



Our ref.: 25357/2022/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, United States of America, 27 February-10 March 2023

Action required: To nominate an expert and submit 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 Centre (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 like to invite you to nominate an expert on 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:

- Holds a university qualification or equivalent, preferably in geo-sciences (meteorology, hydrology, geophysics, environmental sciences, etc.)
- 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: Canada, France, the Netherlands, and the United Kingdom of Great Britain and Northern Ireland (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 Centre, Miami

It is hoped that your country will take advantage of this opportunity by nominating a suitable expert, and that due to the limited funds available your service will be in a position to cover the cost of her/his participation.

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**

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:

<b>Family Name</b>	..... Mr / Ms / Dr		
<b>First Name</b>	.....		
<b>Address</b>	.....		
<b>City – Country</b>	.....		
<b>Telephone</b>	Office + .....	Home + .....	
<b>Fax</b>	Office + .....	Home + .....	
<b>Email</b>	.....		
<b>Date of Birth</b>	.....		
<b>Passport No.</b>	.....		
<b>Expiry Date</b>	.....		
<b>Primary language</b>	.....		

**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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Date

Signature of Permanent Representative

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To be completed and sent by email by **15 November 2022** to.

Ms Barbara Tapia ([btapia@wmo.int](mailto:btapia@wmo.int))

cc: Ms Anne-Claire Fontan ([acfontan@wmo.int](mailto:acfontan@wmo.int))

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## **RA IV WORKSHOP ON HURRICANE FORECASTING AND WARNING**

**Miami, Florida, United States of America**

**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.