

Publication list

- 34 Refereed publications
- 7 Bachelor (3), Master () and PhD (4) theses
- 37 Conference presentations / posters
- 2 Books / edited books
- 5 Popular publications and presentations
- 9 Data books and reports

Refereed publications

Bader, W., B. Bovy, S. Conway, K. Strong, D. Smale, A.J. Turner, T. Blumenstock, C. Boone, M. Collaud Coen, A. Coulon, O. Garcia, D.W.T. Griffith, F. Hase, P. Hausmann, N. Jones, P. Krummel, I. Murata, I. Morino, H. Nakajima, S. O'Doherty, C. Paton-Walsh, J. Robinson, R. Sandrin, M. Schneider, C. Servais, R. Sussmann, and E. Mahieu, The recent increase of atmospheric methane from 10 years of ground-based NDACC FTIR observations since 2005, *Atmos. Chem. Phys.*, **17**, 3, 2255–2277, doi: 10.5194/acp-17-2255-2017, 2017. <http://orbi.ulg.ac.be/handle/2268/207090>

Barthlott, S., M. Schneider, F. Hase, T. Blumenstock, M. Kiel, D. Dubravica, O.E. García, E. Sepúlveda, G. Mengistu Tsidu, S. Takele Kenea, M. Grutter, E.F. Plaza-Medina, W. Stremme, K. Strong, D. Weaver, M. Palm, T. Warneke, J. Notholt, E. Mahieu, C. Servais, N. Jones, D.W.T. Griffith, D. Smale and J. Robinson, Tropospheric water vapour isotopologue data ($H_2^{16}O$, $H_2^{18}O$, and $HD^{16}O$) as obtained from NDACC/FTIR solar absorption spectra, *Earth Syst. Sci. Data*, **9**, 1, 15–29, doi: 10.5194/essd-9-15-2017, 2017. <http://orbi.ulg.ac.be/handle/2268/196044>

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Berhanu, T. A., S. Szidat, D. Brunner, E. Satar, R. Schanda, P. Nyfeler, M. Battaglia, M. Steinbacher, S. Hammer, M. Leuenberger, Estimation of the fossil fuel component in atmospheric CO₂ based on radiocarbon measurements at the Beromünster tall tower, Switzerland, *Atmos. Chem. Phys.*, **17**, 10753-10766, <https://doi.org/10.5194/acp-17-10753-2017>, 2017.

Brunner, D., T. Arnold, S. Henne, A. Manning, R.L. Thompson, M. Maione, S. O'Doherty, S. Reimann, Comparison of four inverse modelling systems applied to the estimation of HFC-125, HFC-134a, and SF₆ emissions over Europe, *Atmos. Chem. Phys.*, **17**, 17, 10651-10674, doi: 10.5194/acp-17-10651-2017, 2017. <https://www.atmos-chem-phys.net/17/10651/2017/>

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Theses

Beck, A., Observing the microstructure of orographic clouds with HoloGondel, PhD Thesis, ETH Zürich, 2017.

Frank, F., Charakterisierung des Eiskeimzählers FINCH, PhD Thesis, Goethe-University, Frankfurt/M., 2017.

Henneberg, O., Orographic mixed-phase clouds in the Swiss Alps - occurrence, persistence and sensitivity, PhD Thesis, ETH Zürich, 2017.

Imhof, S., Abschätzung des schweizerischen CO₂ Flusses mit der Radon-Tracer-Methode anhand von gemessenen CO₂- und Radonkonzentrationen auf dem Jungfraujoch, BSc thesis, University of Basel, 2017.

Lacher, L., Measurements of Ice Nucleating Particles at the High Altitude Research Station Jungfraujoch, PhD Thesis, ETH Zürich, 2017.

Sartorius, O., Vergleich von Eiskeimpopulationen nördlich und südlich der Alpen, BSc Thesis, University of Basel, 2017.

Wolf, J., Atmosphärische Eiskeimkonzentration auf dem Jungfraukoch während der INUIT/CLACE-Kampagne 2017, B.Sc. Thesis, Goethe-University, Frankfurt/M., 2017.

Conference presentations / Posters

- Affolter, S., M. Steinbacher, J. Lauper, M. Leuenberger, M. Schibig, T. Berhanu, High altitude CO₂ measurements at the Jungfrauoch (Switzerland): Comparison between the Sphinx (3570 m a.s.l.) and East Ridge (3690 m a.s.l.), 10th International Carbon Dioxide Conference, Interlaken, Switzerland, August 21-24, 2017.
- Berhanu, T.A., S. Szidat, D. Brunner, E. Satar, R. Schanda, P. Nyfeler, M. Battaglia, M. Steinbacher, S. Hammer, M. Leuenberger, Estimation of the fossil-fuel component in atmospheric CO₂ based on radiocarbon measurements at the Beromünster tall tower, Switzerland, Abstract Volume 15th Swiss Geoscience Meeting, Davos, Switzerland, November 17-18, 2017.
- Bianchi, F., New particle formation around the globe: From laboratory experiments to the Everest Base Camp (Arne Richter Award Lecture for OYS), European Geophysical Union 2017, Vienna, Austria, April 23 – 28, 2017.
- Bianchi, F., H. Junninen, A. Bigi, P. Bonasoni, S. Buenrostro Mazon, L. Dada, J. Dommen, C. Frege, C.R. Hoyle, P. Laj, K. Lehtipalo, J. Kontkanen, A. Marinoni, U. Molteni, M. Riva, V. Sinclair, K. Sellegri, C. Yan, D.R. Worsnop, U. Baltensperger, M. Kulmala, The Himalayan aerosol factory: the chemistry of new particle formation, European Aerosol Conference 2017, Zurich, Switzerland, August 27 – September 1, 2017.
- Brockmann, E. et al., National Report of Switzerland, EUREF-Symposium, Wroclaw, Poland, May 17-19, 2017.
- Brockmann, E., S. Lutz, D. Ineichen, S. Schaer, Multi-GNSS developments for the EPN and for the Swiss networks, EUREF-Symposium, Wroclaw, Poland, May 17-19, 2017.
- Brockmann, E., S. Lutz, D. Ineichen, S. Schaer, Impact of Multi-GNSS analysis on precise geodetic applications, IAG-IASPEI scientific Assembly, Kobe, Japan, July 30 – August 4, 2017.
- Brockmann, E., swisstopo Report for EGVAP 2017, EGVAP expert meeting, De Bilt, Netherlands, November 28-29, 2017.
- Burri, S., M. Steinbacher, L. Merbold, L. Hörtnagl, M. Leuenberger, L. Emmenegger, R. Zweifel, N. Buchmann and the ICOS-CH Consortium, Integrated Carbon Observation System Switzerland - ICOS-CH: The Swiss Contribution to a Pan-European Environmental Research Infrastructure, Swiss Global Change Day, Bern, Switzerland, April 11, 2017.
- Henneberger, J., A. Beck, F. Ramelli and U. Lohmann, Observation of orographic clouds in alpine terrain with a holographic imager (HOLIMO), ACPM2017, Gotemba, Japan, November 6-10, 2017.
- Imhof, S., M. Steinbacher and F. Conen, Large-scale CO₂ flux estimated from CO₂ and ²²²Rn measurements on Jungfrauoch, 15th Swiss Geoscience Meeting, Davos, Switzerland, November 17-18, Abstract booklet Session 12, 486, 2017.
- Lacher, L., U. Lohmann, E. Herrmann, A. Zipori, M. Steinbacher and Z. A. Kanji, Free tropospheric ice nucleating particle concentrations at the High Altitude Research Station Jungfrauoch, 3rd BACCHUS Annual Meeting, Zurich, Switzerland, January 10-12, 2017.
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- Lehtipalo, K., U. Baltensperger, M. Kulmala, Nano-CAVa project – formation of clusters from atmospheric vapours, Proceedings of 'the Center of Excellence in Atmospheric Sciences (CoE ATM) - From Molecular and Biological Processes to the Global Climate' Annual Meeting 2017, Editors: Päivi Haapanala, Anna Lintunen, Joonas Enroth and Markku Kulmala, 2017.
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- Mair, D., A. Lechmann, N. Akcar, F. Schlunegger, Quantifying the erosional mechanisms of steep headwalls: the case of the Eiger (Central Swiss Alps), European Geosciences Union, General Assembly, Vienna, Austria, April 23-28, 2017, Geophysical Research Abstracts, 19, EGU2017-12165, 2017.
- Mair, D., A. Lechmann, F. Schlunegger, How to build the Eiger: Surface expression of litho-tectonic preconditioning, European Geosciences Union, General Assembly, Vienna, Austria, April 23-28, 2017, Geophysical Research Abstracts, 19, EGU2017-8932, 2017.

- Müller, M., B. Tuzson and L. Emmenegger, Analysis of high resolution isotopic signatures of CO₂ at the high altitude site Jungfrauoch in the period 2008-2016, EGU, Vienna, Austria, April 23-28, 2017.
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- Reimann, S., M.K. Vollmer, D. Brunner, L. Emmenegger, A. Manning, P.L. DeCola, O. Tarasova, Towards a Novel Integrated Approach for Estimating Greenhouse Gas Emissions in Support of International Agreements, NOAA ESRL Global Monitoring Conference, Boulder, Colorado, USA, May 23–24, 2017.
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