

Collaborations and networks

Institutions collaborating with research projects at Jungfraujoch and Gornergrat in 2014:

Institution / network	Country	Collaborating with project:
Ecotech Pty Ltd G. Kassell and Dr. M. Laborde	Australia	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Belgian Institute for Space Aeronomy Atmospheric physics and chemistry Dr. Katrijn Clemer, Dr. Michel Van Roozendaal Ringlaan 3 B-1180 Brussels Belgium	Belgium	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Belgian Institute for Space Aeronomy Atmospheric physics and chemistry Dr. Michel Van Roozendaal Ringlaan 3 B-1180 Brussels Belgium	Belgium	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Überlandstrasse 129 CH-8600 Dübendorf
IASB (Institut d'Aéronomie Spatiale de Belgique)	Belgium	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
Université Libre de Bruxelles for IASI FORLI data validation	Belgium	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Université de Liège Institut d'Astrophysique et de Géophysique and NDACC Partners Allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)	Belgium	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium

Institution / network	Country	Collaborating with project:
Université de Liège Institut d'Astrophysique et de Géophysique Allée du VI août, 17 B-4000 Sart Tilman (Liège)	Belgium	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Überlandstrasse 129 CH-8600 Dübendorf
ACTRIS (Aerosol, Clouds and Trace Gases Research Network)	European network	Halogenated greenhouse gases at Jungfraujoch Empa Laboratory for Air Pollution / Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
ACTRIS (Aerosol, Clouds and Trace Gases Research Network)	European network	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Überlandstrasse 129 CH-8600 Dübendorf
CLOUD-TRAIN (http://cloud.web.cern.ch/)	European network	Study of new particle formation in the free troposphere (NUCLACE-2014) Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Collaboration with S&T for the NORS Validation Server	European network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Collaboration with European FTIR and UV-Vis teams and modelling teams in the frame of the EU project NORS	European network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Collaboration with partners of the EC-project NORS (http://nors.aeronomie.be)	European network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium

Institution / network	Country	Collaborating with project:
E-GVAP II (EUMETNET GPS Water Vapor Programme)	European network	Automated GNSS Network Switzerland (AGNES) Swiss Federal Office of Topography swisstopo Seftigenstrasse 264 CH-3084 Wabern
EMEP (European Monitoring and Evaluation Programme)	European network	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Überlandstrasse 129 CH-8600 Dübendorf
European FP7 Project Real-Time Database for High Resolution Neutron Monitor Measurements (NMDB) http://www.nmdb.eu/	European network	Neutron monitors - Study of solar and galactic cosmic rays Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern
GAW-CH	European network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
GNSS4SWEC (COST EU project)	European network	Automated GNSS Network Switzerland (AGNES) Swiss Federal Office of Topography swisstopo Seftigenstrasse 264 CH-3084 Wabern
ICOS Integrated Carbon Observation System http://www.icos-infrastructure.eu	European network	Long-term observations of ¹⁴ CO ₂ at Jungfraujoch Universität Heidelberg Institut für Umweltphysik Im Neuenheimer Feld 229 D-69120 Heidelberg
ICOS Integrated Carbon Observation System http://www.icos-infrastructure.eu	European network	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Überlandstrasse 129 CH-8600 Dübendorf

Institution / network	Country	Collaborating with project:
ICOS Integrated Carbon Observation System partners http://www.icos-infrastructure.eu	European network	Flask comparison on Jungfraujoch Isotope Research — Energy and Sustainability Research Institute Groningen Nijenborgh 4 9747 AG Groningen / The Netherlands
ICOS Integrated Carbon Observation System partners http://www.icos-infrastructure.eu	European network	Flask comparison on Jungfraujoch Max Planck Institut für Biogeochemie Hans Knöll Str. 10 D-007745 Jena
ICOS Integrated Carbon Observation System partners http://www.icos-infrastructure.eu	European network	High precision carbon dioxide and oxygen measurements at Jungfraujoch Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern
InGOS (Integrated non-CO ₂ Greenhouse gas Observation System)	European network	Halogenated greenhouse gases at Jungfraujoch Empa Laboratory for Air Pollution/ Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
InGOS (Integrated non-CO ₂ Greenhouse gas Observation System)	European network	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Überlandstrasse 129 CH-8600 Dübendorf
University of Helsinki Department of Physics Prof. M. Kulmala Helsinki, Finland	Finland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
University of Helsinki Markku Kulmala 00560 Helsinki Finland	Finland	Study of new particle formation in the free troposphere (NUCLACE-2014) Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
University of Helsinki 00560 Helsinki Finland	Finland	Study of ultrafine particle concentrations and nucleation events Goethe-University Frankfurt am Main Institute for Atmospheric and Environmental Sciences Altenhöferallee 1 D-60438 Frankfurt am Main, Germany
INRA Plant pathology research unit Dr. Cindy Morris 147 rue de l'université 75338 Paris Cedex 07 France	France	Biological ice nucleators at tropospheric cloud height University of Basel Department of Environmental Sciences Bernoullistrasse 30 CH-4056 Basel
LATMOS France (SAOZ) F. Goutail, J.-P. Pommerau, A. Pazmino	France	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
National Meteorological Research Center CNRM-GAME Dr. G. Roberts Dr. T. Bourrianne Toulouse, France	France	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Université J. Fourier Laboratoire de Glaciologie et Géophysique de l'Environnement CNRS Dr. P. Laj Grenoble, St Martin d'Hères Cedex, France	France	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Forschungszentrum Jülich Dr. Martina Krämer Wilhelm-Johnen-Strasse D-52428 Jülich	Germany	Assessment of high altitude aerosol and cloud characteristics by remote sensing Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstrasse 16 CH-8092 Zürich, Switzerland
Freie Universität Berlin Prof. Dr. J. Fischer and Dr. T. Ruhtz	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Goethe University of Frankfurt Institute for Atmospheric and Environmental Sciences D-60438 Frankfurt am Main	Germany	Study of new particle formation in the free troposphere (NUCLACE-2014) Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen, Switzerland
Helmholtz-Zentrum Berlin HZB Hahn-Meitner-Platz 1 D-14109 Berlin	Germany	Characterization of ice residuals using X-ray microspectroscopy Max Planck Institute for Chemistry Multiphase Chemistry Department Hahn-Meitner-Weg 1 D-55128 Mainz, Germany
IMK (Forschungszentrum Karlsruhe)	Germany	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
Institute of Atmospheric Physics, DLR Dr. A. Petzold Oberpfaffenhofen, Germany	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen, Switzerland
Johann Wolfgang Goethe Universität Frankfurt am Main Institut für Atmosphäre und Umwelt Dr. Heinz Bingemer Annika Kube Frankfurt am Main, Deutschland	Germany	Field measurements of aerosols acting as ice nucleating particles and their influence on mixed-phase clouds Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstr. 16 CH-8092 Zürich, Switzerland
Johann Wolfgang Goethe Universität Frankfurt am Main Institut für Atmosphäre und Umwelt Prof. J. Curtius Frankfurt am Main, Deutschland	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen, Switzerland
Karlsruhe Institute of Technology (KIT) Institute of Meteorology and Climate Research Dr. Martin Schnaiter Karlsruhe, Germany	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Karlsruhe Institute of Technology (KIT) Institute of Meteorology and Climate Research Karlsruhe, Germany	Germany	Study of snowfall by means of remote sensing and in-situ instruments Environmental Remote Sensing Laboratory EPFL – ENAC – LTE Bâtiment GR, Station 2 CH-1015 Lausanne
Leibniz Institut für Troposphärenforschung D-04318 Leipzig Deutschland	Germany	Assessment of high altitude aerosol and cloud characteristics by remote sensing Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstrasse 16 CH-8092 Zürich, Switzerland
Leibniz Institut für Troposphärenforschung Dr. T. Müller Dr. St. Mertes Prof. A. Wiedensohler D-04318 Leipzig Deutschland	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen, Switzerland
Max-Planck Institute for Biogeochemistry Hans Knöll Str. 10 D-007745 Jena Germany	Germany	Continuous measurement of stable CO ₂ isotopes at Jungfraujoch, Switzerland Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
Max-Planck Institute for Intelligent Systems Stuttgart, Germany	Germany	Characterization of ice residuals using X-ray microspectroscopy Max Planck Institute for Chemistry Multiphase Chemistry Department Hahn-Meitner-Weg 1 D-55128 Mainz, Germany
Max-Planck-Institut für Chemie Biogeochemistry Department Dr. U. Pöschl Mainz	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen, Switzerland
Max-Planck-Institut für Biogeochemie Jena	Germany	High precision carbon dioxide and oxygen measurements at Jungfraujoch Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern

Institution / network	Country	Collaborating with project:
Max-Planck-Institute Mainz, Germany Dr. Jacob Fugal	Germany	Field measurements of aerosols acting as ice nucleating particles and their influence on mixed-phase clouds Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstr. 16 CH-8092 Zürich, Switzerland
Max-Planck-Institut für Biogeochemie Jena	Germany	Flask comparison on Jungfraujoch Isotope Research — Energy and Sustainability Research Institute Groningen Nijenborgh 4 9747 AG Groningen / The Netherlands
SFC Energy AG Eugen-Sänger-Ring 7 D-85649 Brunnthal	Germany	Performance of Methanol fuel cells in alpine environments Armasuisse Wissenschaft + Technologie Fachbereich Testcenter Feuerwerkerstrasse 39 CH-3602 Thun, Switzerland
Technische Universität Darmstadt Institut für Angewandte Geowissenschaften D-64287 Darmstadt	Germany	Characterization of ice residuals using X-ray microspectroscopy Max Planck Institut für Chemie Multiphasenchemie Hahn-Meitner-Weg 1 D-55128 Mainz, Germany
University of Bonn Germany	Germany	Influences of the snowcover on thermal processes in steep permafrost rockwalls Long-term permafrost monitoring WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf, Switzerland
Universität Darmstadt Institut für Mineralogie Prof. S. Weinbruch Darmstadt, Germany	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen, Switzerland
University of Mainz Particle Chemistry Department Dr. J. Schneider Prof. S. Borrmann Mainz, Germany	Germany	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
ACE-FTS science team http://www.ace.uwaterloo.ca/participants.html /	International network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
AGAGE (Advanced Global Atmospheric Gases Experiment)	International network	Halogenated Greenhouse Gases at Jungfraujoch Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf, Switzerland
Both the UV-Vis and FTIR observations contribute to the international Network for the Detection of Atmospheric Composition Changes (NDACC)	International network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels, Belgium
Global Atmosphere Watch (GAW)	International network	National Air Pollution Monitoring Network (NABEL) Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf, Switzerland
Global Atmosphere Watch (GAW)	International network	Halogenated greenhouse gases at Jungfraujoch Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf, Switzerland
Global Atmosphere Watch (GAW)	International network	Study of new particle formation in the free troposphere (NUCLACE-2014) Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Globalview	International networks	High precision carbon dioxide and oxygen measurements at Jungfraujoch Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern

Institution / network	Country	Collaborating with project:
Collaboration with the OMI, ACE and MetOp GOME-2 and IASI satellite communities	International networks	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels, Belgium
NDACC (Network for the Detection of Atmospheric Composition Change, http://www.ndacc.org/) /	International network	GROMOS-C: GRoundbased Ozone Monitoring Spectrometer for Campaigns Institut für angewandte Physik Universität Bern Sidlerstrasse 5 CH-3012 Bern
NDACC (Network for the Detection of Atmospheric Composition Change, http://www.ndacc.org/) /	International network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
Obspack	International network	High precision carbon dioxide and oxygen measurements at Jungfraujoch Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern
Radiation data submitted to the World Radiation Data Centre (WRDC, St. Petersburg, Russian Federation) within the framework of the Global Atmosphere Watch	International network	Global Atmosphere Watch Radiation Measurements Federal Office of Meteorology and climatology MeteoSwiss Ch. de l'Aérologie CH-1530 Payerne
Satellite experiments: IASI ((Infrared Atmospheric Sounding Interferometer)), AURA, OMI, ENVISAT	International network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
World Meteorological Organization (WMO)	International network	Halogenated greenhouse gases at Jungfraujoch Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf

Institution / network	Country	Collaborating with project:
Earth Science Institute Hebrew University of Jerusalem Edmond J. Safra Campus Givat-Ram Jerusalem, 91904	Israel	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Nagoya University Solar Terrestrial Environment Laboratory Prof. Y. Matsubara Prof. Y. Muraki Dr. T. Sako Dr. S. Masuda Nagoya 464-8601, Japan	Japan	SONTEL - Solar Neutron Telescope for the identification and the study of high-energy neutrons produced in energetic eruptions at the Sun Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern
Korea Polar Research Institute KOPRI	Korea	Halogenated greenhouse gases at Jungfraujoch Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
University of the Basque Country Bilbao	Spain	Effects of enriched environment (EE) including exercise in recovery of high-altitude induced memory impairment Institute of Veterinary Physiology University of Zürich Winterthurerstrasse 260 CH-8057 Zürich
Aerosol Consulting ML Ennetbaden, Switzerland	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Alpes Lasers SA 1-3 Max.-de-Meuron C.P. 1766 CH-2001 Neuchâtel	Switzerland	Continuous measurement of stable CO ₂ isotopes at Jungfraujoch, Switzerland Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
Astronomical Institute of the University of Bern (AIUB) Sidlerstrasse 5 CH-3012 Bern	Switzerland	Stellarium Gornergrat Center for Space and Habitability University of Bern Parkterrasse 14 CH-3012 Bern

Institution / network	Country	Collaborating with project:
Bundesamt für Umwelt (BAFU)/ Federal Office for the Environment (FOEN)	Switzerland	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Ueberlandstrasse 129 CH-8600 Dübendorf
Bundesamt für Umwelt (BAFU)/ Federal Office for the Environment (FOEN)	Switzerland	Halogenated greenhouse gases at Jungfraujoch Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf
Burgergemeinde Zermatt Bahnhofstrasse 53 CH-3920 Zermatt	Switzerland	Stellarium Gornergrat Center for Space and Habitability Universität Bern Parkterrasse 14 CH-3012 Bern
Empa B. Buchmann, D. Brunner, S. Henne, S. Reimann, M. Steinbacher Ueberlandstrasse 129 CH-8600 Dübendorf	Switzerland	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf	Switzerland	High precision carbon dioxide and oxygen measurements at Jungfraujoch Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern
Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf	Switzerland	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
Empa NABEL Laboratory for Air Pollution/Environmental Technology CH-8600 Dübendorf	Switzerland	Biological ice nucleators at tropospheric cloud height University of Basel Department of Environmental Sciences Bernoullistrasse 30 CH-4056 Basel

Institution / network	Country	Collaborating with project:
Empa Laboratory for Air Pollution/Environmental Technology Dr. C. Hüglin, Dr. S. Henne, Dr. S. Reimann, Dr. M. Steinbacher Ueberlandstrasse 129 CH-8600 Dübendorf	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Empa Laboratory for Air Pollution/Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf	Switzerland	Measurement of biological particles during desert dust events Karlsruhe Institute of Technology Institute for Meteorology and Climate Research IMK-AAF Hermann-von-Helmholtz-Platz 1 D-76344 Eggenstein-Leopoldshafen Germany
Empa Laboratory for Air Pollution/Environmental Technology Dr. Stephan Henne Überlandstrasse 129 CH-8600 Dübendorf	Switzerland	Emissions and imissions of atmospheric mercury in Switzerland Institute for Chemical and Bioengineering ETH Zürich Vladimir-Prelog-Weg 1 CH-8093 Zürich
Empa Laboratory for Air Pollution/Environmental Technology CH-8600 Dübendorf	Switzerland	Quantifying mountain venting of boundary layer air through Rn-222 measurements University of Basel Department of Environmental Sciences Bernoullistrasse 30 CH-4056 Basel
ETH Zürich Swiss Federal Institute of Technology Computer Engineering and Networks Laboratory Dr. Jan Beutel Gloriastrasse 35 CH-8092 Zurich	Switzerland	Influences of the snowcover on thermal processes in steep permafrost rockwalls Long-term permafrost monitoring WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf, Switzerland
ETH Zürich Swiss Federal Institute of Technology Institute for Quantum Electronics Wolfgang-Pauli-Str.16 CH-8093 Zurich	Switzerland	Continuous measurement of stable CO2 isotopes at Jungfraujoch, Switzerland Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf

Institution / network	Country	Collaborating with project:
ETH Zürich Swiss Federal Institute of Technology Institute for Atmospheric and Climate Science Prof. U. Lohmann Prof. T. Peter Universitätstrasse 16 CH-8092 Zürich	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
ETH Zürich Swiss Federal Institute of Technology Institute for Atmospheric and Climate Science Yvonne Boose Universitätstrasse 16 CH-8092 Zürich	Switzerland	Interactions between aerosols and rain clouds as a function of aerosol types and sources Earth Science Institute Hebrew University of Jerusalem Edmond J. Safra, Campus Givat-Ram Jerusalem, 91904 Israel
ETH Zürich Swiss Federal Institute of Technology Institute of Geodesy and Photogrammetry	Switzerland	Automated GNSS Network Switzerland (AGNES) Swiss Federal Office of Topography swisstopo Seftigenstrasse 264 CH-3084 Wabern
ETH Zürich Swiss Federal Institute of Technology Institute for Atmospheric and Climate Science Dr. Zamin Kanji / Yvonne Boose Universitätstrasse 16 CH-8092 Zürich	Switzerland	Measurement of ice nucleating particles by the Frankfurt Deposition Freezing Experiment FRIDGE Institute for Atmospheric and Environmental Sciences University Frankfurt Altenhöferallee 1 D-60438 Frankfurt am Main
ETH Zürich Swiss Federal Institute of Technology Institute for Atmospheric and Climate Science Universitätstrasse 16 CH-8092 Zürich	Switzerland	Characterization of ice residuals using X-ray microspectroscopy Max Planck Institut für Chemie Multiphasenchemie Hahn-Meitner-Weg 1 D-55128 Mainz, Germany
ETH Zürich Swiss Federal Institute of Technology Institute of Plant, Animal and Agroecosystem Sciences Dr. W. Eugster	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Federal Office for the Environment FOEN	Switzerland	Glaciological investigations on the Grosser Aletschgletscher ETH Zürich Versuchsanstalt für Wasserbau, Hydrologie und Glaziologie (VAW) Wolfgang-Pauli-Strasse 27 CH-8093 Zürich
Gebäudeversicherung Bern (GVB) Papiermühlestrasse 130 CH-3063 Ittigen	Switzerland	Long-term study on the efficiency of photovoltaics at alpine sites Berner Fachhochschule BFH Technik und Informatik TI Labor für Photovoltaik Jlcoweg 1 CH-3400 Burgdorf
Institut für Aerosol- und Sensortechnik, Fachhochschule Nordwestschweiz, Windisch Prof. H. Burtscher Dr. E. Weingartner Dr. M. Fierz	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Institute of Applied Physics University of Bern Dr. Axel Murk	Switzerland	Field test of a total-power radiometer comprising a 340 GHz sub-harmonic image rejection mixer (SHIRM) receiver for atmospheric remote sensing RAL Space Harwell Oxford Didcot, OX11 0QX Oxfordshire United Kingdom
Kantonsspital St. Gallen Pedriatische Kardiologie Dr. Dominik Stambach	Switzerland	Cardiopulmonary adaptation of short term exposure to high altitude in Fontan patients: Swiss multicenter Fontan & Altitude Collaboration (FALCON) Study Center for Congenital Heart Disease Cardiology University Hospital Inselspital Freiburgstrasse CH-3010 Bern
3100 Kulmhotel Gornergrat Gornergrat 3100m CH-3920 Zermatt	Switzerland	Stellarium Gornergrat Center for Space and Habitability University of Bern Parkterrasse 14 CH-3012 Bern

Institution / network	Country	Collaborating with project:
MeteoSwiss	Switzerland	<p>Assessment of high altitude aerosol and cloud characteristics by remote sensing</p> <p>Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstrasse 16 CH-8092 Zürich, Switzerland</p>
MeteoSwiss	Switzerland	<p>GROMOS-C: GRoundbased Ozone Monitoring Spectrometer for Campaigns</p> <p>Institut für angewandte Physik Universität Bern Sidlerstrasse 5 CH-3012 Bern</p>
MeteoSwiss	Switzerland	<p>National Air Pollution Monitoring Network (NABEL)</p> <p>Empa Swiss Federal Laboratories for Materials Science and Technology Ueberlandstrasse 129 CH-8600 Dübendorf</p>
MeteoSwiss	Switzerland	<p>Comprehensive Radiation Flux Assessment (CRUX)</p> <p>Physikalisch-Meteorologisches Observatorium Davos PMOD World Radiation Center WRC Dorfstrasse 33 CH-7260 Davos Dorf</p>
MeteoSwiss, Zurich and Payerne	Switzerland	<p>Automated GNSS Network Switzerland (AGNES)</p> <p>Swiss Federal Office of Topography swisstopo Seftigenstrasse 264 CH-3084 Wabern</p>
MeteoSwiss, Payerne Office fédéral de météorologie et de climatologie MétéoSuisse Dr. D. Ruffieux ch. de l'Aérologie CH-1530 Payerne	Switzerland	<p>The Global Atmosphere Watch Aerosol Program at Jungfraujoch</p> <p>Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen, Switzerland</p>
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	<p>Biological ice nucleators at tropospheric cloud height</p> <p>University of Basel Department of Environmental Sciences Bernoullistrasse 30 CH-4056 Basel</p>

Institution / network	Country	Collaborating with project:
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	Quantifying mountain venting of boundary layer air through Rn-222 measurements University of Basel Department of Environmental Sciences Bernoullistrasse 30 CH-4056 Basel
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	Assessment of high altitude aerosol and cloud characteristics by remote sensing Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstrasse 16 CH-8092 Zürich, Switzerland
Paul Scherrer Institute Laboratory of Atmospheric Chemistry Prof. Urs Baltensperger Dr. Erik Herrmann CH-5232 Villigen Switzerland	Switzerland	Field measurements of aerosols acting as ice nucleating particles and their influence on mixed-phase clouds Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstr. 16 CH-8092 Zürich, Switzerland
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	National Air Pollution Monitoring Network (NABEL) Empa Swiss Federal Laboratories for Materials Science and Technology Ueberlandstrasse 129 CH-8600 Dübendorf
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	The Morphology and Optical Properties of Ice Particles in Mixed Phase Clouds (ISI-MICROPHYSICS) Karlsruhe Institute of Technology Institute for Meteorology and Climate Research IMK-AAF Hermann-von-Helmholtz-Platz 1 D-76344 Eggenstein-Leopoldshafen
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	Measurement of biological particles during desert dust events Karlsruhe Institute of Technology Institute for Meteorology and Climate Research IMK-AAF Hermann-von-Helmholtz-Platz 1 D-76344 Eggenstein-Leopoldshafen

Institution / network	Country	Collaborating with project:
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	Study of ultrafine particle concentrations and nucleation events Goethe-University Frankfurt am Main Institute for Atmospheric and Environmental Sciences Altenhöferallee 1 D-60438 Frankfurt am Main, Germany
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	Characterization of ice residuals using X-ray microspectroscopy Max Planck Institut für Chemie Multiphasenchemie Hahn-Meitner-Weg 1 D-55128 Mainz, Germany
Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland	Switzerland	Interactions between aerosols and rain clouds as a function of aerosol types and sources Earth Science Institute Hebrew University of Jerusalem Edmond J. Safra, Campus Givat-Ram Jerusalem, 91904 Israel
Paul Scherrer Institute Laboratory of Atmospheric Chemistry Dr. Ernest Weingartner CH-5232 Villigen Switzerland	Switzerland	Measurement of ice nucleating particles by the Frankfurt Deposition Freezing Experiment FRIDGE Institute for Atmospheric and Environmental Sciences University Frankfurt Altenhöferallee 1 D-60438 Frankfurt am Main
PermaSense Network www.permasense.ch	Switzerland	Influences of the snowcover on thermal processes in steep permafrost rockwalls Long-term permafrost monitoring WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf, Switzerland
PermaSense Network ETH Zürich Computer Engineering and Networks Laboratory (TIK) Gloriastrasse 35 CH-8092 Zürich	Switzerland	Swiss Permafrost Monitoring Network PERMOS University of Zürich Department of Geography Winterthurerstrasse 190 CH-8057 Zürich

Institution / network	Country	Collaborating with project:
PERMOS (Permafrost Monitoring Switzerland) http://www.permos.ch/	Switzerland	Influences of the snowcover on thermal processes in steep permafrost rockwalls Long-term permafrost monitoring WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf, Switzerland
Physikalisch-Meteorologisches Observatorium Davos PMOD World Radiation Center WRC Dr. Julian Gröbner Davos Switzerland	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
SCCER-FURIES (Swiss Competence Center for Energy Research) http://sccer-furies.epfl.ch/	Switzerland	Long-term study on the efficiency of photovoltaics at alpine sites Berner Fachhochschule BFH Technik und Informatik TI Labor für Photovoltaik Jlcoweg 1 CH-3400 Burgdorf
Sputnik Engineering AG http://www.solarmax.com/ch/de/	Switzerland	Long-term study on the efficiency of photovoltaics at alpine sites Berner Fachhochschule BFH Technik und Informatik TI Labor für Photovoltaik Jlcoweg 1 CH-3400 Burgdorf
Studiengesellschaft Mont Soleil Les Brenet	Switzerland	Long-term study on the efficiency of photovoltaics at alpine sites Berner Fachhochschule BFH Technik und Informatik TI Labor für Photovoltaik Jlcoweg 1 CH-3400 Burgdorf
Study of solar photometry (aerosol optical depth) and long-wave infrared radiative forcing in collaboration with the Physikalisch Meteorologisches Observatorium Davos (PMOD), World Radiation Center (WRC) Dorfstrasse 33 CH-7260 Davos Dorf	Switzerland	Global Atmosphere Watch Radiation Measurements Federal Office of Meteorology and climatology MeteoSwiss Station Aérologique Ch. de l'Aérologie CH-1530 Payerne

Institution / network	Country	Collaborating with project:
Swiss Federal Office for the Environment (FOEN)	Switzerland	Emissions and imissions of atmospheric mercury in Switzerland Institute for Chemical and Bioengineering ETH Zürich Vladimir-Prelog-Weg 1 CH-8093 Zürich
Swiss GCOS office http://www.proclim.ch/4dcgi/proclim/all/News?33566	Switzerland	High precision carbon dioxide and oxygen measurements at Jungfraujoch Universität Bern Physikalisches Institut Klima- und Umweltphysik Sidlerstrasse 5 CH-3012 Bern
Swiss Glacier Monitoring Network http://glaciology.ethz.ch/swiss-glaciers	Switzerland	Glaciological investigations on the Grosser Aletschgletscher ETH Zürich Versuchsanstalt für Wasserbau, Hydrologie und Glaziologie (VAW) Wolfgang-Pauli-Strasse 27 CH-8093 Zürich
Uepaa AG Seefeldstrasse 301a CH-8008 Zürich	Switzerland	Avalanche Rescue Beacon with Smartphones ETH Zürich Computer Engineering and Networks Laboratory Communication Systems Group Gloriastrasse 35 CH-8092 Zürich
Universität Basel Institut für Umweltgeowissenschaften Dr. Franz Conen Bernoullistrasse 30 CH-4056 Basel	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Universität Basel Kardiologie PD Dr. Daniel Tobler	Switzerland	Cardiopulmonary adaptation of short term exposure to high altitude in Fontan patients: Swiss multicenter Fontan & Altitude Collaboration (FALCON) Study Center for Congenital Heart Disease Cardiology University Hospital Inselspital Freiburgstrasse CH-3010 Bern

Institution / network	Country	Collaborating with project:
University of Bern	Switzerland	<p>Long-term study on the efficiency of photovoltaics at alpine sites</p> <p>Berner Fachhochschule BFH Technik und Informatik TI Labor für Photovoltaik Jlcoweg 1 CH-3400 Burgdorf</p>
University of Bern Astronomical Institute (AIUB), Sidlerstrasse 5 CH-3012 Bern	Switzerland	<p>Automated GNSS Network Switzerland (AGNES)</p> <p>Swiss Federal Office of Topography swisstopo Seftigenstrasse 264 CH-3084 Wabern</p>
University of Bern Institute of Applied Physics (IAP) Sidlerstrasse 5 CH-3012 Bern	Switzerland	<p>Automated GNSS Network Switzerland (AGNES)</p> <p>Swiss Federal Office of Topography swisstopo Seftigenstrasse 264 CH-3084 Wabern</p>
University of Bern Physics Institute Climate and Environmental Physics Sidlerstrasse 5 CH-3012 Bern	Switzerland	<p>National Air Pollution Monitoring Network (NABEL)</p> <p>Empa Swiss Federal Laboratories for Materials Science and Technology Ueberlandstrasse 129 CH-8600 Dübendorf</p>
University of Bern Physics Institute Climate and Environmental Physics Prof. M. Leuenberger Sidlerstrasse 5 CH-3012 Bern	Switzerland	<p>The Global Atmosphere Watch Aerosol Program at Jungfraujoch</p> <p>Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland</p>
University of Bern Physics Institute Climate and Environmental Physics Sidlerstrasse 5 CH-3012 Bern	Switzerland	<p>Continuous measurement of stable CO₂ isotopes at Jungfraujoch, Switzerland</p> <p>Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf</p>
University of Bern Physics Institute Climate and Environmental Physics Sidlerstrasse 5 CH-3012 Bern	Switzerland	<p>Flask comparison on Jungfraujoch</p> <p>Max Planck Institut für Biogeochemie Hans Knöll Str. 10 D-007745 Jena</p>

Institution / network	Country	Collaborating with project:
University of Bern Physics Institute Climate and Environmental Physics Sidlerstrasse 5 CH-3012 Bern	Switzerland	Flask comparison on Jungfraujoch Isotope Research — Energy and Sustainability Research Institute Groningen Nijenborgh 4 9747 AG Groningen / The Netherlands
Universität Bern Physikalisches Institut Klima- und Umweltphysik Dr. Roland Pertschert Sidlerstrasse 5 CH-3012 Bern	Switzerland	85Kr Activity Determination in Tropospheric Air Bundesamt für Strahlenschutz Rosastrasse 9 D-79098 Freiburg
Universität Fribourg Departement für Geowissenschaften Prof. Dr. B. Grobéty Chemin du Musée 6 CH-1700 Fribourg	Switzerland	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
Universität Fribourg Department of Geosciences Prof. Martin Hoelzle Chemin du Musée 6 CH-1700 Fribourg	Switzerland	Influences of the snowcover on thermal processes in steep permafrost rockwalls Long-term permafrost monitoring WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf, Switzerland
University of Geneva Geneva Observatory Astronomy Department 51, Chemin des Maillettes CH-1290 Sauverny	Switzerland	Stellarium Gornergrat Center for Space and Habitability University of Bern Parkterrasse 14 CH-3012 Bern
University of Zurich Cardiology PD Dr. Matthias Greutmann	Switzerland	Cardiopulmonary adaptation of short term exposure to high altitude in Fontan patients: Swiss multicenter Fontan & Altitude Collaboration (FALCON) Study Center for Congenital Heart Disease Cardiology University Hospital Inselspital Freiburgstrasse CH-3010 Bern

Institution / network	Country	Collaborating with project:
University of Zurich Department of Geography Glaciology, Geomorphodynamics & Geochronology Winterthurerstr. 190 CH-8057 Zürich, Switzerland	Switzerland	Influences of the snowcover on thermal processes in steep permafrost rockwalls Long-term permafrost monitoring WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf, Switzerland
WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf Dr. Marcia Phillips	Switzerland	Swiss Permafrost Monitoring Network PERMOS University of Zürich Department of Geography Winterthurerstrasse 190 CH-8057 Zürich
Centre for Isotope Research CIO Groningen, The Netherlands	The Netherlands	High precision carbon dioxide and oxygen measurements at Jungfraujoch Universität Bern Physikalisches Institut Sidlerstrasse 5 CH-3012 Bern
Centre for Isotope Research CIO Groningen, The Netherlands	The Netherlands	Flask comparison on Jungfraujoch Max Planck Institut für Biogeochemie Hans Knöll Str. 10 D-007745 Jena
Abant Izzet Baysal University Department of Physics Experimental Nuclear and High Energy Group Prof. Dr. Haluk Denizli Bolu / Turkey	Turkey	Test for a new concept of an EAS detector for UHE neutrinos University of Rome La Sapienza Departement of Physics Piazza A. Moro 5 I-00185 Rome
University of Birmingham School of Sport, Exercise and Rehabilitation Sciences Prof. James Fisher United Kingdom	UK	Human adaptation to high altitude University of Zürich Institute of Physiology Winterthurerstrasse 190 CH-8057 Zürich
University of Bristol	UK	Halogenated greenhouse gases at Jungfraujoch Empa Laboratory for Air Pollution/ Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf

Institution / network	Country	Collaborating with project:
University of Leeds School of Earth and Environment Collaboration with Martin Chipperfield Leeds, LS2 9JT United Kingdom http://www.see.leeds.ac.uk/people/ m.chipperfield	UK	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
University of Leeds	UK	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
University of Manchester School of Earth, Atmospheric and Environmental Sciences (SEAES) Prof. H. Coe Prof. T. Choularton Manchester, UK	UK	The Global Atmosphere Watch Aerosol Program at Jungfraujoch Paul Scherrer Institute Laboratory of Atmospheric Chemistry CH-5232 Villigen Switzerland
University of Manchester Centre for Atmospheric Science SEAES University of Manchester Manchester, UK	UK	Study of snowfall by means of remote sensing and in-situ instruments Environmental Remote Sensing Laboratory EPFL – ENAC – LTE Bâtiment GR, Station 2 CH-1015 Lausanne
University of Manchester Centre for Atmospheric Science SEAES Paul Connolly and Gary Lloyd Manchester, UK	UK	Field measurements of aerosols acting as ice nucleating particles and their influence on mixed-phase clouds Swiss Federal Office of Technology, ETH Zürich Institute for Atmospheric and Climate Science Universitätsstr. 16 CH-8092 Zürich, Switzerland
University of Manchester Centre for Atmospheric Science SEAES University of Manchester Manchester, UK	UK	Measurement of biological particles during desert dust events Karlsruhe Institute of Technology Institute for Meteorology and Climate Research IMK-AAF Hermann-von-Helmholtz-Platz 1 D-76344 Eggenstein-Leopoldshafen

Institution / network	Country	Collaborating with project:
University of Manchester Centre for Atmospheric Science SEAES University of Manchester Manchester, UK	UK	The Morphology and Optical Properties of Ice Particles in Mixed Phase Clouds (ISI-MICROPHYSICS) Karlsruhe Institute of Technology Institute for Meteorology and Climate Research IMK-AAF Hermann-von-Helmholtz-Platz 1 D-76344 Eggenstein-Leopoldshafen
Carnegie Mellon University Dept. of Physics Prof. James Russ 5000 Forbes Ave. Pittsburgh, PA 15213 USA	USA	Test for a new concept of an EAS detector for UHE neutrinos University of Rome La Sapienza Departement of Physics Piazza A. Moro 5 I-00185 Rome
NASA JPL	USA	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere University of Liège Dept. of Astrophysics, Geophysics & Oceanology Allée du six Août, 17 - Bâtiment B5a B-4000 Liège, Belgium
University of Albany Department of Atmospheric and Environmental Sciences Mathias Vuille Albany, NY 12222 USA	USA	Test of equipment for ice core drilling on high-alpine glaciers Paul Scherrer Institute Laboratory of Radiochemistry and Environmental Chemistry CH-5232 Villigen Switzerland
University of Massachusetts Douglas Hardy Amherst, MA 01003 USA	USA	Test of equipment for ice core drilling on high-alpine glaciers Paul Scherrer Institute Laboratory of Radiochemistry and Environmental Chemistry CH-5232 Villigen Switzerland