











The 2024 Wet Season Caribbean Regional Climate Outlook Forum (CariCOF) Georgetown, Guyana

May 23rd and 24th

Concept Note





















Background

Addressing climate change and increasing climate variability are regional and national priorities established by the Heads of Government of the Caribbean Community. Climate variability and change, as exemplified by extreme weather and climate events, such as droughts, floods, heat waves and tropical cyclones, continue to pose significant risks for the Caribbean region. These make early warning information systems critical components of preparedness, risk reduction and adaptation.

Regional Climate Outlook Forums (RCOFs) were first organized in 1997 in response to a threatening El Niño event, to provide seasonal climate information to help decision-makers reduce climate-related risks, develop technical forecasting capacity, and to strengthen connections between science providers and decision-makers¹. Thanks to the promotion by the World Meteorological Organization (WMO), RCOFs are now active in several parts of the world. The Caribbean Climate Outlook Forum (CariCOF) is a significant step towards providing those relevant and necessary climate information and services to support adaptation and disaster risk reduction in climate sensitive sectors and communities across the Caribbean.

In June 2010, in the wake of one of the most intense droughts in Caribbean history, a workshop was convened to re-establish the Caribbean Climate Outlook Forum (CariCOF) after its hiatus in the early 2000s, in order to develop a sustained collaborative process that provides credible and authoritative real-time regional climate products. To cement the re-establishment, the first of many CariCOFs was held in February/March 2012 that consisted of three separate but complementary activities:

- 1. A Technical Training Workshop that developed a draft seasonal (three-month) rainfall outlook,
- 2. A Partnership Workshop that brought together key partners and users of climate information, and
- 3. The Outlook Forum that discussed the rainfall forecast with users, which determined the final product.

Since the 2012 CariCOF, the CIMH has been coordinating climate forecasting activities leading to a consistently growing body of climate forecasters who: (i) contribute to the monthly production of consensus-based seasonal climate outlooks, and (ii) engage with the user community, both nationally and regionally, to facilitate awareness-building within climate sensitive sectors. At the 2012 CariCOF, it was also agreed that the bi-annual hosting of such forums, roving across the region, just prior to the beginning of the wet season and the dry season in the Caribbean, be pursued. Since 2012, CariCOF face to face workshops were held in:

¹ Gerlak, A. K., et al, 2018: Building a framework for process-oriented evaluation of Regional Climate Outlook Forums. Wea. Climate Soc., 10, 225–239, https://doi.org/10.1175/WCAS-D-17-0029.1





















- Trinidad and Tobago, Jamaica, Saint. Lucia, Dominica, St. Vincent and the Grenadines, Barbados and Sint Maarten prior to the 2013 to 2019, and 2023 wet/hurricane seasons.
- Antigua and Barbuda, St. Kitts and Nevis, Grenada, Guyana, Trinidad and Tobago, Barbados and Dominica prior to the 2014 to 2019, and 2022 to 2023 dry seasons.

The face-to-face forums followed a similar agenda to that in 2012, but with the partnership workshop and forum merged into one General Assembly. From May 2020 until May 2022, CariCOFs were held virtually due to the COVID-19 pandemic.

The 2024 Wet/Hurricane Season Caribbean Climate Outlook Forum (CariCOF)

The Caribbean wet/hurricane season typically has implications for disaster risk management, with perennial threats from tropical cyclones (tropical depressions and storms, and hurricanes), floods, landslides and, increasingly, heat. There is heightened interest for this particular wet/hurricane season CariCOF as the season is expected to be one of climate extremes in the Caribbean basin, particularly related to heat (both ambient and marine), the number and strength of tropical cyclones and flood potential. It is customary to have significant participation from practitioners from national disaster management organizations in the Caribbean for this season's CariCOF.

In collaboration with our partners the European Union, the Organization of African, Caribbean and Pacific States (OACPS), the National Oceanic and Atmospheric Administration of the USA, and the Columbia Climate School International Research Institute for Climate and Society, the 2024 Wet/hurricane Season CariCOF is scheduled for 21st to 24th May in Georgetown, Guyana. The Stakeholder Forum will be held on the 23rd and 24th May featuring 5 main sections:

- 1. The delivery of the forecasts for the season (which includes rainfall and temperature forecasts, as well as forecasts of drought and dry spells that limit water availability, wet days, wet spells, extremely wet days and extreme wet spells that provide insight into the potential for flooding), the Atlantic Hurricane Season activity, heatwaves at both seasonal and sub-seasonal (weekly forecasts from 2 to 4 weeks in advance) and coral reef watch.
- 2. Multi-Hazard Tournament a fun and engaging way of collectively responding to the 2024 Wet/Hurricane season forecasted climate conditions reflecting, as closely as possible, real decision-making processes, amongst competing teams.
- 3. Focus on heat forecast information at the seasonal to sub-seasonal timescales. Sub-seasonal heat information to follow the approach adopted for sub-seasonal forecasting of excessive rainfall and dry days developed in 2023 and showcased at the 2023 Dry Season CariCOF.
- 4. Evaluating the impact of CariCOF and its climate products on the decision- and policy-making landscapes in support of risk reduction in our climate sensitive socio-economic sectors in the Caribbean. Ten years after the first evaluation of CariCOF, led by a team from the University of Arizona, we commence an assessment of the advances since 2014 and gaps still to be covered, if any.





















5. Led by the Climate Studies Group Mona, UWI and INSMET Cube, tools in the CLIEn'T (Caribbean Climate Information Education and Tools) platform will be showcased. CLIEn'T is a web-based platform which offers climate products, risk assessment tools and simulations.

This agenda reflects strides to transition the global RCOF to Regional Climate Forums where the focus moves beyond just the outlooks for the season, but broader climate related issues.

Pre-CariCOF Training of Caribbean Meteorologists and Climatologists

The technical training workshop, often referred to as the pre-CariCOF training of Caribbean meteorologists and climatologists will take place on 21st and 22nd, 2024. After training sub-seasonal forecasting of water-related extremes of dry spells and excessive rainfall (as relates to the potential for flash flood occurrence) at the two 2023 pre-CariCOF sessions, the same methodology will be used to develop sub-seasonal extreme temperature and heat products.

The CariCOF Outlook Generator, integrated with the Climate Predictability Tool that develops statistically downscaled climate products for the Caribbean, has been going through enhancement for the delivery of its second version. Personnel from the meteorological services will be updated on the developments to date and the new functions embedded. This would be a key time for feedback for completion of the second version of the tool later in the calendar year.

During the pre-CariCOF session, as is the custom, the region's meteorologists and climatologists will also come to a consensus on the products and information to be delivered during the seasonal outlook presentation at the Stakeholder Forum on the 23rd May.





