



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

# CARIBBEAN TOURISM CLIMATIC BULLETIN

for Tourism Businesses and Policymakers

March-May 2025 | Vol 9 | Issue 1



# Purpose

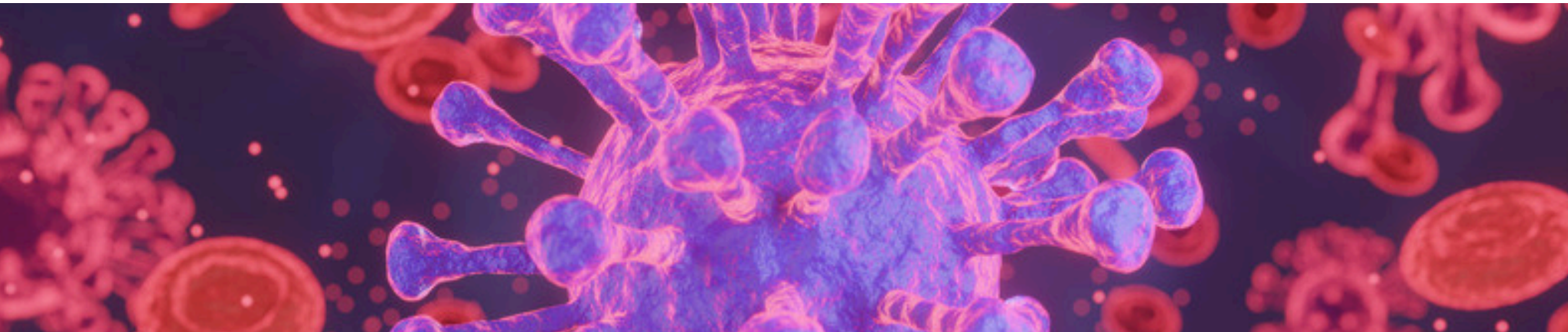
This Bulletin is a joint effort between the Caribbean Tourism Organization (CTO), the Caribbean Hotel & Tourism Association (CHTA) and the Caribbean Institute for Meteorology and Hydrology (CIMH) to help tourism businesses and policymakers identify and prepare for favourable or inclement climate conditions 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 2025) 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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# CLIMATE RISK MANAGEMENT & VISITOR HEALTH

Climate risk management linked to enhancing visitor health and safety, remains a critical factor in ensuring tourism sector resilience and managing the overall visitor experience. Tourism interests across the region should be prepared to deal with weather and climate emergencies in addition to ongoing concerns related to managing COVID-19, other respiratory issues and dengue, as well as other possible health threats as they arise. The CTO, CHTA, and CIMH will continue to closely monitor the situation.



# 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 **late Dry Season** in Belize and the Caribbean Islands.

This season is typically characterised by relatively few **wet days** and a small number of **wet spells**, but many dry days and quite a few **dry spells**. The resulting drier surface and foliage increase **wildfire potential** and the concentration of local dust. At the same time, incursions of **Saharan dust** into the Caribbean typically increase in frequency.



In The Bahamas, the Greater Antilles, and the Guianas, the **wet season** usually tends to start in May, with a return of heavy rainfall.



Largely fueled by drier soils, the onset of the **Caribbean Heat Season** – characterised by the recurrence of heatwaves – typically occurs in April or May. Nonetheless, in recent years, the onset has occurred as early as March (in Belize and Trinidad) or April (elsewhere).



In addition, though the **2025 Hurricane Season** officially starts on 1 June, severe weather events, including storms and hurricanes have occurred and are increasingly common before that date. Severe weather events can come with a range of hazards, including high winds, landslides, long-term flooding, flash floods, coastal flooding, among others.

# Climate Advisories: Caribbean


This year, high **sea surface temperatures** in the Tropical North Atlantic Ocean and the Caribbean Sea are expected to persist. By contrast, weak **La Niña** conditions in the tropical Pacific Ocean will *more likely than not* make way for ENSO neutral conditions.

Years in which Atlantic ocean temperatures are high typically drive (1) an uptick in **excessive, humid heat** in the Caribbean to the point of **significant heat stress** in the Heat Season and, later in the year, potentially triggering **coral reef bleaching**; (2) an early and often **rapid transition into the wet season** – particularly in Barbados, Trinidad and Tobago and the Windward Islands – with frequent, heavy showers triggering episodes of flooding and flash floods; and (3) an increase chance for an early onset of an **active Atlantic Hurricane Season**.


If intrusions of **dusty, dry air from the Sahara** into the Caribbean end up being more frequent than usual, 2025 will be even **hotter & more humid**, often with hazy conditions. By contrast, more Saharan air intrusions also translate to **more erratic tropical cyclone and other severe weather activity**, as well as **reduced potential for flooding**, flash floods and associated hazards and impacts. Conversely, any ongoing **drought concerns** may be prolonged, with increased wildfire potential and frequency of dry spells. Because the exact timing of these Saharan air intrusions is not predictable at the seasonal timescale, but weather forecasts (up to 7 days in advance) can easily pick these up, it is recommended that stakeholders pay close attention to the local weather forecasts as it pertains to haze and dust

# Climate Advisories: Caribbean

The forecast for March to May 2025 further suggests:



Night-time and, with the exception of the area from Haiti eastwards to the Leeward Islands, daytime temperatures are forecast to be higher than usual in most areas (*medium to high confidence*). Therefore, significant episodes of **heat stress** may appear as the region is forecast to transition into the Heat Season in April. However, heatwaves might already be recorded this March in a number of locations, notably where soil moisture content is even lower than usual. Therefore, tourism practitioners should expect a significantly higher demand for cooling/hydration services (e.g., AC use and refrigeration use, use of pools and showers, and drinking water) than usual for the period, and should advise their staff and guests accordingly in the upcoming period.



**Severe weather** systems related to tropical cyclones, as well as heavy showers may affect Caribbean territories repeatedly in April and May. Tourism operators are advised to **constantly monitor and abide by weather advisories** issued by 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 Cont'd



Apart from The Bahamas and Cuba, seasonal **rainfall amounts** are forecast to be the usual or even higher in the rest of the region (*medium confidence*).

**Short-term drought** is expected to be a significant concern by the end of May 2025 in the northern Bahamas and in Grand Cayman (*medium to high confidence*), but also *possible* in the central Bahamas, western Cuba, and Jamaica (*medium confidence*). Short-term drought may impact food production, water quality and quantity from small streams, small ponds and other surface sources.



**Long-term drought** is expected to be a significant concern by the end of May 2025 in the northern Bahamas and southwest Belize (*high confidence*) and might possibly develop or continue in the ABC islands, the central Bahamas and southeast Puerto Rico (*medium confidence*). Long-term drought (on a 12 months timescale) 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.



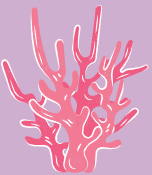
Tourism facilities should continue to enhance/upgrade their water conservation practices, as well as rainwater harvesting and repairs to leaky pipes, etc., and advise staff and guests of the need to reduce water wastage on an ongoing basis.

# Climate Advisories: Caribbean Cont'd

In view of the very *high* to *extremely high* exposure to **harmful UV light** 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.




Though widespread marine heatwaves triggered a mass **coral bleaching** event in the second half of 2024, ocean temperatures are not expected to become as warm to trigger coral bleaching between March and May 2025. It should be noted that a portion of the recently bleached corals may recover in cooler, clear and clean water. Therefore, it is imperative to minimise runoff of pollutants into coastal waters and to encourage the use of reef-safe sunscreen by guests and locals alike. This can increase the survival chances of coral reefs. This is also 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 Cont'd



The frequency of **Saharan dust** incursions into the Caribbean tends to increase during this period to peak starting in May. It should be noted that, in some years, significant Saharan dust episodes also occur in March and April. (Access more detailed forecast information on dust and air quality in the Caribbean here: <http://dafc.cimh.edu.bb/>). **Local dust** levels should be increasing during prolonged dry spells and towards the end of the dry season. Tourism practitioners should be aware that there may be an increase in visitors and staff experiencing respiratory and eye-related concerns.

# Climate Advisories: Caribbean Source Markets

**March to May marks the spring season in the source markets.**

**What should you do?**

Inbound Tour Operators are recommended to monitor the weather forecasts in the source markets. They should be on the lookout for reports of inclement weather in Canada, northern US and northern Europe (e.g., cold spells, torrential rains, prolonged periods of gloomy skies, etc.).

In addition, some competing markets in the ASEAN region of Southeast Asia which will experience the hottest part of the year and the late dry season in this period (i.e., Vietnam, The Philippines and Thailand), with a high chance of extreme heat and recurrent wildfires. These conditions would result in high concentration of smoke haze and its degrading impact on air pollution.

Marketing efforts could focus on attracting visitors to the generally sunny, warm and breezy weather, and general health and safety in the Caribbean region. Additionally, they should differentiate themselves through innovative package offers, memorable customer service (bearing in mind appropriate health protocols where applicable), and activities that take advantage of the pristine natural environments on offer.



# Surf and Sargassum Outlook

## 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/outlook-bulletin.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://caribbeanhotelandtourism.com/publications/>

Additional resources and publications for Sargassum management are also available from CTO here: <https://www.onecaribbean.org/our-work/sustainable-tourism-dept/sargassum-resources/>



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# Upcoming Events

- 1. CTO - Sustainability in Action Webinar (date TBA)**
- 2. CHTA Marketplace, 18-22 May 2025, Antigua and Barbuda**
- 3. CIMH hosted 2025 Wet/Atlantic Hurricane Season Caribbean Climate Outlook Forum, 22-23 May 2025, Grenada**
- 4. The Global Sustainable Islands Summit 2025, 25-30 May, St. Kitts**

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

## 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>

# Glossary

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

Forecast information in this Bulletin 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.

**Caribbean Heat Season** - most heatwaves and the associated spikes in heat stress occur between April or May and October in the Caribbean

**Caribbean Cool Season** - occurs between December and February or March when the Caribbean experiences comfortably cool weather

**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/>