

# Publications

## Manuscripts under Review

1. Meng, L., J. Liu, D. W. Tarasick, W. J. Randel, **A. K. Steiner**, H. Wilhelmson, and L. Wang, Continuous Rise of the Tropopause in the Extratropical Northern Hemisphere over 1980-2017, *Science Advances* (in review).

## Journal Publications – Peer Reviewed

66. Engdaw, M. M., A. P. Ballinger, G. C. Hegerl, and **A.K. Steiner** (2021), Changes in temperature and heat waves over Africa using observational and reanalysis data sets, *Int. J. Climatol.*, doi:[10.1002/joc.7295](https://doi.org/10.1002/joc.7295).
65. Yessimbet, K., A. Ossó, R. Kaltenberger, L. Magnusson, and **A. K. Steiner** (2021), Heavy Alpine snowfall in January 2019 connected to atmospheric blocking, *Weather*, doi:[10.1002/wea.4020](https://doi.org/10.1002/wea.4020).
64. Santer, B.D., S. Po-Chedley, C. Mears, J. C. Fyfe, N. Gillett, Q. Fu, J. F. Painter, S. Solomon, **A. K. Steiner**, F. J. Wentz, M. D. Zelinka, and C-Z. Zou (2021), Using climate model simulations to constrain observations, *J. Climate*, 34(15), 6281–6301, doi:[10.1175/JCLI-D-20-0768.1](https://doi.org/10.1175/JCLI-D-20-0768.1).
63. Scherllin-Pirscher, B., **A. K. Steiner**, R. A. Anthes, M. J. Alexander, S. P. Alexander, R. Biondi, T. Birner, J. Kim, W. J. Randel, S-W. Son, T. Tsuda, Z. Zeng (2021), Tropical temperature variability in the UTLS: New insights from GPS radio occultation observations, *J. Climate*, 34(8), 2813–2838, doi:[10.1175/JCLI-D-20-0385.1](https://doi.org/10.1175/JCLI-D-20-0385.1) (published online 2020), (**Review paper**).
62. Tournigand, P.-Y., V. Cigala, A. J. Prata, **A. K. Steiner**, G. Kirchengast, H. Brenot, L. Clarisse, and R. Biondi (2020), The 2015 Calbuco Volcanic Cloud Detection Using GNSS Radio Occultation and Satellite Lidar, *Proceedings of IGARSS 2020 – 2020 IEEE International Geoscience and Remote Sensing Symposium*, 6834–6837, doi: [10.1109/IGARSS39084.2020.9323356](https://doi.org/10.1109/IGARSS39084.2020.9323356).
61. Tournigand, P.-Y., V. Cigala, E. Lasota, M. Hammouti, L. Clarisse, H. Brenot, F. Prata, G. Kirchengast, **A. K. Steiner**, and R. Biondi (2020), A multi-sensor satellite-based archive of the largest SO<sub>2</sub> volcanic eruptions since 2006, *Earth Syst. Sci. Data*, 12(4), 3139–3159, doi:[10.5194/essd-12-3139-2020](https://doi.org/10.5194/essd-12-3139-2020).
60. Lasota, E., **A. K. Steiner**, G. Kirchengast, and R. Biondi (2020), Tropical cyclones vertical structure from GNSS radio occultation: an archive covering the period 2001–2018, *Earth Syst. Sci. Data*, 12(4), 2679–2693, doi:[10.5194/essd-12-2679-2020](https://doi.org/10.5194/essd-12-2679-2020).
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58. **Steiner, A. K.**, F. Ladstädter, W. J. Randel, A. C. Maycock, Q. Fu, C. Claud, H. Gleisner, L. Haimberger, S.-P. Ho, P. Keckhut, T. Leblanc, C. Mears, L. Polvani, B. Santer, T. Schmidt, V. Sofieva, R. Wing, and C.-Z. Zou (2020), Observed temperature changes in the troposphere and stratosphere from 1979 to 2018, *J. Climate*, 33(19), 8165–8194. doi:[10.1175/JCLI-D-19-0998.1](https://doi.org/10.1175/JCLI-D-19-0998.1).
57. Ho, S.-P., R. A. Anthes, C. O. Ao, S. Healy, A. Horanyi, D. Hunt, A. J. Mannucci, N. Pedatella, W. J. Randel, A. Simmons, **A. K. Steiner**, F. Xie, X. Yue, and Z. Zeng (2020), The COSMIC/FORMOSAT-3 Radio Occultation Mission after 12 years: Accomplishments, Remaining Challenges, and Potential Impacts of COSMIC-2, *Bull. Amer. Meteor. Soc.*, 101(7), E1107–E1136, doi: [10.1175/BAMS-D-18-0290.1](https://doi.org/10.1175/BAMS-D-18-0290.1).
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44. Angerer, B., F. Ladstädter, B. Scherllin-Pirscher, M. Schwärz, **A. K. Steiner**, U. Foelsche, and G. Kirchengast (2017), Quality Aspects of the Wegener Center Multi-Satellite GPS Radio Occultation Record OPSv5.6, *Atmos. Meas. Tech.*, 10, 4845–4863, doi:[10.5194/amt-10-4845-2017](https://doi.org/10.5194/amt-10-4845-2017).
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