



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 (September - November 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: May - July 2020



As of 28 August 2020, the **2020 Hurricane Season** has already brought about a record 13 named Tropical Storms, of which 4 had developed into hurricanes and 1 into a major hurricane (Laura).



As of August 1st, **short term drought** has developed in Dominica, southern Guadeloupe, southwest French Guiana, southwest Hispaniola, Martinique, Saint Lucia, western Trinidad & eastern Tobago. At the same time, northernmost & southeastern islands in the Bahamas, Belize, the Cayman Islands, the Dominican Republic, eastern Guadeloupe, western French Guiana, southwest Puerto Rico, St. Croix, western Trinidad, and the Windward Islands (excluding Dominica & Grenada) are in **long term drought**. Whereas short and/or long term drought may be in place, it should be noted that wet season rains have begun to put a dent in the 2019-2020 regional drought across much of the affected Caribbean Islands (with the notable exceptions of parts of the Dominican Republic, Haiti, Jamaica, and the Windward Islands) and Guyana.



With the period forming the first half of the Caribbean heat season, **temperatures** have remained high across virtually the entire Caribbean, especially in parts of the Northwestern Bahamas, Belize, Grand Cayman, Cuba, Jamaica, the US Caribbean Territories and in the southern half of the Lesser Antilles. Barbados and Grenada faced their warmest July on record, accentuated by a record-long heatwave in July in Barbados.

Climate Advisories: Caribbean

September through November marks: 1) the late wet season in Belize and the Caribbean Islands, 2) the transition to the wet season in the ABC Islands, and 3) the dry season in the Guianas. What should you do?



The **2020 Hurricane Season** officially lasts until November 30th, with the peak of tropical cyclone activity typically lasting until around mid-October, but storms and hurricanes have occurred after the official end date. As of the latest forecasts (produced in early-August), there remained a strong consensus that this year will bring a **particularly active season** with a forecasted 2020 season total of between 19-25 named storms, of which there may be between 7-11 hurricanes (high confidence) and possibly more.



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.

Climate Advisories: Caribbean Cont'd



Climatically, September to November forms the **second half of the Caribbean Wet Season** with a large number of wet days and frequent wet spells, but at the same time, still a number of short dry spells, particularly in the Greater Antilles. This year, the possibility of a La Niña event in the Pacific, as well as, particularly high ocean temperatures around the Caribbean both tilt the odds towards even more frequent and more intense rainfall, and higher rainfall totals across the Caribbean (*medium confidence*). The intense and frequent heavy showers clustered in **very wet spells** and **extreme wet spells** throughout the period in Belize and the Caribbean Islands results in high **potential for long-term flooding** in flood-prone areas, as well as, for **flash floods** (*high confidence*).



Moreover, the forecast suggests a higher than usual number of very wet and extreme wet spells, further increasing flood potential (*medium confidence*). By contrast, in the coastal Guianas, flood potential should be relatively low up until the onset of their secondary wet season in mid- to late-November (*high confidence*). Besides often resulting in flash floods, extreme wet spells may coincide with thunderstorms and high winds, land slippage or rockfall, power outages and possible contamination of food and water supplies. It should be emphasized that, while tropical cyclones typically produce extreme wet spells, a majority of extreme wet spells occur during the passage of other weather systems. Therefore, proper planning / contingencies for these scenarios is imperative for tourism operators, especially those operating outdoors. Tourism facilities should continue to regularly clear their drainage and clean catchment systems.

Climate Advisories: Caribbean Cont'd



Long term drought (12 months), which may affect water availability across a multitude of socio-economic sectors in a country, should slowly ease in most affected areas. However, by the end of November, long term drought is expected to potentially persist in Martinique, Suriname, and Trinidad (medium to high confidence).

By contrast, **short term drought** (3 to 6 months) is unlikely to be of significant concern in most countries by the end of November, with the possible exception of southwest Belize and Trinidad (medium confidence). Short term drought may impact food production, potable water availability, as well as, water availability from small streams and small ponds. However, such drought impacts are not expected to be widespread or pronounced at this time.

Climate Advisories: Caribbean Cont'd



High temperature, high air humidity and heat waves are expected to raise the concern about **excessive heat exposure** this year (*high confidence*). The risk of excessive heat exposure is set to last until late-October across the region. In Barbados, Guadeloupe, the Guianas and the Windward Islands this risk may reach similar levels this year as during the hottest times in recent years (i.e. 2010 and 2016) and may put additional stress on healthcare services.

Night-time and day-time temperatures in the Caribbean are forecast to remain at least as high as usual for the remainder of the **Caribbean Heat Season** - which starts in May, peaks in September and ends in October - (*medium to high confidence*). A higher than usual number of heat waves are forecast to occur in most locations in September (*medium to high confidence*), particularly in Barbados, Guadeloupe and the Windward Islands. In addition, in Barbados, the Windward Islands, Trinidad and Tobago and the Guianas, heat waves are also possible through October.

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 three years. Persons (i.e. both staff and visitors) should be sensitised to the importance of staying cool and properly hydrated.

Climate Advisories: Caribbean Cont'd



The noon time **UV index** on sunny days will decrease from extremely high (11-12) initially to very high (8-10) by the end of November (on a scale from 1 to 12, with details available here: <https://www.epa.gov/sunsafety/uv-index-scale-1>). There is still a high risk of skin damage due to intense UV radiation, though it will decrease to a certain extent towards the end of November. 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 working outdoors.



Ocean temperatures will peak in September and are forecast to remain warm enough to trigger **coral bleaching** during October and November across most of the islands. According to the Caribbean Coral Reef Watch, the bleaching outlook suggests that most of the Caribbean will be under Alert Level 1 (i.e. bleaching is likely) in October and November, with northern Hispaniola reaching Alert Level 2 (i.e. widespread bleaching is expected). Hispaniola and the Windward Islands are expected to remain under Alert Level 1 through December. This is a good season to minimise runoff of pollutants into coastal waters and to encourage the use of reef-safe sunscreen by guests and locals alike, which can increase the survival chances of coral reefs.

Climate Advisories: Caribbean Source Markets

**September to November marks the Autumn season in the source markets.
What should you do?**

Although there are some restrictions to foreign travel from some northern source markets, they will experience less sunny and cooler weather in the Autumn season. This may create a climate driven increase in demand for Caribbean vacations.

Inbound Tour Operators are advised 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 autumn weather in Canada and northern Europe. In addition, some competing markets in the ASEAN region of Southeast Asia are expected to likely see wetter than usual conditions, with increased chances of flooding and reduced sunshine. Marketing efforts could focus on attracting visitors to the generally sunny, warm and breezy weather, and general health and safety in the Caribbean region.

Climate Outlook for the Caribbean

We are moving into the wettest time of the year. What do we expect for the Caribbean?

How wet?

Regionally, rainfall totals from September to November are likely to be at least as high as usual in the western parts of the Guianas, as well as, in much of the Antilles (*medium confidence*).

How dry?

Short term drought (on a 3-6 months timescale) is unlikely to be of significant concern by the end of November, with the possible exception of southwest Belize and Trinidad (*medium confidence*). **Long term drought** (on a 12 months timescale) should slowly ease in most affected areas, particularly after August, but may still evolve in Martinique, Suriname, and Trinidad (*medium to high confidence*).

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 remain frequent across the entire region during September and in Barbados, Guadeloupe, the Guianas and the Windward Islands during October. Usually, there are up to 5 heatwave days in the Bahamas, Belize and the Greater Antilles between September and November, 7-12 days in the Lesser Antilles and 14-21 days in the coastal Guianas. The number of heatwaves is forecast to be up to twice the usual number or higher (*medium confidence*). By consequence, heat stress is expected to be a greater concern than in most recent years in Barbados, Guadeloupe, the Guianas and the Windward Islands (*high 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 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?

With the beginning of the Autumn season in September, based on historical information, we expect less sunny and cooler weather in most northern source markets. While the current rainfall forecasts provide no specific indication of seasonal climate beyond these historical expectations, temperatures are unlikely to be cooler than usual (*medium confidence*).



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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>

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. CTO, CHTA and CIMH disclaim any liability with respect to the use of any information within this document by any person or entity.

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.

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.

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.

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/>