

News from WMO Messages to TFMM

Paolo Laj

Chief, Atmospheric Composition and Environmental Services



WORLD
METEOROLOGICAL
ORGANIZATION

ACES/GAW is about Atmospheric Composition and its impact on socio-economic sectors

- Collect, harmonize and make available **global atmospheric composition observations from all over the World** .
- Provide members with **up-to-date assessments** of atmospheric composition and its impacts on climate, health, and other sectors.
- Identify and promote the **best tools and strategies** for observing, analyzing, and predicting atmospheric composition (now including AI..).
- Support the development of **operational services** for early warnings, environmental management, climate policies
- Support WMO's role in **international agreements** by providing solid scientific information.
- Ensure all countries have access to **training** to operate monitoring and forecasting systems

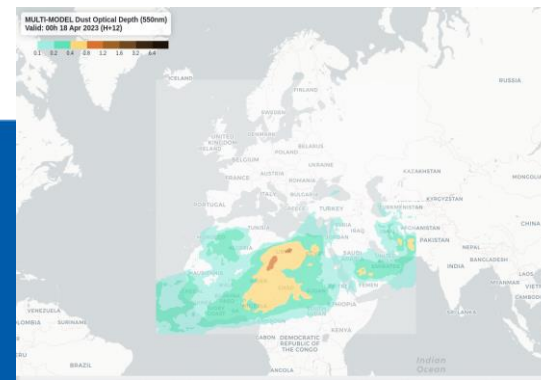
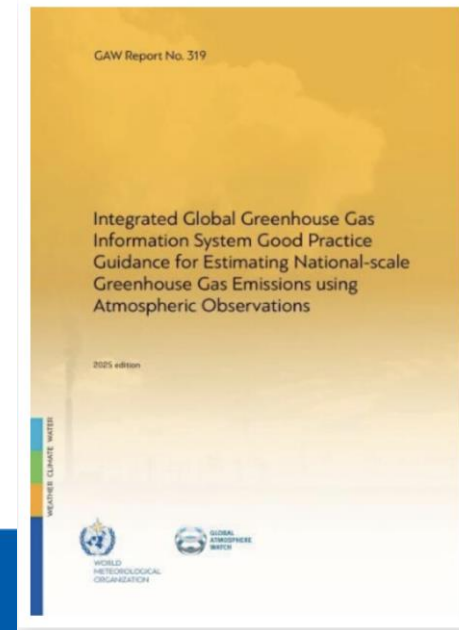
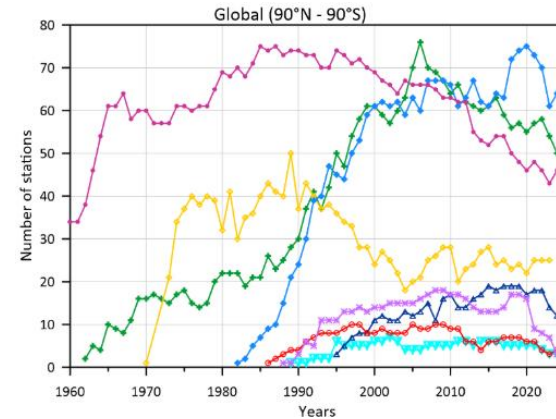
Translated into questions...

- What is the **status of the current ground-based observing system** ?
- Where are the **best-suited sites** for implementing new observations for GHG and ODS ?
- Can we **detect and quantify impacts** of emission reduction at Global scale ?
- How can we implement **air quality forecasting** systems in areas where they are missing ?
- How can we mitigate impacts of **dust storms and extreme heat** on Human health ?
- How can we **raise awareness** on critical issues regarding atmospheric composition and its impacts ?
- What are the key messages to COPs (Ozone treaties, UNFCCC,..) ?



...and into practical implementation (examples)

- Status of the ground-based monitoring system in 2026 (with GCOS);
- Annual WMO GAW bulletins 2026 and the quadriennial ozone assessment 2027;
- Guidance for estimating emissions from atmospheric observations
- Enhancing the Sand and Dust storm forecasting service
- Supporting Calibration of Brewer and Dobson instruments and training



2026 update

- Kosetice is a new Global GAW Station
- Air Quality forecasting training for Region III in Santiago de Chile (May 2026)
- Develop the GAWNET information system
- AISUS+ project on using AI for Atmospheric data management in Urban Areas (Fudan University lead)
- New instruments for the Sand and Dust Storms Warning and advisory System
- New sites for Ozone depleting substances measurements (South-East Asia, Southern Africa, Latin America)
- GCOS status report on the risks for the observing system (public review)
- WMO 2026 Bulletins: main messages to policy-makers

GAW-Symposium April 13-17

- 270 people attending (in-person and online)
- Expanding **Regional** capacity and Engaging countries
- Preparing the **future GAW** program



GAW IP 2028-2031

(Business as usual...)

- Modernize, expand and sustain the **observing network** and the **interoperable global data-exchange** and information system;
- Maintain and expand **capacity** to operate the observing system;
- Providing **authoritative, science-driven**, support to policies

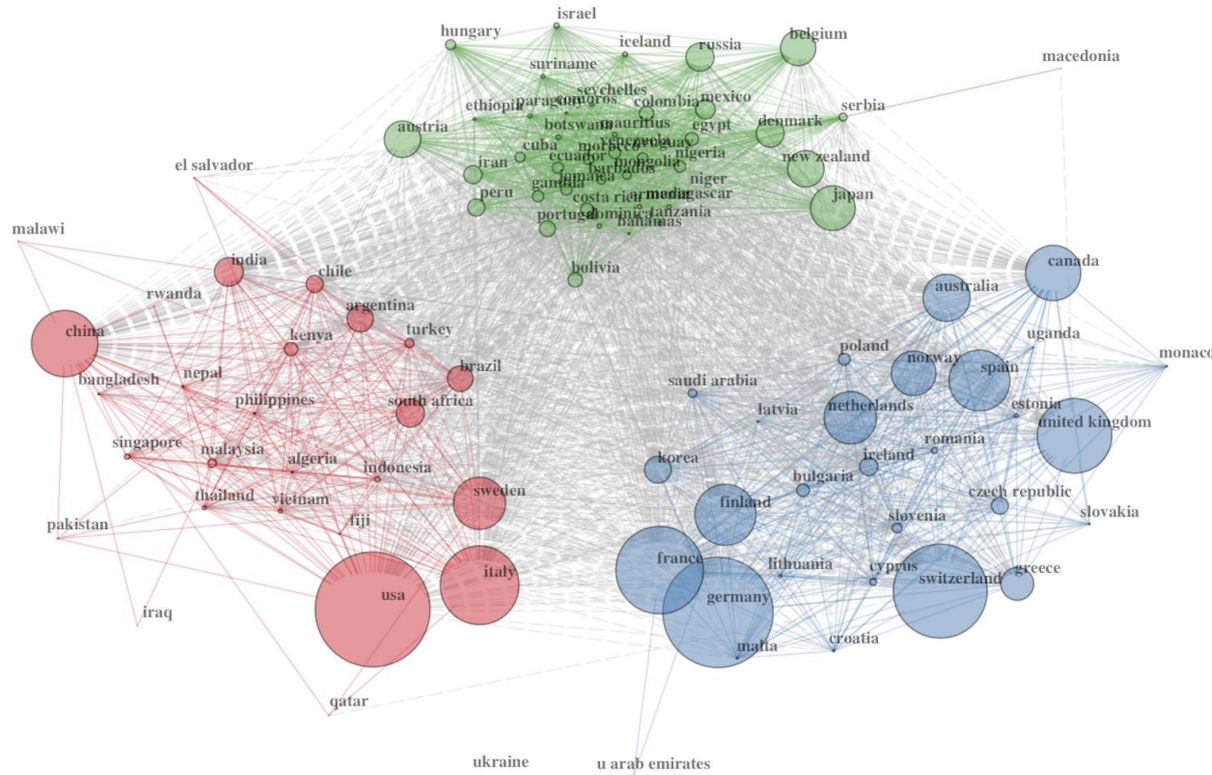
(...but not only)

- **Enhance predictive capabilities** for All (Vegetation fires, SDS, Air Quality), accounting for advancing technologies
- More regular **assessments of the State of the Atmospheric Composition**, perhaps extending to new pollutants, and **impacts**
- **Early Warning for All**: Accelerate Research to Operations through regional centres and fostering role of NMHS
- Expanding **Regional** capacity and Engaging countries



*with partner
organizations
and the
scientific
communities*

GAW-WMO



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