



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

CARIBBEAN TOURISM CLIMATIC BULLETIN

for Tourism Businesses and Policymakers

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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 (June - August 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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COVID-19 PANDEMIC

The direct link between the spread of COVID-19 and the movement of people has resulted in the **closure of tourism activities and business across the region**. The impact has been unprecedented because of the abrupt way in which these closures happened, as well as the global scale of the pandemic crisis.

Climate risk management linked to enhancing visitor health and safety, is a critical factor in ensuring tourism sector resilience and managing the overall visitor experience. The **convergence of the COVID-19 pandemic with an active Atlantic Hurricane season will present a challenge to Caribbean countries**. Tourism interests across the region should be prepared to deal with weather and climate emergencies in addition to the added concern of managing the current COVID-19 pandemic. Be assured that the CTO, CHTA, and CIMH will continue to closely monitor the situation and issue the relevant climate outlooks.

Looking Back: February - April 2020



Short term drought has developed across central and southeastern parts of the Bahamas, in northern Belize, the Cayman Islands, Cuba, northern and western Guyana, Hispaniola, Martinique, southern Saint Lucia, southeastern Suriname and western Trinidad, impacting mainly on food production and small surface water reservoirs. Aruba, northern and southeastern parts of the Bahamas, Barbados, Belize, the Cayman Islands, northern Cuba, the Dominican Republic, northwestern French Guiana, Martinique, Saint Lucia, St. Vincent, Trinidad and St. Croix are in **long term drought**. The latter means water resources have been depleted faster during the 2019-2020 Dry Season than in many other years throughout much of the region. In fact, in Belize and the affected islands of the Lesser Antilles, rainfall deficits during the preceding 2019 Wet Season strongly contributed to the ongoing long term drought.



Averaged over February, March and April, **temperatures** were warmer than usual across virtually the entire Caribbean. Even so, comfortably cool conditions prevailed in February and March. By contrast, in April, temperatures and the accompanying heat sensation rose at a faster rate than usual. Record high temperatures in April were recorded in Belize, Saint Lucia, St. Kitts and Sint Maarten. Finally, for the second consecutive year, Cuba has recorded an all-time high temperature close to 40°C.

Climate Advisories: Caribbean

June through August marks: 1) part of the long Dry Season in the ABC Islands, 2) the early Wet Season in Belize and the Lesser Antilles, 3) the summer portion of the Wet Season in the Greater Antilles, and 4) the transition from the Wet to the Dry Season in the Guianas.

What should you do?



The **2020 Atlantic Hurricane Season** officially starts on June 1st and is forecast to be active with the consensus suggesting **close to 16 named storms and around 8 hurricanes** over the entire season.



Storms and hurricanes have, (including 3 named Tropical Storms this year), occurred 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 keenly 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/>). Given the current global COVID-19 pandemic, at all times, tourism operators should maintain a state of readiness, including communication plans and response protocols to deal with sudden eventualities.

We expect wetter than usual conditions will bring progressive drought relief and keep daytime temperatures close to normal. However, **night time heat stress, flood potential and tropical cyclone activity will be particularly elevated**. That said, there is a chance that more heat stress and slower drought relief will take place than anticipated, wherever rainfall does not end up being very high.

Climate Advisories: Caribbean Cont'd



Climatically, June to August forms the **first half of the Caribbean Wet Season** with a fair number of wet days and longer wet spells, and a decreasing number of short dry spells. Some of these dry spells may coincide with incursions of **Saharan dust**, which tends to be most frequent around this time of the year, particularly in the Lesser Antilles. The combination of dryness and dust may impact on respiratory and ocular illness in employees and visitors. Besides such dry spells, the intensity and frequency of heavy showers tends to be relatively high and clustered in wet spells and **very wet spells** throughout the period, particularly towards August.



In addition, the forecasts suggest **more rainfall to accumulate over the three month period than usual**, with an increase in the number of wet spells and very wet spells in most areas (medium confidence). Consequently, there is growing **potential for flooding** throughout Belize and the Caribbean Islands (high confidence). In the coastal Guianas, flooding potential should start decreasing in August, with the return of their primary dry season (high confidence). **Extreme wet spells**, of which up to one or two are expected during these three months (high confidence), 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 for tourism operators, especially those operating outdoors. Tourism facilities should clear their drainage and clean catchment systems as soon as possible.

Climate Advisories: Caribbean Cont'd



Ongoing severe drought is expected to progressively ease throughout the Caribbean, with significant **short term drought relief expected by the end of July and long term drought relief mostly after August.**

By the end of August, impactful **short term drought** is likely to subside throughout the region, except in north-western and west-central Belize, where it is likely to remain, and in the ABC islands, eastern Belize, and Trinidad & Tobago, where it is less likely to remain. Short term drought may impact food production, potable water availability, as well as, water availability from small streams and small ponds. With the forecasted short term drought relief for most, the potential for bushfires should largely subside, reducing the occasional increases in smoke and soot concentrations in the air.

Long term drought, which can affect water availability across a multitude of socio-economic sectors in a country, may possibly persist through the end of November in west-central Belize, northern French Guiana, Martinique, Saint Lucia, St. Vincent, and Trinidad. Tourism facilities should continue to enhance/upgrade their water conservation practices, as well as, rainwater harvesting and repairs to leaky pipes, etc., and advise staff and guests of the need to reduce water wastage on an ongoing basis.

Climate Advisories: Caribbean Cont'd



Night-time and day-time temperatures in the Caribbean are set to remain high throughout this portion of the **Caribbean's annual heat season which starts in May and ends in October**. The exception is the Guianas which tend to be slightly cooler during their primary wet season lasting through the end of July. At the same time, humidity and the associated **heat stress** will steadily increase through August, and will peak during heatwaves. Note that the forecasts suggest warmer than usual temperatures during both day and night, except where rainfall totals will be significantly higher than usual. Consequently, there may be an increase in the frequency of **heatwaves** when compared to most years (high confidence). Tourism practitioners should expect an increase in demand for cooling/hydration services (e.g. AC use, use of pools and showers, and drinking water) in the upcoming period as compared to the same period in recent years.



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 extremely high on sunny days (with details available here: <https://www.epa.gov/sunsafety/uv-index-scale-1>). 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 will warm up into August, but are not yet expected to become so warm as to trigger **coral bleaching** throughout the period, with the possible exception of northern portions of the Bahamas 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.

Climate Advisories: Caribbean Source Markets

June to August marks the summer season in the source markets. What should you do?

Although most source markets are still not fully open to foreign travel, they tend to experience the warm and sunny summer conditions vacationers are seeking at this time, with the exception of northern Europe. Tourism operators are therefore recommended to focus on enhanced marketing efforts to attract visitors. Additionally, they should differentiate themselves through innovative package offers, memorable customer service (including enhanced COVID-19 protocols), and activities that take advantage of the pristine natural environments on offer.

In addition, inbound Tour Operators are recommended to monitor the weather forecasts, as well as, the COVID-19 situation in the source markets during this season. They should be on the lookout for reports of inclement summer weather in Canada and northern Europe. In addition, some competing markets in the ASEAN region of South East Asia are expected to likely see wetter than usual conditions. Marketing efforts should focus on attracting visitors to the generally sunny, warm and breezy weather, and general health and safety, in the Caribbean Islands, as well as, in the coastal areas of Belize and the Guianas.

Climate Outlook for the Caribbean

Except in the ABC Islands, it is the wet season. What do we expect for the Caribbean?

How wet?

Regionally, **rainfall totals** from June to August are likely to be at least as wet as usual in the Greater Antilles, the Guianas, and the Leeward Islands. (medium confidence).

How dry?

Short term drought (on a 3-6 months timescale) is evolving by the end of August in northwestern and west-central Belize (medium to high confidence) and might possibly continue in the ABC islands, eastern Belize, and Trinidad & Tobago (medium confidence) by the end of August.

Long term drought (on a 12 months timescale), may possibly remain in place in west-central Belize, northern French Guiana, Martinique, Saint Lucia, St. Vincent, and Trinidad by the end of November (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://www3.cimh.edu.bb/>

How hot?

Night-time and day-time temperatures are likely to be at least as warm as usual across the Caribbean (medium to high confidence). Heat waves tend to become more frequent by July in The Bahamas and Turks and Caicos, and the Greater Antilles. They become more frequent by August in the rest of the Caribbean. In view of the ongoing drought, which increases the chance of heat waves, heat stress is expected to be a greater concern than in most recent years in Barbados, the Windward Islands and Trinidad and Tobago (high confidence).

Sargassum Outlook

Tourism operators may consult the University of the West Indies / Centre for Resource Management and Environmental Studies (UWI/CERMES)'s Sargassum sub-regional Outlook Bulletin for the Eastern Caribbean or the monthly University of South Florida (USF)/NASA Sargassum Outlook Bulletin for the entire Caribbean before planning activities. Click here to access the latest UWI/CERMES product:

https://www.cavehill.uwi.edu/cermes/projects/sargassum/docs/bulletin/sargassum_outlook_bulletin_issue_04_mjj_cermes_202.aspx

Click here to access the USF/NASA 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 much of Europe and the eastern half of Canada may be warmer than usual during summer.



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Upcoming Events

No upcoming events



Disclaimer

Websites

Caribbean Tourism Organization:
www.onecaribbean.org

Caribbean Hotel and Tourism Association:
www.caribbeanhotelassociation.com

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

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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.

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/>