

# Gesamtliste Publikationen des IAU 2014-2017

Stand: 20. Juli 2017

## 2017

- [1] U. Achatz, B. Ribstein, F. Senf, and R. Klein. The interaction between synoptic-scale balanced flow and a finite-amplitude mesoscale wave field throughout all atmospheric layers: weak and moderately strong stratification. *QUARTERLY JOURNAL OF THE ROYAL METEOROLOGICAL SOCIETY*, 143(702, A, UNDEFINED, UNDEFINED):342–361, JAN 2017.
- [2] Mohamadou Diallo, Bernard Legras, Eric Ray, Andreas Engel, and Juan A. Anel. Global distribution of CO<sub>2</sub> in the upper troposphere and stratosphere. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 17(6):3861–3878, MAR 21 2017.
- [3] Andreas Engel, Harald Boenisch, Markus Ullrich, Robert Sitals, Olivier Membrive, Francois Danis, and Cyril Crevoisier. Mean age of stratospheric air derived from AirCore observations. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 17(11):6825–6838, JUN 12 2017.
- [4] Jennifer Ostermoeller, Harald Boenisch, Patrick Joeckel, and Andreas Engel. A new time-independent formulation of fractional release. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 17(6):3785–3797, MAR 20 2017.
- [5] Trang Van Pham, Jennifer Brauch, Barbara Frueh, and Bodo Ahrens. Simulation of snowbands in the Baltic Sea area with the coupled atmosphere-ocean-ice model COSMO-CLM/NEMO. *METEOROLOGISCHE ZEITSCHRIFT*, 26(1):71–82, 2017.
- [6] Jann Schrod, Daniel Weber, Jaqueline Druecke, Christos Keleshis, Michael Pikridas, Martin Ebert, Bojan Cvetkovic, Slobodan Nickovic, Eleni Marinou, Holger Baars, Albert Ansmann, Mihalis Vrekoussis, Nikos Mihalopoulos, Jean Sciare, Joachim Curtius, and Heinz G. Bingemer. Ice nucleating particles over the Eastern Mediterranean measured by unmanned aircraft systems. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 17(7):4817–4835, APR 12 2017.

- [7] Jann Schrod, Daniel Weber, Jaqueline Druecke, Christos Keleshis, Michael Pikridas, Martin Ebert, Bojan Cvetkovic, Slobodan Nickovic, Eleni Marinou, Holger Baars, Albert Ansmann, Mihalis Vrekoussis, Nikos Mihalopoulos, Jean Sciare, Joachim Curtius, and Heinz G. Bingemer. Ice nucleating particles over the Eastern Mediterranean measured by unmanned aircraft systems. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 17(7):4817–4835, APR 12 2017.

## 2016

- [8] L. Ahlm, T. Yli-Juuti, S. Schobesberger, A. P. Praplan, J. Kim, O. P. Tikkanen, M. J. Lawler, J. N. Smith, J. Trostl, J. C. Acosta Navarro, U. Baltensperger, F. Bianchi, N. M. Donahue, J. Duplissy, A. Franchin, T. Jokinen, H. Keskinen, J. Kirkby, A. Kuerten, A. Laaksonen, K. Lehtipalo, T. Petaja, F. Riccobono, M. P. Rissanen, L. Rondo, S. Schallhart, M. Simon, P. M. Winkler, D. R. Worsnop, A. Virtanen, and I. Riipinen. Modeling the thermodynamics and kinetics of sulfuric acid-dimethylamine-water nanoparticle growth in the CLOUD chamber. *AEROSOL SCIENCE AND TECHNOLOGY*, 50(10):1017–1032, 2016.
- [9] F. Bianchi, J. Trostl, H. Junninen, C. Frege, S. Henne, C. R. Hoyle, U. Molteni, E. Herrmann, A. Adamov, N. Bukowiecki, X. Chen, J. Duplissy, M. Gysel, M. Hutterli, J. Kangasluoma, J. Kontkanen, A. Kuerten, H. E. Manninen, S. Muench, O. Perakyla, T. Petaja, L. Rondo, C. Williamson, E. Weingartner, J. Curtius, D. R. Worsnop, M. Kulmala, J. Dommen, and U. Baltensperger. New particle formation in the free troposphere: A question of chemistry and timing. *SCIENCE*, 352(6289):1109–1112, MAY 27 2016.
- [10] Yvonne Boose, Andre Welti, James Atkinson, Fabiola Ramelli, Anja Danielczok, Heinz G. Bingemer, Michael Ploetze, Berko Sierau, Zamin A. Kanji, and Ulrike Lohmann. Heterogeneous ice nucleation on dust particles sourced from nine deserts worldwide - Part 1: Immersion freezing. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(23):15075–15095, DEC 6 2016.
- [11] Erwan Brisson, Matthias Demuzere, and Nicole P. M. van Lipzig. Modeling strategies for performing convection-permitting climate simulations. *METEOROLOGISCHE ZEITSCHRIFT*, 25(2):149–163, 2016.
- [12] Erwan Brisson, Kwinten Van Weverberg, Matthias Demuzere, Annemarie Devis, Sajjad Saeed, Martin Stengel, and Nicole P. M. van Lipzig.

- How well can a convection-permitting climate model reproduce decadal statistics of precipitation, temperature and cloud characteristics? *CLIMATE DYNAMICS*, 47(9-10):3043–3061, NOV 2016.
- [13] J. Duplissy, J. Merikanto, A. Franchin, G. Tsagkogeorgas, J. Kangasluoma, D. Wimmer, H. Vuollekoski, S. Schobesberger, K. Lehtipalo, R. C. Flagan, D. Brus, N. M. Donahue, H. Vehkamäki, J. Almeida, A. Amorim, P. Barmet, F. Bianchi, M. Breitenlechner, E. M. Dunne, R. Guida, H. Henschel, H. Junninen, J. Kirkby, A. Kuerten, A. Kupc, A. Maattanen, V. Makhmutov, S. Mathot, T. Nieminen, A. Onnela, A. P. Praplan, F. Riccobono, L. Rondo, G. Steiner, A. Tome, H. Walthert, U. Baltensperger, K. S. Carslaw, J. Dommen, A. Hansel, T. Petaja, M. Sipila, F. Stratmann, A. Vrtala, P. E. Wagner, D. R. Worsnop, J. Curtius, and M. Kulmala. Effect of ions on sulfuric acid-water binary particle formation: 2. Experimental data and comparison with QC-normalized classical nucleation theory. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 121(4):1752–1775, FEB 27 2016.
- [14] E. Eckert, A. Laeng, S. Lossow, S. Kellmann, G. Stiller, T. von Clarmann, N. Glatthor, M. Hoepfner, M. Kiefer, H. Oelhaf, J. Orphal, B. Funke, U. Grabowski, F. Haenel, A. Linden, G. Wetzela, W. Woitwode, P. F. Bernath, C. Boone, G. S. Dutton, J. W. Elkins, A. Engel, J. C. Gille, F. Kolonjari, T. Sugita, G. C. Toon, and K. A. Walker. MIPAS IMK/IAA CFC-11 (CCl3F) and CFC-12 (CCl2F2) measurements: accuracy, precision and long-term stability. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 9(7):3355–3389, 2016.
- [15] Sebastian Ehrhart, Luisa Ickes, Joao Almeida, Antonio Amorim, Peter Barmet, Federico Bianchi, Josef Dommen, Eimear M. Dunne, Jonathan Duplissy, Alessandro Franchin, Juha Kangasluoma, Jasper Kirkby, Andreas Kuerten, Agnieszka Kupc, Katrianne Lehtipalo, Tuomo Nieminen, Francesco Riccobono, Linda Rondo, Siegfried Schobesberger, Gerhard Steiner, Antonio Tome, Daniela Wimmer, Urs Baltensperger, Paul E. Wagner, and Joachim Curtius. Comparison of the SAWNUC model with CLOUD measurements of sulphuric acid-water nucleation. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 121(20):12401–12414, OCT 27 2016.
- [16] Andreas Engel, Harald Boenisch, Tim Schwarzenberger, Hans-Peter Haase, Katja Grunow, Jana Abalichin, and Stephan Sala. Long-term validation of ESA operational retrieval (version 6.0) of MIPAS Envisat vertical profiles of methane, nitrous oxide, CFC11, and CFC12 using

- balloon-borne observations and trajectory matching. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 9(3):1051–1062, 2016.
- [17] Hamish Gordon, Kamalika Sengupta, Alexandru Rap, Jonathan Duplissy, Carla Frege, Christina Williamson, Martin Heinritzi, Mario Simon, Chao Yan, Joao Almeida, Jasmin Trostl, Tuomo Nieminen, Ismael K. Ortega, Robert Wagner, Eimear M. Dunne, Alexey Adamov, Antonio Amorim, Anne-Kathrin Bernhammer, Federico Bianchi, Martin Breitenlechner, Sophia Brilke, Xuemeng Chen, Jill S. Craven, Antonio Dias, Sebastian Ehrhart, Lukas Fischer, Richard C. Flagan, Alessandro Franchin, Claudia Fuchs, Roberto Guida, Jani Hakala, Christopher R. Hoyle, Tuija Jokinen, Heikki Junninen, Juha Kangasluoma, Jaeseok Kim, Jasper Kirkby, Manuel Krapf, Andreas Kuerten, Ari Laaksonen, Katrianne Lehtipalo, Vladimir Makhmutov, Serge Mathot, Ugo Molteni, Sarah A. Monks, Antti Onnela, Otso Perakyla, Felix Piel, Tuukka Petaja, Arnaud P. Praplan, Kirsty J. Pringle, Nigel A. D. Richards, Matti P. Rissanen, Linda Rondo, Nina Sarnela, Siegfried Schobesberger, Catherine E. Scott, John H. Seinfeldo, Sangeeta Sharma, Mikko Sipila, Gerhard Steiner, Yuri Stozhkov, Frank Stratmann, Antonio Tome, Annele Virtanen, Alexander Lucas Vogel, Andrea C. Wagner, Paul E. Wagner, Ernest Weingartner, Daniela Wimmer, Paul M. Winkler, Penglin Ye, Xuan Zhang, Armin Hansel, Josef Dommen, Neil M. Donahue, Douglas R. Worsnop, Urs Baltensperger, Markku Kulmala, Joachim Curtius, and Kenneth S. Carslaw. Reduced anthropogenic aerosol radiative forcing caused by biogenic new particle formation. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, 113(43):12053–12058, OCT 25 2016.
- [18] Martin Heinritzi, Mario Simon, Gerhard Steiner, Andrea C. Wagner, Andreas Kuerten, Armin Hansel, and Joachim Curtius. Characterization of the mass-dependent transmission efficiency of a CIMS. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 9(4):1449–1460, 2016.
- [19] R. Hossaini, P. K. Patra, A. A. Leeson, G. Krysztofiak, N. L. Abraham, S. J. Andrews, A. T. Archibald, J. Aschmann, E. L. Atlas, D. A. Belikov, H. Boenisch, L. J. Carpenter, S. Dhomse, M. Dorf, A. Engel, W. Feng, S. Fuhlbruegge, P. T. Griffiths, N. R. P. Harris, R. Hommel, T. Keber, K. Krueger, S. T. Lennartz, S. Maksyutov, H. Mantle, G. P. Mills, B. Miller, S. A. Montzka, F. Moore, M. A. Navarro, D. E. Oram, K. Pfeilsticker, J. A. Pyle, B. Quack, A. D. Robinson, E. Saikawa, A. Saiz-Lopez, S. Sala, B. M. Sinnhuber, S. Taguchi, S. Tegtmeier, R. T. Lidster, C. Wilson, and F. Ziska. A multi-model intercomparison

- of halogenated very short-lived substances (TransCom-VSLS): linking oceanic emissions and tropospheric transport for a reconciled estimate of the stratospheric source gas injection of bromine. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(14):9163–9187, 2016.
- [20] C. R. Hoyle, C. Fuchs, E. Jaervinen, H. Saathoff, A. Dias, I. El Haddad, M. Gysel, S. C. Coburn, J. Troestl, A. K. Bernhammer, F. Bianchi, M. Breitenlechner, J. C. Corbin, J. Craven, N. M. Donahue, J. Duplissy, S. Ehrhart, C. Frege, H. Gordon, N. Hoepfel, M. Heinritzi, T. B. Kristensen, U. Molteni, L. Nichman, T. Pinterich, A. S. H. Prevot, M. Simon, J. G. Slowik, G. Steiner, A. Tome, A. L. Vogel, R. Volkamer, A. C. Wagner, R. Wagner, A. S. Wexler, C. Williamson, P. M. Winkler, C. Yan, A. Amorim, J. Dommen, J. Curtius, M. W. Gallagher, R. C. Flagan, A. Hansel, J. Kirkby, M. Kulmala, O. Moehler, F. Stratmann, D. R. Worsnop, and U. Baltensperger. Aqueous phase oxidation of sulphur dioxide by ozone in cloud droplets. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(3):1693–1712, 2016.
- [21] Karoliina Ignatius, Thomas B. Kristensen, Emma Jaervinen, Leonid Nichman, Claudia Fuchs, Hamish Gordon, Paul Herenz, Christopher R. Hoyle, Jonathan Duplissy, Sarvesh Garimella, Antonio Dias, Carla Frege, Niko Hoepfel, Jasmin Troestl, Robert Wagner, Chao Yan, Antonio Amorim, Urs Baltensperger, Joachim Curtius, Neil M. Donahue, Martin W. Gallagher, Jasper Kirkby, Markku Kulmala, Ottmar Moehler, Harald Saathoff, Martin Schnaiter, Antonio Tome, Annele Virtanen, Douglas Worsnop, and Frank Stratmann. Heterogeneous ice nucleation of viscous secondary organic aerosol produced from ozonolysis of alpha-pinene. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(10):6495–6509, 2016.
- [22] Emma Jaervinen, Karoliina Ignatius, Leonid Nichman, Thomas B. Kristensen, Claudia Fuchs, Christopher R. Hoyle, Niko Hoepfel, Joel C. Corbin, Jill Craven, Jonathan Duplissy, Sebastian Ehrhart, Imad El Haddad, Carla Frege, Hamish Gordon, Tuija Jokinen, Peter Kallinger, Jasper Kirkby, Alexei Kiselev, Karl-Heinz Naumann, Tuukka Petaja, Tamara Pinterich, Andre S. H. Prevot, Harald Saathoff, Thea Schiebel, Kamalika Sengupta, Mario Simon, Jay G. Slowik, Jasmin Troestl, Annele Virtanen, Paul Vochezer, Steffen Vogt, Andrea C. Wagner, Robert Wagner, Christina Williamson, Paul M. Winkler, Chao Yan, Urs Baltensperger, Neil M. Donahue, Rick C. Flagan, Martin Gallagher, Armin Hansel, Markku Kulmala, Frank Stratmann, Douglas R. Worsnop, Ottmar Moehler, Thomas Leisner, and Martin Schnaiter. Observation of

- viscosity transition in alpha-pinene secondary organic aerosol. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(7):4423–4438, 2016.
- [23] J. Kim, L. Ahlm, T. Yli-Juuti, M. Lawler, H. Keskinen, J. Troestl, S. Schobesberger, J. Duplissy, A. Amorim, F. Bianchi, N. M. Donahue, R. C. Flagan, J. Hakala, M. Heinritzi, T. Jokinen, A. Kuerten, A. Laaksonen, K. Lehtipalo, P. Miettinen, T. Petaja, M. P. Rissanen, L. Rondo, K. Sengupta, M. Simon, A. Tome, C. Williamson, D. Wimmer, P. M. Winkler, S. Ehrhart, P. Ye, J. Kirkby, J. Curtius, U. Baltensperger, M. Kulmala, K. E. J. Lehtinen, J. N. Smith, I. Riipinen, and A. Virtanen. Hygroscopicity of nanoparticles produced from homogeneous nucleation in the CLOUD experiments. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(1):293–304, 2016.
- [24] Jasper Kirkby, Jonathan Duplissy, Kamalika Sengupta, Carla Frege, Hamish Gordon, Christina Williamson, Martin Heinritzi, Mario Simon, Chao Yan, Joao Almeida, Jasmin Troestl, Tuomo Nieminen, Ismael K. Ortega, Robert Wagner, Alexey Adamov, Antonio Amorim, Anne-Kathrin Bernhammer, Federico Bianchi, Martin Breitenlechner, Sophia Brilke, Xuemeng Chen, Jill Craven, Antonio Dias, Sebastian Ehrhart, Richard C. Flagan, Alessandro Franchin, Claudia Fuchs, Roberto Guida, Jani Hakala, Christopher R. Hoyle, Tuija Jokinen, Heikki Junninen, Juha Kangasluoma, Jaeseok Kim, Manuel Krapf, Andreas Kuerten, Ari Laaksonen, Katrianne Lehtipalo, Vladimir Makhmutov, Serge Mathot, Ugo Molteni, Antti Onnela, Otso Peraekylae, Felix Piel, Tuukka Petaja, Arnaud P. Praplan, Kirsty Pringle, Alexandru Rap, Nigel A. D. Richards, Ilona Riipinen, Matti P. Rissanen, Linda Rondo, Nina Sarnela, Siegfried Schobesberger, Catherine E. Scott, John H. Seinfeld, Mikko Sipilae, Gerhard Steiner, Yuri Stozhkov, Frank Stratmann, Antonio Tome, Annele Virtanen, Alexander L. Vogel, Andrea C. Wagner, Paul E. Wagner, Ernest Weingartner, Daniela Wimmer, Paul M. Winkler, Penglin Ye, Xuan Zhang, Armin Hansel, Josef Dommen, Neil M. Donahue, Douglas R. Worsnop, Urs Baltensperger, Markku Kulmala, Kenneth S. Carslaw, and Joachim Curtius. Ion-induced nucleation of pure biogenic particles. *NATURE*, 533(7604):521+, MAY 26 2016.
- [25] Steffen Kothe, Julian Toedter, and Bodo Ahrens. Strategies for soil initialization of regional decadal climate predictions. *METEOROLOGISCHE ZEITSCHRIFT*, 25(6):775–794, 2016.
- [26] Andreas Kuerten, Anton Bergen, Martin Heinritzi, Markus Leiminger, Verena Lorenz, Felix Piel, Mario Simon, Robert Sitals, Andrea C. Wag-

- ner, and Joachim Curtius. Observation of new particle formation and measurement of sulfuric acid, ammonia, amines and highly oxidized organic molecules at a rural site in central Germany. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(19):12793–12813, OCT 14 2016.
- [27] Andreas Kuerten, Federico Bianchi, Joao Almeida, Oona Kupiainen-Maatta, Eimear M. Dunne, Jonathan Duplissy, Christina Williamson, Peter Barmet, Martin Breitenlechner, Josef Dommen, Neil M. Donahue, Richard C. Flagan, Alessandro Franchin, Hamish Gordon, Jani Hakala, Armin Hansel, Martin Heinritzi, Luisa Ickes, Tuija Jokinen, Juha Kangasluoma, Jaeseok Kim, Jasper Kirkby, Agnieszka Kupc, Katrianne Lehtipalo, Markus Leiminger, Vladimir Makhmutov, Antti Onnela, Ismael K. Ortega, Tuukka Petaja, Arnaud P. Praplan, Francesco Riccobono, Matti P. Rissanen, Linda Rondo, Ralf Schnitzhofer, Siegfried Schobesberger, James N. Smith, Gerhard Steiner, Yuri Stozhkov, Antonio Tome, Jasmin Trostl, Georgios Tsagkogeorgas, Paul E. Wagner, Daniela Wimmer, Penglin Ye, Urs Baltensperger, Ken Carslaw, Markku Kulmala, and Joachim Curtius. Experimental particle formation rates spanning tropospheric sulfuric acid and ammonia abundances, ion production rates, and temperatures. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 121(20):12377–12400, OCT 27 2016.
- [28] Michael J. Lawler, Paul M. Winkler, Jaeseok Kim, Lars Ahlm, Jasmin Trostl, Arnaud P. Praplan, Siegfried Schobesberger, Andreas Kuerten, Jasper Kirkby, Federico Bianchi, Jonathan Duplissy, Armin Hansel, Tuija Jokinen, Helmi Keskinen, Katrianne Lehtipalo, Markus Leiminger, Tuukka Petaja, Matti Rissanen, Linda Rondo, Mario Simon, Mikko Sipila, Christina Williamson, Daniela Wimmer, Ilona Riipinen, Annele Virtanen, and James N. Smith. Unexpectedly acidic nanoparticles formed in dimethylamine-ammonia-sulfuric-acid nucleation experiments at CLOUD. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(21):13601–13618, NOV 3 2016.
- [29] Katrianne Lehtipalo, Linda Rondo, Jenni Kontkanen, Siegfried Schobesberger, Tuija Jokinen, Nina Sarnela, Andreas Kuerten, Sebastian Ehrhart, Alessandro Franchin, Tuomo Nieminen, Francesco Riccobono, Mikko Sipila, Taina Yli-Juuti, Jonathan Duplissy, Alexey Adamov, Lars Ahlm, Joao Almeida, Antonio Amorim, Federico Bianchi, Martin Breitenlechner, Josef Dommen, Andrew J. Downard, Eimear M. Dunne, Richard C. Flagan, Roberto Guida, Jani Hakala, Armin Hansel, Werner Jud, Juha Kangasluoma, Veli-Matti Kerminen, Helmi Keskinen, Jaeseok Kim, Jasper Kirkby, Agnieszka Kupc, Oona Kupiainen-Maatta,

- Ari Laaksonen, Michael J. Lawler, Markus Leiminger, Serge Mathot, Tinja Olenius, Ismael K. Ortega, Antti Onnela, Tuukka Petaja, Arnaud Praplan, Matti P. Rissanen, Taina Ruuskanen, Filipe D. Santos, Simon Schallhart, Ralf Schnitzhofer, Mario Simon, James N. Smith, Jasmin Trostl, Georgios Tsagkogeorgas, Antonio Tome, Petri Vaattovaara, Hanna Vehkamäki, Aron E. Vrtala, Paul E. Wagner, Christina Williamson, Daniela Wimmer, Paul M. Winkler, Annele Virtanen, Neil M. Donahue, Kenneth S. Carslaw, Urs Baltensperger, Ilona Riipinen, Joachim Curtius, Douglas R. Worsnop, and Markku Kulmala. The effect of acid-base clustering and ions on the growth of atmospheric nano-particles. *NATURE COMMUNICATIONS*, 7, MAY 2016.
- [30] Stefan Mueller, Peter Hoor, Heiko Bozem, Ellen Gute, Baerbel Vogel, Andreas Zahn, Harald Boenisch, Timo Keber, Martina Kraemer, Christian Rolf, Martin Riese, Hans Schlager, and Andreas Engel. Impact of the Asian monsoon on the extratropical lower stratosphere: trace gas observations during TACTS over Europe 2012. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(16):10573–10589, AUG 25 2016.
- [31] Leonid Nichman, Claudia Fuchs, Emma Jaervinen, Karoliina Ignatius, Niko Florian Hoeppel, Antonio Dias, Martin Heinritzi, Mario Simon, Jasmin Trostl, Andrea Christine Wagner, Robert Wagner, Christina Williamson, Chao Yan, Paul James Connolly, James Robert Dorsey, Jonathan Duplissy, Sebastian Ehrhart, Carla Frege, Hamish Gordon, Christopher Robert Hoyle, Thomas Bjerring Kristensen, Gerhard Steiner, Neil McPherson Donahue, Richard Flagan, Martin William Gallagher, Jasper Kirkby, Ottmar Moehler, Harald Saathoff, Martin Schnaiter, Frank Stratmann, and Antonio Tome. Phase transition observations and discrimination of small cloud particles by light polarization in expansion chamber experiments. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(5):3651–3664, 2016.
- [32] Anika Obermann, Benedikt Edelmann, and Bodo Ahrens. Influence of sea surface roughness length parameterization on Mistral and Tramontane simulations. *ADVANCES IN SCIENCE AND RESEARCH*, 13:107–112, 2016. 15th EMS Annual Meeting & 12th European Conference on Applications of Meteorology (ECAM), Sofia, BULGARIA, SEP 07-11, 2015.
- [33] F. Obersteiner, H. Boenisch, and A. Engel. An automated gas chromatography time-of-flight mass spectrometry instrument for the quantita-



- tive analysis of halocarbons in air. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 9(1):179–194, 2016.
- [34] Florian Obersteiner, Harald Boenisch, Timo Keber, Simon O’Doherty, and Andreas Engel. A versatile, refrigerant- and cryogen-free cryofocusing-thermodesorption unit for preconcentration of traces gases in air. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 9(11):5265–5279, OCT 31 2016.
- [35] Davide Panosetti, Steven Boing, Linda Schlemmer, and Juerg Schmidli. Idealized Large-Eddy and Convection-Resolving Simulations of Moist Convection over Mountainous Terrain. *JOURNAL OF THE ATMOSPHERIC SCIENCES*, 73(10):4021–4041, OCT 2016.
- [36] A. Paxian, D. Sein, H. J. Panitz, M. Warscher, M. Breil, T. Engel, J. Toedter, A. Krause, W. D. Cabos Narvaez, A. H. Fink, B. Ahrens, H. Kunstmann, D. Jacob, and H. Paeth. Bias reduction in decadal predictions of West African monsoon rainfall using regional climate models. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 121(4):1715–1735, FEB 27 2016.
- [37] Uwe Pfeifroth, Joerg Trentmann, Andreas H. Fink, and Bodo Ahrens. Evaluating Satellite-Based Diurnal Cycles of Precipitation in the African Tropics. *JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY*, 55(1):23–39, JAN 2016.
- [38] Theodoros Potouridis, Elisabeth Berger, and Wilhelm Puettmann. Analysis of alkyl esters of p-hydroxybenzoic acid (parabens) in baby teethers via gas chromatography-quadrupole mass spectrometry (GC-qMS) using a stable isotope dilution assay (SIDA). *ANALYTICAL METHODS*, 8(17):3466–3474, 2016.
- [39] Armin Rauthe-Schoech, Angela K. Baker, Tanja J. Schuck, Carl A. M. Brenninkmeijer, Andreas Zahn, Markus Hermann, Greta Stratmann, Helmut Ziereis, Peter F. J. van Velthoven, and Jos Lelieveld. Trapping, chemistry, and export of trace gases in the South Asian summer monsoon observed during CARIBIC flights in 2008. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 16(5):3609–3629, 2016.
- [40] B. Ribstein and U. Achatz. The interaction between gravity waves and solar tides in a linear tidal model with a 4-D ray-tracing gravity-wave parameterization. *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*, 121(9):8936–8950, SEP 2016.

- [41] L. Rondo, S. Ehrhart, A. Kuerten, A. Adamov, F. Bianchi, M. Breitenlechner, J. Duplissy, A. Franchin, J. Dommen, N. M. Donahue, E. M. Dunne, R. C. Flagan, J. Hakala, A. Hansel, H. Keskinen, J. Kim, T. Jokinen, K. Lehtipalo, M. Leiminger, A. Praplan, F. Riccobono, M. P. Rissanen, N. Sarnela, S. Schobesberger, M. Simon, M. Sipila, J. N. Smith, A. Tome, J. Trostl, G. Tsagkogeorgas, P. Vaattovaara, P. M. Winkler, C. Williamson, D. Wimmer, U. Baltensperger, J. Kirkby, M. Kulmala, T. Petaja, D. R. Worsnop, and J. Curtius. Effect of dimethylamine on the gas phase sulfuric acid concentration measured by Chemical Ionization Mass Spectrometry. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 121(6):3036–3049, MAR 27 2016.
- [42] P. M. Ruti, S. Somot, F. Giorgi, C. Dubois, E. Flaounas, A. Obermann, A. Dell’Aquila, G. Pisacane, A. Harzallah, E. Lombardi, B. Ahrens, N. Akhtar, A. Alias, T. Arsouze, R. Aznar, S. Bastin, J. Bartholy, K. Beranger, J. Beuvier, S. Bouffies-Cloche, J. Brauch, W. Cabos, S. Calmanti, J. C. Calvet, A. Carillo, D. Conte, E. Coppola, V. Djurdjevic, P. Drobinski, A. Elizalde-Arellano, M. Gaertner, P. Galan, C. Gallardo, S. Gualdi, M. Goncalves, O. Jorba, G. Jorda, B. L’Heveder, C. Lebeaupin-Brossier, L. Li, G. Liguori, P. Lionello, D. Macias, P. Nabat, B. Onol, B. Raikovic, K. Ramage, F. Sevault, G. Sannino, M. V. Struglia, A. Sanna, C. Torma, and V. Vervatis. MED-CORDEX INITIATIVE FOR MEDITERRANEAN CLIMATE STUDIES. *BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY*, 97(7):1187–1208, JUL 2016.
- [43] Jann Schrod, Anja Danielczok, Daniel Weber, Martin Ebert, Erik S. Thomson, and Heinz G. Bingemer. Re-evaluating the Frankfurt isothermal static diffusion chamber for ice nucleation. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 9(3):1313–1324, 2016.
- [44] Jan-Peter Schulz, Gerd Vogel, Claudia Becker, Steffen Kothe, Udo Rummel, and Bodo Ahrens. Evaluation of the ground heat flux simulated by a multi-layer land surface scheme using high-quality observations at grass land and bare soil. *METEOROLOGISCHE ZEITSCHRIFT*, 25(5, SI):607–620, 2016.
- [45] Mario Simon, Martin Heinritzi, Stephan Herzog, Markus Leiminger, Federico Bianchi, Arnaud Praplan, Josef Dommen, Joachim Curtius, and Andreas Kuerten. Detection of dimethylamine in the low pptv range using nitrate chemical ionization atmospheric pressure interface time-of-flight (CI-APi-TOF) mass spectrometry. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 9(5):2135–2145, 2016.

- [46] Julian Toedter, Paul Kirchgessner, Lars Nerger, and Bodo Ahrens. Assessment of a Nonlinear Ensemble Transform Filter for High-Dimensional Data Assimilation. *MONTHLY WEATHER REVIEW*, 144(1):409–427, JAN 2016.
- [47] Marine Tort, Bruno Ribstein, and Vladimir Zeitlin. Symmetric and asymmetric inertial instability of zonal jets on the f-plane with complete Coriolis force. *JOURNAL OF FLUID MECHANICS*, 788:274–302, FEB 2016.
- [48] Jasmin Troestl, Wayne K. Chuang, Hamish Gordon, Martin Heinritzi, Chao Yan, Ugo Molteni, Lars Ahlm, Carla Frege, Federico Bianchi, Robert Wagner, Mario Simon, Katrianne Lehtipalo, Christina Williamson, Jill S. Craven, Jonathan Duplissy, Alexey Adamov, Joao Almeida, Anne-Kathrin Bernhammer, Martin Breitenlechner, Sophia Brilke, Antonio Dias, Sebastian Ehrhart, Richard C. Flagan, Alessandro Franchin, Claudia Fuchs, Roberto Guida, Martin Gysel, Armin Hansel, Christopher R. Hoyle, Tuija Jokinen, Heikki Junninen, Juha Kangasluoma, Helmi Keskinen, Jaeseok Kim, Manuel Krapf, Andreas Kuerten, Ari Laaksonen, Michael Lawler, Markus Leiminger, Serge Mathot, Ottmar Moehler, Tuomo Nieminen, Antti Onnela, Tuukka Petaejae, Felix M. Piel, Pasi Miettinen, Matti P. Rissanen, Linda Rondo, Nina Sarnela, Siegfried Schobesberger, Kamalika Sengupta, Mikko Sipila, James N. Smith, Gerhard Steiner, Antonio Tome, Annele Virtanen, Andrea C. Wagner, Ernest Weingartner, Daniela Wimmer, Paul M. Winkler, Penglin Ye, Kenneth S. Carslaw, Joachim Curtius, Josef Dommen, Jasper Kirkby, Markku Kulmala, Ilona Riipinen, Douglas R. Worsnop, Neil M. Donahue, and Urs Baltensperger. The role of low-volatility organic compounds in initial particle growth in the atmosphere. *NATURE*, 533(7604):527+, MAY 26 2016.
- [49] Alexander L. Vogel, Johannes Schneider, Christina Mueller-Tautges, Gavin J. Phillips, Mira L. Poehlker, Diana Rose, Christoph Zuth, Ulla Makkonen, Hannele Hakola, John N. Crowley, Meinrat O. Andreae, Ulrich Poeschl, and Thorsten Hoffmann. Aerosol Chemistry Resolved by Mass Spectrometry: Linking Field Measurements of Cloud Condensation Nuclei Activity to Organic Aerosol Composition. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 50(20):10823–10832, OCT 18 2016.
- [50] Manfred Wendisch, Ulrich Poeschl, Meinrat O. Andreae, Luiz A. T. Machado, Rachel Albrecht, Hans Schlager, Daniel Rosenfeld, Scot T.

Martin, Ahmed Abdelmomonem, Armin Afchine, Alessandro C. Araujo, Paulo Artaxo, Heinfried Aufmhoff, Henrique M. J. Barbosa, Stephan Borrmann, Ramomon Braga, Bernhard Buchholz, Micael Amomore Cecchini, Anja Costa, Joachim Curtius, Maximilian Dollner, Marcel Dorf, Volker Dreiling, Volker Ebert, Andre Ehrlich, Florian Ewald, Gilberto Fisch, Andreas Fix, Fabian Frank, Daniel Futterer, Christoppher Heckl, Fabian Heidelberg, Tilman Hueneke, Evelyn Jakel, Emmmma Jarvinen, Tina Jurkat, Sandra Kanter, Udo Kaestner, Mareike Kenntner, Jurgen Kesselmeier, Thomomas Klimach, Matthias Knecht, Rebecca Kohl, Tobias Koelling, Martina Kraemer, Mira Krueger, Trismomono Candra Krisna, Jost V. Lavric, Karla Longo, Christopph Mahnke, Antonio O. Manzi, Bernhard Mayer, Stephan Mertes, Andreas Minikin, Sergej Mollerker, Steffen Munch, Bjorn Nillius, Klaus Pfeilsticker, Christoppher Pohlker, Anke Roiger, Diana Rose, Dagmar Rosenowow, Daniel Sauer, Martin Schnaiter, Johannes Schneider, Christiane Schulz, Rodrigo A. F. de Souza, Antonio Spanu, Paul Stock, Daniel Vila, Christiane Voigt, Adrian Walser, David Walter, Ralf Weigel, Bernadett Weinzierl, Frank Werner, Marcia A. Yamasoe, Helmumut Ziereis, Tobias Zinner, and Martin Zoeger. ACRIDICON-CHUVA CAMPAIGN Studying Tropical Deep Convective Clouds and Precipitation over Amazonia Using the New German Research Aircraft HALO. *BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY*, 97(10):1885–1908, OCT 2016.

- [51] Jeroen Wouters, Stamen Iankov Dolaptchiev, Valerio Lucarini, and Ulrich Achatz. Parameterization of stochastic multiscale triads. *NONLINEAR PROCESSES IN GEOPHYSICS*, 23(5):435–445, NOV 28 2016.
- [52] Fathi Zereini, Clare L. S. Wiseman, My Vang, Peter Albers, Wolfgang Schneider, Roland Schindl, and Kerstin Leopold. Geochemical behaviour of palladium in soils and Pd/PdO model substances in the presence of the organic complexing agents L-methionine and citric acid. *ENVIRONMENTAL SCIENCE-PROCESSES & IMPACTS*, 18(1):22–31, 2016.

## 2015

- [53] Shakeel Asharaf and Bodo Ahrens. Indian Summer Monsoon Rainfall Processes in Climate Change Scenarios. *JOURNAL OF CLIMATE*, 28(13):5414–5429, JUL 2015.
- [54] D. E. Bowler, P. Haase, I. Kroencke, O. Tackenberg, H. G. Bauer, C. Brendel, R. W. Brooker, M. Gerisch, K. Henle, T. Hickler, C. Hof,

- S. Klotz, I. Kuehn, S. Matesanz, R. O’Hara, D. Russell, O. Schweiger, F. Valladares, E. Welk, M. Wiemers, and K. Boehning-Gaese. A cross-taxon analysis of the impact of climate change on abundance trends in central Europe. *BIOLOGICAL CONSERVATION*, 187:41–50, JUL 2015.
- [55] Erwan Brisson, Matthias Demuzere, Patrick Willems, and Nicole P. M. van Lipzig. Assessment of natural climate variability using a weather generator. *CLIMATE DYNAMICS*, 44(1-2):495–508, JAN 2015.
- [56] Beatrice Bruder, Clare L. S. Wiseman, and Fathi Zereini. Solubility of Emitted Platinum Group Elements (Pt, Pd and Rh) in Airborne Particulate Matter (PM10) in the Presence of Organic Complexing Agents. In Zereini, F and Wiseman, CLS, editor, *PLATINUM METALS IN THE ENVIRONMENT*, Environmental Science and Engineering-Environmental Engineering, pages 265–275. 2015.
- [57] Meghnath Dhimal, Bodo Ahrens, and Ulrich Kuch. Climate Change and Spatiotemporal Distributions of Vector-Borne Diseases in Nepal - A Systematic Synthesis of Literature. *PLOS ONE*, 10(6), JUN 18 2015.
- [58] Meghnath Dhimal, Ishan Gautam, Hari Datt Joshi, Robert B. O’Hara, Bodo Ahrens, and Ulrich Kuch. Risk Factors for the Presence of Chikungunya and Dengue Vectors (*Aedes aegypti* and *Aedes albopictus*), Their Altitudinal Distribution and Climatic Determinants of Their Abundance in Central Nepal. *PLOS NEGLECTED TROPICAL DISEASES*, 9(3), MAR 2015.
- [59] Peter D. Duben and Stamen I. Dolapchiev. Rounding errors may be beneficial for simulations of atmospheric flow: results from the forced 1D Burgers equation. *THEORETICAL AND COMPUTATIONAL FLUID DYNAMICS*, 29(4):311–328, AUG 2015.
- [60] A. Franchin, S. Ehrhart, J. Leppa, T. Nieminen, S. Gagne, S. Schobesberger, D. Wimmer, J. Duplissy, F. Riccobono, E. M. Dunne, L. Rondo, A. Downard, F. Bianchi, A. Kupc, G. Tsagkogeorgas, K. Lehtipalo, H. E. Manninen, J. Almeida, A. Amorim, P. E. Wagner, A. Hansel, J. Kirkby, A. Kuerten, N. M. Donahue, V. Makhmutov, S. Mathot, A. Metzger, T. Petaja, R. Schnitzhofer, M. Sipila, Y. Stozhkov, A. Tome, V. M. Kerminen, K. Carslaw, J. Curtius, U. Baltensperger, and M. Kulmala. Experimental investigation of ion-ion recombination under atmospheric conditions. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(13):7203–7216, 2015.

- [61] Imke Fricke, Rolf Goetz, Ruprecht Schleyer, and Wilhelm Puettmann. Analysis of Sources and Sinks of Mercury in the Urban Water Cycle of Frankfurt am Main, Germany. *WATER*, 7(11):6097–6116, NOV 2015.
- [62] N. Hiranuma, S. Augustin-Bauditz, H. Bingemer, C. Budke, J. Curtius, A. Danielczok, K. Diehl, K. Dreischmeier, M. Ebert, F. Frank, N. Hoffmann, K. Kandler, A. Kiselev, T. Koop, T. Leisner, O. Moehler, B. Nillius, A. Peckhaus, D. Rose, S. Weinbruch, H. Wex, Y. Boose, P. J. DeMott, J. D. Hader, T. C. J. Hill, Z. A. Kanji, G. Kulkarni, E. J. T. Levin, C. S. McCluskey, M. Murakami, B. J. Murray, D. Niedermeier, M. D. Petters, D. O’Sullivan, A. Saito, G. P. Schill, T. Tajiri, M. A. Tolbert, A. Welti, T. F. Whale, T. P. Wright, and K. Yamashita. A comprehensive laboratory study on the immersion freezing behavior of illite NX particles: a comparison of 17 ice nucleation measurement techniques. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(5):2489–2518, 2015.
- [63] J. Hoker, F. Obersteiner, H. Boenisch, and A. Engel. Comparison of GC/time-of-flight MS with GC/quadrupole MS for halocarbon trace gas analysis. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 8(5):2195–2206, 2015.
- [64] M. Kaufmann, J. Blank, T. Guggenmoser, J. Ungermann, A. Engel, M. Ern, F. Friedl-Vallon, D. Gerber, J. U. Grooss, G. Guenther, M. Hopfner, A. Kleinert, E. Kretschmer, Th. Latzko, G. Maucher, T. Neubert, H. Nordmeyer, H. Oelhaf, F. Olschewski, J. Orphal, P. Preusse, H. Schlager, H. Schneider, D. Schuettmeyer, F. Stroh, O. Suminska-Ebersoldt, B. Vogel, C. M. Volk, W. Woiwode, and M. Riese. Retrieval of three-dimensional small-scale structures in upper-tropospheric/lower-stratospheric composition as measured by GLORIA. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 8(1):81–95, 2015.
- [65] A. Kuerten, S. Munch, L. Rondo, F. Bianchi, J. Duplissy, T. Jokinen, H. Junninen, N. Sarnela, S. Schobesberger, M. Simon, M. Sipila, J. Almeida, A. Amorim, J. Dommen, N. M. Donahue, E. M. Dunne, R. C. Flagan, A. Franchin, J. Kirkby, A. Kupc, V. Makhmutov, T. Petaja, A. P. Praplan, F. Riccobono, G. Steiner, A. Tome, G. Tsagkogeorgas, P. E. Wagner, D. Wimmer, U. Baltensperger, M. Kulmala, D. R. Worsnop, and J. Curtius. Thermodynamics of the formation of sulfuric acid dimers in the binary (H<sub>2</sub>SO<sub>4</sub>-H<sub>2</sub>O) and ternary (H<sub>2</sub>SO<sub>4</sub>-H<sub>2</sub>O-NH<sub>3</sub>) system. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(18):10701–10721, 2015.

- [66] A. Kuerten, C. Williamson, J. Almeida, J. Kirkby, and J. Curtius. On the derivation of particle nucleation rates from experimental formation rates. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(8):4063–4075, 2015.
- [67] A. Laeng, J. Plieninger, T. von Clarmann, U. Grabowski, G. Stiller, E. Eckert, N. Glatthor, F. Haenel, S. Kellmann, M. Kiefer, A. Linden, S. Lossow, L. Deaver, A. Engel, M. Hervig, I. Levin, M. McHugh, S. Noel, G. Toon, and K. Walker. Validation of MIPAS IMK/IAA methane profiles. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 8(12):5251–5261, 2015.
- [68] S. T. Lennartz, G. Krysztofiak, C. A. Marandino, B. M. Sinnhuber, S. Tegtmeier, F. Ziska, R. Hossaini, K. Kruger, S. A. Montzka, E. Atlas, D. E. Oram, T. Keber, H. Boenisch, and B. Quack. Modelling marine emissions and atmospheric distributions of halocarbons and dimethyl sulfide: the influence of prescribed water concentration vs. prescribed emissions. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(20):11753–11772, 2015.
- [69] A. Molina, V. Vanacker, E. Brisson, D. Mora, and V. Balthazar. Multidecadal change in streamflow associated with anthropogenic disturbances in the tropical Andes. *HYDROLOGY AND EARTH SYSTEM SCIENCES*, 19(10):4201–4213, 2015.
- [70] J. Muraschko, M. D. Fruman, U. Achatz, S. Hickel, and Y. Toledo. On the application of Wentzel-Kramer-Brillouin theory for the simulation of the weakly nonlinear dynamics of gravity waves. *QUARTERLY JOURNAL OF THE ROYAL METEOROLOGICAL SOCIETY*, 141(688, A):676–697, APR 2015.
- [71] J. Muraschko, M. D. Fruman, U. Achatz, S. Hickel, and Y. Toledo. On the application of Wentzel-Kramer-Brillouin theory for the simulation of the weakly nonlinear dynamics of gravity waves (vol 141, pg 3446, 2015). *QUARTERLY JOURNAL OF THE ROYAL METEOROLOGICAL SOCIETY*, 141(693, B):3446, OCT 2015.
- [72] A. P. Praplan, S. Schobesberger, F. Bianchi, M. P. Rissanen, M. Ehn, T. Jokinen, H. Junninen, A. Adamov, A. Amorim, J. Dommen, J. Duplissy, J. Hakala, A. Hansel, M. Heinritzi, J. Kangasluoma, J. Kirkby, M. Krapf, A. Kuerten, K. Lehtipalo, F. Riccobono, L. Rondo, N. Sarnela, M. Simon, A. Tome, J. Troestl, P. M. Winkler, C. Williamson, P. Ye, J. Curtius, U. Baltensperger, N. M. Donahue, M. Kulmala, and

- D. R. Worsnop. Elemental composition and clustering behaviour of alpha-pinene oxidation products for different oxidation conditions. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(8):4145–4159, 2015.
- [73] Andreas F. Prein, Wolfgang Langhans, Giorgia Fossler, Andrew Ferrone, Nikolina Ban, Klaus Goergen, Michael Keller, Merja Toelle, Oliver Gutjahr, Frauke Feser, Erwan Brisson, Stefan Kollet, Juerg Schmidli, Nicole P. M. van Lipzig, and Ruby Leung. A review on regional convection-permitting climate modeling: Demonstrations, prospects, and challenges. *REVIEWS OF GEOPHYSICS*, 53(2):323–361, JUN 2015.
- [74] Sebastian Remmler, Stefan Hickel, Mark D. Fruman, and Ulrich Achatz. Direct Numerical Simulation of Breaking Atmospheric Gravity Waves. In Nagel, WE and Kroner, DH and Resch, MM, editor, *HIGH PERFORMANCE COMPUTING IN SCIENCE AND ENGINEERING'14: TRANSACTIONS OF THE HIGH PERFORMANCE COMPUTING CENTER, STUTTGART (HLRS) 2014*, pages 593–607, 2015. 17th Annual Results and Review Workshop on High Performance Computing in Science and Engineering (HLRS), Univ Stuttgart, Stuttgart, GERMAN, SEP 29-30, 2014.
- [75] Sebastian Remmler, Stefan Hickel, Mark D. Fruman, and Ulrich Achatz. Validation of Large-Eddy Simulation Methods for Gravity Wave Breaking. *JOURNAL OF THE ATMOSPHERIC SCIENCES*, 72(9):3537–3562, SEP 2015.
- [76] B. Ribstein, U. Achatz, and F. Senf. The interaction between gravity waves and solar tides: Results from 4-D ray tracing coupled to a linear tidal model. *JOURNAL OF GEOPHYSICAL RESEARCH-SPACE PHYSICS*, 120(8):6795–6817, AUG 2015.
- [77] Joran Rolland. Stochastic analysis of the time evolution of laminar-turbulent bands of plane Couette flow. *EUROPEAN PHYSICAL JOURNAL E*, 38(11), NOV 24 2015.
- [78] S. Schobesberger, A. Franchin, F. Bianchi, L. Rondo, J. Duplissy, A. Kuerten, I. K. Ortega, A. Metzger, R. Schnitzhofer, J. Almeida, A. Amorim, J. Dommen, E. M. Dunne, M. Ehn, S. Gagne, L. Ickes, H. Junninen, A. Hansel, V-M Kerminen, J. Kirkby, A. Kupc, A. Laaksonen, K. Lehtipalo, S. Mathot, A. Onnela, T. Petaja, F. Riccobono, F. D. Santos, M. Sipila, A. Tome, G. Tsagkogeorgas, Y. Viisanen, P. E. Wagner, D. Wimmer, J. Curtius, N. M. Donahue, U. Baltensperger, M. Kulmala, and D. R. Worsnop. On the composition of ammonia-sulfuric-acid



- ion clusters during aerosol particle formation. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(1):55–78, 2015.
- [79] Jian-Xiong Sheng, Debra K. Weisenstein, Bei-Ping Luo, Eugene Rozanov, Andrea Stenke, Julien Anet, Heinz Bingemer, and Thomas Peter. Global atmospheric sulfur budget under volcanically quiescent conditions: Aerosol-chemistry-climate model predictions and validation. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 120(1):256–276, JAN 16 2015.
- [80] M. Sipila, N. Sarnela, T. Jokinen, H. Junninen, J. Hakala, M. P. Rissanen, A. Praplan, M. Simon, A. Kuerten, F. Bianchi, J. Dommen, J. Curtius, T. Petaja, and D. R. Worsnop. Bisulfate - cluster based atmospheric pressure chemical ionization mass spectrometer for high-sensitivity ( $> 100$  ppqV) detection of atmospheric dimethyl amine: proof-of-concept and first ambient data from boreal forest. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 8(10):4001–4011, 2015.
- [81] G. Wetzel, H. Oelhaf, M. Birk, A. de Lange, A. Engel, F. Friedl-Vallon, O. Kirner, A. Kleinert, G. Maucher, H. Nordmeyer, J. Orphal, R. Ruhnke, B. M. Sinnhuber, and P. Vogt. Partitioning and budget of inorganic and organic chlorine species observed by MIPAS-B and TELIS in the Arctic in March 2011. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(14):8065–8076, 2015.
- [82] H. Wex, S. Augustin-Bauditz, Y. Boose, C. Budke, J. Curtius, K. Diehl, A. Dreyer, F. Frank, S. Hartmann, N. Hiranuma, E. Jantsch, Z. A. Kanji, A. Kiselev, T. Koop, O. Moehler, D. Niedermeier, B. Nillius, M. Roesch, D. Rose, C. Schmidt, I. Steinke, and F. Stratmann. Intercomparing different devices for the investigation of ice nucleating particles using Snomax (R) as test substance. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(3):1463–1485, 2015.
- [83] D. Wimmer, K. Lehtipalo, T. Nieminen, J. Duplissy, S. Ehrhart, J. Almeida, L. Rondo, A. Franchin, F. Kreissl, F. Bianchi, H. E. Manninen, M. Kulmala, J. Curtius, and T. Petaja. Technical Note: Using DEGCPCs at upper tropospheric temperatures. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(13):7547–7555, 2015.
- [84] A. Worringen, K. Kandler, N. Benker, T. Dirsch, S. Mertes, L. Schenk, U. Kaestner, F. Frank, B. Nillius, U. Bundke, D. Rose, J. Curtius, P. Kupiszewski, E. Weingartner, P. Vochezer, J. Schneider, S. Schmidt,

- S. Weinbruch, and M. Ebert. Single-particle characterization of ice-nucleating particles and ice particle residuals sampled by three different techniques. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 15(8):4161–4178, 2015.
- [85] Fathi Zereini, Ilka Mueller, and Clare L. S. Wiseman. The Influence of Anionic Species (Cl-, NO<sub>3</sub>-, SO<sub>4</sub><sup>2-</sup>) on the Transformation and Solubility of Platinum in Platinum/Aluminum Oxide Model Substance. In Zereini, F and Wiseman, CLS, editor, *PLATINUM METALS IN THE ENVIRONMENT*, Environmental Science and Engineering-Environmental Engineering, pages 277–288. 2015.
- [86] Fathi Zereini and Clare L. S. Wiseman. Platinum Metals in the Environment Preface. In Zereini, F and Wiseman, CLS, editor, *PLATINUM METALS IN THE ENVIRONMENT*, Environmental Science and Engineering-Environmental Engineering, pages VII–IX. 2015.
- [87] Fathi Zereini, Clare L. S. Wiseman, My Vang, Peter Albers, Wolfgang Schneider, Roland Schindl, and Kerstin Leopold. The influence of ethylenediamine tetra acetic acid (EDTA) on the transformation and solubility of metallic palladium and palladium(II) oxide in the environment. *ENVIRONMENTAL SCIENCE-PROCESSES & IMPACTS*, 17(5):915–921, 2015.

## 2014

- [88] N. Akhtar, J. Brauch, A. Dobler, K. Beranger, and B. Ahrens. Medicanes in an ocean-atmosphere coupled regional climate model. *NATURAL HAZARDS AND EARTH SYSTEM SCIENCES*, 14(8):2189–2201, 2014.
- [89] Federico Bianchi, Arnaud P. Praplan, Nina Sarnela, Josef Dommen, Andreas Kuerten, Ismael K. Ortega, Siegfried Schobesberger, Heikki Junninen, Mario Simon, Jasmin Troestl, Tuija Jokinen, Mikko Sipila, Alexey Adamov, Antonio Amorim, Joao Almeida, Martin Breitenlechner, Jonathan Duplissy, Sebastian Ehrhart, Richard C. Flagan, Alessandro Franchin, Jani Hakala, Armin Hansel, Martin Heinritzi, Juha Kangasluoma, Helmi Keskinen, Jaeseok Kim, Jasper Kirkby, Ari Laaksonen, Michael J. Lawler, Katrianne Lehtipalo, Markus Leiminger, Vladimir Makhmutov, Serge Mathot, Antti Onnela, Tuukka Petaja, Francesco Riccobono, Matti P. Rissanen, Linda Rondo, Antonio Tome, Annele Virtanen, Yrjo Viisanen, Christina Williamson, Daniela Wimmer, Paul M.

- Winkler, Penglin Ye, Joachim Curtius, Markku Kulmala, Douglas R. Worsnop, Neil M. Donahue, and Urs Baltensperger. Insight into Acid-Base Nucleation Experiments by Comparison of the Chemical Composition of Positive, Negative, and Neutral Clusters. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 48(23):13675–13684, DEC 2 2014.
- [90] B. Bonn, E. Bourtsoukidis, T. S. Sun, H. Bingemer, L. Rondo, U. Javed, J. Li, R. Axinte, X. Li, T. Brauers, H. Sonderfeld, R. Koppmann, A. Sogachev, S. Jacobi, and D. V. Spracklen. The link between atmospheric radicals and newly formed particles at a spruce forest site in Germany. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 14(19):10823–10843, 2014.
- [91] Sebastian Borchert, Ulrich Achatz, and Mark D. Fruman. Gravity wave emission in an atmosphere-like configuration of the differentially heated rotating annulus experiment. *JOURNAL OF FLUID MECHANICS*, 758:287–311, NOV 2014.
- [92] Sebastian Borchert, Ulrich Achatz, Sebastian Remmler, Stefan Hickel, Uwe Harlander, Miklos Vincze, Kiril D. Alexandrov, Felix Rieper, Tobias Heppelmann, and Stamen I. Dolaptchiev. Finite-volume models with implicit subgrid-scale parameterization for the differentially heated rotating annulus. *METEOROLOGISCHE ZEITSCHRIFT*, 23(6):561–580, NOV 2014.
- [93] E. Bourtsoukidis, H. Kawaletz, D. Radacki, S. Schuetz, H. Hakola, H. Hellen, S. Noe, I. Moelder, C. Ammer, and Boris Bonn. Impact of flooding and drought conditions on the emission of volatile organic compounds of *Quercus robur* and *Prunus serotina*. *TREES-STRUCTURE AND FUNCTION*, 28(1):193–204, FEB 2014.
- [94] E. Bourtsoukidis, J. Williams, J. Kesselmeier, S. Jacobi, and B. Bonn. From emissions to ambient mixing ratios: online seasonal field measurements of volatile organic compounds over a Norway spruce-dominated forest in central Germany. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 14(13):6495–6510, 2014.
- [95] Efstratios Bourtsoukidis, Boris Bonn, and Steffen M. Noe. On-line field measurements of BVOC emissions from Norway spruce (*Picea abies*) at the hemiboreal SMEAR-Estonia site under autumn conditions. *BOREAL ENVIRONMENT RESEARCH*, 19(3):153–167, JUN 30 2014.

- [96] Sven Brinckmann, Joerg Trentmann, and Bodo Ahrens. Homogeneity Analysis of the CM SAF Surface Solar Irradiance Dataset Derived from Geostationary Satellite Observations. *REMOTE SENSING*, 6(1):352–378, JAN 2014.
- [97] Meghnath Dhimal. Knowledge, Attitude and Practice Regarding Dengue Fever among the Healthy Population of Highland and Lowland Communities in Central Nepal (vol 9, e102028, 2014). *PLOS ONE*, 9(10), OCT 6 2014.
- [98] Meghnath Dhimal, Bodo Ahrens, and Ulrich Kuch. Malaria control in Nepal 1963-2012: challenges on the path towards elimination. *MALARIA JOURNAL*, 13, JUN 23 2014.
- [99] Meghnath Dhimal, Bodo Ahrens, and Ulrich Kuch. Species composition, seasonal occurrence, habitat preference and altitudinal distribution of malaria and other disease vectors in eastern Nepal. *PARASITES & VECTORS*, 7, NOV 28 2014.
- [100] Meghnath Dhimal, Krishna Kumar Aryal, Mandira Lamichhane Dhimal, Ishan Gautam, Shanker Pratap Singh, Chop Lal Bhusal, and Ulrich Kuch. Knowledge, Attitude and Practice Regarding Dengue Fever among the Healthy Population of Highland and Lowland Communities in Central Nepal. *PLOS ONE*, 9(7), JUL 9 2014.
- [101] Meghnath Dhimal, Ishan Gautam, Aljoscha Kress, Ruth Mueller, and Ulrich Kuch. Spatio-Temporal Distribution of Dengue and Lymphatic Filariasis Vectors along an Altitudinal Transect in Central Nepal. *PLOS NEGLECTED TROPICAL DISEASES*, 8(7), JUL 2014.
- [102] Meghnath Dhimal, Robert B. O’Hara, Ramchandra Karki, Garib D. Thakur, Ulrich Kuch, and Bodo Ahrens. Spatio-temporal distribution of malaria and its association with climatic factors and vector-control interventions in two high-risk districts of Nepal. *MALARIA JOURNAL*, 13, NOV 25 2014.
- [103] Mark D. Fruman, Sebastian Remmler, Ulrich Achatz, and Stefan Hickel. On the construction of a direct numerical simulation of a breaking inertia-gravity wave in the upper mesosphere. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 119(20):11613–11640, OCT 27 2014.

- [104] H. Garny, T. Birner, H. Boenisch, and F. Bunzel. The effects of mixing on age of air. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 119(12):7015–7034, JUN 27 2014.
- [105] M. Ghysels, L. Gomez, J. Cousin, H. Tran, N. Amarouche, A. Engel, I. Levin, and G. Durry. Temperature dependences of air-broadening, air-narrowing and line-mixing coefficients of the methane  $\nu(3)$  R(6) manifold lines-Application to in-situ measurements of atmospheric methane. *JOURNAL OF QUANTITATIVE SPECTROSCOPY & RADIATIVE TRANSFER*, 133:206–216, JAN 2014.
- [106] Claudia Jacobasch, Carolin Voelker, Sabrina Giebner, Johannes Voelker, Heiko Alsenz, Theodoros Potouridis, Heike Heidenreich, Gernot Kayser, Joerg Oehlmann, and Matthias Oetken. Long-term effects of nanoscaled titanium dioxide on the cladoceran *Daphnia magna* over six generations. *ENVIRONMENTAL POLLUTION*, 186:180–186, MAR 2014.
- [107] T. Jurkat, C. Voigt, S. Kaufmann, A. Zahn, M. Sprenger, P. Hoor, H. Bozem, S. Mueller, A. Doernbrack, H. Schlager, H. Boenisch, and A. Engel. A quantitative analysis of stratospheric HCl, HNO<sub>3</sub>, and O<sub>3</sub> in the tropopause region near the subtropical jet. *GEOPHYSICAL RESEARCH LETTERS*, 41(9):3315–3321, MAY 16 2014.
- [108] S. Kothe, D. Luethi, and B. Ahrens. Analysis of the West African Monsoon system in the regional climate model COSMO-CLM. *INTERNATIONAL JOURNAL OF CLIMATOLOGY*, 34(2):481–493, FEB 2014.
- [109] Steffen Kothe, Hans-Juergen Panitz, and Bodo Ahrens. Analysis of the radiation budget in regional climate simulations with COSMO-CLM for Africa. *METEOROLOGISCHE ZEITSCHRIFT*, 23(2):123–141, AUG 2014.
- [110] M. L. Krueger, S. Mertes, T. Klimach, Y. F. Cheng, H. Su, J. Schneider, M. O. Andreae, U. Poeschl, and D. Rose. Assessment of cloud supersaturation by size-resolved aerosol particle and cloud condensation nuclei (CCN) measurements. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 7(8):2615–2629, 2014.
- [111] Andreas Kuerten, Tuija Jokinen, Mario Simon, Mikko Sipila, Nina Sarnela, Heikki Junninen, Alexey Adamov, Joao Almeida, Antonio Amorim, Federico Bianchi, Martin Breitenlechner, Josef Dommen, Neil M. Donahue, Jonathan Duplissy, Sebastian Ehrhart, Richard C. Flagan,

- Alessandro Franchin, Jani Hakala, Armin Hansel, Martin Heinritzi, Manuel Hutterli, Juha Kangasluoma, Jasper Kirkby, Ari Laaksonen, Katrianne Lehtipalo, Markus Leiminger, Vladimir Makhmutov, Serge Mathot, Antti Onnela, Tuukka Petaja, Arnaud P. Praplan, Francesco Riccobono, Matti P. Rissanen, Linda Rondo, Siegfried Schobesberger, John H. Seinfeld, Gerhard Steiner, Antonio Tome, Jasmin Troestl, Paul M. Winkler, Christina Williamson, Daniela Wimmer, Penglin Ye, Urs Baltensperger, Kenneth S. Carslaw, Markku Kulmala, Douglas R. Worsnop, and Joachim Curtius. Neutral molecular cluster formation of sulfuric acid-dimethylamine observed in real time under atmospheric conditions. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, 111(42):15019–15024, OCT 21 2014.
- [112] Johan Liakka, Florence Colleoni, Bodo Ahrens, and Thomas Hickler. The impact of climate-vegetation interactions on the onset of the Antarctic ice sheet. *GEOPHYSICAL RESEARCH LETTERS*, 41(4):1269–1276, FEB 28 2014.
- [113] Wiebke Meyer, Thomas-Benjamin Seiler, Andreas Christ, Regine Redelstein, Wilhelm Puettmann, Henner Hollert, and Christine Achten. Mutagenicity, dioxin-like activity and bioaccumulation of alkylated p-cene and chrysene derivatives in a German lignite. *SCIENCE OF THE TOTAL ENVIRONMENT*, 497:634–641, NOV 1 2014.
- [114] Wiebke Meyer, Thomas-Benjamin Seiler, Jan Schwarzbauer, Wilhelm Puettmann, Henner Hollert, and Christine Achten. Polar polycyclic aromatic compounds from different coal types show varying mutagenic potential, EROD induction and bioavailability depending on coal rank. *SCIENCE OF THE TOTAL ENVIRONMENT*, 494:320–328, OCT 1 2014.
- [115] S. Mieruch, H. Feldmann, G. Schaedler, C. J. Lenz, S. Kothe, and C. Kottmeier. The regional MiKlip decadal forecast ensemble for Europe: the added value of downscaling. *GEOSCIENTIFIC MODEL DEVELOPMENT*, 7(6):2983–2999, 2014.
- [116] Eric A. Ray, Fred L. Moore, Karen H. Rosenlof, Sean M. Davis, Colm Sweeney, Pieter Tans, Tao Wang, James W. Elkins, Harald Boenisch, Andreas Engel, Satoshi Sugawara, T. Nakazawa, and S. Aoki. Improving stratospheric transport trend analysis based on SF6 and CO2 measurements. *JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES*, 119(24):14110–14128, DEC 27 2014.

- [117] Bruno Ribstein, Vladimir Zeitlin, and Ann-Sophie Tissier. Barotropic, baroclinic, and inertial instabilities of the easterly Gaussian jet on the equatorial beta-plane in rotating shallow water model. *PHYSICS OF FLUIDS*, 26(5), MAY 2014.
- [118] Francesco Riccobono, Siegfried Schobesberger, Catherine E. Scott, Josef Dommen, Ismael K. Ortega, Linda Rondo, Joao Almeida, Antonio Amorim, Federico Bianchi, Martin Breitenlechner, Andre David, Andrew Downard, Eimear M. Dunne, Jonathan Duplissy, Sebastian Ehrhart, Richard C. Flagan, Alessandro Franchin, Armin Hansel, Heikki Junninen, Maija Kajos, Helmi Keskinen, Agnieszka Kupc, Andreas Kuerten, Alexander N. Kvashin, Ari Laaksonen, Katrianne Lehtipalo, Vladimir Makhmutov, Serge Mathot, Tuomo Nieminen, Antti Onnela, Tuukka Petaja, Arnaud P. Praplan, Filipe D. Santos, Simon Schallhart, John H. Seinfeld, Mikko Sipila, Dominick V. Spracklen, Yuri Stozhkov, Frank Stratmann, Antonio Tome, Georgios Tsagkogeorgas, Petri Vaattovaara, Yrjo Viisanen, Aron Vrtala, Paul E. Wagner, Ernest Weingartner, Heike Wex, Daniela Wimmer, Kenneth S. Carslaw, Joachim Curtius, Neil M. Donahue, Jasper Kirkby, Markku Kulmala, Douglas R. Worsnop, and Urs Baltensperger. Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. *SCIENCE*, 344(6185):717–721, MAY 16 2014.
- [119] L. Rondo, A. Kuerten, S. Ehrhart, S. Schobesberger, A. Franchin, H. Junninen, T. Petaja, M. Sipila, D. R. Worsnop, and J. Curtius. Effect of ions on the measurement of sulfuric acid in the CLOUD experiment at CERN. *ATMOSPHERIC MEASUREMENT TECHNIQUES*, 7(11):3849–3859, 2014.
- [120] D. K. Stepien and W. Puettmann. Source identification of high glyme concentrations in the Oder River. *WATER RESEARCH*, 54:307–317, MAY 1 2014.
- [121] Dania K. Stepien, Peter Diehl, Johanna Helm, Alina Thorns, and Wilhelm Puettmann. Fate of 1,4-dioxane in the aquatic environment: From sewage to drinking water. *WATER RESEARCH*, 48:406–419, JAN 1 2014.
- [122] A. Tilgner, L. Schoene, P. Braeuer, D. van Pinxteren, E. Hoffmann, G. Spindler, S. A. Styler, S. Mertes, W. Birmili, R. Otto, M. Merkel, K. Weinhold, A. Wiedensohler, H. Deneke, R. Schroedner, R. Wolke,

- J. Schneider, W. Haunold, A. Engel, A. Weber, and H. Herrmann. Comprehensive assessment of meteorological conditions and airflow connectivity during HCCT-2010. *ATMOSPHERIC CHEMISTRY AND PHYSICS*, 14(17):9105–9128, 2014.
- [123] Trang Van Pham, Jennifer Brauch, Christian Dieterich, Barbara Frueh, and Bodo Ahrens. New coupled atmosphere-ocean-ice system COSMO-CLM/NEMO: assessing air temperature sensitivity over the North and Baltic Seas. *OCEANOLOGIA*, 56(2):167–189, 2014.
- [124] Miklos Vincze, Sebastian Borchert, Ulrich Achatz, Thomas von Larcher, Martin Baumann, Claudia Liersch, Sebastian Remmler, Teresa Beck, Kiril D. Alexandrov, Christoph Egbers, Jochen Froehlich, Vincent Heuveline, Stefan Hickel, and Uwe Harlander. Benchmarking in a rotating annulus: a comparative experimental and numerical study of baroclinic wave dynamics. *METEOROLOGISCHE ZEITSCHRIFT*, 23(6):611–635, NOV 2014.
- [125] Clare L. S. Wiseman, Fathi Zereini, and Wilhelm Puettmann. Metal translocation patterns in *Solanum melongena* grown in close proximity to traffic. *ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH*, 21(2):1572–1581, JAN 2014.