

Publications

Journal Publications – Peer Reviewed

83. Reiter, A., J. Danzer, and **A. K. Steiner** (2025), The potential of GNSS radio occultation data for the analysis of the tropical width: a comparison with reanalyses, *Weather Clim. Dynam.*, 6, 1683–1698, doi:[10.5194/wcd-6-1683-2025](https://doi.org/10.5194/wcd-6-1683-2025).
82. Ladstädter, F., M. Stocker, S. Scher, and **A. K. Steiner** (2025), Observed changes in the temperature and height of the globally resolved lapse rate tropopause, *Atmos. Chem. Phys.*, 25, 16053–16062, doi:[10.5194/acp-25-16053-2025](https://doi.org/10.5194/acp-25-16053-2025).
81. Randel, W. J., C. Covey, L. Polvani, and **A. K. Steiner** (2025), Stratospheric temperature, In: State of the Climate in 2024 (Dunn et al.), *Bull. Amer. Meteor. Soc.* 106 (8), S364–S365, doi:[10.1175/BAMS-D-25-0102.1](https://doi.org/10.1175/BAMS-D-25-0102.1).
80. Sweeney, A., Q. Fu, S. Solomon, S. Po-Chedley, W. J. Randel, **A. K. Steiner**, P. Lin, T. Birner, S. Davis, P. Wang (2025), Recent warming of the Southern hemisphere subtropical lower stratosphere and Antarctic ozone healing, *AGU Advances*, 6, e2025AV001737, doi:[10.1029/2025AV001737](https://doi.org/10.1029/2025AV001737).
(Research highlight in EOS, 12 Aug 2025).
79. Shao, H., U. Foelsche, A. J. Mannucci, I. Azeem, N. E. Bowler, J. J. Braun, K. Lonitz, C. Marquardt, **A. K. Steiner**, B. Ruston, and P. Vergados (2025). Advances in GNSS-Based Remote Sensing for Weather, Climate, and Space Weather: Missions, Applications, and Emerging Techniques, *Bull. Amer. Meteor. Soc., Meeting Report*, 106(7), E1471–E1477, <https://doi.org/10.1175/BAMS-D-25-0138.1>.
78. Shi, J., M. Li, **A. K. Steiner**, W. Li, M. Zhang, Y. Fan, W. Gao, K. Zhang (2025), Stacking machine learning model for precipitable water vapor vertical adjustment using GNSS networks and radio occultation data, *Atmospheric Res.*, 325, 108212, doi:[10.1016/j.atmosres.2025.108212](https://doi.org/10.1016/j.atmosres.2025.108212).
77. Yessimbet, K., **A. K. Steiner**, F. Ladstädter, and A. C. Ossó (2024), Observational perspective on sudden stratospheric warmings and blocking from Eliassen-Palm fluxes, *Atmos. Chem. Phys.*, 24, 10893–10919, doi:[10.5194/acp-24-10893-2024](https://doi.org/10.5194/acp-24-10893-2024).
76. Stocker, M., **A. K. Steiner**, F. Ladstädter, U. Foelsche, and W. J. Randel (2024), Strong persistent cooling of the stratosphere after the Hunga eruption, *Commun. Earth. Environ.*, 5, 450, 1–11, doi:[10.1038/s43247-024-01620-3](https://doi.org/10.1038/s43247-024-01620-3) **(Featured Article)**
75. Dunn, R. J. H., J. Blannin, N. Gobron, J. B. Miller, K. M. Willett, M. Ades, ... **A.K. Steiner** et al. (2024). Global Climate. In: State of the Climate in 2023, *Bull. Amer. Meteor. Soc.*, 105(8), S12–S155 doi:[10.1175/BAMS-D-24-0116.1](https://doi.org/10.1175/BAMS-D-24-0116.1).
74. Dunn, R. J. H., J. B. Miller, K. M. Willett, N. Gobron, M. Ades, M., R. Adler, ...**A.K. Steiner**, et al. (2023), Global Climate, In: State of the Climate in 2022. *Bull. Amer. Meteor. Soc.*, 104(9), S11–S145. doi:[10.1175/BAMS-D-23-0090.1](https://doi.org/10.1175/BAMS-D-23-0090.1).
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70. Yessimbet, K., T. G. Shepherd, A. C. Ossó, and **A. K. Steiner** (2022), Pathways of influence between northern hemisphere blocking and stratospheric polar vortex variability, *Geophys. Res. Lett.*, 49(23), e2022GL100895, doi:[10.1029/2022GL100895](https://doi.org/10.1029/2022GL100895).
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