

**WMO OMM**

World Meteorological Organization
Organisation météorologique mondiale
Organización Meteorológica Mundial
Всемирная метеорологическая организация
المنظمة العالمية للأرصاد الجوية
世界气象组织

Secrétariat

7 bis, avenue de la Paix – Case postale 2300
CH 1211 Genève 2 – Suisse
Tél.: +41 (0) 22 730 81 11
Fax: +41 (0) 22 730 81 81
wmo@wmo.int – public.wmo.int

Ref.: 08277/2024-1.8 MS/ETR

Our ref.: 08277/2024/MS/ETR/CRS-1324

21 May 2024

Annexes: 3 (available in English only)

Subject: Invitation to West Africa Data Assimilation Workshop

Action required: For information and appropriate action, as necessary

Dear Sir/Madam,

In line with our dedication to capacity-development, especially in connection with the Early Warnings for All initiative, we are delighted to announce the forthcoming "West Africa Data Assimilation Workshop" organized by the WMO Education and Training Office with the support of the WMO Regional Training Centre Nigeria (NiMet). This workshop aims to bolster the development of competencies essential for Numerical Weather Prediction (NWP) in the West African region, with a specific emphasis on data assimilation techniques.

Scheduled to occur from 22 to 26 July 2024, in Abuja, Nigeria, the workshop will feature hands-on practice sessions employing the Plug-N-Run NWP Tool (PN-Tool), developed by the WMO Education and Training Office. Participants will acquire invaluable insights and practical skills in implementing operational NWP systems and assimilating local observations to enhance NWP accuracy. Moreover, they will have the opportunity to collaborate with peers from across the region.

Enclosed herewith are comprehensive documents detailing the workshop's objectives, curriculum, and application forms. We kindly request your assistance in disseminating this information among relevant stakeholders within your organization and encouraging eligible candidates to apply. Interested candidates from the selected countries are encouraged to submit their applications to NiMet and forward a duly completed application form ([Annex III](#)) with the relevant attachments to Prof. Vincent Ezikornwor Weli at v.weli@nimet.gov.ng with a copy to tra@wmo.int. Please be advised that only individuals endorsed by the Permanent Representative of their respective countries are eligible to apply no later than **14 June 2024**.

Selection for participation will be conducted through a competitive process, with priority given to applicants actively engaged in operational NWP activities. Please note that while we encourage Members to cover the expenses of their participants to attend the course, WMO is prepared to support one participant each from selected Members. Selected candidates will be notified by NiMet and will be contacted by WMO for the preparation of the travel logistics.

To: Permanent Representatives of Regional Association I: Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo (limited distribution)

cc: Hydrological Advisers

May I take this opportunity to assure you of my unwavering commitment to capacity-development-related activities supporting competency development and EW4ALL and thank you for your continued cooperation in this endeavour.

Yours faithfully,

A handwritten signature in black ink, appearing to be 'C. Saulo', written in a cursive style.

Prof. Celeste Saulo
Secretary-General

**WEST AFRICA DATA ASSIMILATION WORKSHOP
NIGERIAN METEOROLOGICAL AGENCY (NiMET)
ABUJA, NIGERIA**

Ref.: 08277/2024.1.8 MS/ETR

Host Member	Nigeria
Host institution(s)	Nigerian Meteorological Agency
Website	https://nimet.gov.ng/
Location(city) of institution(s)	Abuja, Nigeria
Address of institution	Bill Clinton Drive, Nmandi Azikiwe International Airport, FCT, Abuja
Course type	In-person
Main course content	<ul style="list-style-type: none"> • Introduction to the PN-Tool • Overview of WRF architecture • Fundamental concepts of data assimilation • Hands-on practice for data assimilation • Implementation of cycling system
Duration of study	5 days
Course dates	22 to 26 July 2024
Target Region and Members	Benin, Burkina Faso, Cabo Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo
Basic requirements	<ul style="list-style-type: none"> • Understanding of meteorological principles and terminology • Basic knowledge of NWP concepts • Proficiency in Linux commands and programming languages • Experience with NWP software package
Language	English
Number of awards	Up to 16 participants
Application form	Mandatory
Admission from institution	Mandatory
Application closing date	14 June 2024
Contact information	Professor Vincent Ezikornwor Weli (NiMet): v.weli@nimet.gov.ng Copy to tra@wmo.int

**NIGERIAN METEOROLOGICAL AGENCY (NiMET)
ABUJA, NIGERIA**

WEST AFRICA DATA ASSIMILATION WORKSHOP

Ref.: 08277/2024.1.8 MS/ETR

Workshop description

This workshop aims to enhance the capacity of West African countries in high-resolution modelling for the Early Warnings for All initiative. The in-person workshop will focus on hands-on training for NWP implementation and operation. To achieve this, we will utilize the Plug-N-Run NWP Tool (PN-Tool) developed by the WMO Education and Training Office. Using the PN-Tool, participants will directly design and develop operational high-resolution NWP systems for their countries. They will also gain an understanding of the fundamental concepts of data assimilation and skills required to assimilate observational data produced in their respective countries. Upon completion of the workshop, participants will take the PN-Tool back to their countries and utilize it to implement and operate the necessary NWP systems tailored to their specific needs.

Course format

This will be an in-person workshop, and participants are required to bring their own laptops for practical exercises. The workshop will primarily focus on hands-on training using the PN-Tool, an external USB storage device, which contains the Linux OS and a pre-configured WRF system. Participants will have the opportunity to directly build operational NWP systems with data assimilation for their countries during the workshop using PN-Tool.

Expected Learning outcomes

By the end of the workshop, the participants will have successfully achieved the following outcomes:

1. Enhanced capacity in operational high-resolution modelling system;
2. Practical skills in implementing and operating Numerical Weather Prediction systems;
3. Proficiency in utilizing the PN-Tool for designing and developing operational NWP systems;
4. Deeper understanding of data assimilation concepts;
5. Application of learnt skills to build operational NWP systems with data assimilation tailored to specific requirements.

Competencies attained and certificates issued

Participants who pass the assessment will receive a certificate of "Successfully Completed", while those who do not pass the assessment will receive a certificate of "Participation".

Target audience

Staff members in the National Meteorological and Hydrological Services in West Africa responsible for Numerical Weather Prediction tasks, related duties, or those who will be undertaking such responsibilities in the future.

Instructors

Trainers responsible for NWP-related education and training at the WMO, with experience in high-resolution NWP development, data assimilation development, and relevant educational training.

Working language

The course will be conducted in English.

Entry requirements

- Involvement in Numerical Weather Prediction and related fields
- Good skills in English reading, written and spoken (language comprehension)
- All this needs to be verified by proof of CV and qualifications.

Work experience: Relevant work experience in operational Numerical Weather Prediction system is preferred.

Useful resources in preparing for the course

- Online NWP Training series course
https://www.meted.ucar.edu/education_training/course/21
- WRF User Guide
https://www2.mmm.ucar.edu/wrf/users/docs/user_guide_v4/contents.html
- PN-Tool User Guide
https://docs.google.com/document/d/1Agpabjw5fSUD0EH1Fbmt-xdLXp3s0EOJY_SW0CSyxXs/edit?usp=drive_link

Procedure for application

The applications thus must include:

- A letter of motivation in English limited to 200 words
- A CV
- Relevant certified qualifications
- Signed nomination letter from the relevant Permanent Representative.

All applications will be handed according to protection of private information requirements.

Application for consideration should be forwarded to:

NiMet

Professor Vincent Ezikornwor Weli v.weli@nimet.gov.ng

Copy to: Education and Training Office tra@wmo.int

Clearly mark the subject of the email as: NiMet – Nigeria – CRS-1324 – West Africa Data Assimilation Workshop.

Deadline for application: **14 June 2024**

Only successful applications will be notified by email by NiMet and WMO.

APPLICATION FORM
WEST AFRICA DATA ASSIMILATION WORKSHOP
ABUJA, NIGERIA
22-26 JULY 2024

Ref.: 08277/2024.1.8 MS/ETR

Note: Please read the [notes and instructions](#) on the last page before completing this application form

A. PERSONAL	
1. First name	
2. Family name	
3. Country	
4. Date of birth (DD/MM/YYYY)	
5. Gender	M / F
6. Passport number	
7. Passport validity	
8. Do you have a disability	Yes / No
If yes, please specify	
9. Permanent home address (number, street, postal code, town)	
10. Telephone (mobile)	
11. Email	
12. Professional contact	
Name	
Telephone (office)	
Professional links	
13. Would you request financial assistance to participate at the course? Yes / No	

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B. GENERAL

1. Give details of working experience in meteorology

Name of organization	Starting and end date	Brief description of role and responsibilities	Reason for leaving

2. Write a brief statement setting out clearly why you have chosen this course and how you intend to use it after graduation

I declare that to the best of my knowledge all the information on this form is true and correct.

Signature

Date

C. PERMANENT REPRESENTATIVE ENDORSEMENT

Signature

Date

Notes and instructions

Please read these notes and instructions carefully before completing this application form. Be sure to read every section and that the information you provide is accurate.

1. Applications received after the date of **14 June 2024** will not be considered;
2. Applications received without the endorsement of the Permanent Representative will not be considered;
3. Incomplete application forms will not be considered;
4. Closing dates for the application dates are published and will be strictly adhered to;
5. A copy of the passport must be included in the application;
6. Successful candidates will be contacted by email. Please ensure that your contact details are correct and clearly written.
