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 (December 2019 - February 2020) 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.

Table of Contents

Looking Back: August - October 2019  Page 3
Climate Advisories: Caribbean  Page 4
Climate Advisories: Caribbean Source Markets  Page 7
Climate Outlook for Caribbean  Page 8
Climate Outlook for Caribbean Source Markets  Page 9
Upcoming events and contact information  Page 10
Glossary  Page 11
Short term drought has developed in Barbados, the Cayman Islands, northwestern Martinique, St. Vincent and southern Trinidad. At the same time, Barbados, Cayman, Martinique, western Puerto Rico, St-Barth and Trinidad are in long term drought. By contrast, the Guianas have been very wet.

With the period forming the second half of the Caribbean heat season, including its annual peak, temperatures have recurrently been uncomfortably high for large sections of the population, particularly during heatwaves. Apart from northwestern-most Puerto Rico and a few small pockets within the region, most of the region was significantly warmer than average.

The 2019 Atlantic Hurricane Season has officially drawn to a close. Tropical cyclone activity (i.e. due to tropical depressions, tropical storms and hurricanes) was enhanced in the Caribbean when compared to the 2018 Season, but not as disastrous to many countries as the 2017 Season. However, Hurricane Dorian caused significant damage to parts of Abaco and Grand Bahama.
As of December 1st, the 2019 Hurricane Season is officially finished, but storms and hurricanes can occur and have occurred after the official end date. Severe weather systems, which can come with a range of hazards, including high winds, landslides, flash floods, coastal flooding, among others, may still affect Caribbean territories in December. From January onwards, this risk should be strongly reduced throughout the islands and Belize. 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.

Climatically, December to February forms the first half of the Caribbean Dry Season, characterised by a steady decrease in the frequency of wet days and longer wet spells, and an increasing number of dry days and dry spells. That said, up to one extreme wet spell occurs in December in Belize and the Caribbean Islands. By contrast, up to two extreme wet spells can occur in the coastal Guianas until the end of February, as this area experiences its secondary wet season. Extreme wet spells may coincide with thunderstorms and high winds, and often result in flash floods, which may be accompanied by land slippage, power outages and possible contamination of food and water supplies. Therefore, tourism stakeholders are encouraged to engage in proper planning for these possible scenarios.
Long term drought (on a 12 months timescale), which may affect water availability across a multitude of socio-economic sectors in a country, is evolving in Barbados, much of Belize and the Cayman Islands. It should be noted that, wherever long term drought persists during the dry season, drought impacts related to shortages in water availability typically worsen over time. By comparison, short term drought (on a 3-6 months timescale) is evolving in the northwestern Bahamas, and the Cayman Islands (medium to high confidence), which may impact food production, potable water availability, as well as, water collecting in small streams and small ponds. Finally, with a steadily increasing number of dry days and dry spells, the ground surface and foliage typically can dry out and increase the potential for wildfires by February, especially in areas currently experiencing short term drought. Tourism facilities should enhance/upgrade their water conservation practices (e.g. rainwater harvesting and repairs to leaky pipes) ahead of the peak of the dry season, advise staff and guests of the need for water conservation and fire safety on an ongoing basis.

Night-time and day-time temperatures in the Caribbean are forecast to feel seasonably comfortable, though evidence suggests it will probably be slightly warmer than usual for the cool season. Tourism practitioners may experience a slight 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.
There is a moderate to high risk of skin damage due to intense ultraviolet (UV) light emitted by the sun. During this period, the **UV index** will initially be moderately high on sunny days, but will increase in February. 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 expected to cool towards the end of February, with **virtually no coral bleaching expected beyond December**. For the month of December, bleaching alert level 1 (i.e. some bleaching is likely) only pertains to the ABC Islands and Trinidad and Tobago. 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.
Source markets in North America and Europe will experience cold weather throughout the winter, with prolonged episodes of dull and cloudy skies in northwestern Europe, including the UK. Tourism operators are therefore recommended to focus on enhanced 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 and cultural attractions on offer.
Climate Outlook for the Caribbean

Except in the Guianas, it is the Dry Season. What do we expect for the Caribbean?

How wet?
Regionally, rainfall totals from December to February are forecast to be, at best, as high as usual in the Bahamas, Belize and the Cayman Islands, but at least as usual in the ABC Islands, the Guianas and the Windward Islands (medium confidence).

How hot?
Night-time and day-time temperatures are forecast to be at least as warm as usual (medium to high confidence). As the period forms the cool season and humidity decreases towards February, the period should be seasonably comfortable for most and virtually free of heat waves (high confidence).

How dry?
Short term drought (on a 3-6 months timescale) is evolving in the northwestern Bahamas and the Cayman Islands (medium to high confidence) and may possibly develop or persist in the far northern Bahamas, Barbados, parts of Belize, and northwestern Puerto Rico (medium confidence).

Long term drought (on a 12 months timescale), is evolving in Barbados, much of Belize and the Cayman Islands (high confidence) and may possibly develop or persist in the ABC Islands, Haiti, Trinidad and the Windward Islands (with the exception of Grenada) (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/

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
Climate Outlook for Caribbean Source Markets

What do we expect in the source markets?

Winter cold affects most source countries, including the often dull skies in European source markets. At the same time, southern Florida is forecast to possibly be wetter than usual during this winter season.
Contact Us

Amanda Charles
Sustainable Tourism Specialist, CTO
Email: acharles@caribtourism.com

Dr. Roché Mahon
Social Scientist, CIMH
Email: rmahon@cimh.edu.bb

Shomari Jones
Sustainable Tourism Consultant, CTO
Email: joness@caribtourism.com

Loreto Duffy-Mayers
CHTA
Email: loreto.duffy-mayers@un.org

Dr. Cédric Van Meerbeeck
Climatologist, CIMH
Email: cmeerbeeck@cimh.edu.bb

Upcoming Events

January 21-23, 2020: CHTA Caribbean Travel Market Place, Nassau, Bahamas

Photo: The Bahamas Junkanoo Festival

Websites

Caribbean Tourism Organization:
www.onecaribbean.org

Caribbean Hotel and Tourism Association:
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

**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.


#### 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/](https://rcc.cimh.edu.bb/glossary-of-terms/)