With this issue, the CTO, CHTA and CIMH celebrate the 5th Anniversary of the publication of the Caribbean Tourism Climatic Bulletin!
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 2022) 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 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 COVID-19 pandemic. The CTO, CHTA, and CIMH will continue to closely monitor the situation and issue the relevant climate outlooks.
The November 2021 to January 2022 period saw lingering seasonal dryness throughout most of the eastern Caribbean with many of those islands experiencing severely dry or drier conditions.

Although temperatures were warmer than usual, they were generally comfortable across the region.
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?

On average, 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.

The intensity and frequency of rainfall increases towards May, especially in the Greater Antilles and the Guianas. **Extreme wet spells** become a possibility and very wet spells a more frequent occurrence from April onwards across the region. Extreme wet spells 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 (please see page 13, Glossary, for definitions of extreme and very wet spells).

**Short term drought** (on a 3-6 months timescale) is evolving by the end of May in The Virgin Islands and Sint Martin (medium confidence). Short term drought implications may include impacts on food production, water quality, flow rates from small streams, and water levels in small ponds and other surface sources.
**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. Long term drought is evolving by the end of May in Aruba, Antigua, parts of Belize, Dominica, Guadeloupe, Martinique, Sint-Martin, Saint Lucia, The Virgin Islands (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), and advise staff as well as guests of the need for water conservation and fire safety on an ongoing basis (please see page 13, Glossary, for definitions of dry days and dry spells).

**Night-time and day-time temperatures** in the Caribbean are forecast to warm up into May (high confidence). The early part of the Caribbean Heat Season which runs between April to July is characterized by low humidity heat with the sensation of dryness.
Temperatures are likely to be warmer than usual in The Bahamas, Belize, the Cayman Islands and Cuba. 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, particularly 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.

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), especially 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 frequency of **Saharan dust** incursions into the Caribbean tends to increase during this period with a peak in May. It should be noted that, in some years, significant Saharan dust episodes also occur in March and April. 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 symptoms in visitors and staff with respiratory ailments.

The **Hurricane Season** officially starts on June 1st, but be aware that storms may occur earlier. Severe weather systems related to tropical storms often affect Caribbean territories. Tourism operators are advised to constantly monitor 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/), 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.
Northern source markets 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. Drier and sunnier weather than usual is expected in the south of the US. Inbound Tour Operators should be aware of reports of inclement weather at this time of the year. They should also monitor extended weather forecasts in northern source markets during this season.
Climate Outlook for the Caribbean

It is the late dry season. What do we expect for the Caribbean?

**How wet?**
Rainfall totals from March to May are likely to be near normal across the entire region (medium confidence).

**How hot?**
Night-time and day-time temperatures will progressively warm into April, but may remain comfortably cooler than usual throughout much of the Hispaniola and the Lesser Antilles. Overnight temperatures may be warmer than usual for The Bahamas, Belize, the Cayman Islands, and Cuba (medium confidence).

**How dry?**

**Short term drought** by the end of May 2022 is evolving in The Virgin Islands and Sint Martin (medium confidence) and might possibly develop or continue in Barbados, Dominica, The Dominican Republic, Guadeloupe, Martinique, southwest Puerto Rico, Saint Lucia, and Saint Vincent (medium confidence).

**Long term drought** by the end of May 2022 is evolving in the ABC Islands, Antigua, parts of Belize, Dominica, Guadeloupe, Martinique, Sint-Martin, Saint Lucia, The Virgin Islands (medium confidence), and may possibly develop or persist in the northern Bahamas, Barbados, western Cuba, The Dominican Republic, southern Puerto Rico, Saint Kitts, Trinidad, and Saint Vincent (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/](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](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](https://optics.marine.usf.edu/projects/SaWS.html).

Winter cold affects most source countries, including the often dull skies in European source markets. At the same time, the winter months are likely to be drier, sunnier, and warmer in the Desert Southwest, along the shores of the Gulf of Mexico and the Atlantic Seaboard of the Southeast US, including Florida.
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Websites

Caribbean Tourism Organization:  
www.onecaribbean.org

Caribbean Hotel and Tourism Association:  
www.caribbeanhotelassociation.com

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

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.

No upcoming events
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/