



Our ref.: 25218/2022/S/DPS/TCP/RA IV Miami-2023

1 November 2022

Annexes: 2 (available in English only)

Subject: RA IV Workshop on Hurricane Forecasting and Warning, Miami, Florida, USA, 27 February–10 March 2023

Action required: To nominate an expert and submit the completed Nomination Form to WMO Secretariat on or before **15 November 2022**

Dear Sir/Madam,

I am pleased to inform you that the Government of the United States of America has kindly agreed to host the RA IV Workshop on Hurricane Forecasting and Warning in Miami, Florida, from 27 February to 10 March 2023. Eight working days will be allocated to the hurricane forecasting and warning component and two working days for a training to understand and communicate better with the emergency managers.

The workshop will be conducted with simultaneous interpretation in English and Spanish at the Regional Specialized Meteorological Centre - Hurricane Center (RSMC-HC) of the National Oceanic and Atmospheric Administration/National Weather Service (NOAA/NWS) in Miami. Please find attached herewith an outline of the Provisional Programme ([Annex 2](#)). The Information Note for Participants will be provided in due time.

The workshop will provide training for hurricane forecasters from the region, assist RA IV members in their efforts to improve operational tropical cyclone forecasting and warning, and help participants to understand and communicate better with the stakeholders engaged in the emergency decision-making process. Designed particularly for meteorologists with practical experience in operational tropical cyclone forecasting, the workshop will provide them with refresher training and updated information.

I would, therefore, like to invite you to nominate an expert on operational hurricane forecasting and warning from your service to participate in this workshop. To ensure the effectiveness and positive impacts of the workshop on the work of your service, it is strongly recommended that the nominated expert be a forecaster who is currently engaged in hurricane and associated weather forecasting, has a direct link to the operational tasks of your service, and meets the following requirements:

- (1) Holds a university qualification or equivalent, preferably in geo-sciences (meteorology, hydrology, geophysics, environmental sciences, etc.),
- (2) Is expected to continue working in your service for a long period after participation in the workshop.

To: Permanent Representatives of members of Regional Association IV with WMO: Antigua & Barbuda, Bahamas, Barbados, Belize, British Caribbean Territories, Cabo Verde, Colombia, Costa Rica, Cuba, Curaçao and Sint Maarten, Dominica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Saint Lucia, Trinidad and Tobago and Venezuela (limited distribution)

cc: Mr Evan Thompson, President RA IV, Kingston, Jamaica
Mr Jamie Rhome, Acting Chair of RA IV Hurricane Committee, Miami
Dr Richard Pasch, Senior Hurricane Specialist, National Hurricane Center, Miami

Due to limited funds available for this workshop, it is hoped that your service could cover the expenses relating to the attendance of your nominated expert. However, WMO upon request could consider providing financial support (travel and a lump sum in lieu of per diem) for the participation of your expert. If such assistance is required, kindly indicate this in the Nomination Form attached herewith ([Annex 1](#)). Candidates from Spanish-speaking countries will be given priority as regards the allocation of the funds available.

Regarding insurance coverage for non-staff members, may I draw your attention to the following:

Non-staff members of WMO who are authorized to travel at the Organization's expense and/or who are receiving a DSA from WMO must ensure they are fully responsible for expenses incurred in the event of death, illness or injury during official travel and attendance at meetings on behalf of the Organization. They are, therefore, fully responsible for arranging life, health, accident, as well as any other forms of insurance with an adequate level of coverage for the duration of such meetings and events. WMO liability is limited to the performance of services or attendance at a meeting on behalf of the Organization, is covered by an injury and illness benefit insurance which provides a limited coverage for medical, emergency and supplementary official travel expenses.

It is hoped that your country will take advantage of this opportunity by nominating a suitable expert.

I should be grateful if the completed Nomination Form ([Annex 1](#)) could be returned to the WMO Secretariat on or before **15 November 2022**.

Yours faithfully,



Dr Elena Manaenkova
for the Secretary-General

RA IV WORKSHOP ON HURRICANE FORECASTING AND WARNINGS**Miami, Florida, United States of America****27 February–10 March 2023****NOMINATION FORM**

The Government of nominates the following candidate as a participant on the above training workshop:

Family Name Mr / Ms / Dr

First Name

Address

City – Country

Telephone Office + Home +

Fax Office + Home +

Email

Date of Birth

Passport No.

Expiry Date

Primary language

Qualifications (certificates, diplomas or degrees):

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Training in the field of meteorology (other than as noted in above):

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Present position and brief description of current duties

(please include public weather services functions, if any):

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Brief description of past relevant professional/operational experience

(please include experience in aspects of public weather services (e.g. media work, working with disaster management, public outreach and education, etc.) if any and/or relevant planned future work/activities):

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Name and address of person to be notified in case of emergency:

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Please complete if financial assistance is required from WMO:

Support required: YES ? NO

.....
Date

.....
Signature of Permanent Representative

To be completed and sent by mail, at the latest by **15 November 2022** to:

Ms Barbara Tapia (btapia@wmo.int)
Copy: Ms Anne-Claire Fontan (acfontan@wmo.int)

RA IV WORKSHOP ON HURRICANE FORECASTING AND WARNING

Miami, Florida, USA, 27 February – 10 March 2023

PROVISIONAL PROGRAMME

While the workshop will include lectures and presentations, emphasis will be placed on group interactions and practical, hands-on exercises. The main subject areas to be covered will include:

- The large-scale tropics - an overview
- An overview of hurricane research
- Tropical analysis and tropical waves
- Marine forecasting and other TPC/TAFB products
- Satellite applications, including rainfall, the Dvorak technique, microwave and scatterometer
- Tropical cyclone genesis and structure
- Numerical Weather Prediction (NWP), ensemble forecasting, and TC track prediction models
- Developing a user focus
- Doppler radar
- Storm surge
- Extratropical transition
- Interannual and intraseasonal TC variability/Seasonal forecasting
- Best track, CLIPER and wind radii CLIPER/Wind speed probabilities
- TC track and intensity forecasting
- Operational TC forecasting and advisory preparation
- Communication and coordination with emergency managers. Messaging:
 - Hurricane Risk
 - Tropical Cyclone Hazards (wind, rain, storm surges, tornadoes ...)
 - Uncertainty
 - NHC Advisory Products
 - NHC Wind Speed Probability and Storm Surge Products

- The Hurricane Liaison Team (Department of Homeland Security's Federal Emergency Management Agency)
- Coordination with the media
- Quiz for the whole workshop
- Conclusions and recommendations

The programme will also include current weather map discussions.

Note: Eight working days allocated to the hurricane forecasting and warning component and two working days specifically dedicated to a training to understand and communicate better with the emergency managers. A total of 12 days including weekend.