The 2025 Wet/Hurricane Season Caribbean Regional Climate Outlook Forum (CariCOF)

St. George's, Grenada

May 19th to 23rd, 2025

Concept Note

WORLD METEOROLOGICAL ORGANIZATION

GAA Grenada Airports Authority.

IRI International Research Institute for Climate and Society
EARTH INSTITUTE | COLUMBIA UNIVERSITY

Background

Preparing for climate change and natural climate variability are regional and national priorities established by the Heads of Government of the Caribbean Community. Climate variability and change, as exemplified by the frequency and magnitude of extreme weather and climate events, such as droughts, floods, heat waves and tropical cyclones, continue to pose significant risks for the Caribbean region. The threats from such hazards 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-makers[1]. 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. Its intent was to develop a sustained collaborative process to provide credible and authoritative real-time regional climate information 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.

[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

Since the 2012 CariCOF, the CIMH has been coordinating seasonal 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:

- Guyana, Trinidad and Tobago, Jamaica, Saint. Lucia, Dominica, St. Vincent and the Grenadines, Barbados and Sint Maarten prior to the 2013 to 2019, and 2023 to 2024 wet/hurricane seasons.
- Saint Lucia, Antigua and Barbuda, St. Kitts and Nevis, Grenada, Guyana, Trinidad and Tobago, Barbados and Dominica prior to the 2014 to 2019, and 2022 to 2024 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.

1. The 2025 Wet/Hurricane Season Caribbean Climate Outlook Forum (CariCOF) Stakeholder Forum

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. It is customary, therefore, 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 Columbia Climate School International Research Institute for Climate and Society, the 2025 Wet/hurricane Season CariCOF is scheduled for 19th to 23rd May in St. Georges, Grenada. The Stakeholder Forum will be held on the 22nd and 23rd May featuring 3 main sections:

1. The delivery of the forecasts for the wet season (including 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, and heatwaves at both seasonal and sub-seasonal (weekly forecasts from 2 to 4 weeks in advance) scale.

2. 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.
3. After the training of the region's media practitioners and meteorologists as outlined in 3 below, these two groups join national and regional sector practitioners and other stakeholders in an engaging session that continues the awareness and capacity building to enhance communication of climate information in the Caribbean.
4. Fun, interactive game show reflecting on the seasonal forecasts and recent climate conditions.

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.

2. 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 May 19th and 20th, 2025. 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 research and development methodology is being 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. Several rounds of feedback for requests of additional or enhancement of existing functionality have been had in the past 2.5 half years (and in the past year for training in its use) either at or between face-to-face pre-CariCOF training workshops. Meanwhile, the Climate Predictability Tool has also undergone continual improvements, many of which specifically in view of the need for inclusion of sub-seasonal forecasting functionality. The wealth of feedback has now been implemented and, barring any remaining infancy challenges which always forms part of tool operationalisation, CAROGEN version 2 is now ready for adoption into operations.

During the pre-CariCOF session, as is customary, 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 22nd May.

3. Training for regional media practitioners, and National Meteorological and Hydrological Services (NMHSs)

Awareness and capacity building seminars for regional media practitioners and NMHSs will take place from the 20th to 21st May with specific objectives to:

2.1. Strengthen the capacity and awareness among regional media of climate services, products, and applications including sector-specific forecasts and their value in policymaking to improve the frequency of climate-related news coverage and the accuracy of reporting.

2.2. Strengthen the communications capacity of NMHSs to improve how they engage and share information with their national policymakers, sectoral partners, media, the public and other stakeholders.