



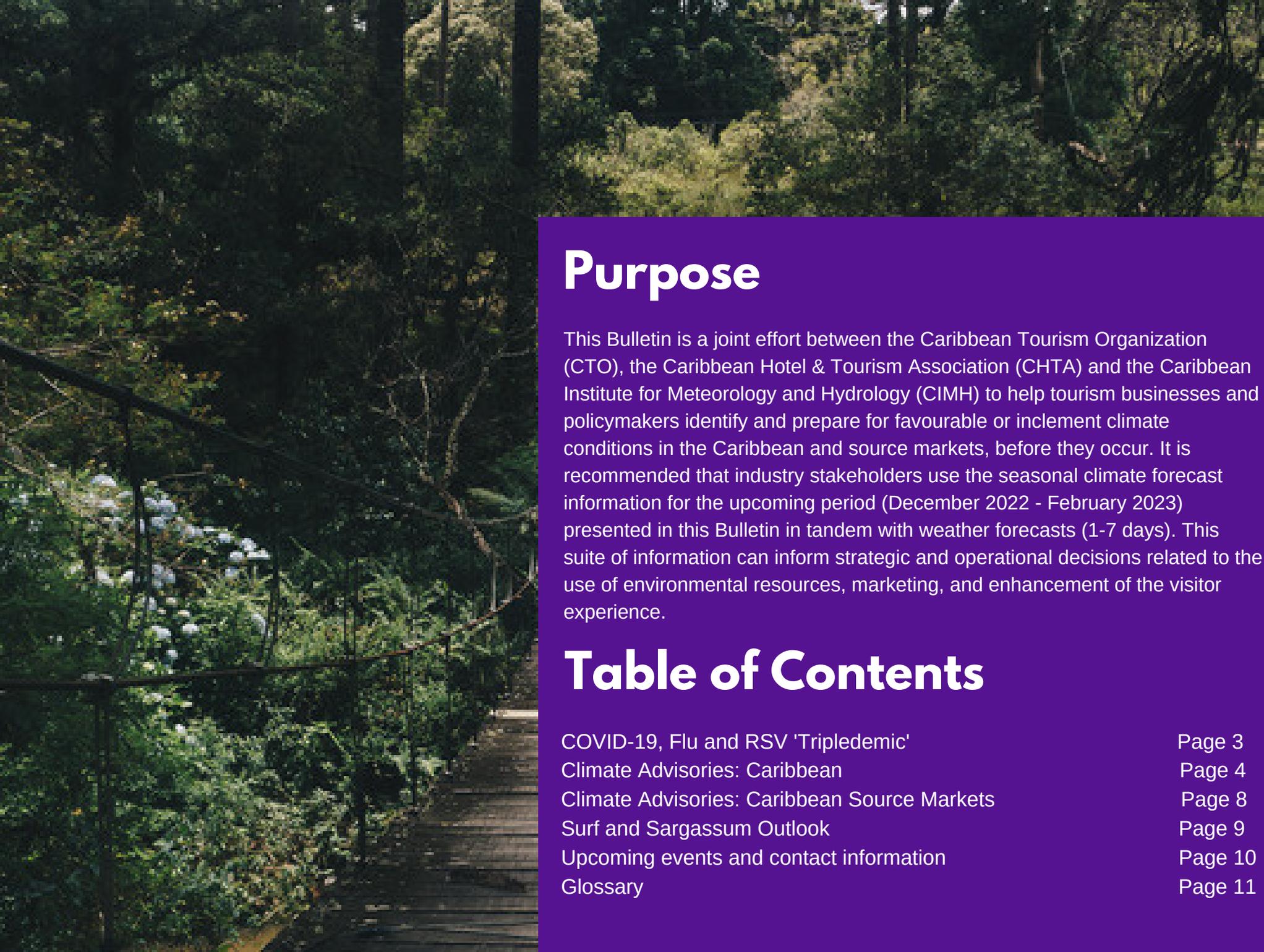
A Joint Bulletin of the CTO, the CHTA and the CIMH

CARIBBEAN TOURISM CLIMATIC BULLETIN

for Tourism Businesses and Policymakers

Dec 2022 - Feb 2023 | Vol 6 | Issue 4



A lush green forest with a wooden walkway and a rope bridge. The scene is filled with dense foliage and tall trees, creating a serene and natural atmosphere. The walkway is made of wooden planks and is bordered by a rope railing. The background shows a dense canopy of green leaves and branches, with some sunlight filtering through. The overall tone is bright and natural, with a focus on the environment.

Purpose

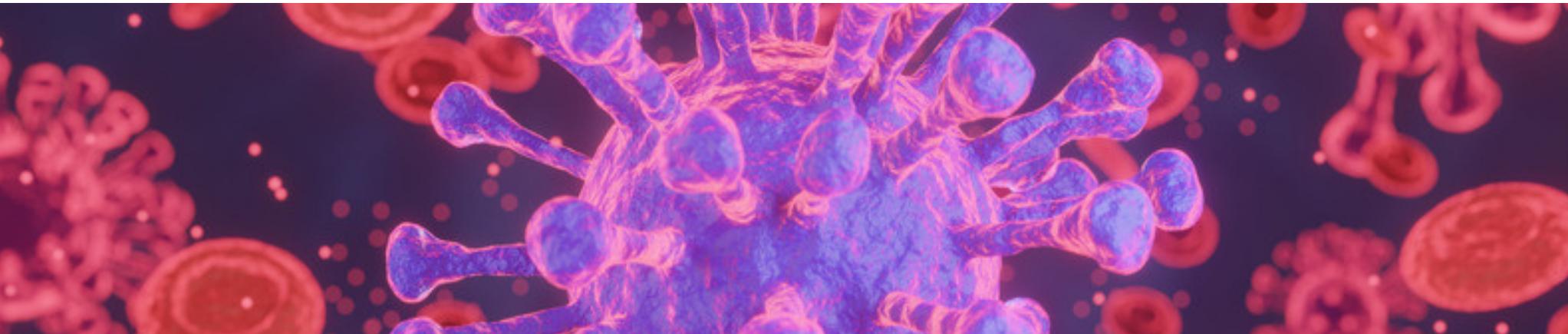
This Bulletin is a joint effort between the Caribbean Tourism Organization (CTO), the Caribbean Hotel & Tourism Association (CHTA) and the Caribbean Institute for Meteorology and Hydrology (CIMH) to help tourism businesses and policymakers identify and prepare for favourable or inclement climate conditions 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 2022 - February 2023) 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, FLU & RSV 'TRIPLEDEMIC'

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 the 'Tripledemic', as well as other possible threats as they arise. The CTO, CHTA, and CIMH will continue to closely monitor the situation.



Climate Advisories: Caribbean

December through February marks: 1) the early dry season in the Caribbean Islands and Belize, except for the ABC Islands which transition into the long dry season; and 2) the secondary wet season in the coastal Guianas.

What should you do?



The **2022 Hurricane Season** officially ended November 30th, but severe weather events, including storms and hurricanes have occurred after the official end date. Severe weather events can come with a range of hazards, including high winds, landslides, long-term flooding, flash floods, coastal flooding, among others.

The potential for **floods and cascading hazards** -- such as land slippage or rockfall, power outages and possible contamination of food and water supplies -- arising from excessive rainfall is expected to be moderate (two to five times in 10 years) throughout the Greater Antilles, Belize and the Leeward Islands and high (every other year or more) in the ABC Islands, Barbados, the Windward Islands and Trinidad and Tobago in the month of December. This potential decreases to marginal (seldom) to limited (once every 5 to 10 years) in February. In the coastal Guianas, flash flood potential will be extremely high (in most years) until early-February and decreases to limited or moderate by the end of February.



Climate Advisories: Caribbean

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/>). Tourism operators should, at all times, maintain a state of readiness, including communication plans and response protocols to deal with sudden eventualities.

The historical record shows that the first half of the **Caribbean Dry Season** in the Bahamas, Belize, the Greater and Lesser Antilles is usually characterised by a steady decrease in the frequency of wet days and in the intensity of heavy showers. Conversely, the number of **dry days and dry spells** is high westwards of Puerto Rico throughout the period while, further east, their frequency increases towards the end of February. The resulting drier surface and foliage increase wildfire potential and the concentration of airborne particulates.

By contrast, in the Guianas, the **secondary wet season** usually runs until early-February, while in the ABC Islands, the wet season usually runs until January.



Climate Advisories: Caribbean Cont'd

In the context of the above weather and climate characteristics for December 2022 to February 2023, the **seasonal forecast** further suggests:

- A weak to **moderate La Niña event** persisting in the Pacific Ocean throughout 2022, tilting the odds towards slightly cooler but wetter conditions. The potential for long-term flooding, flash floods and cascading hazards is therefore even higher than usual. The exception is the Bahamas and Cuba, where La Niña tends to make the dry season even drier than usual, increasing chances of drought, the frequency of dry spells, wildfire potential and airborne particulates.
- **Short-term drought** (on a 3-6 months timescale) concerns at the end of February 2023 are few in the region. However, some concern arises in The Bahamas, parts of Belize, Central and Eastern Cuba, potentially impacting food production, water quality and quantity from small streams, small ponds and other surface sources (*medium confidence*). **Long-term drought** (on a 12 months timescale), which may affect water availability across a multitude of socio-economic sectors in a country, is not a major concern at this time (*high confidence*).
- **Heat discomfort** during the core of the Caribbean Cool Season – which runs from December through March – should not be of significant concern (*high confidence*).



Climate Advisories: Caribbean Cont'd



Exposure to **harmful UV light** on sunny days will be high in the northern Bahamas and very high elsewhere until January, and then increase to very high and extremely high by February, respectively. 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 decrease to their annual minimum by the end of February, but may still be sufficiently high to cause **bleaching to coral reefs** in the far southern Caribbean in December. 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, which 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.

The frequency of **Saharan dust** incursions into the Caribbean tends to be low during this period though, in some years, significant episodes occur as early as February. (Access more detailed forecast information on dust and air quality in the Caribbean here: <http://dafc.cimh.edu.bb/>). Though initially low, **local dust** levels may increase towards February, particularly in areas under short-term drought. Tourism practitioners should be aware that visitors and staff may temporarily experience symptoms associated with respiratory ailments during dust episodes.

Climate Advisories: Caribbean Source Markets

**December to February marks the Winter season in the source markets.
What should you do?**

Although there may be some issues in some northern source markets related to the COVID-19, Flu and RSV 'Tripledemic', they will experience winter cold, short days and limited sunshine. This may create a climate driven increase in demand for Caribbean vacations, as well as vacations to Florida, the desert southwest and the southeast of the United States. Due to La Niña, drier and sunnier weather than usual is expected in the latter areas of the US. Inbound Tour Operators are recommended to monitor the weather forecasts, as well as, the 'Tripledemic' situation in the source markets during this season. They should be on the lookout for reports of inclement winter weather in Canada, northern US 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.



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/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>



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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 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/>



**Best Wishes for a Safe,
Prosperous & Productive 2023!**