

LIST OF PUBLICATIONS

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LIST OF PEER-REVIEWED PUBLICATIONS

1. Khadir, T., Riipinen, I., **Talvinen, S.**, Heslin-Rees, D., Pöhlker, C., Rizzo, L., Machado, L. A. T., Franco, M. A., Kremper, L. A., Artaxo, P., Petäjä, T., Kulmala, M., Tunved, P., Ekman, A. M. L., Krejci, R., & Virtanen, A. (2023). Sink, Source or Something In-Between? Net Effects of Precipitation on Aerosol Particle Populations. *Geophysical Research Letters*, 50(19), e2023GL104325. <https://doi.org/10.1029/2023GL104325>
2. **Isokääntä, S.**, Kim, P., Mikkonen, S., Kühn, T., Kokkola, H., Yli-Juuti, T., Heikkinen, L., Luoma, K., Petäjä, T., Kipling, Z., Partridge, D., & Virtanen, A. (2022). The effect of clouds and precipitation on the aerosol concentrations and composition in a boreal forest environment. *Atmospheric Chemistry and Physics*, 22(17), 11823–11843. <https://doi.org/10.5194/acp-22-11823-2022>
3. **Isokääntä, S.**, Mikkonen, S., Laurikainen, M., Buchholz, A., Schobesberger, S., Blande, J. D., Nieminen, T., Ylivinkka, I., Bäck, J., Petäjä, T., Kulmala, M., & Yli-Juuti, T. (2022). Multivariate model-based investigation of the temperature dependence of ozone concentration in Finnish boreal forest. *Atmospheric Environment*, 289, 119315. <https://doi.org/10.1016/j.atmosenv.2022.119315>
4. Rosati, B., **Isokääntä, S.**, Christiansen, S., Jensen, M. M., Moosakutty, S. P., Wollesen de Jonge, R., Massling, A., Glasius, M., Elm, J., Virtanen, A., & Bilde, M. (2022). Hygroscopicity and CCN potential of DMS-derived aerosol particles. *Atmospheric Chemistry and Physics*, 22(20), 13449–13466. <https://doi.org/10.5194/acp-22-13449-2022>
5. Leinonen, V., Tiitta, P., Sippula, O., Czech, H., Leskinen, A., **Isokääntä, S.**, Karvanen, J., & Mikkonen, S. (2022). Modeling atmospheric aging of small-scale wood combustion emissions: Distinguishing causal effects from non-causal associations. *Environmental Science: Atmospheres*, 2(6), 1551–1567. <https://doi.org/10.1039/D2EA00048B>
6. Yli-Juuti, T., Mielonen, T., Heikkinen, L., Arola, A., Ehn, M., **Isokääntä, S.**, Keskinen, H.-M., Kulmala, M., Laakso, A., Lipponen, A., Luoma, K., Mikkonen, S., Nieminen, T., Paasonen, P., Petäjä, T., Romakkaniemi, S., Tonttila, J., Kokkola, H., & Virtanen, A. (2021). Significance of the organic aerosol driven climate feedback in the boreal area. *Nature Communications*, 12(1), Article 1. <https://doi.org/10.1038/s41467-021-25850-7>
7. **Isokääntä, S.**, Kari, E., Buchholz, A., Hao, L., Schobesberger, S., Virtanen, A., & Mikkonen, S. (2020). Comparison of dimension reduction techniques in the analysis of mass spectrometry data. *Atmospheric Measurement Techniques*, 13(6), 2995–3022. <https://doi.org/10.5194/amt-13-2995-2020>
8. Mikkonen, S., Pitkänen, M. R. A., Nieminen, T., Lipponen, A., **Isokääntä, S.**, Arola, A., & Lehtinen, K. E. J. (2019). Technical note: Effects of uncertainties and number of data points on line

fitting – a case study on new particle formation. *Atmospheric Chemistry and Physics*, 19(19), 12531–12543. <https://doi.org/10.5194/acp-19-12531-2019>

9. Kari, E., Faiola, C., **Isokääntä, S.**, Miettinen, P., Yli-Pirilä, P., Buchholz, A., Kivimäenpää, M., Mikkonen, S., Holopainen, J., & Virtanen, A. (2019). Time-resolved characterization of biotic stress emissions from Scots pines being fed upon by pine weevil by means of PTR-ToF-MS. *Boreal Environment Research*, 24, 25–49.

THESIS

PhD thesis “Two-way interactions between aerosols and clouds: from chamber simulations to long term measurements”, 06/2023, <http://urn.fi/URN:ISBN:978-952-7507-03-2>

Master thesis “Resolving Highly Complex Car Exhaust Emission Data by Statistical Dimension Reduction Techniques”, grade 5/5, 29.10.2018, <http://urn.fi/urn:nbn:fi:uef-20181157>

Bachelor thesis “Sateiden ja ilmakehän pienhiukkaspitoisuuksien viikkosykli – fysikaalinen perusta ja syklien tarkasteluun käytetyt menetelmät (*Weekly cycles of precipitation and concentrations of atmospheric aerosols—physical basis and methodologies*)”, grade 5/5, 7.9.2016

PUBLISHED CONFERENCE ABSTRACTS

Isokääntä, S., P. Kim, E. Tovazzi, Z. Kipling, J. Teixeira, T. Kühn, H. Kokkola, A. Sellar, A. Virtanen and D. Partridge (2022), *The effect of clouds and precipitation on aerosols: observations versus UKESM1.0*, Abstract Book of the ACCC & Finnish Atmospheric Science Network Conference 2022, Editors: Aino Ovaska and Elisa Männistö, Report series in aerosol science, N:o 257, pp 87-88. https://www.faar.fi/wp-content/uploads/2022/11/RS257_ACCC_FASN_abstract_book.pdf

Isokääntä, S., P. Kim, S. Mikkonen, T. Kühn, H. Kokkola, T. Yli-Juuti, T. Nieminen, L. Heikkinen, K. Luoma, T. Petäjä, D. Partridge and A. Virtanen (2021), *The effect of wet processing along air mass trajectory on aerosol composition in boreal environment*, Proceedings of the Atmosphere and Climate Competence Center (ACCC) Research Flagship and Finnish Atmospheric Science Network Conference 2021, Editors: Tiia Laurila, Anna Lintunen and Magdalena Okuljar, Report series in aerosol science, N:o 226, pp 299-301. http://www.faar.fi/wp-content/uploads/2021/11/ACCC_proceeding_2021.pdf

Isokääntä, S., B. Rosati, M. Bilde, A. Virtanen (2019), *Hygroscopic properties of DMS derived aerosols in smog chamber studies*, Proceedings of 'the Center of Excellence in Atmospheric Sciences (CoE ATM) -From Molecular and Biological Processes to the Global Climate' Annual Meeting 2019, Editors: Tiia Laurila, Anna Lintunen and Markku Kulmala, Report series in aerosol science, N:o 226, pp 299-301. http://www.atm.helsinki.fi/fcoe/images/CoE_proceedings_2019.pdf

Isokääntä, S., E. Kari, A. Buchholtz, A. Virtanen, S. Mikkonen (2018), *Statistical dimension reduction techniques applied to multivariate car exhaust emission data*, Proceedings of the NOSA-FAAR Symposium 2018, Editors: Petri Clusius, Joonas Enroth and Antti Lauri, Report series in aerosol science, N:o 208, pp 58. <http://www.atm.helsinki.fi/FAAR/reportseries/rs-208.pdf>

Isokääntä, S., E. Kari, C. Faiola, A. Buchholtz, S. Mikkonen (2017), *Comparing statistical dimension reduction techniques in the analysis of multivariate atmospheric data*, 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, Report series in aerosol science, N:o 202, pp 259-261.
<http://www.atm.helsinki.fi/FAAR/reportseries/rs-202.pdf>

Isokääntä, S., T. Yli-Juuti, D. M. Schultz, P. Aalto, S. Mikkonen (2016), *Detecting weekly cycles in precipitation and aerosol concentration*, Proceedings of 'The Centre of Excellence in Atmospheric Science (CoE ATM) – From Molecular and Biological processes to The Global Climate' Annual Meeting 2016, Editors: Anna Lintunen, Joonas Enroth, Silja Häme and Markku Kulmala, Report series in aerosol science, N:o 189, pp 217-220.
<http://www.atm.helsinki.fi/FAAR/reportseries/rs-189.pdf>