

## PEER-REVIEWED PUBLICATIONS

- Hawkins, E., P. Brohan, S. Burgess, S. Burt, G. Compo, S. Gray, I. Haigh, H. Hersbach, K. Kuijjer, O. Martinez-Alvarado, C. McColl, A. Schurer, L. **Slivinski**, and J. Williams, 2022. Rescuing historical weather observations improves quantification of severe windstorm risks. *EGUsphere* [preprint]. <https://doi.org/10.5194/egusphere-2022-1045>
- 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>
- Slivinski, L.C.**, D.E. Lippi, J.S. Whitaker, G. Ge, J.R. Carley, C. Alexander, G.P. Compo, 2022: Overlapping Windows in a Global Hourly Data Assimilation System. *Monthly Weather Review* 150(6). <https://doi.org/10.1175/mwr-d-21-0214.1>
- Broennimann, S., P. Stucki, J. Franke, V. Valler, Y. Brugnara, R. Hand, L.C. **Slivinski**, G.P. Compo, P.D. Sardeshmukh, M. Lang, 2022: Influence of warming and atmospheric circulation changes on multidecadal European flood variability. *Climate of the Past* 18(4). <https://doi.org/10.5194/cp-18-919-2022>
- Slivinski, L. C.**, G. P. Compo, P. D. Sardeshmukh, J. S. Whitaker, and 36 coauthors, 2021: An evaluation of the performance of the 20th Century Reanalysis version 3. *J. Climate* 34(4): 1417–1438. <https://doi.org/10.1175/JCLI-D-20-0505.1>
- Fogt, R.L., C.P. Belak, J.M. Jones, L.C. **Slivinski**, and G.P. Compo, 2021: An assessment of early 20th century Antarctic pressure reconstructions using historical observations. *Int. J. Climatol.* 41 (Suppl. S1): E672–E689. <https://doi.org/10.1002/joc.6718>
- Robertson, F. R., J.B. Roberts, M.G. Bosilovich, A. Bentamy, C.A. Clayson, K. Fennig, M. Schröder, H. Tomita, G.P. Compo, M. Gutenstein, H. Hersbach, C. Kobayashi, L. Ricciardulli, P. Sardeshmukh, and L.C. **Slivinski**, 2020: Uncertainties in Ocean Latent Heat Flux Variations over Recent Decades in Satellite-Based Estimates and Reduced Observation Reanalyses. *J. Climate* 33: 8415–8437. <https://doi.org/10.1175/JCLI-D-19-0954.1>
- Slivinski, L.C.**, G.P. Compo, J.S. Whitaker, P.D. Sardeshmukh, and 42 coauthors, 2019: Towards a more reliable historical reanalysis: Improvements for version 3 of the Twentieth Century Reanalysis system. *Quarterly Journal of the Royal Meteorological Society* 145:2876-2908. <https://doi.org/10.1002/qj.3598> [Invited.]

- 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.  
<https://doi.org/10.1175/MWR-D-18-0120.1>
- Wang, J.-W. A., P.D. Sardeshmukh, G.P. Compo, J.S. Whitaker, **L.C. Slivinski**, C.M. McColl, and P.J. Pegion, 2019: Sensitivities of the NCEP Global Forecast System. *Monthly Weather Review* 147, 1237 – 1256. <https://doi.org/10.1175/MWR-D-18-0239.1>
- Slivinski, L.C.**, 2018: Historical reanalysis: what, how, and why? *Journal of Advances in Modeling Earth Systems* 10, 1736 – 1739. <https://doi.org/10.1029/2018MS001434> [Invited.]
- Dole, R.M., J.R. Spackman, M. Newman, G.P. Compo, C.A. Smith, L.M. Hartten, J.J. Barsugli, R.S. Webb, M.P. Hoerling, R. Cifelli, K. Wolter, C.D. Barnet, M. Gehne, R. Gelaro, G.N. Kiladis, S. Abbott, E. Akish, J. Albers, J.M. Brown, C.J. Cox, L. Darby, G. de Boer, B. DeLuisi, J. Dias, J. Dunion, J. Eischeid, C. Fairall, A. Gambacorta, B.K. Gorton, A. Hoell, J. Intrieri, D. Jackson, P.E. Johnston, R. Lataitis, K.M. Mahoney, K. McCaffrey, H.A. McColl, M.J. Mueller, D. Murray, P.J. Neiman, W. Otto, O. Persson, X. Quan, I. Rangwala, A.J. Ray, D. Reynolds, E.R. Dellaripa, K. Rosenlof, N. Sakaeda, P.D. Sardeshmukh, **L.C. Slivinski**, L. Smith, A. Solomon, D. Swales, S. Tulich, A. White, G. Wick, M.G. Winterkorn, D.E. Wolfe, and R. Zamora, 2018: Advancing science and services during the 2015-16 El Niño: The NOAA El Niño Rapid Response field campaign. *Bulletin of the American Meteorological Society*, 99, 975 – 1001. <https://doi.org/10.1175/BAMS-D-16-0219.1>
- Thorne, P., R.J. Allan, L. Ashcroft, P. Brohan, R.J. Dunn, M.J. Menne, P.R. Pearce, J. Picas, K.M. Willett, M. Benoy, S. Bronnimann, P.O. Canziani, J. Coll, R. Crouthamel, G.P. Compo, D. Cuppett, M. Curley, C. Duffy, I. Gillespie, J. Guijarro, S. Jourdain, E.C. Kent, H. Kubota, T.P. Legg, Q. Li, J. Matsumoto, C. Murphy, N.A. Rayner, J.J. Rennie, E. Rustemeier, **L.C. Slivinski**, V. Slonosky, A. Squintu, B. Tinz, M.A. Valente, S. Walsh, X.L. Wang, N. Westcott, K. Wood, S.D. Woodruff, and S.J. Worley, 2017: Toward an integrated set of surface meteorological observations for climate science and applications. *Bulletin of the American Meteorological Society*, 98, 2680 – 2702. <https://doi.org/10.1175/BAMS-D-16-0165.1>
- Slivinski, L.C.**, L.J. Pratt, I.I. Rypina, M.M. Orescanin, B. Raubenheimer, J. MacMahan, and S. Elgar, 2017: Assimilating Lagrangian data for parameter estimation in a multiple-inlet system. *Ocean Modelling*, 113, 131 – 144.  
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- Xia, C., C. Cochrane, J. DeGuire, G. Fan, E. Holmes, M. McGuirl, P. Murphy, J. Palmer, P. Carter, **L.C. Slivinski**, and B. Sandstede, 2017: Assimilating Eulerian and Lagrangian data in traffic-flow models. *Physica D*, 346, 59 – 72.  
<https://doi.org/10.1016/j.physd.2017.02.004>

**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.  
<http://rda.ucar.edu/datasets/ds132.2/>. Accessed 31 Oct. 2019.

**Slivinski, L. C.**, et al. 2019. NOAA-CIRES-DOE Twentieth Century Reanalysis Version 3. Research Data Archive at the National Center for Atmospheric Research, Computational and Information Systems Laboratory.  
<https://doi.org/10.5065/H93G-WS83>. Accessed 31 Oct. 2019.

**Slivinski, L.C.**, E.T. Spiller, and A. Apte, 2015: A hybrid particle-ensemble Kalman filter for high-dimensional Lagrangian data assimilation. *Dynamic Data-Driven Environmental Systems Science*. Ed. Sai Ravela, Adrian Sandu. Volume 8964 of Lecture Notes in Computer Science, pp 263-273. Springer International Publishing.  
[https://doi.org/10.1007/978-3-319-25138-7\\_24](https://doi.org/10.1007/978-3-319-25138-7_24)

**Slivinski, L.C.**, A.R. Margetts, and D.W. Bliss, 2011: Sparse space-time equalization with  $l_1$  norm. *Asilomar Conference on Signals, Systems, and Computers*. Pacific Grove, CA. <https://doi.org/10.1109/ACSSC.2011.6190282>

Cigna, J., P. Davé, C. Hickey, J. Holzberger, M. Kuhn, S. Kwok, B. O'Haver, E. Ryan, and **L. Slivinski**, 2009: Specializing pedestrian maps to address the needs of people using wheelchairs: A case study in community-sustainable information systems. (*Undergraduate Thesis*.) Available from the Digital Repository at the University of Maryland (<http://hdl.handle.net/1903/9076>).