

## WMO Research Board

Connect strategic aims of WMO Executive Council and Congress with the community

→ EW4All, G3W, Cryosphere, Hydrology

Forum for exchange and alignment among members and regions:

INFCOM (infrastructure)

SERCOM (services)

6 WMO regions

Independent Science Input from SAP and research community organized in

WWRP (weather)

WCRP (climate)

GAW (in-situ observations and forecast of atmospheric composition)

## WMO Research Board

- RB meets quarterly; one in-person meeting per year
- 17<sup>th</sup> Session was held in Geneva from 27-30 September 2025

Objective: identify what the RB needs to act on and how to take action in the context of the ongoing WMO restructuring process and increasing geopolitical and financial challenges

- Review the role of the RB in the WMO governance structure and requests from WMO Executive Council and Congress
- Review outcomes and expected outcomes from RB Task Teams
- Discuss strategic matters, including WMO strategic planning, research programme priorities and how to advance identified priority actions
- Address RB governance matters, including selecting a Chair and Vice-Chair and approving WWRP Scientific Steering Committee members

# WMO Research Board

## *79th Session of the WMO Executive Council (EC-79)*

### Research Board Outcomes

Resolution 6 (EC-79) notes the WCRP Science & Implementation Plan

Resolution 7 (EC-79) notes the WMO Weather Modification Statement developed by WWRP

Resolution 14 (EC-79) adopts a Unified Rules of Procedure for Bodies Reporting to the EC (including the RB)

Resolution 15 (EC-79) adopts the Revised terms of reference and additional rules of procedure of the Research Board

Resolution 4 (EC-79) establishes the Joint Advisory Group on Artificial Intelligence (co-chaired by the RB)

Decision 9 (EC-79) re-appointed A. Lynch and I. Pechlivanidis to serve on the RB

# WMO Research Board

## *Subsidiary Bodies*

- Task Team on AI for Weather has developed a final report and recommendations to the RB regarding how to move forward on this issue for RB approval (WGNE collaboration)
- Task Team on Hydrology Research presented proposed updates to the WMO Plan of Action for Hydrology at the Hydrological Coordination Panel meeting in February 2025 and is completed revisions to the WMO Hydrology Research Strategy for RB endorsement
- Task Team on Data Exchange with the Research Sector conducted a survey with the research community. Final outputs expected December 2025
- Task Team on EW4All started meeting in April 2025. Final outputs expected December 2027

# WMO Research Board

## ***WWRP key updates***

Nowcasting and Mesoscale Research WG contributions to WIPPS pilot project on AI for nowcasting

Perspective on AI strategies in data assimilation by DAOS/PDEF working groups to be submitted soon

Online workshop on applications of AI for S2S prediction, advancing in skill and operational integration (May 2025)

Community and capacity building: Nowcasting School in Argentina July 2025

WWRP's Urban-PREDICT project plan approved by the Research Board in Aug 2025

# WMO Research Board

## ***WCRP key updates***

Planning for next strategic and implementation cycle underway (e.g., next generation of WCRP Lighthouse Activities... and Global South Inclusion Task Team)

Significant progress being made by WCRP Core Projects, Lighthouse Activities and Academy:

- Progress with WCRP CMIP, including scenario runs for IPCC on schedule
- Global Extremes Platform now live, including Indices Data Portal
- ([globalextremeindices.com](http://globalextremeindices.com))
- Increased regional focus e.g., Africa Task Team under Regional Information for Society
- Core Project
- WCRP Academy's catalogue now has almost 200 courses and workshops online; African
- fellowship awarded

# WMO Research Board

## ***GAW key updates***

Supporting EW4All: further improvements of work for Sand and Dust Storm and Vegetation Fires and Smoke pollution WAS

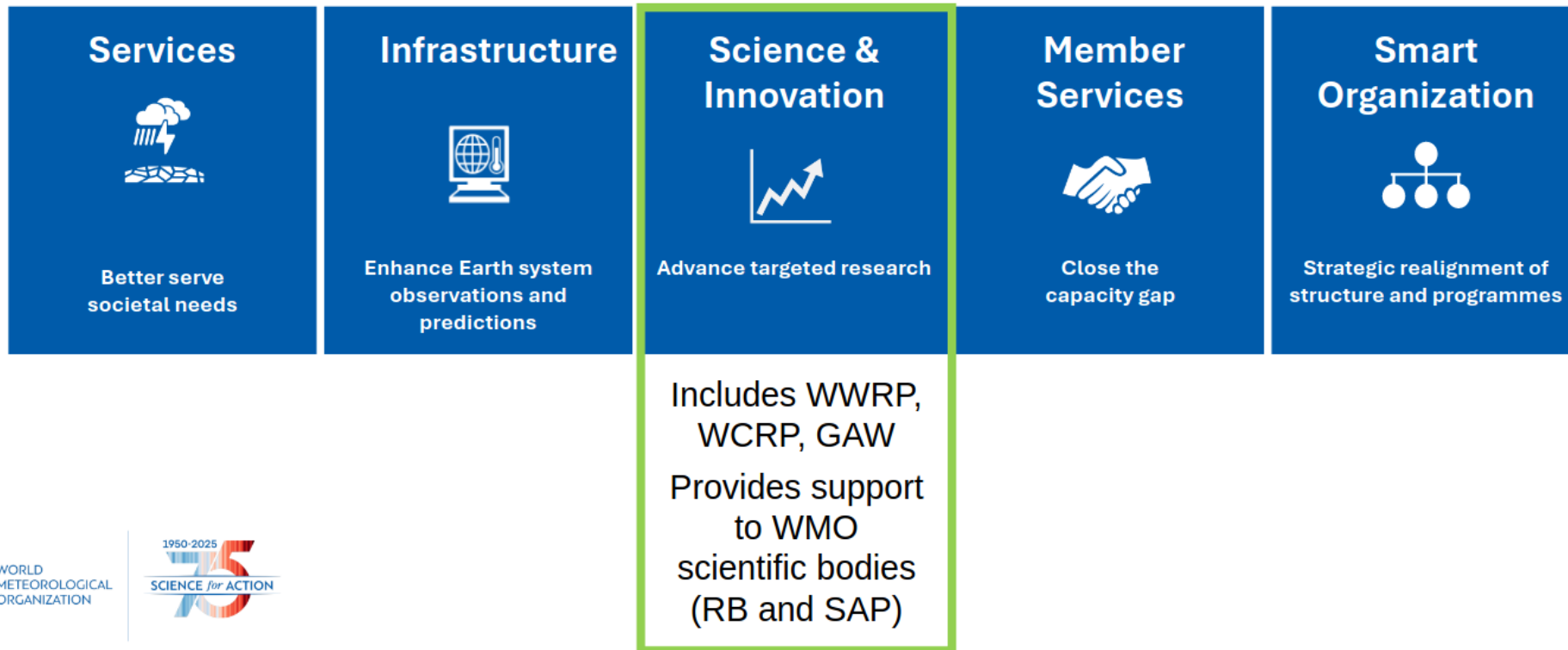
Air Quality Webinar Region IV/III, > 500 attendees

Worldwide assessment of Black Carbon levels (Putaud et al., Atmos. Envir. 2025)

GAW Symposium 2026 (April 13-17, Geneva): Launch of the GAW 2028-2031 strategic plan

# Current WMO Structure

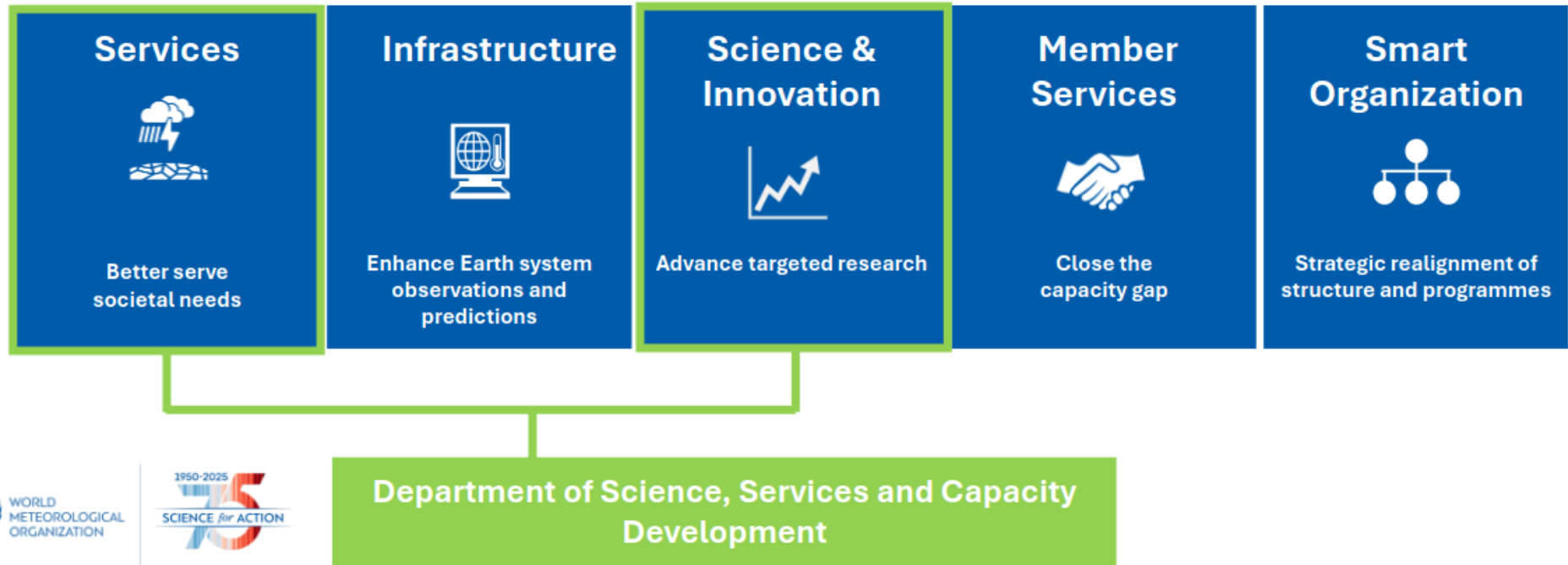
## Five departments across the Secretariat



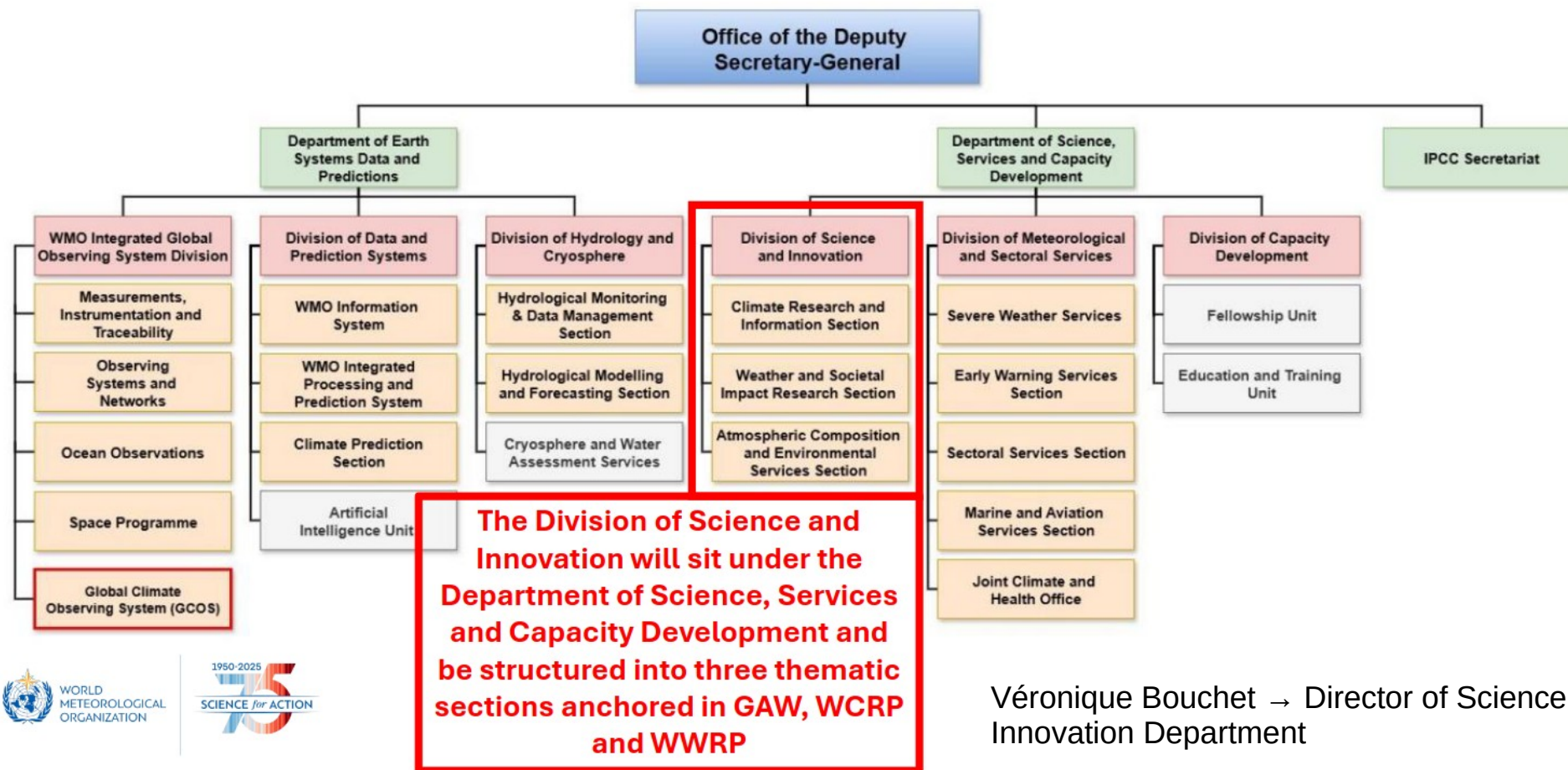


# New WMO Structure

Services and Science and Innovation Departments will merge into one new Department of Science, Services and Capacity Development



# New WMO Structure



# In which areas could WMO support your NMHS in preparing for this future?

## Top 5

### Emerging Priorities

#### *Innovation & digitalization*

Guidance on integration of AI/ML into forecasting & service delivery (incl. cybersecurity), staff re-skilling, access to supercomputing, technical assistance w/ digital platforms, mobile apps

WMO Strategic Planning, Assia Alexieva, Chief, Planning, Foresight and Performance

Support for staff re-skilling in digital tools, big data, and emerging tech

Support for quality control and calibration

Training on advanced forecasting, nowcasting, and Earth system modelling

Guidance on modernizing and integrating observing networks

Guidance on integrating AI/ML into forecasting and service delivery