

QA/SAC Switzerland Activities and Achievements



Materials Science and Technology

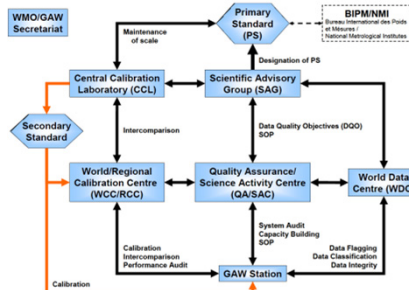
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Introduction

Quality Assurance / Science Activity Centres (QA/SACs) play a central role in the GAW quality assurance system. QA/SAC Switzerland (QA/SAC-CH), co-funded by MeteoSwiss and Empa, was established in 2000. It is closely linked to the World Calibration Centre also hosted by Empa, and thus mainly focuses on surface ozone, carbon monoxide, methane and carbon dioxide measurements. Furthermore, it is also broader in scope and provides technical and scientific support in general.



QA/SAC-Switzerland's Key Tasks

- The main tasks of QA/SAC-CH are
- research activities promoting technical progress and scientific data analysis,
 - twinning, support, capacity building, and training
 - contribution to GAW outreach,
 - networking / cooperation with other programmes / projects in line with the GAW strategy

← Elements of the GAW Quality Assurance System (GAW Implementation Plan: 2016-2023, 2017)

Research Activities

- Main topics are
- the evaluation of new measurement techniques,
 - the assessment of their applicability for long-term monitoring purposes,
 - the identification of suitable QA/QC strategies,
 - dissemination of know-how to the GAW community through publications and presentations,
 - supporting GAW investigators in data exploitation and publication.

Twinning & Support

- Twinning and support of GAW stations are core activities of QA/SAC Switzerland since the early beginning, initially devoted to a small number of stations only.
- Gradually, the activity became increasingly diverse due to the growing renown of the QA/SAC-CH's work, the developments of the GAW network and improved technical means for remote support and trouble-shooting.
- Requests for support usually concern input for instrument selection, instrument operation, repair and procurement of spare parts, calibration strategies, data analysis and quality control and data submission.

Training & Capacity Building

- Training is given either by email and phone or face-to-face during on-site visits, stays of GAW staff in Switzerland and during international meetings.
- QA/SAC Switzerland has also been a partner of the GAW Training and Education Centre (GAWTEC) for a long time. GAWTEC, a German contribution to GAW, provides technical guidance through twice yearly training courses, where the Swiss QA/SAC is regularly involved in teaching.



Glossary of QA/QC Terminology

The WMO/GAW Glossary of QA/QC-Related Terminology, initially compiled by QA/SAC-CH and WCC-N₂O, was recently thoroughly reviewed and subject to major layout improvements. This ensures that the glossary remains the internet resource for QA/QC terminology within GAW. see <http://www.empa.ch/gaw/glossary>



Networking

QA/SAC-CH's cooperation with other projects and programmes, e.g. by sharing expert knowledge, aims at fostering the synergies and at ensuring homogeneity between GAW and those initiatives. Examples are the Integrated Carbon Observation System (ICOS), the Integrated Global Greenhouse Gas Information System (IG³IS) and the Aerosol, Clouds, and Trace Gases Research Network (ACTRIS).



GAW Outreach

QA/SAC-CH regularly authors and contributes to GAW reports as well as other related publications when its expertise is beneficial to the outreach material.

