



# GRUAN as a cooperating network of GAW

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# Parameters measured by GAW

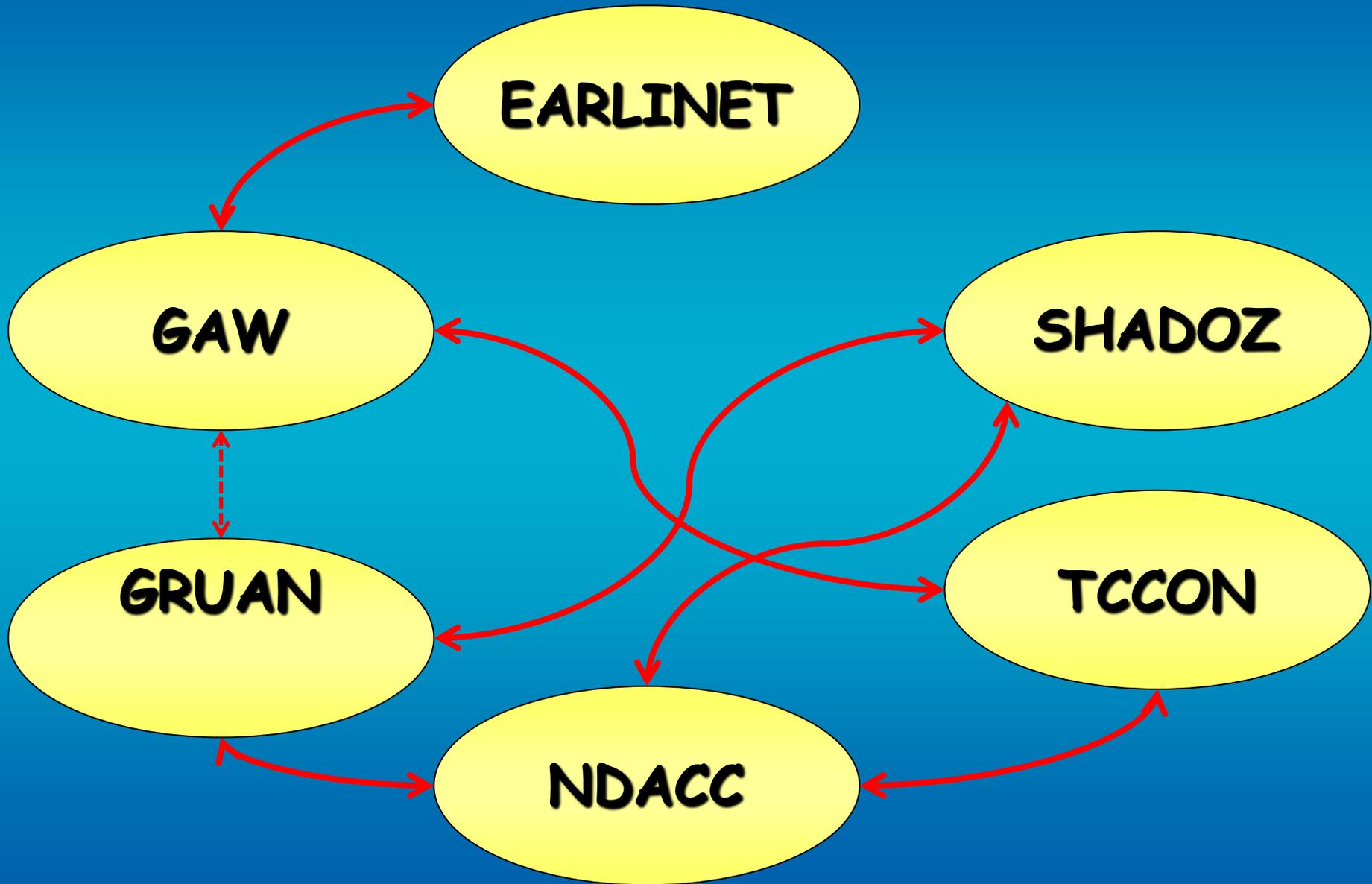
- Stratospheric ozone (total, Umkehr, sondes)
- Greenhouse gases ( $\text{CO}_2$ ,  $\text{CH}_4$ ,  $\text{N}_2\text{O}$ )
- Reactive gases ( $\text{O}_3$ ,  $\text{CO}$ , VOCs,  $\text{NO}_x$ ,  $\text{SO}_2$  etc.)
- Aerosols
- Total Atmospheric Deposition (formerly Precip. chem.)
- Solar UV radiation

# GAW stations



Includes a number of stations that would be attractive to GRUAN.

# Relationships between networks



# Letter of Agreement signed between GRUAN and GAW

**Purpose:** The purpose of this Agreement shall be to recognize GRUAN observational sites that measure water vapour and/or ozone concentration as a contributing network to WMO/GAW and to define each Party's responsibilities.

# GRUAN's responsibilities

- Assist GAW expert groups in setting up requirements and measurement recommendations related to water vapour. Developing respective guidelines;
- Continue to satisfy the requirements set up by GAW on the quality of the observations assessed by the GAW Scientific Advisory Group on Ozone;
- Ensure the shortest possible link of the network standards to the WMO reference standards, or perform network calibration directly against WMO primary standards;
- Participate where appropriate in WMO/GAW comparison campaigns;
- Provide information for all sites for WMO/GAW to assess if their siting conforms to WMO/GAW requirements;
- Provide the GAW Station Information System (GAW SIS) with a list of sites from the network and relevant metadata;
- Maintain current metadata descriptions on the GRUAN web site that may be used in GAW SIS;
- Establish a link from GRUAN web site to home page of the WMO/GAW World Data Centre for Ozone and UV Radiation as well as to GAW SIS;
- Allow free use of GRUAN data with appropriate attribution.

# General Conditions

- The Parties shall inform each other regularly about planned and completed work and about the results generated under this Agreement.
- The Parties agree that any differences of views arising out of the execution of this Agreement shall be resolved in an amicable manner.
- In all publications, presentations or other information destined for the public which relate to cooperation under this Agreement appropriate reference shall be made to the cooperation and the partners involved.
- This Agreement shall come into force when signed by both Parties and shall have a duration of five years.