

Publication list

- 34 Refereed publications
 - 1 Bachelor (), Master () and PhD (1) theses
- 35 Conference presentations / posters
 - 2 Books / edited books
 - 4 Popular publications and presentations
- 11 Data books and reports

Refereed publications

- Beck, A., J. Henneberger, J.P. Fugal, R.O. David, L. Lacher, U. Lohmann, Impact of surface and near-surface processes on ice crystal concentrations measured at a mountain-top research station, *Atmos. Chem. Phys.*, **18**, 12, 8909-8927, doi: 10.5194/acp-18-8909-2018, 2018. <https://www.atmos-chem-phys.net/18/8909/2018/>
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Theses

Motos, G., Cloud and fog droplet activation of atmospheric black carbon: In-situ observations of the influence of particle size, mixing state and ambient supersaturation, PhD Thesis, ETH Zürich, 2018.

Conference presentations / Posters

- Affolter, S., M.F. Schibig, T. Berhanu and M.C. Leuenberger, Comparison of two high alpine CO₂ records from the Jungfrauoch area, 16th Swiss Geoscience Meeting, Bern, Switzerland, November 30 – December 1, 2018.
- Affolter, S., M.F. Schibig, T. Berhanu, V. Mandrakis and M.C. Leuenberger, The comparison of two high altitude carbon dioxide records from the Jungfrauoch area (Switzerland) reveals diurnal differences, EGU, Vienna, Austria, April 8-13, 2018.
- Brockmann, E., S. Lutz, D. Ineichen, S. Schaer, Maintaining the Swiss Terrestrial Reference Frame CHTRF using Multi-GNSS, EUREF-Symposium in Amsterdam, The Netherlands, May 30 – June 1, 2018.
- Brunner, D., S. Henne, S. Reimann, M. Steinbacher, J. Mohn, and L. Emmenegger, Top-down emission estimation to support national inventories: A Swiss perspective, oral presentation, First IG3IS Symposium, Geneva, Switzerland, November 13-15, 2018.
- Bukowiecki, N., S. Henne, M. Steinbacher, M. Hervo, G. Martucci, M. Collaud Coen, G. Wehrle, U. Baltensperger and M. Gysel, Local pollution sources and local vertical transport effects at the Jungfrauoch, Switzerland (3580 m asl) and Jungfrau East Ridge (3700 m asl), VAO Symposium, Grenoble, France, March 13, 2018,
- Burri, S., N. Buchmann, L. Emmenegger, L. Hörtnagl, M.C. Leuenberger, M. Steinbacher, R. Zweifel & the ICOS-CH consortium, ICOS Switzerland – Greenhouse gas stories from high altitudes, 3rd ICOS Science conference, Prague, Czech Republic, September 11-13, 2018.
- Creamean, J.M., C. Mignani, and F. Conen, Using spectra characteristics to define ice nucleating particle populations from north and south of the Alps, 6th Workshop – Microphysics of ice clouds, Vienna, Austria, April 7, 2018.
- Frege, C., M. Steinbacher, and B. Schwarzenbach, NO_x measurement at Jungfrauoch and Rigi, ACTRIS-2 WP3 Trace Gases Meeting, Douai, France, May 16-18, 2018.
- Gysel, M., Insights and open questions from more than a decade of aerosol-cloud interactions studies at the high-alpine research station Jungfrauoch, International Congress of the Mountains - Sierra Nevada 2018, Granada, Spain, March 9, 2018.
- Gysel, M., G. Motos, J. Schmale, J. Corbin, M. Zanatta, R. Modini, and U. Baltensperger, Single particle measurements of size and mixing state of black carbon particles combined with simplified κ-Köhler theory explains their droplet activation behaviour, observed in fog and clouds, International Aerosol Conference 2018, St. Louis, USA, September 4, 2018.

- Henne, S., J. Mohn, M. Leuenberger, F. Meinhardt, M. Steinbacher, M. Vollmer, S. Reimann, L. Emmenegger, and D. Brunner, Top-down Validation of Swiss non-CO₂ Greenhouse Gas Emissions, oral presentation, IG3IS - TRANSCOM meeting, Lund, Sweden, September 17-20, 2018.
- Lechmann, A., D. Mair, A. Ariga, A. Ereditato, R. Nishiyama, P. Scampoli, T. Ariga, C. Pistillo, M. Vladymyrov, F. Schlunegger, The effect of rock composition on muon tomography measurements, European Geoscience Union General Assembly, Vienna, Austria, April 8-13, 2018.
- Lutz, S., E. Brockmann, Status Report on the Working Group on “European Dense Velocities”, EUREF-Symposium in Amsterdam, The Netherlands, May 30 – June 1, 2018.
- Mahieu, E., E.V. Fischer, Z.A. Tzompa-Sosa, B. Franco, M. Prignon, C. Servais, J.W. Hannigan, I. Ortega, M. Palm, J. Notholt, and G.C. Toon, Attempting to retrieve peroxyacetyl nitrate from ground-based infrared solar spectra, poster at the EGU General Assembly 2018, Geophysical Research Abstracts, 20, EGU2018-8001, Vienna, Austria, April 8-13, 2018.
- Mahieu, E., B. Franco, A. Pozzer, D. Taraborrelli, W. Bader, M. Prignon, C. Servais, and the ethane_team, Observation and simulation of ethane at 23 FTIR sites, talk at the EGU General Assembly 2018, Geophysical Research Abstracts, 20, EGU2018-13950, Vienna, Austria, April 8-13, 2018.
- Mair, D., A. Lechmann, M. Herwegh, F. Schlunegger, Complex deformation of an exhumed basement-cover contact: the Eiger-Jungfrau Mountain (Aar Massif, Central European Alps, Switzerland), European Geoscience Union General Assembly, Vienna, Austria, April 8-13, 2018.
- Mair, D., A. Lechmann, S. Yesilyurt, N. Akçar, C. Vockenhuber, F. Schlunegger, Exposure age patterns of the Eiger north and south faces (Central Swiss Alps), European Geoscience Union General Assembly, Vienna, Austria, April 8-13, 2018.
- Mignani, C., J.M. Creamean, L. Zimmermann, and F. Conen, Examining single snow crystals for ice-nucleating particles – a new approach to investigate primary versus secondary ice formation, BACCHUS Final Meeting, Zurich, Switzerland, April 24-26, 2018.
- Motos, G., J. Schmale, J. Corbin, M. Zanatta, R. Modini, U. Baltensperger, and M. Gysel, Parameterization of the cloud condensation nuclei (CCN) activity of ambient black carbon at different aging levels: Comparison between theoretical and experimental results, EGU General Assembly, Vienna, Austria, April 12, 2018, Geophysical Research Abstracts, 20, EGU2018-14464-1, 2018.
- Nishiyama, R., A. Ariga, T. Ariga, A. Lechmann, D. Mair, C. Pistillo, P. Scampoli, M. Vladymyrov, A. Ereditato, F. Schlunegger, Radiographic monitoring of Alpine glaciers with cosmic-ray muons, European Geoscience Union General Assembly, Vienna, Austria, April 8-13, 2018.
- Nishiyama, R., (Eiger-mu collaboration), Imaging the bedrock beneath Alpine glaciers with muography, Muographers, Tokyo, Japan, November, 2018.
- Pieber S.M., D. Brunner S. Henne, M. Steinbacher, B. Tuzson and L. Emmenegger, A decade of continuous atmospheric CO₂ isotope ratio measurements at Jungfraujoch, Swiss Geoscience Meeting, Bern, Switzerland, December 1, 2018.
- Salavitch, R.J., W.R. Tribett, P. Wales, A.P. Hope, L. Mc Bride, T.P. Canty, S.M. Frith, R.D. Mc Peters, E. Mahieu, M. Prignon, L. Oman, D.E. Kinnison, and P. Joeckel, Analysis of trends in total stratospheric ozone, talk at the AGU Fall Meeting 2018, A31A-02, Washington, USA, December 10-14, 2018.
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