

Peer-reviewed publications for Aircraft and Ground-based Counterflow Virtual Impactor Sampling Inlet Systems (Models 1204 & 1205)

Linn Karlsson, Radovan Krejci, Makoto Koike, Kerstin Ebelt, and Paul Zieger. (2021). A long-term study of cloud residuals from low-level Arctic clouds, *Atmos. Chem. Physics* 21(11): 8933-8959, doi:10.5194/acp-21-8933-2021.

Emelie L. Graham, Paul Zieger, Claudia. Mohr, Ulla Wideqvist, Tabea Hennig, Annica Ekman, Radovan Krejci, Johan Ström and Ilona Riipinen. Physical and chemical properties of aerosol particles and cloud residuals on Mt. Areskutan in Central Sweden during Summer 2014, *Tellus B: Chemical and Physical Meteorology*, 72:1, 1-16, DOI: 10.1080/16000889.2020.1776080.

Paul Zieger, Linn Karlsson, et al. Aerosol-cloud interactions in the high Arctic, Paper F1-4392694 presented at the European Aerosol Conference, Gothenburg, Sweden, 2019.

Hyo Jin Kang, Young Jun Yoon, Radovan Krejci. Comparison of microphysical properties of aerosols and cloud droplet residuals at Arctic low troposphere, Paper F1-4394716 presented at the European Aerosol Conference, Gothenburg, Sweden, 2019.

Emelie L. Graham, Paul Zieger, Claudia. Mohr, Ulla Wideqvist, Radovan Krejci, Johan Ström and Ilona Riipinen. Aerosol volatility, hygroscopicity and chemical composition in- and out-of-cloud during the CAEsAR campaign, Paper F1-4385715 presented at the European Aerosol Conference, Gothenburg, Sweden, 2019.

Linn Karlsson, Radovan Krejci, Makoto Koike, Peter Tunved, and Paul Zieger. The annual cycle of Arctic cloud residual size distributions, Paper F1-4392980 presented at the European Aerosol Conference, Gothenburg, Sweden, 2019.

Zhang, G., Lin, Q., Peng, L., Bi, X., Chen, D., Li, M., Li, L., Brechtel, F. J., Chen, J., Yan, W., Wang, X., Peng, P., Sheng, G., and Zhou, Z.: The single-particle mixing state and cloud scavenging of black carbon: a case study at a high-altitude mountain site in southern China, *Atmos. Chem. Phys.*, 17, 14975–14985, <https://doi.org/10.5194/acp-17-14975-2017>, 2017.

Lin, Q., Zhang, G., Peng, L., Bi, X., Wang, X., Brechtel, F. J., Li, M., Chen, D., Peng, P., Sheng, G., and Zhou, Z.: In situ chemical composition measurement of individual cloud residue particles at a mountain site, southern China, *Atmos. Chem. Phys.*, 17, 8473–8488, <https://doi.org/10.5194/acp-17-8473-2017>, 2017.

Zhang, G., Lin, Q., Peng, L., Yang, Y., Fu, Y., Bi, X., Li, M., Chen, D., Chen, J., Cai, Z., Wang, X., Peng, P., Sheng, G., and Zhou, Z.: Insight into the in-cloud formation of oxalate based on in situ measurement by single particle mass spectrometry, *Atmos. Chem. Phys.*, 17, 13891–13901, <https://doi.org/10.5194/acp-17-13891-2017>, 2017.

Prabhakar, G., B. Ervens, Z. Wang, L. C. Maudlin, M. M. Coggon, H. H. Jonsson, J. H. Seinfeld, and A. Sorooshian (2014). Sources of nitrate in stratocumulus cloud water: Airborne measurements during the 2011 E-PEACE and 2013 NiCE studies, *Atmos. Environ.*, 97: 166-173, doi:10.1016/j.atmosenv.2014.08.019.

Coggon, M. M., A. Sorooshian, Z. Wang, J. S. Craven, A. R. Metcalf, J. J. Lin, A. Nenes, H. H. Jonsson, R. C. Flagan, and J. H. Seinfeld (2014). Observations of continental biogenic impacts on marine aerosol and clouds

1789 Addison Way, Hayward, CA 94544

www.brechtel.com

off the coast of California, *J. Geophys. Res.*, 119: doi:10.1002/2013JD021228.

Wang, Z., A. Sorooshian, G. Prabhakar, M. M. Coggon, and H. H. Jonsson (2014). Impact of emissions from shipping, land, and the ocean on stratocumulus cloud water elemental composition during the 2011 E-PEACE Field Campaign, *Atmos. Environ.*, 89: 570-580, doi.org/10.1016/j.atmosenv.2014.01.020.

A. Sorooshian, Z. Wang, M. M. Coggon, H. H. Jonsson, and B. Ervens (2013). Observations of sharp oxalate reductions in stratocumulus clouds at variable altitudes: organic acid and metal measurements during the 2011 E-PEACE campaign, *Environ. Sci. Technol.*, 47: 7747–7756, doi:10.1021/es4012383.

L. M. Russell, A. Sorooshian, J. H. Seinfeld, B. A. Albrecht, A., Nenes, L. Ahlm, Y. –C., Chen, M. M. Coggon, J. S. Craven, R. C. Flagan, A. A. Frossard, H. Jonsson, E. Jung, J. J. Lin, A. R. Metcalf, R. Modini, J. Mulmenstadt, G. C. Roberts, T. Shingler, S. Song, Z. Wang, and A. Wonaschutz (2013). Eastern Pacific Emitted Aerosol Cloud Experiment (E-PEACE), *Bull. Amer. Meteor. Soc.*, 94: 709–729, doi: <http://dx.doi.org/10.1175/BAMS-D-12-00015.1>

Jessie M. Creamean, Kaitlyn J. Suski, Daniel Rosenfeld, Alberto Cazorla, Paul J. DeMott, Ryan C. Sullivan, Allen B. White, F. Martin Ralph, Patrick Minnis, Jennifer M. Comstock, Jason M. Tomlinson, Kimberly A. Prather (2013). Dust and Biological Aerosols from the Sahara and Asia Influence Precipitation in the Western U.S., *Science Express*, DOI: 10.1126/science.1227279

Daniel Rosenfeld, Rei Chemke, Paul DeMott, Ryan C. Sullivan, Roy Rasmussen, Frank McDonough, Jennifer Comstock, Beat Schmid, Jason Tomlinson, Haflidi Jonsson, Kaitlyn Suski, Alberto Cazorla, and Kimberly Prather (2013). The common occurrence of highly supercooled drizzle and rain near the coastal regions of the western United States, *JOURNAL OF GEOPHYSICAL RESEARCH: ATMOSPHERES*, VOL. 118: 9819–9833, doi:10.1002/jgrd.50529.

M. M. Coggon, A. Sorooshian, Z. Wang, A. R. Metcalf, A. A. Frossard, J. J. Lin, J. S. Craven, A. Nenes, H. H. Jonsson, L. M. Russell, R. C. Flagan, and J. H. Seinfeld (2012). Ship impacts on the marine atmosphere: Insights into the contribution of shipping emissions to the properties of marine aerosol and clouds, *Atmos. Chem. Phys.*, 12: 8439-8458.

T. Shingler, S. Dey, A. Sorooshian, F. J. Brechtel, Z. Wang, A. Metcalf, M. Coggon, J. Mulmenstadt, L. M. Russell, H. H. Jonsson, and J. H. Seinfeld (2012). Characterisation and airborne deployment of a new counterflow virtual impactor inlet , *Atmos. Measurement Techniques*, 5: 1259-1269.

R. A. Zaveri, et. al. (2012). Overview of th e2010 Carbonaceous Aerosols and Radiative Effects Study (CARES). *Atmos. Chem. Phys.*, 12, 7647-7687, doi:10.5194/acp-12-7647-2012.

Mikhail S. Pekour & Daniel J. Cziczo (2011): Wake Capture, Particle Breakup, and Other Artifacts Associated with Counterflow Virtual Impaction, *Aerosol Science and Technology*, 45:6, 758-764

R. J. Vong, B. M. Baker, F. J. Brechtel, R. T. Collier, J. M. Harris, A. S. Kowalski, N. C. McDonald, and L. M. McInnes (1997). Ionic and Trace Element Composition of Cloudwater Collected on the Olympic Peninsula of Washington State. *Atmospheric Environment*, 31, 1991-2001.