

## PEER-REVIEWED PUBLICATIONS

- Slivinski, L. C.**, Whitaker, J. S., Frolov, S., Smith, T. A., & Agarwal, N., 2025: Assimilating observed surface pressure into ML weather prediction models. *Geophysical Research Letters*, 52, e2024GL114396. <https://doi.org/10.1029/2024GL114396>.
- Sun, L., A. Apte, **L. C. Slivinski**, E. T. Spiller, 2025: Exploring the Potential of Strongly Coupled Lagrangian Data Assimilation in an Ocean-Atmosphere System. *Mon. Wea. Rev.* **153**, 425–445, <https://doi.org/10.1175/MWR-D-23-0284.1>.
- Stammer, D., . . . , **L. C. Slivinski**, et al., 2024: Earth System Reanalysis in Support of Climate Model Improvements. *Bull. Amer. Meteor. Soc.*, <https://doi.org/10.1175/BAMS-D-24-0110.1>.
- Stanley, Z., C. Draper, S. Frolov, **L. C. Slivinski**, W. Huang, J. S. Whitaker and H. R. Winterbottom, 2024: Vertical localization for strongly coupled data assimilation: experiments in a global coupled atmosphere-ocean model. *J. Adv. Model. Earth Syst.*, e2023MS003783, <https://doi.org/10.1029/2023MS003783>.
- Storto, A., Frolov, S., **Slivinski, L.**, and Yang, C.: Correction of Air-Sea Heat Fluxes in the NEMO Ocean General Circulation Model Using Neural Networks, *Geosci. Model Dev. Discuss.* [preprint], <https://doi.org/10.5194/gmd-2024-185>, in review, 2024.
- Trent, ..., **L. C. Slivinski**, et al., 2024: Evaluation of Total Column Water Vapour Products from Satellite Observations and Reanalyses within the GEWEX Water Vapour Assessment. *Atmos. Chem. Phys.*, **24**, 9667–9695, <https://doi.org/10.5194/acp-24-9667-2024>
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- Hawkins, E., P. Brohan, S. Burgess, S. Burt, G. Compo, S. Gray, I. Haigh, H. Hersbach, K. Kuijzer, O. Martinez-Alvarado, C. McColl, A. Schurer, **L. Slivinski**, and J. Williams, 2023. Rescuing historical weather observations improves quantification of severe windstorm risks. *Nat. Hazards Earth Syst. Sci.*, **23**, 1465–1482, <https://doi.org/10.5194/nhess-23-1465-2023>
- Yu, B., X.L. Wang, Y. Feng, R. Chan, G.P. Compo, **L.C. Slivinski**, P.D. Sardeshmukh, M. Wehner, and X.-Y. Yang, 2022. Northern Hemisphere Extratropical Cyclone Activity in the Twentieth Century Reanalysis Version 3 (20CRv3) and Its Relationship with Continental Extreme Temperatures. *Atmosphere* **13** (8): 1166. <https://doi.org/10.3390/atmos13081166>
- Lorrey, A.M., P.R. Pearce, R. Allan, C. Wilkinson, J.-M. Woolley, E. Judd, S. Mackay, S. Rawhat, **L.C. Slivinski**, S. Wilkinson, E. Hawkins, P. Quesnel, G.P. Compo, 2022: Meteorological data rescue: Citizen science lessons learned from Southern Weather Discovery. *Patterns* **3**(6). <https://doi.org/10.1016/j.patter.2022.100495>

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**Slivinski, L.C.**, G.P. Compo, J.S. Whitaker, P.D. Sardeshmukh, J.-W. A. Wang, K. Friedman, C. McColl, 2019: What is the impact of additional tropical observations on a modern data assimilation system? *Monthly Weather Review* 147, 2433-2449.  
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**Slivinski, L.C.**, and C. Snyder, 2016: Exploring practical estimates of the ensemble size necessary for particle filters. *Monthly Weather Review*, 144(3), 861 – 875.  
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**Slivinski, L.C.**, E.T. Spiller, A. Apte, and B. Sandstede, 2015: A hybrid particle-ensemble Kalman filter for Lagrangian data assimilation. *Monthly Weather Review*, 143(1), 195 – 211. <https://doi.org/10.1175/MWR-D-14-00051.1>

## OTHER PUBLICATIONS & DATASETS

Compo, G. P., **L.C. Slivinski**, et. al. (2019): *The International Surface Pressure Databank version 4*. Research Data Archive at the National Center for Atmospheric Research, Computational and Information Systems Laboratory.  
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