

Collaborations and networks

Institutions collaborating with research projects at Jungfrauoch and Gornergrat in 2010:

Institution / network	Country	Collaborating with project:
Prof. A. Chilingarian, Cosmic Ray Divison, Yerevan Physics Institute, Yerevan, 375036, Armenia	Armenia	SONTEL - Solar Neutron Telescope for the identification and the study of high- energy neutrons produced in energetic eruptions at the Sun Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern
Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium	Belgium	The Global Atmosphere Watch Aerosol Program at the Jungfrauoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium	Belgium	Calibration of Sun and aureole spectrometer systems within the Cloud and Aerosol Characterization Experiment (CLACE) Institut für Weltraumwissenschaften Freie Universität Berlin Carl-Heinrich-Becker-Weg 6-10 12165 Berlin
Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium	Belgium	Validation of retrieval of atmospheric trace gases with Phaethon system using differential optical absorption spectroscopy Laboratory of Atmospheric Physics Aristotle University of Thessaloniki Campus Box 149 54124Thessaloniki Greece
Collaboration with Royal Meteorological Institute of Belgium (KMI-IRM), Univ. Liège-and Univ. Libre de Bruxelles in the frame of the national projects AGACC, and AGACC-II (Science for Sustainable Development Programme); http://www.oma.be/AGACC/Home.html	Belgium	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium

Institution / network	Country	Collaborating with project:
Prof. Frank Wania University of Toronto at Scarborough, Department of Physical and Environmental Sciences, 1265 Military Trail Toronto, ON, Canada, M1C 1A4 http://www.utsc.utoronto.ca/~wania/main.htm 1	Canada	Quantitative characterisaion of the impact of environmental factors on the performance of passive air samplers for semi-volatile organic compounds Institut für Chemie- und Bioingenieurwissenschaften ETH Zürich Wolfgang-Pauli-Str. 10 8093 Zürich
NANTEN2 Observatory, Pampa la Bola, Atacama, Chile http://www.astro.uni-koeln.de/nanten2/node/10 (Nagoya and Osaka University)	Chile	KOSMA Kölner Observatorium für Submm-Astronomie 1. Physikalisches Institut Universität zu Köln Zülpicher Str. 77 D-50937 Köln Radioastronomisches Institut der Universität Bonn Auf dem Hügel 71 D-53121 Bonn
Astronomy Department Peking University, China http://vega.bac.pku.edu.cn/astro/English.html	China	KOSMA Kölner Observatorium für Submm-Astronomie 1. Physikalisches Institut Universität zu Köln Zülpicher Str. 77 D-50937 Köln Radioastronomisches Institut der Universität Bonn Auf dem Hügel 71 D-53121 Bonn
National Astronomical Observatory Chinese Academy of Science (NAOC), Peking, China http://english.nao.cas.cn/	China	KOSMA Kölner Observatorium für Submm-Astronomie 1. Physikalisches Institut Universität zu Köln Zülpicher Str. 77 D-50937 Köln Radioastronomisches Institut der Universität Bonn Auf dem Hügel 71 D-53121 Bonn
Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf in the frame of the EU project ACTRIS	European network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
IMECC partners IMECC Infrastructure for Measurements of the European Carbon Cycle partners http://imecc.ipsl.jussieu.fr/	European network	Flask comparison on Jungfraujoch Centre for Isotope Research (CIO) Nijenborgh 4 9747 AG Groningen / The Netherlands

Institution / network	Country	Collaborating with project:
AOD network http://www.pmodwrc.ch/worcc/pmod.php?topic=gawpfr_image_gallery http://www.pmodwrc.ch/worcc/	European network	Remote sensing of aerosol optical depth PMOD/WRC Dorfstrasse 33 CH-7260 Davos Dorf
GAW-CH / partners of the EC-project HYMN (http://www.knmi.nl/samenw/hymn/) and GEOmon (http://geomon.ipsl.jussieu.fr/) /	European network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
Satellite experiment: OMI Ozone monitoring instrument (http://www.knmi.nl/omi/research/science/)	European network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
EARLINET – European Aerosol Research Lidar NETwork (http://www.earlinet.org/)	European network	Active optical remote sensing, LIDAR École Polytechnique Fédérale de Lausanne (EPFL) EPFL ENAC EFLUM A0 434 Station 2 CH 1015 Lausanne
SOGE (System for Observations of Halogenated Greenhouse Gases in Europe)	European network	Halogenated Greenhouse Gases at Jungfrauoch Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 8600 Dubendorf, Switzerland
E-GVAP II (EUMETNET GPS Water Vapor Programme)	European network	Automated GPS Network Switzerland (AGNES) Bundesamt für Landestopografie (swisstopo) Seftigenstrasse 264 CH-3084 Wabern
European FP7 Project Real-Time Database for High Resolution Neutron Monitor Measurements (NMDB): http://www.nmbd.eu	European network	Neutron monitors - Study of solar and galactic cosmic rays Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern

Institution / network	Country	Collaborating with project:
Collaboration with European FTIR and UV-Vis teams and modeling teams in the frame of the EU project GEOMon;	European network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Collaboration with Univ. Liège and Univ. Libre de Bruxelles in the frame of the PRODEX projects SECPEA (Space-based Exploration of the Chemistry and Physics of the Earth Atmosphere), and A3C (Atmospheric Composition, Chemistry and Climate)	European network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
IMECC - Infrastructure for Measurements of the European Carbon Cycle	European network	Continuous measurement of stable CO ₂ isotopes at Jungfraujoch, Switzerland Empa Laboratory for Air Pollution & Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
ICOS Integrated Carbon Observation System (http://www.icos-infrastructure.eu)	European network	Long-term observations of ¹⁴ CO ₂ at Jungfraujoch Institut für Umweltphysik Universität Heidelberg Im Neuenheimer Feld 229 D-69120 Heidelberg
IMECC Infrastructure for Measurements of the European Carbon Cycle partners http://imecc.ipsl.jussieu.fr/	European network	Flask comparison on Jungfraujoch Centre for Isotope Research (CIO) Nijenborgh 4 9747 AG Groningen / The Netherlands
IMECC partners IMECC Infrastructure for Measurements of the European Carbon Cycle partners http://imecc.ipsl.jussieu.fr/	European network	Flask comparison on Jungfraujoch Max-Planck Institut für Biogeochemie Hans Knöll Str. 10 DE-007745 Jena
European Space Agency	European organisation	Long-Term Medical Survey System (LTMS-3) University Hospital Lausanne, Department of Internal Medicine CSEM Neuchâtel
Prof. M. Kulmala, Department of Physics, University of Helsinki, Helsinki, Finland	Finland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Dr. Cindy Morris INRA 147 rue de l'université 75338 Paris Cedex 07 FRANCE	France	Towards understanding the importance of biological ice nucleators in rising air Institut für Umweltgeowissenschaften Universität Basel Bernoullistrasse 30 CH-4056 Basel
Dr. F. Goutail/Dr. A. Pazmino LATMOS - CNRS, UVSQ Verrières le Buisson FRANCE	France	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Astrophysics Division of CEA Grenoble, France http://irfu.cea.fr/en/Phoce/Vie_des_labos/Ast/ast_visu.php?id_ast=552	France	KOSMA Kölner Observatorium für Submm-Astronomie 1. Physikalisches Institut Universität zu Köln Zülpicher Str. 77 D-50937 Köln Radioastronomisches Institut der Universität Bonn Auf dem Hügel 71 D-53121 Bonn
Observatoire de Bordeaux, France http://www.obs.u-bordeaux1.fr/	France	KOSMA Kölner Observatorium für Submm-Astronomie 1. Physikalisches Institut Universität zu Köln Zülpicher Str. 77 D-50937 Köln Radioastronomisches Institut der Universität Bonn Auf dem Hügel 71 D-53121 Bonn
Dr. K. Sellegri, Laboratoire de météorologie physique, Université Blaise Pascal, 63170 Aubiere, France	France	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Dr. P. Laj, Laboratoire de Glaciologie et Géophysique de l'Environnement CNRS - Université J. Fourier, Grenoble, St Martin d'Hères Cedex, France	France	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Max Planck Institut Für Meteorologie Bundesstr. 55 D-20146 Hamburg	Germany	Cosmogenic radionuclides in precipitation Eawag Überlandstr. 133 CH-8600 Dübendorf

Institution / network	Country	Collaborating with project:
Prof. Reto Gieré Institut für Geowissenschaften Albert-Ludwigs-Universität Albertstrasse 23b DE-79104 Freiburg	Germany	Sampling and analyzing of aerosol particles from different Saharan dust events. Département de Géosciences Université de Fribourg Ch. du Musée 6 CH-1700 Fribourg
Trinational Network: Airborne particles and their health effects http://www.pm.uni-freiburg.de/	Germany	Single particle analysis of aerosols from Saharan dust events Departement für Geowissenschaften Universität Fribourg Chemin du Musée 6 CH-1700 Fribourg
Satellite experiment: IMK (Forschungszentrum Karlsruhe) / satellite experiments: IASI (Infrared Atmospheric Sounding Interferometer)	Germany	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
Prof. S. Weinbruch, Universität Darmstadt, Institut für Mineralogie, Darmstadt, Germany	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Dr. U. Pöschl, Biogeochemistry Department, Max-Planck-Institut für Chemie, Mainz, Germany	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Dr. J. Schneider and Prof. S. Borrmann, University of Mainz, Particle Chemistry Department, Mainz, Germany	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Prof. J. Curtius, Institut für Atmosphäre und Umwelt, Johann Wolfgang Goethe Universität Frankfurt am Main, Frankfurt, Germany	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Dr. A. Petzold, Institute of Atmospheric Physics, DLR Oberpfaffenhofen, Germany	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Prof. A. Wiedensohler, Institut für Troposphärenforschung, Leipzig, Germany	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Dr. Martin Schnaiter, Institute of Meteorology and Climate Research, Karlsruhe Institute of Technology (KIT) Germany	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Prof. Dr. J. Fischer and Dr. T. Ruhtz, Freie Universität Berlin	Germany	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
MPI für Radioastronomie Bonn http://www.mpifr-bonn.mpg.de/	Germany	KOSMA Kölner Observatorium für Submm-Astronomie 1. Physikalisches Institut Universität zu Köln Zùlpicher Str. 77 D-50937 Köln Radioastronomisches Institut der Universität Bonn Auf dem Hùgel 71 D-53121 Bonn
International Council of the Scientific Union's (ICSU) Scientific Committee on Solar-Terrestrial Physics (SCOSTEP)	International network	Neutron monitors - Study of solar and galactic cosmic rays Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern
World Data Centers A (Boulder), B (Moscow), C (Japan), International GLE database	International network	Neutron monitors - Study of solar and galactic cosmic rays Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern

Institution / network	Country	Collaborating with project:
Collaborations with University of Liège and NDACC partners	International network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Both the UV-Vis and FTIR observations contribute to the international Network for the Detection of Atmospheric Composition Changes (NDACC, or the former NDSC).	International network	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Global Atmosphere Watch (GAW)	International network	Remote sensing of aerosol optical depth PMOD/WRC Dorfstrasse 33 CH-7260 Davos Dorf
NDACC (Network for the Detection of Atmospheric Composition Change, previously NDSC; http://www.ndacc.org/) /	International network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
NASA Langley Research Center http://www.nasa.gov/centers/langley/home/index.html /	International network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
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 Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
Satellite experiment: ACE-FTS	International network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)

Institution / network	Country	Collaborating with project:
Satellite experiment: ENVISAT (http://www.esa.int/esaEO/SEMWYN2VQUD_index_0_m.html) / ...	International network	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
Global Atmosphere Watch (GAW)	International network	Halogenated Greenhouse Gases at Jungfrauoch Empa Laboratory for Air Pollution and Environmental Technology Uberlandstrasse 129 8600 Dubendorf, Switzerland
AGAGE (Advanced Global Atmospheric Gases Experiment)	International network	Halogenated Greenhouse Gases at Jungfrauoch Empa Laboratory for Air Pollution and Environmental Technology Uberlandstrasse 129 8600 Dubendorf, Switzerland
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 Office fédéral de météorologie et de climatologie MétéoSuisse Station Aérologique ch. de l'Aérologie CH-1530 Payerne
Collaboration with the GOME, ENVISAT, 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
Prof. Y. Matsubara, Dr. T. Sako, Dr. S. Masuda, Solar Terrestrial Environment Laboratory, Nagoya University, 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 Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern
Prof. Y Muraki, Konan University, Nada-ku, Kobe 657-0000, Japan	Japan	SONTEL - Solar Neutron Telescope for the identification and the study of high-energy neutrons produced in energetic eruptions at the Sun Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern

Institution / network	Country	Collaborating with project:
T. Sakai; Physical Science Lab., College of Industrial Technology, Nihon University, 2-11-1 Shinei, Narashino-shi, Chiba 275-0005, Japan	Japan	SONTEL - Solar Neutron Telescope for the identification and the study of high-energy neutrons produced in energetic eruptions at the Sun Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern
Korea Polar Research Institute (KOPRI) http://www.kopri.re.kr/index_eng.jsp	Korea	Halogenated Greenhouse Gases at Jungfrauoch Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 8600 Dubendorf, Switzerland
Collaboration with Karin Kreher and Paul V. Johnston of NIWA, New-Zeland NIWA National Institute of Water and Atmospheric Research 41 Market Place Viaduct Harbour Auckland Central 1010 Private Bag 99940 Newmarket, Auckland 1149 New Zealand ph: +64 9 375 2050	New Zealand	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Dr. Ulla Heikkilä Bjerknes Centre for Climate Research Allégaten 55 NO-5007 Bergen	Norway	Cosmogenic radionuclides in precipitation Eawag Überlandstr. 133 CH-8600 Dübendorf
University of Oslo	Norway	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
Institute of Atmospheric Optics – Tomsk, Russia (http://www.nsc.ru/cooper4.htm)	Russia	Active optical remote sensing, LIDAR École Polytechnique Fédérale de Lausanne (EPFL) EPFL ENAC EFLUM A0 434 Station 2 CH 1015 Lausanne

Institution / network	Country	Collaborating with project:
Matthew MacLeod 2011 Department of Applied Environmental Science, Stockholm University Svante Arrhenius väg 8, SE-11418 Sweden http://www.itm.su.se/page.php?pid=536&id=277	Sweden	Quantitative characterisation of the impact of environmental factors on the performance of passive air samplers for semi-volatile organic compounds Institut für Chemie- und Bioingenieurwissenschaften ETH Zürich Wolfgang-Pauli-Str. 10 8093 Zürich
Dr. Frank Wienhold ETH Zürich Institute for Atmospheric and Climate Science Universitätsstrasse 16 CH-8092 Zürich	Switzerland	Calibration of Sun and aureole spectrometer systems within the Cloud and Aerosol Characterization Experiment (CLACE) Institut für Weltraumwissenschaften Freie Universität Berlin Carl-Heinrich-Becker-Weg 6-10 12165 Berlin / Germany
Office fédéral de météorologie et de climatologie MétéoSuisse Station Aérologique ch. de l'Aéologie CH-1530 Payerne	Switzerland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Institute for Atmospheric and Climate Science (IACETH) Swiss Federal Institute of Technology Zürich Universitätstrasse 16 CH-8092 Zürich	Switzerland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Empa Laboratory for Air Pollution & Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf	Switzerland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Departement für Geowissenschaften Universität Fribourg Chemin du Musée 6 CH-1700 Fribourg	Switzerland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Dr. Julian Gröbner, Physikalisch-Meteorologisches Observatorium Davos, World Radiation Center (PMOD/WRC), Davos Switzerland	Switzerland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Longwave Infrared radiative forcing trend assimilation over Switzerland (LIRAS) Remote sensing of aerosol optical depth PMOD/WRC Dorfstrasse 33 CH-7260 Davos Dorf	Switzerland	Global Atmosphere Watch Radiation Measurements Office fédéral de météorologie et de climatologie MétéoSuisse Station Aérologique ch. de l'Aérologie CH-1530 Payerne
Office fédéral de météorologie et de climatologie MétéoSuisse Station Aérologique ch. de l'Aérologie CH-1530 Payerne	Switzerland	Calibration of Sun and aureole spectrometer systems within the Cloud and Aerosol Characterization Experiment (CLACE) Institut für Weltraumwissenschaften Freie Universität Berlin Carl-Heinrich-Becker-Weg 6-10 12165 Berlin
Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland	Switzerland	Calibration of Sun and aureole spectrometer systems within the Cloud and Aerosol Characterization Experiment (CLACE) Institut für Weltraumwissenschaften Freie Universität Berlin Carl-Heinrich-Becker-Weg 6-10 12165 Berlin
Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland	Switzerland	Field measurements of atmospheric ice nuclei and properties of mixed phase clouds Institute for Atmospheric and Climate Science ETH Zurich Universitätsstrasse 16, CHN O16.3 CH-8092 Zürich
MeteoSwiss	Switzerland	Active optical remote sensing, LIDAR École Polytechnique Fédérale de Lausanne (EPFL) EPFL ENAC EFLUM A0 434 Station 2 CH 1015 Lausanne
MeteoSwiss	Switzerland	Remote sensing of aerosol optical depth PMOD/WRC Dorfstrasse 33 CH-7260 Davos Dorf
Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland	Switzerland	Single particle analysis of aerosols from Saharan dust events Departement für Geowissenschaften Universität Fribourg Chemin du Musée 6 CH-1700 Fribourg

Institution / network	Country	Collaborating with project:
Office fédéral de météorologie et de climatologie MétéoSuisse Station Aérologique ch. de l'Aérologie CH-1530 Payerne	Switzerland	Single particle analysis of aerosols from Saharan dust events Departement für Geowissenschaften Universität Fribourg Chemin du Musée 6 CH-1700 Fribourg
Climate and Environmental Physics Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern	Switzerland	Continuous measurement of stable CO ₂ isotopes at Jungfrauoch, Switzerland Empa Laboratory for Air Pollution & Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland	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	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Climate and Environmental Physics Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern	Switzerland	National Air Pollution Monitoring Network (NABEL) Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf
Climate and Environmental Physics Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern	Switzerland	⁸⁵ Kr Activity Determination in Tropospheric Air Bundesamt für Strahlenschutz Rosastrasse 9 D-79098 Freiburg
MeteoSwiss, Zurich and Payerne	Switzerland	National Air Pollution Monitoring Network (NABEL) Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf

Institution / network	Country	Collaborating with project:
Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland	Switzerland	National Air Pollution Monitoring Network (NABEL) Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf
Institute of Geodesy and Photogrammetry, ETH Zürich	Switzerland	Automated GPS Network Switzerland (AGNES) Bundesamt für Landestopografie (swisstopo) Seftigenstrasse 264 CH-3084 Wabern
Institute of Applied Physics (IAP), University of Bern	Switzerland	Automated GPS Network Switzerland (AGNES) Bundesamt für Landestopografie (swisstopo) Seftigenstrasse 264 CH-3084 Wabern
MeteoSwiss, Zurich and Payerne	Switzerland	Automated GPS Network Switzerland (AGNES) Bundesamt für Landestopografie (swisstopo) Seftigenstrasse 264 CH-3084 Wabern
Swiss Glacier Monitoring Network, Federal Office for the Environment (BAFU)	Switzerland	Glaciological investigations on the Grosser Aletschgletscher Versuchsanstalt für Wasserbau, Hydrologie und Glaziologie (VAW), ETH Zürich
Dr. Dominik Brunner Empa Dübendorf Laboratory for Air Pollution/Environmental Technology CH-8600 Dübendorf	Switzerland	Towards understanding the importance of biological ice nucleators in rising air Institut für Umweltgeowissenschaften Universität Basel Bernoullistrasse 30 CH-4056 Basel
Dr. Michael Zemp Glaciology, Geomorphodynamics and Geochronology Physical Geography Division Department of Geography University of Zurich - Irchel Winterthurerstr. 190 CH-8057 Zurich, Switzerland	Switzerland	Linking micro-physical properties to macro features in ice sheets with geophysical techniques (LIMPICS) AWI, Alfred Wegener Institute for Polar and Marine Research Postfach 120161 27515 Bremerhaven, Germany

Institution / network	Country	Collaborating with project:
Prof. Martin Hoelzle Department of Geosciences University of Fribourg CH-1700 Fribourg	Switzerland	Linking micro-physical properties to macro features in ice sheets with geophysical techniques (LIMPICS) AWI, Alfred Wegener Institute for Polar and Marine Research Postfach 120161 27515 Bremerhaven, Germany
Empa Dübendorf Laboratory for Air Pollution/Environmental Technology CH-8600 Dübendorf	Switzerland	NO _y at the interface of planetary boundary layer and the free troposphere from measurements at Jungfraujoch (trace gas measurements at Jungfraujoch) Prof. Johannes Stähelin Institute for Atmospheric and Climate Science (IACETH) Swiss Federal Institute of Technology Zürich Universitätstrasse 16 CH-8092 Zürich
Prof. Christian Schlüchter Institut für Geologie der Universität Bern Baltzerstrasse 1+3 CH-3012 Bern	Switzerland	Altitude dependence of production rates of cosmogenic nuclides in artificial quartz targets. Geologisches Institut Departement Erdwissenschaften ETH Zürich Sonneggstrasse 5 8092 Zürich Schweiz
Swiss Glacier Monitoring Network, Federal Office for the Environment (BAFU)	Switzerland	Glaciological investigations on the Grosser Aletschgletscher ETH Zürich Versuchsanstalt für Wasserbau, Hydrologie und Glaziologie (VAW) Gloriastrasse 37/39 CH-8092 Zürich
Astronomical Institute (AIUB), University of Bern	Switzerland	Automated GPS Network Switzerland (AGNES) Bundesamt für Landestopografie (swisstopo) Seftigenstrasse 264 CH-3084 Wabern
Institute of Applied Physics (IAP), University of Bern	Switzerland	Automated GPS Network Switzerland (AGNES) Bundesamt für Landestopografie (swisstopo) Seftigenstrasse 264 CH-3084 Wabern

Institution / network	Country	Collaborating with project:
Institute of Geodesy and Photogrammetry, ETH Zürich E-GVAP II (EUMETNET GPS Water Vapor Programme)	Switzerland	Automated GPS Network Switzerland (AGNES) Bundesamt für Landestopografie (swisstopo) Seftigenstrasse 264 CH-3084 Wabern
Prof. Jérôme Faist Quantum Optoelectronics Physics ETH Zürich Wolfgang Pauli str. 16 8093 Zürich	Switzerland	Continuous measurement of stable CO ₂ isotopes at Jungfraujoch, Switzerland Empa Laboratory for Air Pollution & Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
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 & Environmental Technology Überlandstrasse 129 CH-8600 Dübendorf
Univ. Bern - Institute of Applied Physics (IAP)	Switzerland	Longwave Infrared radiative forcing trend assimilation over Switzerland (LIRAS) Cloud Climatology and Surface Radiative Forcing over Switzerland (CLASS) PMOD/WRC Dorfstrasse 33 7260 Davos Dorf
Permafrost Monitoring Switzerland (www.permos.ch)	Switzerland	PERMASENSE & PERMOS: Measuring permafrost in Alpine rock walls Department of Geography University of Zurich Winterthurerstr. 190 CH-8057 Zurich, Switzerland
National Center of Competence in Research on Mobile Information and Communication Systems NCCR-MICS (www.mics.org)	Switzerland	PERMASENSE & PERMOS: Measuring permafrost in Alpine rock walls Department of Geography University of Zurich Winterthurerstr. 190 CH-8057 Zurich, Switzerland

Institution / network	Country	Collaborating with project:
Permafrost Monitoring Switzerland (www.permos.ch)	Switzerland	Geophysical monitoring of the evolution of permafrost on Stockhorn University of Fribourg Department of Geosciences - Geography Unit Chemin du Musée 4 CH-1700 Fribourg
Global Atmosphere Watch (GAW)	Switzerland	National Air Pollution Monitoring Network (NABEL) Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf
Bundesamt für Umwelt (BAFU)/ Federal Office for the Environment (FOEN)	Switzerland	National Air Pollution Monitoring Network (NABEL) Empa Laboratory for Air Pollution/Environmental Technology Ueberlandstrasse 129 CH-8600 Dübendorf
CarbonEurope IP partners, http://www.bgc-jena.mpg.de/bgc-processes/ceip/	Switzerland	High precision carbon dioxide and oxygen measurements Climate and Environmental Physics Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern
IMECC Infrastructure for Measurements of the European Carbon Cycle partners http://imecc.ipsl.jussieu.fr/	Switzerland	High precision carbon dioxide and oxygen measurements Climate and Environmental Physics Physikalisches Institut Universität Bern Sidlerstrasse 5 CH-3012 Bern
Institut für angewandte Physik, Universität Bern http://www.iap.unibe.ch/	Switzerland	KOSMA Kölner Observatorium für Submm-Astronomie 1. Physikalisches Institut Universität zu Köln Zülpicher Str. 77 D-50937 Köln Radioastronomisches Institut der Universität Bonn Auf dem Hügel 71 D-53121 Bonn

Institution / network	Country	Collaborating with project:
PERMOS (Permafrost Monitoring Switzerland) http://www.permos.ch/ http://www.permos.ch/partner.html	Switzerland	Permafrost monitoring at high Alpine sites WSL Institute for Snow and Avalanche Research SLF Flüelastrasse 11 CH-7260 Davos Dorf
Dr. Christian Bogdal, Prof. K. Hungerbühler Swiss Federal Institute of Technology, ETH Zurich Institute for Chemical and Bioengineering, ICB Wolfgang-Pauli-Strasse 10 CH-8093 Zürich	Switzerland	Accelerated release of persistent organic pollutants (POPs) from Alpine glaciers Laboratory of Radiochemistry and Environmental Chemistry, Paul Scherrer Institut
Dr. Peter Schmid Empa Analytische Chemie Überlandstrasse 129 CH-8600 Dübendorf	Switzerland	Accelerated release of persistent organic pollutants (POPs) from Alpine glaciers Laboratory of Radiochemistry and Environmental Chemistry, Paul Scherrer Institut
Prof. Dr. Flavio Anselmetti Oberflächengewässer Eawag Überlandstrasse 133 Postfach 611 8600 Dübendorf Schweiz	Switzerland	Accelerated release of persistent organic pollutants (POPs) from Alpine glaciers Laboratory of Radiochemistry and Environmental Chemistry, Paul Scherrer Institut
Dr. Martin Lüthi, Prof. Dr. Martin Funk V. Wasserbau, Hydrologie u. Glaz. VAW D 20 Gloriastrasse 37/39 8092 Zürich	Switzerland	Accelerated release of persistent organic pollutants (POPs) from Alpine glaciers Laboratory of Radiochemistry and Environmental Chemistry, Paul Scherrer Institut
Bundesamt für Umwelt (BAFU) / Federal Office for the Environment (FOEN)	Switzerland	Halogenated Greenhouse Gases at Jungfraujoch Empa Laboratory for Air Pollution and Environmental Technology Überlandstrasse 129 8600 Dübendorf, Switzerland
Dr. W. Eugster, Institute of Plant, Animal and Agroecosystem Sciences, ETH Zürich	Switzerland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland
Prof. H. Burtscher and Dr. M. Fierz, Institut für Aerosol- und Sensortechnik, Fachhochschule Nordwestschweiz, Windisch	Switzerland	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Prof. Dr. Haluk Denizli Department of Physics Experimental Nuclear and High Energy Group Abant Izzet Baysal University Bolu / Turkey	Turkey	Measurement of cosmic rays at large zenith angle Dept. of Physics University of Rome "La Sapienza" p.zz A. Moro 5 I-00185 Rome
Dr. Mithat Kaya Kafkas Universitesi Fen Edebiyat Fakultesi Fizik Bolumu 36000 Kars / Turkey	Turkey	Measurement of cosmic rays at large zenith angle Dept. of Physics University of Rome "La Sapienza" p.zz A. Moro 5 I-00185 Rome
Dr. P. Vermeesch Birkbeck College University of London Malet Street, London SC1E 7HX	United Kingdom	Altitude dependence of production rates of cosmogenic nuclides in artificial quartz targets. Geologisches Institut Departement Erdwissenschaften ETH Zürich Sonneggstrasse 5 8092 Zürich Schweiz
Collaboration with Martin Chipperfield of Univ. Leeds. School of Earth and Environment The University of Leeds Leeds. LS2 9JT United Kingdom http://www.see.leeds.ac.uk/people/m.chipperfield	United Kingdom	Atmospheric physics and chemistry Belgian Institute for Space Aeronomy Ringlaan 3 B-1180 Brussels Belgium
Collaboration with Martin Chipperfield of Univ. Leeds. School of Earth and Environment The University of Leeds Leeds. LS2 9JT United Kingdom http://www.see.leeds.ac.uk/people/m.chipperfield The aim of the collaboration is to compare our measurements with the results from SLIMCAT, a three-dimensional atmospheric chemical transport model that Chipperfield developed.	United Kingdom	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
Prof. H. Coe and Prof. T. Choularton, School of Earth, Atmospheric and Environmental Sciences (SEAES), University of Manchester, Manchester, England	United Kingdom	The Global Atmosphere Watch Aerosol Program at the Jungfraujoch Laboratory of Atmospheric Chemistry Paul Scherrer Institut (PSI) CH-5232 Villigen Switzerland

Institution / network	Country	Collaborating with project:
Prof. James Russ Dept. of Physics Carnegie Mellon University 5000 Forbes Ave. Pittsburgh, PA 15213	USA	Measurement of cosmic rays at large zenith angle Dept. of Physics University of Rome "La Sapienza" p.zz A. Moro 5 I-00185 Rome
NASA JPL	USA	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)
Satellite experiment: AURA (http://aura.gsfc.nasa.gov/)	USA	High resolution, solar infrared Fourier Transform spectrometry. Application to the study of the Earth atmosphere Institut d'Astrophysique et de Géophysique - Université de Liège allée du VI août, 17 - Bâtiment B5a B-4000 Sart Tilman (Liège, Belgique)