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 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.

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Short term drought has developed in the ABC Islands, central Bahamas, southeast Barbados, eastern Dominican Republic, eastern Guadeloupe, parts of northern French Guiana, northernmost Guyana, Saint Lucia, and St. Vincent. At the same time, the ABC Islands, the Antilles (except for Antigua, Western Cuba, Dominica, Grenada, western parts of Guadeloupe, western Jamaica, Puerto Rico and Tobago), northernmost and southeastern parts of The Bahamas, much of northern French Guiana, and the Turks & Caicos Islands are in long term drought. By contrast, Puerto Rico and southwestern Dominica have observed rainfall totals well above average.

Most of the Caribbean has been significantly warmer than average, especially in parts of the Northwestern Bahamas, western Jamaica and French Guiana during this transition period out of the heat season (May to October) and into the cool season (December to March).
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 across the region, 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.

**Short term drought** (on a 3-6 months timescale) is evolving by the end of May in the ABC Islands, Barbados, Belize, Dominica, Grenada, Guyana, NE Puerto Rico, Martinique, Saint Lucia, St. Vincent, and Trinidad & Tobago (medium to high confidence), which may impact food production, potable water availability, as well as, water collecting in small streams and small ponds.
In addition, **long term drought** (on a 12 months timescale), which affects water availability across a multitude of socio-economic sectors in countries where the main freshwater resource is from very large rivers, large reservoirs or groundwater, is evolving by the end of May in Antigua, Barbados, the northwestern half of Belize, Grand Cayman, parts of coastal and interior Guyana, much of the Dominican Republic, St. Kitts, the Windward Islands, and the USVI (high confidence). 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.

With a high number of dry days and **dry spells** across the region, the ground surface and foliage typically can dry out and increase the **potential for wildfires**, especially in areas currently experiencing short term drought.

In the face of drought and dry spells, 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 warm up into May (high confidence) and will likely be warmer than in most recent years. At times, the heat may become uncomfortable across the region, especially in the event of **heat waves** which are relatively frequent during the month of May in Belize and Trinidad. Tourism practitioners should expect an increase in demand for cooling/hydration services (e.g. AC use and drinking water) and should advise their guests accordingly in the upcoming period.
There is a high risk of skin damage due to intense ultraviolet (UV) light emitted by the sun. During this period, the UV index will be very high to extremely high on sunny days. 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 and protective clothing 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 2020 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 possibly affect Caribbean territories. Tourism operators are advised to constantly 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/), and abide by any official advisories issued by the National Meteorological Service in their country. At all times, tourism operators should maintain a state of readiness, including communication plans and response protocols to deal with sudden eventualities.
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. In addition, some competing markets in South East Asia may suffer from increased air pollution and too hot temperatures for the comfort and health for some tourists.

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 environments on offer.
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 indicate as dry as usual or drier conditions in the ABC Islands, the Leeward Islands and Trinidad & Tobago, but likely the usual or wetter in the Bahamas, Cuba, eastern parts of the Guianas and Jamaica (medium confidence).

How hot?
Night-time and day-time temperatures are forecast to likely be at least as warm as usual across most of the Caribbean (medium tp high confidence). As the period forms the transition from the cool season to the heat season and humidity increases slightly towards May, the period should be seasonably comfortable during March for most, but heat discomfort will appear and increase from April and May onwards across the region, with the possibility of several heat waves in Belize and in Trinidad during May (high confidence).

How dry?
Short term drought (on a 3-6 months timescale) is evolving by the end of May in the ABC Islands, Barbados, Belize, Dominica, Grenada, Guyana, NE Puerto Rico, Martinique, Saint Lucia, St. Vincent, and Trinidad & Tobago (medium to high confidence) and might possibly develop or continue in Leeward Islands, Dominican Republic, northern French Guiana, and Suriname (medium confidence).

Long term drought (on a 12 months timescale), is evolving by the end of May in Antigua, Barbados, the northwestern half of Belize, Grand Cayman, parts of coastal and interior Guyana, much of the Dominican Republic, Guyana, St. Kitts, the Windward Islands, and the USVI (high confidence), and may possibly develop or persist in most other areas (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?

There are signs in the seasonal forecasts suggesting southeastern Canada and northern Europe may be warmer than usual during spring. At the same time, the southeastern US are forecast to possibly be wetter than usual during this spring season.
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Upcoming Events

CTO Sustainable Destination Management Webinar: March 12, 2020


Websites

Caribbean Tourism Organization:
www.onecaribbean.org

Caribbean Hotel and Tourism Association:
www.caribbeanhotelassociation.com

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

Disclaimer

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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/