



A Joint Bulletin of the CTO, the CHTA and the CIMH

# CARIBBEAN TOURISM CLIMATIC BULLETIN

for Tourism Businesses and Policymakers

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Photo Credit: Anguilla Tourist Board

The background of the page features a tropical landscape. On the left, a large palm tree's fronds are visible, partially obscuring the view. In the distance, a coastal town with white buildings and a harbor is visible under a clear sky. The foreground shows a paved path and some low-lying vegetation. The image is framed by a green diagonal shape on the top left and a teal diagonal shape on the top right.

# Purpose

This Bulletin is a joint effort between the Caribbean Tourism Organization (CTO), the Caribbean Hotel & Tourism Association (CHTA) and the Caribbean Institute for Meteorology and Hydrology (CIMH) to help tourism businesses and policymakers identify and prepare for favourable or inclement climate conditions in the Caribbean and source markets, before they occur. It is recommended that industry stakeholders use the seasonal climate forecast information for the upcoming period (March-May 2019) presented in this Bulletin in tandem with weather forecasts (1-7 days). This suite of information can inform strategic and operational decisions related to the use of environmental resources, marketing, and enhancement of the visitor experience.

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## Looking back: Nov 2018 - Jan 2019



Many parts of the Caribbean observed **less than the usual rainfall**. Consequently, **severe short term drought** has developed in portions of Barbados, Cuba, Hispaniola, St. Vincent and Trinidad & Tobago. In addition, **severe long term drought** is seen in southern Hispaniola, but with many other territories recording moderate drought, which is depleting water resources faster this dry season than usual.



**Temperatures were slightly to significantly warmer than average** for this part of the year, except in most of the Lesser Antilles. That said, region-wide, temperatures felt comfortably cool especially in December and January which form the coolest part of the year.

# Climate Advisories: Caribbean

**March through May marks: 1) the transition between the dry season (up till April) and the start of the wet season (in May) in the Bahamas, Belize, the Greater Antilles and the Guianas; 2) the second half of the dry season in the Lesser Antilles; and 3) the long dry season in the ABC Islands. What should you do?**



Climatically, March to May forms the **second half of the Caribbean Dry Season** in Belize and the Caribbean Islands, characterised by relatively few wet days and a small number of wet spells, but many dry days and quite a few dry spells. That said, the intensity of heavy showers increases towards May, especially in the Greater Antilles. Consequently, despite being very low in March, the potential for flooding increases in April and May (high confidence). In the coastal Guianas, a steady increase in flooding potential should manifest by May which is the start of their primary wet season (high confidence). Extreme wet spells, which become a possibility from April onwards, may coincide with thunderstorms and high winds, and may result in flash floods, land slippage, power outages and possible contamination of food and water supplies. Therefore, proper planning / contingencies for these scenarios is imperative in tourism disaster plans.



Moderate to severe **drought** has started impacting many areas in the Caribbean. Notably, Barbados, parts of Belize, much of Hispaniola, much of the Leeward Islands, Saint Lucia, St. Vincent and Tobago have seen long term drought developing, while short term drought is seen in the ABC Islands, northern Barbados, south-eastern Cuba, much of Hispaniola, St. Vincent, Trinidad and Tobago. This is, in part, due to a developing weak El Niño. That said, extreme to exceptional drought such as that experienced by many territories between 2014 and 2016, when El Niño was particularly strong, is unlikely. Tourism facilities should continue to enhance/upgrade their water conservation practices (e.g. rainwater harvesting and repairs to leaky pipes) as we enter the peak of the dry season (between March and April), and advise guests of these measures on an ongoing basis.



# Climate Advisories: Caribbean Cont'd



Night-time and day-time **temperatures** in the Caribbean are set to increase as the Caribbean approaches its annual heat season which starts in May, with the exception of the Guianas. Tourism practitioners should expect an increase in demand for cooling/hydration services (e.g. AC use and drinking water) in the upcoming period as compared to the same period in the previous two years.



The **UV index** on sunny days will be very high (10) to extremely high (12) around noon time (on a scale from 1 to 12, with details available here: <https://www.epa.gov/sunsafety/uv-index-scale-1>). In view of the many expected sunny and dry days, there is a high risk of skin damage due to intense UV radiation. Visitors should be encouraged to apply high SPF sunscreen lotion regularly (preferably reef safe), and seek shaded areas between the hours of 10 AM and 3 PM. Outdoor tourism operators and staff should also be mindful to minimise skin exposure during these times, and to wear sunscreen when they work outdoors.



Ocean temperatures are not expected to become as warm as to trigger **coral bleaching** throughout the period. This is a good season to engage in coral reef restoration activities, especially in destinations where there is an on-going standalone program or partnership between tourism practitioners and coastal managers.



The 2019 Hurricane Season officially starts on June 1st, but **storms and hurricanes** can, and in many recent years, did occur before the official start date. Severe weather systems, which can come with a range of hazards, including high winds, landslides, flash floods, among others, are expected to affect Caribbean territories. Tourism operators are advised to monitor weather advisories issued by the National Meteorological Services and other information provided by the Caribbean Disaster Emergency Management Agency (<http://cdema.org/>) and the US National Hurricane Center (<https://www.nhc.noaa.gov/>). At all times, tourism operators should maintain a state of readiness, including communication plans and response protocols to deal with sudden eventualities.



# Climate Advisories: Caribbean Source Markets

March to May marks the spring season in the source markets. What should you do?



Most source markets will probably not yet experience the warm summer conditions vacationers are seeking. Tourism operators are therefore recommended to focus on targeted marketing efforts to attract visitors to the generally sunny, warm and breezy weather in the Caribbean Islands, as well as, in the coastal areas of Belize and the Guianas. Tourism operators can seek to differentiate themselves through package offers, memorable customer service, and activities that take advantage of the pristine natural environments on offer.

USA & CANADA



EUROPE



Photo Credit: cia.gov

# Climate Outlook for the Caribbean

It is the late dry season. What do we expect for the Caribbean?

## *How wet?*

Regionally, **rainfall totals** from March to May are forecast to likely be at least as dry as usual in the ABC Islands, Belize and the Lesser Antilles, but likely the usual or wetter in Cayman, Cuba and eastern portions of the Guianas (medium confidence).

## *How hot?*

Night-time and day-time temperatures are forecast to be at least as warm as usual (medium to high confidence) and, from April onwards, may locally feel uncomfortable at times due to dry heat.

The first heat waves of the year are usually noted in April or May in Belize and Trinidad. In view of the ongoing drought, which increases the chance of occurrence of heat waves, other areas may also experience one or two heat waves locally between April and May (medium confidence).

## *Sargassum Outlook*

Tourism operators may consult the University of South Florida/NASA Sargassum Outlook Bulletin before planning activities. Click here to access this product: <https://optics.marine.usf.edu/projects/SaWS.html>. Additionally, a Sargassum resource guide is available from the Caribbean Alliance for Sustainable Tourism (CAST) and can be accessed here: <https://www.onecaribbean.org/wp-content/uploads/SargassumResourceGuideFinal.pdf>

## *How dry?*

**Short term drought** (on a 3-6 months timescale) is currently evolving in Barbados, parts of Belize, Dominica, Grenada, Guyana, St. Vincent, Trinidad & Tobago (high confidence). Such conditions increase the potential for bushfires and may temporarily increase smoke and soot concentrations in the air.

**Long term drought** (on a 12 months timescale), which affects the largest water reservoirs, is evolving in Antigua, west-central Belize, Cayman, North & South Dominican Rep., North Eastern Guyana, St. Kitts, Trinidad & Tobago, Windward Islands (high confidence), and may develop in most other areas of the Caribbean by the month of May (medium confidence).

## *Surf's Up*

Surfers, divers, fishers and marine craft operators should consult the 7-day wave forecast before planning activities. Click here to access this product: <http://ww3.cimh.edu.bb/>

# Climate Outlook for the Caribbean's Source Markets

## What do we expect in the source markets?

The northeastern US and southeastern Canada are showing signs that spring may end up warmer than usual.

There are no distinct climate patterns currently emerging for the spring season in the European source markets for the upcoming period.



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# Upcoming Events

- Caribbean Week New York - June 2 - 7, 2019
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- Sustainable Tourism Conference (STC-15) - TBC: August / September 2019



Photo Courtesy of the Bahamas Ministry of Tourism & Aviation

## Websites

Caribbean Tourism Organization:  
[www.onecaribbean.org](http://www.onecaribbean.org)

Caribbean Hotel and Tourism Association:  
[www.caribbeanhotelassociation.com](http://www.caribbeanhotelassociation.com)

Regional Climate Centre:  
<http://rcc.cimh.edu.bb>

## Disclaimer

This Bulletin provides a broad overview of climate conditions up to 3 months in advance. It is based on insights drawn from CIMH's suite of technical climate information products and industry insights from the CTO and the CHTA. The information contained herein is provided with the understanding that the CTO, the CHTA, and the CIMH make no warranties, either expressed or implied, concerning the accuracy, completeness, reliability or suitability of said information. The Bulletin may be freely used and distributed by the public with appropriate acknowledgement of its source but shall not be modified in content and then presented as original material.

# Glossary

## Definition of technical terms

**Seasonal climate forecast** - the guidance offered by a forecaster or forecast centre on the climate conditions during the coming months.

NB: This forecast information pertains to the 3 months highlighted in the Issue.

**Short-term drought** – A rainfall deficit over a total period of 6 months.

**Long-term drought** – A rainfall deficit over a total period of 12 months.

**Dry day** - A 24 hour period during which the rainfall total is less than 1 mm.

**Dry spell** - A succession of at least 7 consecutive dry days.

**Wet Day** – A 24 hour period during which the rainfall total is at least 1 mm.

**Wet Spell** – A multi-day period during which the rainfall total is large enough to cross a certain threshold.

**Extreme wet spell** – 3 consecutive days of which the total rainfall is extremely high, with increased flash flood potential.

**The Guianas** – French Guiana, Guyana and Suriname.

**US Caribbean Territories** – Puerto Rico, U.S. Virgin Islands.

**Leeward Islands** – Anguilla, Antigua and Barbuda, British Virgin Islands, Guadeloupe, Montserrat, Saba, St. Barthélemy, St. Eustatius, St. Kitts and Nevis, St. Maarten and St. Martin.

**Windward Islands** – Dominica, Grenada, Martinique, St. Lucia and St. Vincent and the Grenadines.

**Lesser Antilles** – Leeward and Windward Islands along with, Barbados and Trinidad and Tobago.

**Greater Antilles** – Cayman Islands, Cuba, Dominican Republic, Haiti, Jamaica and Puerto Rico.

**ABC Islands** – Aruba, Bonaire, Curacao

**Lucayan Islands** – The Bahamas, Turks and Caicos Islands.

For more technical climate terms:  
<https://rcc.cimh.edu.bb/glossary-of-terms/>