

3. Updates on capacity development activities by WMO Bodies

3.1 Updates from the Research Board

Professor Mary Scholes

Research Board Vice-Chair

12th Meeting of Capacity Development Panel

(EC-CDP-12)

16 and 17 February 2026

Content

- **Key Highlights in Capacity Development Activities**
 - AI & Data-Driven Prediction Capacity
 - NMHS Capacity for Hazard & Air Quality Service
 - Cross-Disciplinary Capacity and Community Engagement
- **Items requiring Panel discussion, guidance or action**

AI & Data-Driven Prediction Capacity

Strategic focus:

- Building capacity in AI/ML-enabled prediction to support next-generation climate services, with emphasis on improving forecast skill, uncertainty communication, and integrating data-driven methods across subseasonal to interdecadal timescales for operational relevance.

Training Schools

- APARC/WCRP AI4Climate School (Senegal, Nov 2025): hands-on Python-based ML/AI training tailored to Global South early-career scientists, with mentored mini-projects addressing regional challenges.
- WCRP School on Prediction Across Timescales (Argentina, Feb 2026, upcoming): intensive training for 30 ECRs and advanced students on predictability, uncertainty, and emerging AI tools.

Global community exchange:

- WGSIP/WCRP Webinar Series delivered 3 international sessions (Q4 2025) for researchers and practitioners on AI/ML and hybrid prediction advances and key scientific challenges.

NMHS Capacity for Hazard & Air Quality Service

Strategy Focus:

- Strengthening NMHS and regional capacity for sand and dust storms and air quality services, supporting user-oriented early warning and risk reduction.

Regional Training Workshops:

- Arab Region Workshop (Jeddah, Oct 2025) and MENA Workshop (Cairo, Dec 2025) delivered hands-on training on dust monitoring platforms, forecasting tools, regional modelling, and adaptation of SDS Warning Advisory Systems.

International Trainings:

- WMO/GAW Training on Seamless Prediction of Air Pollution (Morocco, Oct 2025) linked with CWCC conference (100 participants), strengthening regional expertise and early-career engagement
- Summer school dedicated for graduate/undergraduate students (Fudan University, July 2026)

Cross-Disciplinary Capacity and Community Engagement

Strategic focus

- Strengthening capacity through cross-disciplinary exchange and communication-focused engagement, bridging research advances with operational and societal applications.

WWRP InPRHA webinars:

- Transdisciplinarity (Nov. 2025), End-to-End Forecasting & Early Warning in Africa: From Nowcasts to Community-Based Warnings in Accra, Ghana (Dec 2025); The Precipitation Prediction Grand Challenge (Feb 2026)

WWRP SAGE webinars:

- Uses of subseasonal forecast information in disaster preparedness (Nov 2025) and Engaging users to enhance the effectiveness of S2S forecasts (Jan 2026)

Early-career Researchers and communication:

- The IGAC Science Governance Seminar with WMO Young Professionals (Jan 2026) engaged early-career researchers on pathways to contribute to WWRP, WCRP and GAW, and on the science-policy
- Provide financial support for ECRs to engage in capacity-building opportunities through workshops and/or conferences (within a limited budget)

WCRP Academy

A hub for climate science training

Provides climate science training, and education equipping researchers with essential knowledge, skills, and attributes to address pressing climate challenges and advance impactful research
<https://wcrp-academy.org/>

- Include training material from 262 events
 - Online/hybrid (198)
 - In-person events (64)
- Featured Courses
 - Climate change impacts, adaptation, and vulnerability (146)
 - Physical Science Basis of Climate Change (180)
 - Mitigation of Climate Change (81)

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Training Catalogue

Our catalogue offers a diverse range of Climate Science Training Events, Workshops, and Courses, designed to equip participants with the latest insights and skills in environmental research and sustainability. Through our Global Initiatives, we connect experts, learners, and advocates to drive meaningful action in climate science. Explore programs that empower individuals and organizations to make a lasting impact.

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Keywords... Categories: All Status: All Delivery: All Type: All Show Past Events Search

On demand training

Learning to Co-Produce (L2CP)
Learning to Co-produce (L2CP) is an on-line course designed for post-graduate meteorological students (or those engaged in studies related to...

March 14, 2024
online
Physical Science Basis of Climate Change, Climate Change Impacts, Adaptation, and Vulnerability, Mitigation of Climate Change

View entry --

On demand training

The Climate Shift: Exploring Science, Empowering Action
Deepen your understanding of climate change and learn how you can take meaningful steps towards making a difference in your...

July 22, 2025
online
Physical Science Basis of Climate Change, Climate Change Impacts, Adaptation, and Vulnerability, Mitigation of Climate Change

View entry --

On demand training

Ocean Literacy self paced Training course: Training for architects and urban planners
Aims and Objectives This course will provide architects, urban planners, marine planners, and designers with an overview of the importance...

September 03, 2025
online
Physical Science Basis of Climate Change, Climate Change Impacts, Adaptation, and Vulnerability

View entry --

On demand training

Natural Disaster and Climate Change Risk Assessment in Infrastructure Projects
This course was designed and organized by the Inter-American Institute for Economic and Social Development (INDES) of the Inter-American Development...

September 11, 2023
online
Climate Change Impacts, Adaptation, and Vulnerability

View entry --

Location of Online Events

■ Europe ■ North America ■ Asia
■ South America ■ Africa ■ Unknow

Location of In-person events

■ Europe ■ Asia ■ North America
■ South America ■ Africa ■ Australia

Items requiring Panel discussion, guidance or action

The WCRP Academy (<https://wcrp-academy.org/>) only has funding until the end of 2026. WCRP is working on fund-raising but if not successful and/or another host is not found this important resource will be shut down at the end of this year.

Thank you



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