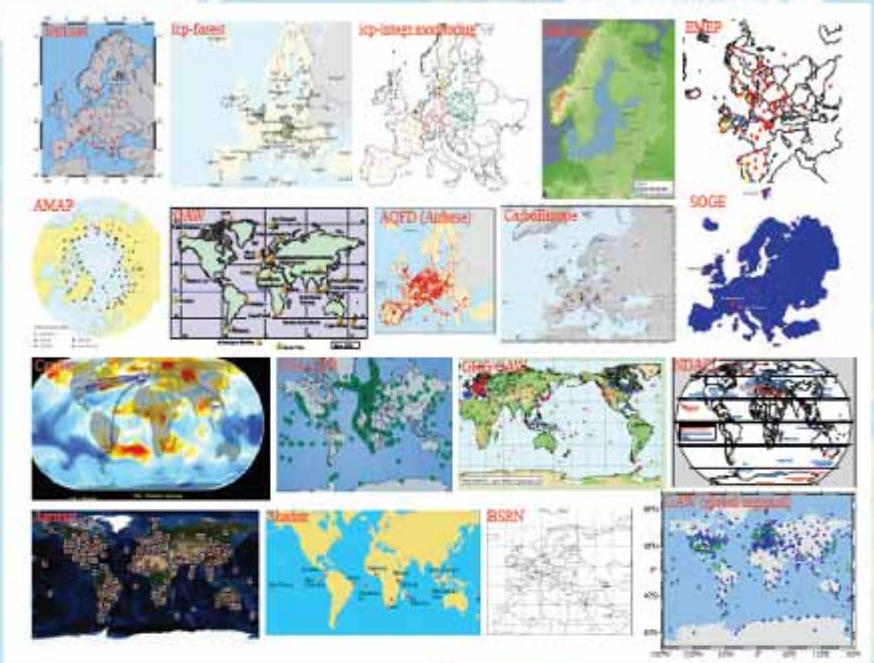
Europe watches the Atmosphere



There are currently many sets of observations of the atmosphere in Europe and other parts of the world. GEOmon is now aiming to create a *one stop shop* for data on atmospheric composition in Europe.

GEOmon products

- Time series of surface and vertical profile data of in-situ observations
- Time series of total column and vertical profile data from ground-based remote sensing stations
- Integrated and harmonized global datasets on atmospheric composition
- Model analyses and assimilated fields
- Selection of representative stations for European air data
- Processed data & trend analysis
- Pilot near real time data

http://www.geomon.eu

GEOmon

Global Earth Observation and Monitoring

http://www.geomon.eu

Global Earth Observation and Monitoring

A major European initiative for monitoring atmospheric composition and climate

The goal of GEOmon is to sustain and analyze European ground-based observations of atmospheric composition and their complimentarity with satellite measurements. This is a first step to build a future integrated pan-European Atmospheric Observing System dealing with systematic observations of long-lived greenhouse gases, reactive gases, aerosols, and stratospheric ozone. This will lay the foundations for a European contribution to GEOSS (Global Earth Observation System of Systems) and optimize the European strategy of environmental monitoring in the field of atmospheric composition observations.

Sixth Framework Programme
2002 - 2006

GEOmon **38 participating institutions** **Duration:** **Feb. 2007 – Feb. 2011**	Coordination: Philippe Ciais[1], Philippe Keckhut[2], Christiane Textor[1], Morag Logan[1] [1]LSCE CEA CNRS UVSQ; France [2]SA CNRS UPMC UVSQ; France **geomon.coord@dsm-mail.saclay.cea.fr** Tel : +33 1 69 08 34 07 Fax : +33 1 69 08 77 16

Structure

Six complementary activities:

Greenhouse Gases and Global Warming
E.G. Nisbet, Royal Holloway and Bedford New College, University of London, United Kingdom

Reactive Gases, Pollutants and Climate
B. Buchmann, Swiss Federal Laboratories for Materials Testing and Research, Switzerland

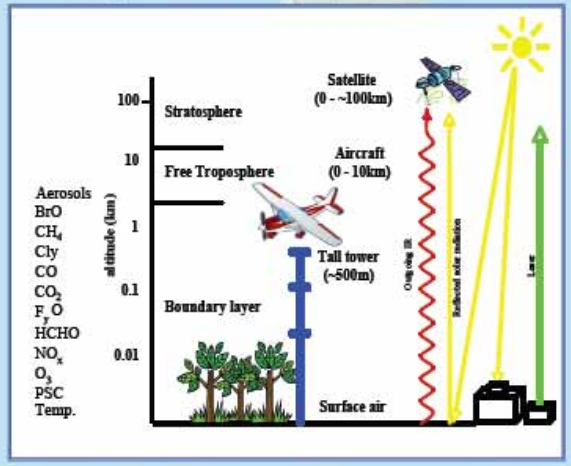
Atmospheric Aerosols and Climate
G. de Leeuw, University of Helsinki, Department of Physics, Finland

Stratospheric Ozone and Climate
M. De Mazière, Institut d'Aéronomie Spatiale de Belgique, Belgium

Integration and Supporting Modelling Studies
M. Schulz, Commisariat à l' Énergie Atomique, France

System Architecture and Outreach
S. Godin-Beekmann, Service d'Aéronomie, Centre National de la Recherche Scientifique, France;
K. Tørseth, Norwegian Institute for Air Research, Norway

Integration of Measurements

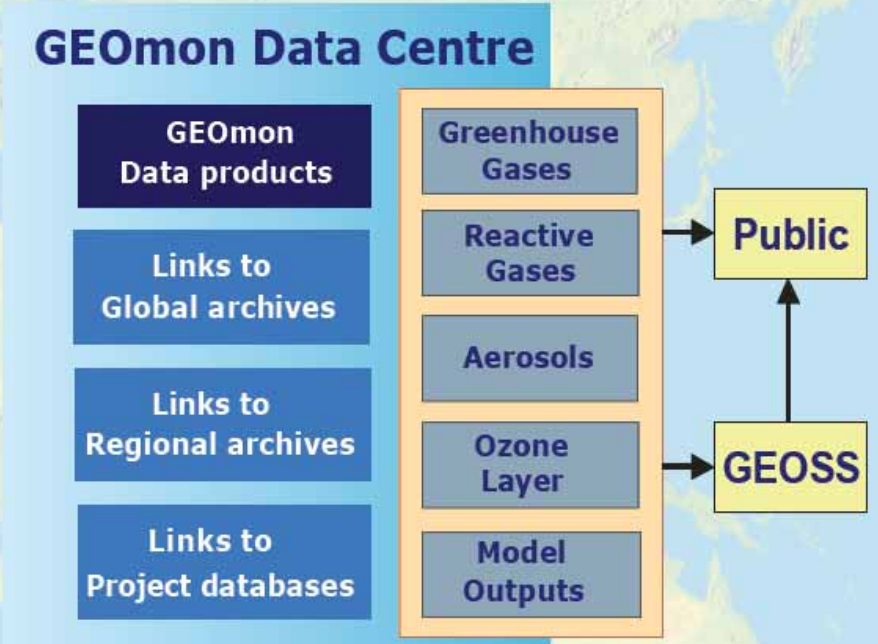


One important strategy of GEOmon is the integration of the different types of measurements of atmospheric composition at different altitudes. This will enable greater understanding and application of each different type of measurement, thereby increasing our understanding of the atmosphere.

GEOmon Data Centre

http://www.geomon.eu/data.html

Towards a *one stop shop* for atmospheric composition data



- Access to data through a common data centre
- Possibility of submission of atmospheric composition data through a common gateway
- Archiving and dissemination of quality controlled and harmonized atmospheric composition data
- Link to global and regional archives
- Common standard for metadata and file formats
- Dissemination of data and data products through user friendly tools