

JOYCE-CF publication list

2020

- D. Cimini, M. Haeffelin, S. Kotthaus, U. Löhnert, P. Martinet, E. O'Connor, C. Walden, M. Collaud Coen, and J. Preissler. Towards the profiling of the atmospheric boundary layer at European scale—introducing the COST Action PROBE, *Bulletin of Atmospheric Science and Technology*, 1, 23-42, 2020. doi: [10.1007/s42865-020-00003-8](https://doi.org/10.1007/s42865-020-00003-8).
- S. Kneifel, and D. Moisseev. Long-term statistics of riming in non-convective clouds derived from ground-based Doppler cloud radar observations. *Journal of Atmospheric Sciences*, early online release, 2020. doi: [10.1175/JAS-D-20-0007.1](https://doi.org/10.1175/JAS-D-20-0007.1).
- T. Marke, U. Löhnert, V. Schemann, J. H. Schween, and S. Crewell. Detection of land-surface-induced atmospheric water vapor patterns, *Atmospheric Chemistry and Physics*, 20, 1723–1736, 2020. doi: [10.5194/acp-20-1723-2020](https://doi.org/10.5194/acp-20-1723-2020).
- M. Mech, M. Maahn, S. Kneifel, D. Ori, E. Orlandi, P. Kollias, V. Schemann, and S. Crewell. PAMTRA 1.0: A Passive and Active Microwave radiative TRANSfer tool for simulating radiometer and radar measurements of the cloudy atmosphere, *Geoscientific Model Development*, accepted, 2020. doi: [10.5194/gmd-2019-356](https://doi.org/10.5194/gmd-2019-356).
- K. Mróz, A. Battaglia, S. Kneifel, L. P. D'Adderio, and J. Dias Neto. Triple-Frequency Doppler Retrieval of Characteristic Raindrop Size. *Earth and Space Science*, 7, e2019EA000789, 2020. doi: [10.1029/2019EA000789](https://doi.org/10.1029/2019EA000789).
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- D. Ori, V. Schemann, M. Karrer, J. Dias Neto, L. von Terzi, A. Seifert, and S. Kneifel. Evaluation of ice particle growth in ICON using statistics of multi-frequency Doppler cloud radar observations. *Quarterly Journal of the Royal Meteorological Society*, early online release, 2020. doi: [10.1002/qj.3875](https://doi.org/10.1002/qj.3875).
- V. Pejčic, P. Saavedra Garfias, K. Mühlbauer, S. Trömel, and C. Simmer. Comparison between precipitation estimates of ground-based weather radar composites and GPM's DPR rainfall product over Germany. *Meteorologische Zeitschrift*, 2020. doi: [10.1127/metz/2020/1039](https://doi.org/10.1127/metz/2020/1039).
- M. Toporov, and U. Löhnert. Synergy of Satellite- and Ground-Based Observations for Continuous Monitoring of Atmospheric Stability, Liquid Water Path and Integrated Water

Vapor, *Journal of Applied Meteorology and Climatology*, 59(7), 1153–1170., 2020. doi: [10.1175/JAMC-D-19-0169.1](https://doi.org/10.1175/JAMC-D-19-0169.1).

F. Tridon, A. Battaglia, and S. Kneifel. How to estimate total differential attenuation due to hydrometeors with ground-based multi-frequency radars?, *Atmospheric Measurement Techniques*, accepted, 2020. doi: [10.5194/amt-2020-159](https://doi.org/10.5194/amt-2020-159).

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C. Acquistapace, M. Maahn, U. Löhnert, and P. Kollias. A new criterion to improve operational drizzle detection with ground-based remote sensing, *Journal of Atmospheric and Oceanic Technology*, 36 (5), 781–801, 2019. doi: [10.1175/JTECH-D-18-0158.1](https://doi.org/10.1175/JTECH-D-18-0158.1).

J. Dias Neto, S. Kneifel, D. Ori, S. Trömel, J. Handwerker, B. Bohn, N. Hermes, K. Mühlbauer, M. Lenefer, and C. Simmer. The TRIPLE-frequency and Polarimetric radar Experiment for improving process observations of winter precipitation. *Earth System Science Data*, 11, 845–863, 2019. doi: [10.5194/essd-11-845-2019](https://doi.org/10.5194/essd-11-845-2019).

A. J. Illingworth, D. Cimini, A. Haefele, M. Haeffelin, H. Maxime, S. Kotthaus, U. Löhnert, P. Martinet, I. Mattis, E. J. O’Connor, and R. Potthast. How can existing ground-based profiling instruments improve european weather forecasts? *Bulletin of the American Meteorological Society*, 100(4), 605–619, 2019. doi: [10.1175/BAMS-D-17-0231.1](https://doi.org/10.1175/BAMS-D-17-0231.1).

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S. Steinke, S. Wahl, and S. Crewell. Benefit of high resolution COSMO reanalysis: The diurnal cycle of column-integrated water vapour over Germany. *Meteorologische Zeitschrift*, doi: [10.1127/metz/2019/0936](https://doi.org/10.1127/metz/2019/0936).

S. Trömel, A. V. Ryzhkov, B. Hickman, K. Mühlbauer, and C. Simmer. Polarimetric Radar Variables in the Layers of Melting and Dendritic Growth at X Band—Implications for a

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- T. Marke, S. Crewell, V. Schemann, J. H. Schween, and M. Tuononen. Long-term observations and high-resolution modeling of midlatitude nocturnal boundary layer processes connected to low-level jets. *Journal of Applied Meteorology and Climatology*, 57(5):1155–1170, 2018. doi: [10.1175/JAMC-D-17-0341.1](https://doi.org/10.1175/JAMC-D-17-0341.1).

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