CARIBBEAN METEOROLOGICAL COUNCIL SIXTY-NINTH SESSION

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# THE COORDINATING DIRECTOR'S REPORT - 2024 ON CMO HEADQUARTERS UNIT ACTIVITIES

(Submitted by the Coordinating Director)

1. This document highlights activities of the CMO Headquarters since the 67<sup>th</sup> Regular Session of the Council, held on 21-22 November 2024, and hosted by the Government of the Virgin Islands (UK). Factors affecting operational aspects at the Headquarters and other matters of interest are also mentioned for information and guidance where appropriate. Details of some activities and developments, where necessary, will be dealt with under separate agenda items.

#### **High Impact Tropical Weather Events**

- 2. Since the last regular session of the Caribbean Meteorological Council in November 2024, the major weather impacts in our region for 2025 were hurricanes, tropical storms, strong tropical waves, upper-level troughs, tornadoes and other tropical disturbances.
- 3. In the Caribbean/Atlantic basins, this hurricane season was forecasted to be above normal, because of warmer than normal sea surface temperatures in the Atlantic Ocean and the potential switch to La Nina conditions late in the season, which is normally associated with an increase in major hurricane development.
- 4. The season in the Caribbean was marked by the record-breaking Hurricane Melissa, the first category-five hurricane to make landfall in Jamaica, which caused catastrophic destruction across Western Jamaica, especially to the parishes of St Elizabeth, Westmoreland, Hanover, St James, Trelawny, and Manchester. Hurricane Melissa tied the record for strongest wind speed at landfall, 185mph, set by the 1935 Florida Keys hurricane. It was also historic for its low pressure of 892 hPa and remaining at category-5 on the Saffir-Simpson wind speed scale for 36 hours.
- 5. Strong performance of tropical cyclone forecasting by the National Meteorological Services and early warning systems <u>saved lives</u>. The death toll could have been far worse without early warnings and appropriate response.
- 6. A preliminary summary of the 2025 Atlantic tropical cyclone activity to 4 November 2025, is shown in **ANNEX I**. Through coordination with the US National Weather Service Weather Prediction Center's International Desk, the region and CMO Headquarters received excessive rainfall outlooks associated with the systems.

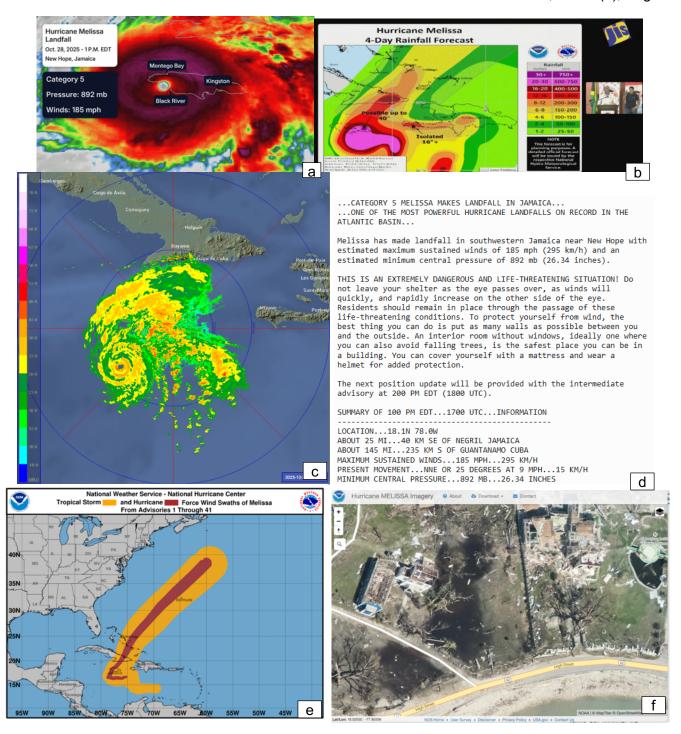


Figure 1. Hurricane Melissa: (a) NOAA GOES IR at landfall (b) rainfall outlook from US NOAA Weather Prediction Center International Desk., displayed by Principal Director of the Meteorological Service of Jamaica during media conference, (c) radar reflectivity from Jamaica's radar at 07:11, 28 October 2025(courtesy of the Meteorological Service of Jamaica), (d) NOAA/NWS National Hurricane Center advisory at landfall, (e) wind history of Hurricane Melissa (NOAA/NWS National Hurricane Center), (f) satellite image of damages in Black River (NOAA, National Geodetic Survey, Remote Sensing Division)

7. Other impactful severe weather, can also be deadly, damaging and cumulatively costly. The reports of the Annual Meeting of the Directors (DMS2025) provide details of the high-impact weather, climate, and water events experienced in the Member States in 2025. These include flash flooding in Jamaica on 17-19 September due to an upper-level trough. A flash flood also occurred in Barbados on 16 November 2025, leading to one death and persons have to be rescued from vehicles and homes, loss of livestock and crops, damage to roads, properties and equipment, with more than 9 inches of rain

recorded in 12 hours. On 7 October, an F1 tornado caused extensive damage to several homes in northwestern Trinidad, with the same severe thunderstorms causing flooding in Maracas Bay area of the northern Trinidad.

8. Frequent episodes of significant Saharan dust also occurred throughout 2025. Members noted the importance of increasing monitoring and prediction capability in the region to support integrated health services and the WMO Global Atmospheric Watch (GAW).

#### Early Warnings for All, Disaster Risk Reduction and Climate Adaptation

- 9. To strengthen the capacity for global and regional early warnings at the national level, the CMO Headquarters has been implementing the *Climate Risk and Early Warning Systems* (CREWS) Caribbean 2.0, via an implementing arrangement with WMO and funding of more than **\$500K**. Details of the project will be provided under Agenda Item 11.
- 10. Council is asked to note a major new project of the CMO Headquarters. The **Green Climate Fund** (GCF) has approved a CMO project entitled, "**Scaling up of Caribbean Hydrometeorological and Multi-hazard Early Warning Services in Belize and Trinidad and Tobago**", with funding of **~\$24million USD** over 5 years. The **Caribbean Development Bank**, a GCF Accredited Entity, is the Contracting Entity for the project and the CMO Headquarters will be the Executing Entity.
- 11. The project was advanced under a new *Scaling Up Framework* between the **GCF Simplified Approval Process** (SAP) and the *Climate Risk and Early Warning Systems* (CREWS) initiative, which develops, scales-up and fast-tracks financing modalities for early warning systems (EWS), firmly grounded in country ownership. Through the *GCF-SAP-CREWS Scaling Up Framework for Early Warnings*, countries that are most exposed to climate change and which have successfully implemented CREWS-funded projects can be fast-tracked to receive funding for early warning systems. Details of the CMO project, are provided under Agenda Item 11.
- 12. The CMO Headquarters is a member of the **Regional Early Warning Systems Consortium**, which is led by *Caribbean Disaster Emergency Management Agency* (CDEMA). The REWS Consortium has been assigned to be the steering committee for the CREWS Caribbean 2.0. The next meeting of the Consortium is scheduled for 9-10 December 2025.
- 13. Council will recall that a major responsibility for the CMO Headquarters with regard to DRR is the Severe Weather Forecast Programme (SWFP) Caribbean, which focuses on severe weather that is not associated with tropical cyclones wind watch and warnings. The focus is on severe weather that can occur at any time of year (heavy rain, strong winds, rough seas/swells, and excessive heat). The Regional Sub-programme Management Team is co-chaired by *Météo-France-Martinique* and CMO Headquarters and supported by CIMH. The SWFP Caribbean is in pre-operational phase, with global and regional model forecasts being used to monitor potential severe weather by the *Regional Forecast Support Facility* (RFSF)—Martinique.
- 14. In addition to the activities reported above, the CMO Headquarters Unit continues to advance disaster risk reduction in cooperation and coordination with CDEMA, CIMH, and other regional institutions. Through the Regional Early Warning System (REWS) Consortium led by CDEMA, CMO HQ aided in advancing Multi-Hazard Early Warning Systems (MHEWS). Other related activities are described under Agenda Items 5 and 11.
- 15. Additionally, the Coordinating Director has been participating in the Americas and the Caribbean EW4All Regional Coordination Mechanism and the Operational Coordination Group of the CREWS initiative.

#### Showcasing the contributions and innovations of National Meteorological Services

#### American Meteorological Society Conferences

16. Council will recall from the 65<sup>th</sup> Session that, in an effort to showcase the excellent work of the National Meteorological Services in 2024, **CMO Headquarters submitted five abstracts on behalf of Members** to the 105<sup>th</sup> Annual Meeting of the *American Meteorological Society* (AMS). This continued a tradition started in 2022. The CMO Headquarters is pleased to report that all five abstracts (linked below) were accepted and presented at the 105<sup>th</sup> AMS Annual Meeting during 12 to 16 January 2025 in New Orleans:

Joint Session with the 41st Conference on Environmental Information Processing Technologies and 10th Symposium on US-International Partnerships: International Hazards – 'The UN's Early Warnings for All (EW4All) Challenge

- 1. <u>Innovations in Observations, Impact-Based Forecasting and Public Engagement to Advance Early Warnings in Barbados</u>
- 2. Recent Advances in Sensor Solutions and Relationships to Underpin Cayman Islands Smart Flood Early Warning Detection System
- 21st Conference on Major Weather Impacts of 2024 Tropical Storms Overview and Hurricane Beryl
  - 3. Efficacy of Grenada's Hurricane Forecast and Warning Services and Communication Process during Hurricane Beryl
  - 4. <u>Preparedness, Impact and Response: The St. Vincent and the Grenadines Meteorological Services Handling of Category-4 Hurricane Beryl</u>
  - 5. <u>Major Hurricane Beryl 2024: Hurricane Preparedness Taking on a New Meaning? -Impacts on Southern Parishes Including the Bread-Basket Parish</u>
- 17. The Council is asked to join the CMO Headquarters in thanking the US Permanent Representative with WMO, NOAA National Weather Service, for sponsoring experts from CMO Member States to participate in the Annual AMS Meeting in 2025, which saw historical participation by the CMO Community.
- 18. In addition to the five oral presentations given by CMO Members with support from CMO Headquarters, experts from CMO participated in two panel discussions, a town hall meeting, and other conference presentations, namely:
  - Building Resilience in the Caribbean: Advancing End-to-End Early Warning Systems
     Moderator: Dr. Arlene Laing, Caribbean Meteorological Organization; Panelists: Dr. Holly
     Hamilton, Turks & Caicos Islands Airports Authority; Mr Geoffrey Greene, Bahamas Department
     of Meteorology; Dr. Nicole Dawkins-Wright, Jamaican Ministry of Health & Wellness; Ms Trisha
     Miller, Grenada Meteorological Service
  - 2. <u>Panel on Climate, Environment, Health, and Early Warning: Advancing Actionable Climate Forecasts and Disease Modeling and Predictions</u>, a growing area in weather and climate services, with panellist, Dr. Nicole Dawkins-Wright.
  - 3. WMO Town Hall Meeting Early Warnings for All: The UN's EW4All Initiative Coordinating Director, Dr. Arlene Laing, was an Invited Speaker
  - 4. 41st Conference on Environmental Information Processing Technologies

    Outcomes from the Innovations in Open Science (IOS) Planning Workshop: Community

    Expectations for a Geoscience Data Commons
- 19. CMO Headquarters also provided a presentation during a CIMH Side Event on <u>Highlights of the</u> Weather, Water, and Climate Challenges in the Caribbean: Collaborations and Opportunities.

#### Latin America High Performance Computing Conference (CARLA 2025)

- 20. Council is asked to note that the Coordinating Director co-organized a pioneering Latin America and Caribbean Advances on Weather Forecasting Workshop the High-Performance Computing (HPC) conference, held in Kingston Jamaica on 23 September. Recognizing that weather forecasting is a highly-valued application for HPC, which is advancing rapidly, the workshop featured high-resolution regional models being developed and adapted for the climate and topographic diversity of Latin America and the Caribbean; next-generation HPC in weather forecasting models; Al/Machine Learning-enhanced forecasting especially for tropical storms and hurricanes; multi-resolution and multi-model integration such as novel methods for nesting grids to optimize forecasting small island scale weather.
- 21. Presentations were made by leading experts from the World Meteorological Organization (WMO), the European Centre for Medium Range Forecasting (ECMWF), Caribbean Meteorological Organization (CMO), NSF National Center for Atmospheric Research (NCAR), Brazilian Institute for Space Research (INPE, Instituto Nacional de Pesquisas Espaciais), Meteorological Service of Jamaica, Meteorological Service of Colombia (IDEAM), Meteorological Service of Argentina, Caribbean Institute for Meteorology & Hydrology (CIMH), University of Illinois, European Centre for Medium-range Weather Forecasts (ECMWF), Cybercolombia, NVIDIA, and Tomorrow.io.
- 22. Evan Thompson, President of WMO Regional Association IV (North America, Central America and the Caribbean), opened the Workshop by highlighting the importance of collaboration to overcome regional barriers of distance, language, and uneven technological capacity. His call to action centred on uniting efforts, sharing tools, and leveraging HPC to transform weather and climate prediction across the region.
- 23. The CMO Coordinating Director showcased the utilization of high-resolution numerical modeling in operational forecasting in the Barbados Meteorological Service, Cayman Islands National Weather Service, Meteo-France AROME model ensemble, which is accessible to forecasters through the Severe Weather Forecasting Programme Caribbean. The presentation also highlighted the capacity building workshop for NWP in operational forecasting that was organized by WMO and CMO in August 2024.

#### **WMO Matters**

- 24. Many of the activities of the CMO Headquarters were aimed at regional implementation of global programmes and initiatives, particularly those emanating from the *World Meteorological Organization* (WMO) as they related to the Caribbean, generally, and CMO Member States, in particular. As one of the pillars of its mandate, the CMO actively participates in WMO activities at the highest possible level in order to ensure that the interests of small developing states are accounted for and to guide and advise the CMO Member States in their own related activities.
- 25. The outcomes of the WMO Extraordinary Congress, Executive Council, Technical Commissions, and Research Board will be covered in detail under Agenda Item 5. Nevertheless, it is useful to mention a few major issues that the CMO Headquarters and the CIMH have been involved in that will have immediate impact on CMO Member States. Among these are:
  - The implementation of the *Early Warnings for All Technical Regulations*;
  - The development of a new WMO Integrated Processing and Prediction System (WIPPS) Strategy Incorporating Artificial Intelligence, and
  - WMO's Call for all Stakeholders to collaborate on the development of Artificial Intelligence (AI)
    and Machine Learning (ML) Environmental Monitoring and Prediction Technologies, Tools
    and Application

- 26. The Coordinating Director, as a member of the *WMO Executive Council* (EC), participated in its 79<sup>th</sup> session (EC-79) in June 2025, along with advisors, Dr David Farrell, Principal of CIMH, and Mr Kenneth Kerr, Science and Technology Officer, CMO Headquarters, and Mr Kerry Powery, Cayman Islands National Weather Service. She also participated in the Extraordinary Executive Council on 24 October, following the 2025 Extraordinary Congress.
- 27. The Coordinating Director continues to serve as the RA IV representative to the *WMO Research Board* (RB), having been selected in May 2025 as a co-chair of RA IV Research and Modelling Expert Team, which was established by the 19<sup>th</sup> Session of RA IV in March 2025. In that capacity, she has advanced activities that support the research priorities of North America, Central America and the Caribbean. She also co-chairs the Research Board *Task Team on Early Warnings for All* and serves on the *Data Exchange for the Research Sector Task Team*.
- 28. As a member of the Executive Council, the Coordinating Director has served on the Young Scientist Award Committee and the WMO Staff Pension Committee since 2019.
- 29. The CMO Headquarters has continued to be active in supporting WMO regional activities and guiding regional and national action for the *WMO Integrated Global Observing System* (WIGOS) and *WMO Information Systems* (WIS). CMO Headquarters hosts a Caribbean node of WIS2.0. Members are reminded of the compulsory implementation of the WIGOS, which became operational in 2020.
- 30. CMO Headquarters is ensuring the availability, accuracy, and timeliness of weather, climate, and water observations and related data and information from National Meteorological and Hydrometeorological Services as a node of the *Regional WIGOS Centre* in Regional Association IV (RA IV North America, Central America and the Caribbean).
- 31. CMO Headquarters/British Caribbean Territories and Trinidad and Tobago Meteorological Service are responsible for the data quality management system for the English-speaking Caribbean in the virtual *Regional WIGOS Centre*. The centre, which has been operating in pilot mode since December 2023, is a collaboration with the United States National Weather Service, Environment Canada, Costa Rica. The STO, who serves as the focal point, attended the **4**<sup>th</sup> **Global Workshop for Regional WIGOS Centres** in September 2025.

#### Dialogues on Strategic Investments: WMO and Partners

- 32. The Council is informed of the Coordinating Director (CD) invited contributions to three (3) WMO events focused on the strategic future of the global weather, climate, and water enterprise.
  - 1. **UN Early Warnings for All (EW4AII):** On October 20, the Extraordinary World Meteorological Congress hosted a High-Level Event on the EW4All Initiative, to which the CD was invited to provide a statement (a written statement was provided in lieu of speaking during the event, which ran over time). The event "showcased the linkages between policy commitments made at the global level, with national and local realities. Distinguished speakers shared their experiences on the benefits of multilateral cooperation and its tangible impact in their countries, highlighting four (4) priority areas to ensure that early warnings are trusted, relevant and actionable:
    - (i) Country ownership;
    - (ii) Scaling up regional collaboration;
    - (iii) Closing the digital divide and
    - (iv) Empowering communities."

<u>Opportunities for CMO NMHSs:</u> Technical Support and Capacity Development for the early warning services in SIDS.

2. Strengthening Partnership with the health sector by leveraging climate and weather information to safeguard public health and safety. The Rockefeller Foundation and the Wellness Network invited a small group of experts, including Dr Farrell, Principal of CIMH, and the Coordinating Director, to participate in a dinner-dialogue on 23 October 2025. The dialogue with the small group of WMO PRs, WMO leaders, and philanthropic partners aimed at understanding WMO PRs' needs and interests, identifying key pathways to strengthen the use of climate and weather information in health decision-making, and exploring new opportunities for collaboration supported by recent investments. Participants provided examples of how National Meteorological Services responded to sector needs for weather and climate information related to heat and diseases. For example, the India Meteorological Department provides tailored weather forecasts of excessive heat in response to a request from a street vendors association and domestic workers group.

Opportunities for CMO NMHSs: Grant Funding for Health-Met Desks, 2026-2029

The WMO Climate and Health Joint Programme, with support from Wellcome and The Rockefeller Foundation, is launching the *Global Climate Services for Health Accelerator*, to support establishing at least three Health-Met Desks at National Meteorological and Hydrological Services in Low-and Middle-income/SIDS countries.

Application deadline: January 15, 2026 Selection announcement: Early 2026 Inception phase begins: Spring 2026

"The Health-Met Desks will respond to national needs by serving as a national multidisciplinary hub where experts in climate science, public health, data analytics, and policy work together to transform climate and weather information into actionable insights that support health decision-making. These desks will help better position NMHS to be the go-to experts for reliable science and expertise in climate risk management and adaptation."

3. Forum on Weathering the Future: Investing in WMO's Global Impact: The Coordinating Director was one of a small number of Permanent Representatives (PRs) with WMO invited to participate in this WMO investors' forum, held on 27-28 October. It was noted that the invited PRs were selected not on the basis of their roles in the WMO governance, but rather recognized for their ability to engage in dialogues beyond the WMO community and with private sector actors. The two-day Investors Forum included presentations from senior representatives of banking, insurance and finance, technology companies, the aviation, shipping and commodity sectors, philanthropies and humanitarian actors, development banks and funders. The CD spoke with a variety of participants on the WMO-CMO history of cooperation and collaboration and the value of investment in activities of WMO and its global partners that contribute to the global observation infrastructure.

Opportunities for CMO:

#### **Development of National Meteorological Services in CMO Member States**

33. In 2025, CMO Headquarters continued to provide guidance to the Director of Meteorology of the Turks and Caicos Island (TCI) Airport Authority, *Dr Holly Hamilton*, on the development of their National Meteorological Service. The CMO Headquarters participated in the national consultation for the implementation of the Common Alerting Protocol in TCI and the Coordinating Director provided brief remarks for the launch of the CAP. Council will recall that CMO Headquarters organized a training workshop on the CAP in May 2023 and the Headquarters is very pleased to have supported TCI in implementing CAP as a key tool for disseminating early warnings. Additionally, CMO Headquarters also assisted with the evaluation of candidates for a meteorological forecaster position in TCI.

34. CMO Headquarters continued to support the development of national meteorological services in the Virgin Islands (UK), by assisting their Ministry of Communication and Works with the review of the Terms of Reference for the position of Change Manager and the related evaluation metrics. CMO Headquarters continued to assist the capacity development of the meteorological services in BVI by ensuring their compliance with WMO requirements for observation timeliness and quality.

#### Legal and Governance to support National Hydro-meteorological Services

- 35. In 2025, CMO Headquarters supported the launch of a National Hydro-meteorology Policy by the Government of Saint Lucia, where the policy was adopted from the Model Meteorology Policy that was endorsed by CMO Members in 2021. Council will recall that a Model Hydro-meteorology Bill and Meteorology Policy were developed under an Implementing Arrangement between WMO and CMO Headquarters with financing from the CREWS Initiative.
- 36. Council Members are urged to enact draft national legislation and policy for their National Meteorological and Hydrometeorological Services (NMHSs) in the Caribbean. Then these operational services will have legal mandate for their services, suitable staffing capabilities to provide the service; develop partnerships with public, private and academic sectors; uptake of science and technology advancement; adapt suitable operating models; develop human and technical capacities and other key aspects. They will be better equipped for the evolving roles and responsibilities of NMHSs.

#### CMO Radar Network and the CMO Operational Radar Group (CORG)

- 37. CMO Headquarters and the *Caribbean Development Bank* were successful in receiving the **approval** of the *Green Climate Fund* for a project that includes upgrading the radars in Belize and Trinidad to dual-polarization systems, which is the current standard for operational meteorology. Details of the project, which is budgeted at **~\$24million USD**, are provided under Item 11.
- 38. Council will recall that the original Doppler radar project was implemented by CMO Headquarters, with funding from the European Union (EU) and oversight of CARIFORUM, with the radars commissioned to the four countries in 2009.
- 39. CMO HQ continued to support the operations of the CMO Radar Network through the collection and disbursement of funds to radar host countries. In 2025, CMO Headquarters assisted the Meteorological Service of Jamaica with funds for the repair of its radar and is pleased to report that the repairs were completed in time for the hurricane season. The radar data was especially valuable for the monitoring and forecasting of Hurricane Melissa, which made landfall in Jamaica on 28 October 2025.
- 40. Additionally, CMO HQ hosted three virtual meetings of the CMO Operational Radar Group (CORG) since CMC67. Council is reminded that the CORG comprises radar technicians and IT personnel from radar host countries and CIMH, and is co-chaired by Mr Brian Murray of the Barbados Meteorological Service and Dr Ashford Reyes of CIMH.
- 41. CMO Headquarters was invited to provide a **keynote presentation** on the CORG, as a community of practice for weather radar operations to support early warnings. The presentation was well-received at the *41st International American Meteorological Society Conference on Radar Meteorology*, Toronto, Canada. Details of the radar network and the CORG are presented under Agenda item 10.
- 42. In June 2025, the CMO Headquarters welcomed representatives from Leonardo, manufacturers of the CMO network radars in Barbados, Belize, Grand Cayman, Guyana, and Trinidad. During the visit, CMO hosted a virtual forum with radar host countries, which provided an opportunity to discuss solutions to challenges; exchange of ideas for sustaining the Caribbean radar network operations and spare parts access, service agreements and emerging for technologies for radar operations.

#### Protecting Radio Frequencies for weather, climate and earth observations

- 43. Council is reminded that CMO Headquarters continues to support the efforts of WMO, ITU, and others to <u>protect radio frequencies that are vital for earth observations, weather forecasting, and climate services</u>.
- 44. Council will recall that CMO Headquarters serves on the **Caribbean Spectrum Management Task Force** because of the dependence of hydro-meteorological services on radio frequencies. In May 2025, CMO HQ participated in a panel at the 2<sup>nd</sup> Caribbean Spectrum Management Conference in Port of Spain, held in conjunction with a meeting of the Caribbean Spectrum Management Task Force. CMO Headquarters provided a written brief to the participants in the 2<sup>nd</sup> Caribbean Spectrum Management Conference, which provided information on the meteorological applications in the Caribbean and the protection of particular radio frequencies.
- 45. The CMO is grateful to the Caribbean Telecommunications Union (CTU) and its Members for supporting proposals to promote safety and safety-related services, including meteorological and related earth observations. Council is asked to note that through coordination by CMO Headquarters, Members of CTU provided reviews of the revised WMO/International Telecommunication Union (ITU) Handbook, "Use of Radio Spectrum for Meteorology: Weather, Climate, Water and related Environmental Applications".
- 46. CMO HQ is encouraging Members to work with their spectrum management authorities to ensure that adequate protection is maintained for radiocommunication allocated to meteorological and related earth observation services.
- 47. A priority for the WMO since the World Radio Conference 2023 has been the impact on seasurface temperature measurements of a new spectrum allocation for the future development of International Mobile Telecommunications (IMT). Studies show that intended new IMT spectrum identification will interfere with sea surface temperature measurements up to 2000 km from the coast, thereby degrading the data. Why do we care about satellite observations of sea surface temperature? Because sea surface temperature measurements help to predict where tropical storms and hurricanes are likely to form, that is, where the sea-surface temperature reaches or exceeds 26°C. Additionally, rapid intensification of storms has been observed when they move over warm currents and eddies. A recent case in point is Hurricane Melissa, which was forecasted to become a major hurricane because it continued to move over an area of high ocean heat content for several days. Hurricane Melissa remained at category-5 intensity for 36 hours as it moved over these areas of high ocean heat content. Satellite observations of the ocean temperature enabled early warnings of the dangerous hurricane for Jamaica and neighbouring islands.
- 48. For the vast areas of the Atlantic Ocean and the Caribbean Sea, the primary observations of the air and sea are from satellites, which measure earth observations at particular frequencies. These vital earth emissions are weak signals that have no alternatives. This is why the CMO is seeking the protection of the radio frequencies used for earth observations and those used for the provision of satellite links to relay data from science and earth observation missions.

#### Lightning monitoring and safety awareness

- 49. Lightning is the most commonly experienced weather hazard for humans and animals and it also poses a danger to wind turbines and solar farms.
- 50. In 2025, CMO Headquarters led the first Lightning Safety Awareness Contest for Schools in the English-speaking Caribbean, with the support of the CREWS Caribbean Project and sponsorship from private sector partners. The contest was a regional activity designed to promote public knowledge of lightning safety and first aid through youth engagement and creative expression. The CMO Headquarters and key partners, the Caribbean Examination Council (CXC), Caribbean Institute for Meteorology and

Hydrology (CIMH) and the Office of Disaster Preparedness and Emergency Management (ODPEM) in Jamaica, worked together to improve the contest design and promotion among regional schools targeting two age categories – 6-11 years and 12-18 years. The CMO also successfully engaged and secured support from the private sector. Prizes for the top three winners in each age category were donated by the HydroMeteorological and Environmental Industry (HMEI) members, including two (2) lightning sensors and six (6) ambient weather stations from Accuweather, and cash donations from Campbell Scientific, Stevens Water Monitoring Systems, and Vaisala, respectively.

- 51. Twelve (12) schools from Belize, the Bahamas, Jamaica, Dominica, and Trinidad and Tobago submitted entries. Winners were announced in a virtual award ceremony on 23 June 2025, coincident with activities leading to International Lightning Safety Day on 28 June.
- 52. These are the top winners in each age category:

6-11 Years

- First Place: Camperdown Primary & Infant School Jamaica
- Second Place: St Mary's Primary School Dominica
- Third Place: St Andrew's Anglican School The Bahamas

12-18 Years

- First Place: Manzanilla Secondary School Trinidad & Tobago
- Second Place: St Catherine's Academy Belize
- Third Place: Mopan Technical School Belize

#### **CARICOM Related Activities**

53. Council is asked to note that the CMO Headquarters participated in various CARICOM Related Activities including the Heads of Government Conference Opening in Barbados on 19th February. The CMO Headquarters Finance and Administrative Officer, *Mrs Natalie Araujo-O'Brien*, continues to serve on the CARICOM RBM Leadership Group and the Finance Committee of the CCAT.

#### **Brazil Technical Cooperation with CARICOM Institutions**

- A generous invitation was received from the Government of the Federative Republic of Brazil for Technical Visits by four Caribbean Community (CARICOM) Institutions to Brazil during 9-13 June 2025, in advance of the **Brazil-Caribbean Summit** held on 13 June 2025. The technical visits were related to the development of complementary cooperative agreements to the **Technical Cooperation Agreement between the Federative Republic of Brazil and the Caribbean Community (CARICOM)**, signed in 2010.
- 55. The delegation included the Executive Director and Deputy Director of the Caribbean Disaster Emergency Management Agency (CDEMA), the Principal of the Caribbean Institute for Meteorology and Hydrology (CIMH), the Coordinating Director of the Caribbean Meteorological Organization Headquarters, and a distinguished Professor of Geology, from The University of the West Indies (UWI) Seismic Research Centre.
- 56. The invited group of CARICOM organizations, led by CDEMA, is in the process of developing project ideas under proposed, revised complementary agreements in the areas of:
  - Comprehensive disaster risk management (Executing agencies: CDEMA, CMO, CIMH)
  - o Integrated fire management (Executing agencies: CDEMA, CMO, CIMH)
  - Geosciences, geophysics and seismology (Executing agency: UWI Seismic Research Centre);
  - Prevention and response to accidents in the petroleum sector (Executing agencies: CDEMA, CIMH)

In addition to the Complementary Agreements above, Brazil has also drafted a potential complementary agreement with CMO in Atmospheric and Hydrological Sciences, including topics of interest to the CMO

Headquarters, CIMH and Guyana Hydrometeorological Service, as well as National Meteorological Services in other Member States, and relevant institutions in the Caribbean, such as The University of the West Indies.

- 57. The CARICOM group met with various institutions and agencies in Brazil, including, the National Centre for Monitoring and Early Warning of Natural Disasters (CEMADEN), Ministry of Science, Technology and Innovation (MCTI); Amazon Protection System Management and Operational Centre (CENSIPAM), Ministry of Defence; National Center for Risk and Disaster Management (CENAD), Ministry of Integration and Regional Development (MIDR); and the Brazilian Institute of Environment and Renewable Natural Resources (IBAMA), Ministry of Environment and Climate Change (MMA). Visits were also made to the research centre, CENPES, of Petrobas and the National Agency of Petroleum, Natural Gas and Biofuels (ANP).
- 58. Discussions and tours with the experts of the National Institute for Space Research (INPE), which the Coordinating Director had visited once before, focused on their impressive remote sensing capabilities, including building of satellites, and numerical weather prediction model development for monitoring and prediction of the atmosphere, land, the marine environment. The work of INPE resonates with the CMO's support for early warnings, e.g., the potential for collaboration and knowledge exchange on detection, monitoring, forecasting risk of wildfires between National Meteorological Services in the Caribbean, INPE and CENSIPAM. Similarly, model development and early warning services at the National Institute for Meteorology (INMET), the organization that represents Brazil with WMO, is another candidate for potential collaboration and technical exchanges between the National Meteorological and Hydrometeorological Services (NMHSs) in the Caribbean.
- 59. The invited group of CARICOM organizations, led by CDEMA, has begun the process of developing project ideas under proposed, revised complementary agreements.

#### **UN COP30**

60. CMO Headquarters also participated in and provided scientific information to the two CARICOM Preparatory Meetings for COP30 of the UNFCCC. In addition, the Coordinating Director was sponsored by the CREWS Secretariat to participate in the UN Framework Convention on Climate Change (UNFCCC) 30<sup>th</sup> Conference of the Parties (COP30) and scheduled to contribute to three Side Events focused on scaling-up multi-hazard early warning services in the Caribbean; disaster risk reduction and climate adaptation; and heat and health services in National Meteorological Services. Unfortunately, the Coordinating Director was unable to participate in-person because of flight disruption due to the US government shutdown.

#### **Strategic Planning**

- 61. An update on the Status of the Strategic Planning of the CMO Headquarters and CIMH will be presented in Agenda Item 12. Council is asked to note that the planned activities will be helping to strengthen the National Meteorological and Hydrometeorological Services; enhance early warning systems and disaster risk reduction; support the implementation of the WMO Integrated Global Observation System (WIGOS); contribute to establishing regional priorities for operationally-directed research, marine meteorology and ocean services; contribute to the framework for the Global Basic Observation Network and the free exchange of core and recommended data.
- 62. The implementation of the USD\$24 million, 5-year grant from the Green Climate Fund will be the major focus of the CMO Headquarters for the period 2025 to 2029. A Project Management Unit will be hired but the CMO will be the Executing Entity and delivery of the outcomes will be the responsibility of the Coordinating Director.

## Reduction of risks to operational weather, climate, and water services in NMHSs of CMO Members

- 63. Council will also note the steps being undertaken by the CMO Headquarters to review and minimize the risks to the daily operations of meteorological and hydrometeorological services in response to a reduction in finance, staff, and services of a key regional and global partner, the National Oceanic and Atmospheric Organization (NOAA). To that end, CMO Headquarters Unit and CIMH provided information to CARICOM leaders of the impacts and risks to the safety and economic development in the region and suggested mitigation measures. The CMO Headquarters shared its briefing documents with the Chair and other Members of the Council, senior Ministry officials, and the Directors of National Meteorological Services. Additionally, two meetings with the Directors were organized by the CMO Headquarters, one virtual in early March, and a second meeting during the 47<sup>th</sup> Hurricane Committee to learn of their concerns and to be updated of any impacts to their daily operations.
- 64. Among the mitigation measures initiated to reduce the impacts and risks to the Caribbean National Meteorological and Hydrometeorological Services is the enhancement of support from key European partners. In May, the Coordinating Director was contacted by the Heads of National Meteorological Services in Europe in relation to questions about support for meteorological services in the Caribbean because of the CMO Headquarters long-established responsibility for operational meteorological matters within the CMO and WMO framework as well as the Coordinating Director's role as the Permanent Representative of the British Caribbean Territories with WMO. Requests for information were submitted to the CARICOM Secretariat by the Chair of the Caribbean Meteorological Council and the CMO Headquarters.
- 65. The Coordinating Director organized a meeting with the relevant Heads of European National Meteorological Services, the European Centre for Medium Range Forecasting (ECMWF), CIMH, and CMO members of the WMO Executive Council on the side of the 79<sup>th</sup> WMO Executive Council session, 16-20 June 2025 in Geneva, Switzerland.
- 66. The CMO Headquarters is pleased to report that the Heads of National Meteorological Services of France, United Kingdom, The Netherlands, and Norway and the European Centre for Medium Range Forecasting (ECMWF) have agreed to support the National Meteorological and Hydrometeorological Services of CARICOM Members, with the provision of products and capacity development to enhance and sustain weather, water, and climate services necessary for the safety and economic health of our region. It was noted that the support will be within the WMO framework and will seek to avoid intervening with existing services being delivered to the region.
- 67. The Council is informed that during the 2025 Extraordinary Congress, 20-23 October 2025, the CD arranged another meeting with the National Meteorological Services of the UK, France, and the European Centre for Medium range Weather Forecasts (ECMWF). This meeting, which was a follow-up to the meeting held in June, included the PRs of Barbados and Jamaica, and Principal of the CIMH. In that meeting, it was noted that the European Commission was working on Terms of Reference related to the support to be provided to the Caribbean. It was recognized there needed to be consultation with the National Meteorological Services in Europe to ensure that their roles were understood and that the specific needs of the Caribbean National Meteorological and Hydrological Services would be addressed.

#### Symposia organization

68. CMO Headquarters, in collaboration with Varysian Ltd, co-organized a Hydro-Meteorology Symposium for Latin America and the Caribbean, from 13-15 May 2025, Miami, Florida, USA. This symposium followed the success of the three Caribbean symposia on Operational Hydro-Meteorology that were co-organized by CMO Headquarters and held in January-February 2023, December 2020, and November 2019, respectively. The 2025 symposium focused on activities and partnerships to support *Early Warnings for All* and included a follow-on session on the potential and current usage of artificial intelligence in operational weather forecasting in Latin America and the Caribbean.

#### Marine Meteorology, Ocean Science, and Services

- 69. Additionally, CMO Headquarters continues to advocate for the Global Basic Observation Network (GBON) to include marine observations and to be then supported through the UN Systematic Observations Financing Facility (SOFF). A regional workshop on the implementation of SOFF in the Caribbean was held on 5-7 May in Kingston, Jamaica, with participation by CMO beneficiary states, implementing partners, and peer advisor meteorological services.
- 70. CMO Headquarters facilitated discussions between the Barbados Meteorological Service and the NOAA Earth-system Modeling Center on the testing of data assimilation of their marine observations into the NOAA weather forecasting models.

#### 75<sup>th</sup> Anniversary of the British Caribbean Meteorological Service

- 71. The Council is asked to note that 2026 will be the 75<sup>th</sup> anniversary of the establishment of the British Caribbean Meteorological Service (BCMS) in 1951. The CMO originated from the BCMS, there the CMO Members are being asked to participate in commemorating this milestone anniversary.
- 72. CMO Headquarters has arranged for interviews with two retired meteorologists from that early era of meteorology in the Anglophone Caribbean. The CMO is grateful to the Department of Meteorology and Atmospheric Science for agreeing to conduct an interview with Dr. John Lee, one of the first employees of the BCMS and a member of the first class of forecasters trained in the BCMS. The National Meteorological Service of Belize will be facilitating an interview with Dr. Kenrick Leslie of Belize, who also served in the regional meteorological service.

#### **Headquarters Matters: Staff Terminal Benefit Fund**

73. Council will recall that the CMO Headquarters was informed by its legal advisors that its Staff Terminal Benefit Fund was required to be registered with the Central Bank of Trinidad and Tobago. In 2025, CMO Headquarters was informed by the Central Bank of Trinidad and Tobago that registration was not required.

#### **Other Matters**

- 74. Council is asked to note that, by 31 October 2025, the level of financial contributions received from Member States stood at 88% of annual contributions approved for 2025 and 14% of arrears outstanding for prior years. Details of contributions and arrears will be discussed under Agenda items 6(c) and 6(d).
- 75. The CMO Headquarters continues supporting the CIMH in its implementation of the Intra-ACP Climate Services and Related Applications (ClimSA) Programme on behalf of the CMO, by serving on the Project Steering Committee and participating in the related workshops and other invited activities. ClimSA is an initiative of the Organisation of the African, Caribbean and Pacific States (OACPS) funded under the 11<sup>th</sup> European Development Fund (EDF) to strengthen the climate services value chain. See the Principal's report for further details.
- 76. **ANNEX II** to this document indicates meetings and other events attended (or scheduled attendance) by officers of the CMO Headquarters since the 67<sup>th</sup> Council Session in November 2024. This schedule of activities undertaken by the CMO Headquarters to-date was relatively heavy this year, comprising of a mix of CMO, WMO, and UNDRR regional implementation activities. Several regional meetings were related to disaster risk reduction and Multi-Hazard Early Warning Systems in the Caribbean. The Headquarters Unit formally congratulated newly-appointed Ministers and Permanent Secretaries, who oversee the National Meteorological Services; introducing each to the CMO and its role in supporting Member States

- 77. The CMO Headquarters continues to promote the participation in as many scientific, technical and training events as possible by the National Meteorological and Hydrometeorological Services and the CIMH, particularly those sponsored by the WMO and its partners that have a special relevance to the region. The list in **ANNEX III** shows the events that the Coordinating Director was able to facilitate from November 2024 to November 2025.
- At the 68th session of the Council (Virtual), Mr 78. John Tibbetts, the Director-General of the Cayman Islands National Weather Service (CINWS) informed the Council that he will be retiring after almost 40 years of service to the government and people of the Cayman Islands. Mr Tibbetts joined the National Weather Service in 1986 and became a forecaster in 1988, after receiving training at CIMH. He was promoted to Chief Meteorologist in 1990 and assumed leadership of the CINWS in 2014. He devised a new organizational structure in 2016, to reflect responsibilities for Aviation and Forecasting, Climate and Observing, Research and Media, and the Maritime sector. He received approval for a proposed new NWS building in 2015, with completion expected in 2026. Mr Tibbetts leaves a legacy of CINWS services and capabilities, including high-resolution numerical weather prediction modelling, a network of automatic weather stations



across all of the Cayman Islands, and a strong relationship with Hazard Management of Cayman Islands. He also grew the staff to enable a 24-hour operational service. In collaboration with CMO, the CINWS developed a National Strategic Plan and Framework for Weather, Water, Climate, and Ocean Services 2023-2028. He served on the WMO Expert Team on Multi-hazard Early Warning Services, which wrote the WMO Guide for National Meteorological and Hydrological Services in Support of National Multi-hazard Early Warning Systems, Procedures, Coordination Mechanisms and Services, Guide No. 1 – Tropical Cyclones (2023 edition). The CMO thanks John for his service to the national, regional and the global meteorology community and extends best wishes for his retirement.

#### 79. The Council is asked to:

- (i) **Note** the activities and issues concerning the CMO Headquarters in 2025, in particular, the approval of a major project by the Green Climate Fund to scale-up early warning systems and upgrade the radars in Belize and Trinidad and Tobago.
- (ii) **Note** the engagement with disaster risk reduction and early warning systems; radio frequency coordination to protect meteorological observations and their transmission, and applications; as well as those issues concerning the wider Caribbean Community.
- (iii) **Discuss** the impact of the 2025 hurricane season, other high impact weather, on the region and, in particular, the impact on CMO Member States.
- (iv) **Note** the progress on the development of the CMO Headquarters Strategic Planning for 2025-2029, which is being revised to integrate the new GCF project.
- (v) **Note** the efforts of the CMO Headquarters in developing strategic partnerships for building capacity for operational services in the Caribbean.
- (vi) **Note** the opportunities for technical exchange with Brazilian entities following the Technical Visits by CARICOM institutions, including CMO Headquarters and CIMH.
- (vii) **Note** the promotion of the contributions of National Meteorological and Hydrometeorological Services and the CMO Operational Radar Group.

(viii) **Support** the commemoration of the 75<sup>th</sup> Anniversary of the establishment of the British Caribbean Meteorological Service.

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CMO Headquarters November 2025

#### **High Impact Hazardous Events of 2025**

Preliminary Atlantic Tropical Cyclone Tracks

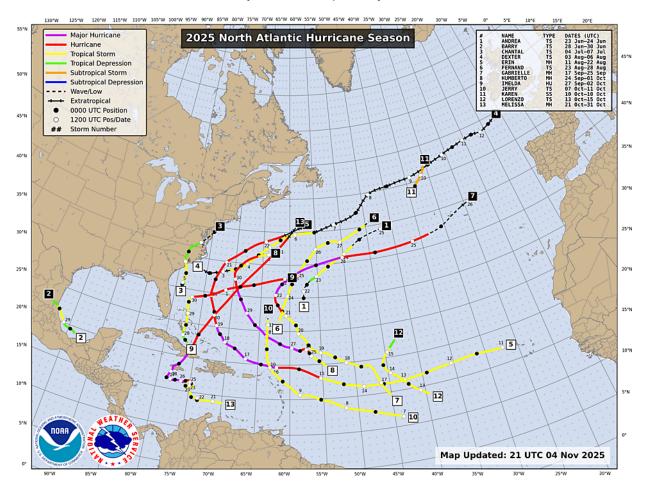


Figure A1. Atlantic Tropical Cyclone Tracks for 2025, up to 4 November 2025



Figure A2. Flood event and loss of life in Barbados, 16 November 2025



Figure A3. Tornado and waterspout over northwest Trinidad, 7 October 2025

2024/2025 CMO HQ Missions
(Not related to the CMC meetings)

Nov 25-27	World Meteorological Organization (WMO) Global workshop for Regional WMO Integrated Global Observing System (WIGOS) Centres- Hybrid, virtual [CD and STO]		
Nov 26-29	CIMH, Caribbean Regional Climate Outlook Forum (CARICOF), Saint Lucia [STO]		
Nov 28	WMO, Technical Regulations on Early Warning Services, virtual [PDO]		
Nov 25-27	Caribbean Catastrophe Risk Insurance Facility (CCRIF), Ivan 20+ events in Cayman, Grenada, SVG (hybrid) [CD]		
Nov 25-27	<b>Trinidad and Tobago Environmental Management Authority</b> (EMA) – Climate Adaptation Plan [STO, CD]		
Nov 25-27	WMO, RA IV Aviation Services, Webinar [STO, PDO]		
Dec 2-5	13 <sup>th</sup> Caribbean Conference on Comprehensive Disaster Management, St Kitts & Nevis [PDO]		
Dec 3-5	<b>WMO</b> , Fourth International Workshop on Satellite Analysis of Tropical Cyclones (IWSATC-4), virtual [STO]		
Dec 18 & Jan 10	Regional Sub-programme Management Team (RSMT) of Severe Weather Forecasting Programme (SWFP) - Eastern Caribbean, virtual [CD, STO]		
Dec 18	<b>Trinidad &amp; Tobago Meteorological Service (TTMS)</b> , 2025 Dry Season – Seventeenth National Climate Outlook Forum, Piarco, Trinidad & Tobago [STO]		
Jan 12-16	105 <sup>th</sup> <b>American Meteorological Society (AMS)</b> , Annual Meeting, New Orleans, Louisiana, USA [CD, STO]		
Jan 14	WMO, 36 <sup>th</sup> Meeting of the RA IV Management Group, hybrid (MG-36) [CD, STO]		
Jan 22	WMO & United Nations Office for Disaster Risk Reduction (UNDRR), First Regional Summit between National Meteorological and Hydrological Services, (NMHSs) and National Disaster Risk Management Offices (NDRMOs), virtual [CD, STO, PDO]		
Jan 24	Caribbean Telecommunications Union (CTU), Caribbean Preparatory Meeting for World Telecommunication Development Conference (WTDC) -25 [CD, STO]		
Jan 27- 5 Feb	<b>WMO</b> , Workshop on the Common Alerting Protocol (CAP), Dominica, Saint Lucia, Grenada [STO]		
Feb 10-14	<b>WMO,</b> Business Continuity Management, Task Team, Indonesia [PDO, Task Team member]		
Feb 18-20	Barbados Meteorological Service, Ministry of Home Affairs and Information-Barbados, Courtesy Visit [CD]		

Feb 19-21	Caribbean Community (CARICOM), 48th Regular Meeting, Heads of Government, Barbados [CD]
Feb 20 & 21	Caribbean Telecommunications Union (CTU), Meeting of the Spectrum Management Task Force & Workshop, hybrid [STO, CD]
Mar 18-20	<b>WMO</b> , Extraordinary Session of the Commission for Weather, Climate, Hydrological, Marine and Related Environmental Services and Applications (SERCOM-Ext (2025)), hybrid [CD, STO, PDO]
Mar 27-29	<b>WMO</b> , 19 <sup>th</sup> Session of the Regional Association IV (North America, Central America, the Caribbean), RA IV-19, El Salvador [CD, STO]
Mar 31–Apr 3	<b>WMO</b> , 47 <sup>th</sup> Session of the RA IV Hurricane Committee, EL Salvador (HC-47) [CD, STO]
Apr 7	<b>CTU</b> , 2 <sup>nd</sup> International ICT Forecast and Industry Watch Meeting, Port of Spain, Trinidad [CD, STO]
Apr 29	<b>CARICOM</b> , 10 <sup>th</sup> Meeting of the Secretary-General of CARICOM and Heads of Community Institutions, virtual [CD]
May 5-7	<b>SOFF-IDB-CREWS,</b> Regional Workshop in the Caribbean, Kingston, Jamaica [CD, STO]
May 12	United Nations (UN), Meeting on Plans to Advance the UN80 Initiative, virtual [CD]
May 13	United Nations University Institute for Water, Environment, and Health (UNU-INWEH), HEC Montreal, Caribbean Broadcasting Union (CBU), Workshop, The Role of the Media in Environmental Awareness and Education, presentation [PDO]
May 13-16	<b>Telecommunications Authority of Trinidad and Tobago (TATT),</b> Caribbean Spectrum Management Conference, Port of Spain [CD, STO]
May 13-15	<b>HydroMeteorological and Environmental Industry (HMEI),</b> HydrometLAC, <i>A Symposium for the Latin America &amp; Caribbean Regions</i> , Miami, United States of America [CD]
May 19-23	<b>CIMH</b> , 2025 Wet and Hurricane Season Caribbean Climate Outlook Forum (CariCOF) and Early Warning Information Systems Across Climate Timescales (EWISACTs), St George's, Grenada [STO]
Jun 2-6	<b>UNDRR</b> , 8 <sup>th</sup> Session Global Platform for Disaster Risk Reduction, Virtual [PDO]
Jun 9-13	Brazilian Cooperation Agency (ABC), Ministry of Foreign Affairs, Federal Republic of Brazil, Technical Visits and Brazil-Caribbean Summit, Brazil [CD]
Jun 16-20	WMO, 79th Session of the Executive Council (EC-79), Geneva [CD, STO]
Jul 3	Inter-American Institute for Global Change Research (IAI), and the University of Colorado Boulder, Seminar on "Translating advances in ENSO research to operations in Latin America and the Caribbean", virtual [STO]

Jul 14-15	Antigua & Barbuda Meteorological Services, Ministry of Tourism, Investment, Civil Aviation & Transportation, Antigua & Barbuda "Strengthening Aeronautical and other Meteorological Services in Antigua & Barbuda", Antigua & Barbuda [STO]
Jul 21-23	WMO, CIMH, CMO HQ, Regional Forecast Support Facility (RFSF), Regional Specialized Meteorological Centre (RSMC) and World Meteorological Centre (WMC), SWFP–Caribbean Operational Workshop, virtual [CD]
Jul 25	Office of Disaster Preparedness and Management (ODPM) Trinidad & Tobago and the Inter-American Development Bank (IDB), Development Partners Roundtable for the proposed Multi-Hazard Early Warning Systems (MHEWS) Policy for Trinidad and Tobago, Port of Spain, Trinidad & Tobago [STO]
Aug 8	CTU, 2nd Preparatory Meeting for the World Telecommunication Development Conference (WTDC), virtual [CD]
Aug 22	<b>WMO</b> , First Meeting of the RA IV Expert Team (ET) on Marine Meteorological and Oceanographic Services, virtual [STO]
Aug 25 & 26	<b>Global Water Partnership-Caribbean (GWP-C)</b> , Caribbean Science Symposium on Water, "From Plans to Progress: A Caribbean Dialogue on Strengthening Water Security through Science-Informed Adaptation Planning", panelist, virtual [CD]
Aug 25-29	<b>AMS</b> , 41 <sup>st</sup> International Radar Conference, Toronto, Canada [STO, Keynote Speaker]
Aug 26	<b>UN World Food Programme (WFP)</b> , Invitation to the ANACAONA Community's Consultation on Regional Emergency Preparedness, virtual [CD]
Aug 27	WMO, First Meeting of the RA IV Expert Team on Services for Aviation, virtual [STO]
Sep 2	WMO & the United Nations Issues-Based Coalition on Climate Change and Resilience, Regional Webinar, "How does Atmospheric Composition Science Support Mitigation Strategies and Climate Action in the Americas?", virtual [CD]
Sep 3-4	Caribbean Development Bank, CCRIF SPC and CAF – Development Bank of Latin America and the Caribbean, 2nd Wider Caribbean Regional Risk Conference to Tackle Urgent and Emerging Threats, virtual [CD]
Sep 4	<b>WMO</b> , Sub-Regional Consultations on WMO Strategic Plan 2028-2031 - English Session for RA III & RA IV, virtual [CD]
Sep 4	Ministry of Infrastructure, Ports, Transport, Physical Development & Urban Renewal Saint Lucia, Launch of the National Hydro-Meteorological Policy, virtual [CD]
Sep 5	WMO, 36th RA-III-IV-Satellite Data Requirements (SDR) Group Teleconference, [STO]
Sep 9-11	<b>WMO</b> , Al Conference: Al for Weather Prediction, Advances, Challenges & Future Outlook, Abu Dhabi, United Arab Emirates [STO]
Sep 17-18, 22-23	<b>WMO</b> , 4 <sup>th</sup> Regional WIGOS Centers Global Workshop, virtual [STO]

Sep 22-26	<b>WMO,</b> Business Continuity Management, Task Team, Geneva [PDO, Task Team Member]
Sep 23	Scientific Research Council (SRC), the University of the West Indies (UWI) Mona, RedCLARA, Latin America High Performance Computing Conference (CARLA 2025), Latin America and Caribbean Advances on Weather Forecasting Workshop, Kingston, Jamaica [CD]
Sep 25	<b>WMO</b> , 2 <sup>nd</sup> Meeting of the RA IV Expert team on Research and Modelling (ET-REM), virtual [CD]
Sep 29-30	<b>WMO</b> , 12 <sup>th</sup> Session of the WMO Research Board (RB-12) and Scientific Advisory Panel, Geneva, Switzerland [CD]
Oct 7-9	Caribbean Community (CARICOM), Pre-COP Meeting & Heads of Government, virtual [CD]
Oct 13	<b>WMO</b> , Webinar, Flood Forecasting for All: Advancing Practice Together, virtual [STO]
Oct 13	<b>Media Institute of the Caribbean (MIC)</b> , Online Discussion, " <i>Disaster Resilience in the Caribbean: Insights from the New Casebook</i> ", virtual [PDO]
Oct 14	WMO, Financial Advisory Committee - FINAC-Ext (2025), virtual [CD]
Oct 20-24	<b>WMO</b> , Extraordinary Session of the World Meteorological Congress and the Extraordinary Session of the Executive Council, hybrid [CD, STO]
Oct 27-28	<b>WMO</b> , Forum Weathering the Future: Investing in WMO's Global Impacts, Geneva, Switzerland [CD]
Oct 27-31	International Institute for Sustainable Development (IISD), WASH Thematic Working Group Meeting in Response to Hurricane Melissa, virtual [PDO]
Oct 29	<b>WMO</b> , RA IV Webinar Series: "Updates on Research, modelling and AI for weather forecasting in North America, Central America, and the Caribbean", virtual [CD, STO, PDO]
Oct 30	World Bank & International Telecommunication Union (ITU), CTU, Information Session on the "Implementation of a Cell-Broadcast-based Emergency Alert System in the ECTEL countries", virtual [STO]
Nov 6	<b>WMO</b> , RA IV, Regional Webinar: Early Warnings For All: Tsunami Warning Communication and Dissemination in the Americas and Caribbean, virtual [STO, PDO]
Nov 6-7	CTU, Caribbean Spectrum Management Task Force meeting, virtual [CD]
Nov 17	WMO, Webinar on WIGOS [PDO]
Nov 24-25	Saint Lucia Meteorological Service, Ministry of Infrastructure, Ports, Transport, Physical Development & Urban Renewal Saint Lucia, National Strategic Plan National Strategic

Strategic Plan National Stakeholder Consultation, Castries, Saint Lucia

[CD, STO, PDO] Nov 25-28 CIMH, Caribbean Climate Outlook Forum and EWISACTS Meeting, St Kitts & Nevis [CD] WMO & CREWS, Capacity Development - Leadership and Management Training Dec 1-5 workshop, Port of Spain, Trinidad & Tobago [CD, STO, PDO] Economic Commission for Latin America and the Caribbean (ECLAC), 22<sup>nd</sup> Dec 8 Session of the Monitoring Committee of the Caribbean Development and Cooperation Committee (CDCC), Seminar, "Unlocking Caribbean Potential: Enhancing Growth and Development Through South-South Cooperation", Port of Spain, Trinidad [STO] Caribbean Disaster Emergency Management Agency (CDEMA), 7<sup>th</sup> Regional Dec 9-10 Early Warning Systems Consortium (REWSC) Meeting, Port of Spain, Trinidad & Tobago [CD, PDO] Dec 9-12 ICAO, Regional Meeting of North America, Central America, and the Caribbean (NACC), Mexico City [STO]

### Technical Activities of Member States and CIMH facilitated by the Coordinating Director

# YEAR TRAINING/COURSES/MEETING/CONFERENCES NAME PARTICIPATING COUNTRY/ORGANIZATION

			COUNTRY/ORGANIZATION
2024	Regional Early Warnings for All (EW4All) Multi-Stakeholder Forum (MSF) for Latin	Kenrick Bedeau	Grenada
	America and the Caribbean  2-6 December 2024	Denel Dixon	St Kitts & Nevis
2025	RA IV Workshop on Hurricane Forecasting & Warnings, Miami, Florida 7-11 April	Kerrie Forbes	Cayman Islands
	Extraordinary session of the Commission for Weather, Climate, Water and Related Environmental Services and	Kathy-Ann Caesar Cedric Van	CIMH
	Applications (SERCOM)	Meerbeeck	
		Kathy Ann Caesar	CIMH
	WMO, RA IV Hurricane Committee (HC-47) EL Salvador, 27 March - 3 April	Gerard Tamar	Grenada
		Gregory Cato	St Vincent & the Grenadines
		Carlos Zepeda	Research Associate, King's College London
	WMO, 19th RA IV Session, 27 to 29 March	Shawn Boyce	CIMH
	WMO, 79 <sup>th</sup> Session WMO Executive Council, 16-20 June	Kerry Linwood Powery	Cayman Islands
	Nomination of Youth Focal Point - WMO RA	Nardia Magloire	Virgin Islands (UK)
	Nomination for RA IV Expert Team on Aviation Services	Cécil Mitchell	Grenada
	WMO, Extraordinary World Meteorological Congress, 20-23 October	Nardia Magloire	Virgin Islands (UK)

YEAR	TRAINING/COURSES/MEETING/CONFERENCES	NAME	PARTICIPATING COUNTRY/ORGANIZATION
2025	CREWS, Attachment of Antigua & Barbuda	Lorne	Antigua & Barbuda
	Meteorological Service SWFP Focal Point to	Salmon	
	Martinique Martinique,12-14 November		
	WMO & CREWS, Training on Leadership &	Jeffery	Anguilla
	Management of National Meteorological &	Jennings	
	Hydrometeorological Services (NMHSs) in	Sharlene	Virgin Islands (UK)
	RA III & RA IV, 1-5 December	Smith	
		Kerry	Cayman Islands
		Powery	
		Linwood	
		Zhuan	Montserrat
		Sweeny	
		Holly	Turks & Caicos Islands
		Hamilton	
		Shawn	CIMH
		Boyce	
		Gerard	Grenada
		Tamar	
		Gregory	St Vincent and the
		Cato	Grenadines