October-November (SON)



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

Sep to Nov - wet season. Usually frequent heavy showers.

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

Sep to Nov - wet season. Usually frequent heavy showers.

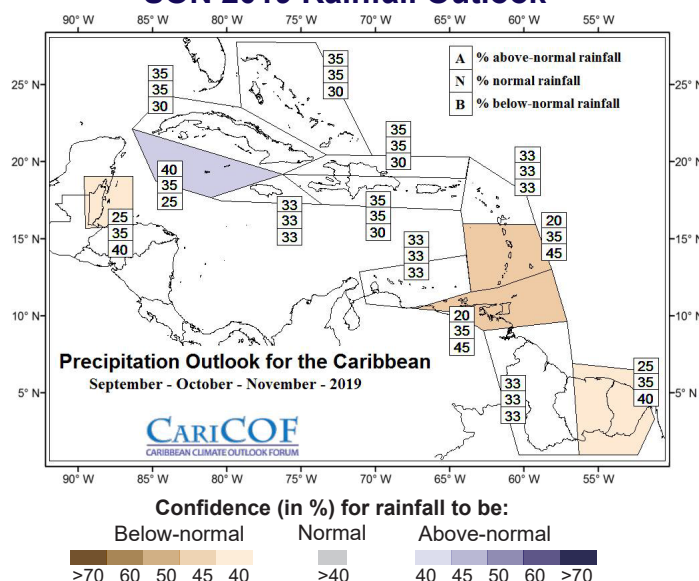
ABC Islands: mostly dry with occasional wet spells.

Guianas:

Sep to Oct - Dry season with heavy showers at times.

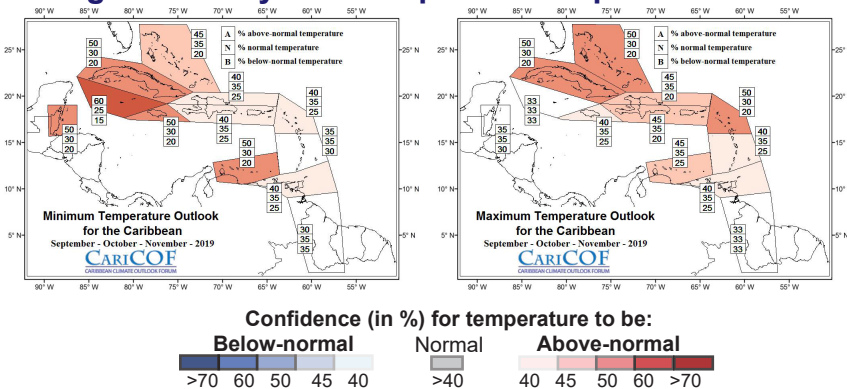
November - Increase in showers.

SON 2019 Rainfall Outlook



Rainfall totals from September to November are likely to be less than the usual or, at best, the usual across Barbados, Belize, eastern Guianas, Trinidad & Tobago and the Windward Isls., but are likely to be at least as wet as usual in Cayman Isls. White areas show where the forecast indicates little information on rainfall totals.

Night- and day-time temperatures up to November



SON night-time (min.) and day-time (max.) temperatures are likely to be at least as warm as usual across most of the Caribbean during this period, which includes the annual peak of the Heat Season in the Windward Islands and Guianas.

Wet days and wet spells up to November

What usually happens from September to November?

- Number of wet days: roughly 35 to 50 (ABC Is: 10 to 20; coastal Guianas: 20 to 35).
- Number of wet spells: 3 to 6 (coastal Guianas: 1 to 3), of which 1 to 4 are very wet (coastal Guianas: up to 2).
- Number of extremely wet spells: up to 2 (Guianas: none).

Forecast and Implications:

- **Long-term flooding & flash flood potential** a concern in the event of very wet & extreme wet spells, resp.
- **Slightly reduced recharge rates** of water reservoirs in Barbados & Windwards, but accelerated depletion rates in Guianas associated with fewer wet spells than usual.
- **Less reliable rains for agriculture** than usual in the ABC Islands, Barbados, Belize & Windwards.

Drought conditions up to November

Drought situation:
(as of August 1)

Severe (or worse) drought has developed in much of the ABC Islands, Belize, parts of Hispaniola, Trinidad, Turks & Caicos Islands on the short term; Aruba, southern Belize, easternmost Cuba, southern- and easternmost Dominican Rep., parts of French Guiana, Haiti, northern Leewards, Martinique, northern Trinidad, US C'bean Territories are in long term drought.

Shorter term outlook:

Shorter term drought is possible in much of Belize, Dominica, Martinique, Trinidad, and Suriname.

Long term concern:

Long term drought is evolving in Belize, Dominica, French Guiana, Martinique, St. Kitts, Saint Lucia, St. Vincent, and Suriname and is possible in ABC Islands, Antigua, Barbados, Dom. Repub., Grenada, Guyana, Trinidad & Tobago.

BRIEF CLIMATE OUTLOOK - December 2019 to February 2020

Indications are that the first half of the 2019-'20 Caribbean dry season may be wetter than usual along southern Hispaniola, while portions of the coastal Guianas might see a wetter than usual secondary wet season. The average occurrence of extreme wet spells and corresponding flash flood potential diminishes drastically towards February across the entire region. Temperatures and humidity will feel seasonably comfortable for the coolest part of the year in spite of potentially warmer than usual temperatures forecast for most parts of the Caribbean.

For detailed temperature and precipitation outlooks for DJF 2019-'20, please visit rcc.cimh.edu.bb/caricof-climate-outlooks/

What influences the next season?

El Niño Southern Oscillation (ENSO)

Recent observations: In the past month, sea-surface temperature (SSTs) in the tropical Pacific decreased to ENSO neutral levels with SST anomalies less than 0.5°C above average.

Model forecast and guidance: Most models suggest ENSO neutral conditions to persist during SON (with 65-60% confidence) and possibly maintain ENSO neutral through DJF (50% confidence).

Expected impacts on rainfall and temperatures: The ENSO neutral phase offers little contribution to seasonal rainfall or temperature prediction in any part of the Caribbean other than reducing confidence in the forecast. Climate conditions in the Caribbean region may be more affected by North Atlantic SST variability during ENSO neutral periods.

Climate outlooks - background

The Caribbean Climate Outlooks are prepared by the Caribbean 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. 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 |

CariCOF Outlooks offer consensus-based information averaged across multiple territories. In some cases, individual national results may differ from region wide results. To get information on your specific country context, please consult your National Meteorological and Hydrological Services and/or any national level bulletins they may provide.

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