



World Meteorological Organization  
Working together in weather, climate and water

# Collaboration between WMO/GAW and EMEP



# General Information



GAW

The Global Atmosphere Watch (GAW)  
Programme [www.wmo.int/gaw](http://www.wmo.int/gaw)

GAW Station Information System  
(GAWSYS) <http://gaw.empa.ch/gawsis>

The screenshot displays the GAWSYS (Global Atmosphere Watch Station Information System) web interface. The browser address bar shows [gaw.empa.ch/gawsis/](http://gaw.empa.ch/gawsis/). The page header includes the GAWSYS logo, a navigation menu with links like Home, Advanced Search, Edit/Add Information, Register a New Station, Feed-back, FAQs & Glossary, and About, and logos for the Global Atmosphere Watch and the World Meteorological Organization.

The main content area features search filters on the left and a map on the right. The filters include:

- Stations by country (dropdown)
- Stations by network (dropdown)
- Station by name (GAW only) (dropdown)
- Station by GAWID (GAW only) (dropdown)
- Contact information (dropdown)
- Advanced Search (GO! Clear)

The 'Select by Station type' section has checkboxes for Global (checked), Regional (checked), and Contributing (checked). The 'Select by Parameter' section has a dropdown menu.

The map on the right shows the distribution of GAW stations worldwide, with a legend indicating: Global Station (red dot), Regional Station (blue dot), and Contributing Station (green dot). The map is dated 11-Sep-2013.

At the bottom left, there is a 'What's New' section with updates on metadata intake and network changes. The bottom right corner contains logos for EMPA, the Swiss Confederation, and the Federal Department of Home Affairs.

[www.wmo.int/gaw](http://www.wmo.int/gaw)



# Strategic issues



- WMO held the Extraordinary Congress on 29-31 October 2012
- The GAW-2013 Symposium was held on 18-20 March 2013 in Geneva
- Meeting of the Joint Scientific Committee of the Open Programme Area Group on Environmental Pollution and Atmospheric Chemistry (JSC OPAG-EPAC), 20 March 2013
- GAW-2013 Symposium was held back-to-back with HTAP annual meeting



# Network developments



- Since September 2012 10 European stations joined the GAW Programme as GAW Regional stations.
- Important contribution from ACTRIS research infrastructure
- A number of GAW/EMEP stations were involved in a full year intensive measurement period (June 2012- June 2013)

**Importance of monitoring:** ‘In-situ coordination in support of Copernicus operations: Achievements and way forward’, Copenhagen, Denmark, 10-11 April 2013.



# Air pollution and climate



**GAW**

- 4th International Workshop on Air Quality Forecasting (IWAQFR), hosted by WMO on 12-14 December 2012
- This 12th International Conference on Atmospheric Sciences and Application to Air Quality (ASA AQ), Seoul, Korea on 3-5 June 2013



# Technical meetings



- "ACSO" ("Absorption Cross Sections of Ozone") workshop, WMO, June 2013
- GESAMP Workshop on the Atmospheric Deposition of Nitrogen and its Impact on Marine Biogeochemistry was held in Norwich, UK, 11-14 February 2013
- The 17th WMO/IAEA Meeting on Carbon Dioxide, Other Greenhouse Gases and Related Measurement Techniques (GGMT-2013) was held in Beijing, China on 10-13 June 2013



# Important publications



- WMO/IGAC report on Impacts of Megacities on Air Pollution and Climate (GAW Report No 205)
- “The Atlas of Health and Climate” was published jointly by the World Health Organization (WHO) and WMO in October 2012.
- Research papers on aerosol decadal trends based on in-situ optical measurements at GAW and IMPROVE stations and based on in-situ aerosol particle number concentrations at GAW and ACTRIS stations as well as long awaited paper with **recommendations for the interpretation of "black carbon" measurements** (in ACP)



# Important publications



- WMO Greenhouse Gas Bulletin
- GAW Report 209 “Guidelines for Continuous Measurements of Ozone in the Troposphere”
- GAW Report 207 “Recommendations for a Composite Surface-Based Aerosol Network”
- GAW Report 204 “ Standard Operating Procedures (SOPs) for Air Sampling in Stainless Steel Canisters for Non-Methane Hydrocarbons Analysis”





# Quality Assurance



The Central Facilities, including Central Calibration Laboratories, World and Regional Calibration Centers and Data Centers are supported by National Partners and play an important role in QA/AC system. Many of them are supported by European countries.

*NEW:*

- World Calibration Center for UV Radiation in Davos, Switzerland
- Central Calibration Laboratory for monoterpenes in NIST, USA



# Training



- The GAW Training and Education Centre, GAWTEC, hosted by Germany gives two two-week courses annually for station personnel (24 courses, 270 people)

[www.gawtec.de](http://www.gawtec.de)

- MACC Summer School “Modeling and forecasting of atmospheric composition at different scales”, Anglet, France on 9-16 June 2013
- Second Training Course on WMO SDS-WAS products for the African and Middle-East countries, will take place on 7-11 December 2013