

John Kochendorfer, Ph.D.

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Featured Publications

Kochendorfer, J., M.E. Earle, D. Hodyss, A. Reverdin, Y. Roulet, R. Nitu, R. Rasmussen, S. Landolt, S. Buisan, and T. Laine, (2020). **Undercatch adjustments for tipping bucket gauge measurements of solid precipitation**. *J. Hydrometeor.*, 21, 1193–1205, <https://doi.org/10.1175/JHM-D-19-0256.1>.

Nitu, R., Y.-A. Roulet, M. Wolff, M. Earle, A. Reverdin, C. Smith, J. Kochendorfer, S. Morin, R. Rasmussen, K. Wong, J. Alastrué, L. Arnold, B. Baker, S. Buisán, J.L. Collado, M. Colli, B. Collins, A. Gaydos, H.-R. Hannula, J. Hoover, P. Joe, A. Kontu, T. Laine, L. Lanza, E. Lanzinger, G.W. Lee, Y. Lejeune, L. Leppänen, E. Mekis, J.-M. Panel, A. Poikonen, S. Ryu, F. Sabatini, J. Theriault, D. Yang, C. Genthon, F. van den Heuvel, N. Hirasawa, N. H. Konishi, H. Motoyoshi, S. Nakai, K. Nishimura, A. Senese, and K. Yamashita (2018), **WMO Solid Precipitation Intercomparison Experiment (SPICE) (2012 - 2015)**, WMO, IOM No. 131.

Dobosy, R., D. Sayres, C. Healy, E. Dumas, M. Heuer, J. Kochendorfer, B. Baker, and J. Anderson (2017): **Estimating Random Uncertainty in Airborne Flux Measurements over Alaskan Tundra: Update on the Flux Fragment Method**. *J. Atmos. Oceanic Technol.*, 34, 1807–1822, <https://doi.org/10.1175/JTECH-D-16-0187.1>

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Sayres, D. S., Dobosy, R., Healy, C., Dumas, E., Kochendorfer, J., Munster, J., Wilkerson, J., Baker, B., and Anderson, J. G.: **Arctic Regional Methane Fluxes by Ecotope As Derived Using Eddy Covariance from a Low-Flying Aircraft** (2017) *Atmos. Chem. Phys.*, 17, 8619-8633, <https://doi.org/10.5194/acp-17-8619-2017>

Kochendorfer, J., Rasmussen, R., Wolff, M., Baker, B., Hall, M. E., Meyers, T., Landolt, S., Jachcik, A., Isaksen, K., Brækkan, R., and Leeper, R. (2017) **The Quantification and Correction of Wind-Induced Precipitation Measurement Errors**, *Hydrol. Earth Syst. Sci.*, 21, 1973-1989, <https://doi.org/10.5194/hess-21-1973-2017>

Krishnan P., J. Kochendorfer, E.J. Dumas, P.C. Guillevic, C. B. Baker, Tilden P. Meyers, B. Martos (2015) **Comparison of In-Situ, Aircraft, and Satellite Land Surface Temperature Measurements Over a NOAA Climate Reference Network Site**, *Remote Sensing of Environment*, Volume 165, August 2015, Pages 249-264, ISSN 0034-4257, <http://dx.doi.org/10.1016/j.rse.2015.05.011>.

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Kochendorfer, J., T.P. Meyers, J. Frank, W. Massman, and M. Heuer (2012) **How Well Can We Measure the Vertical Wind Speed? Implications for Fluxes of Energy and Mass.** *Boundary-Layer Meteorol.* doi:10.1007/s10546-012-9738-1.

Publications

Smith, C. D., Ross, A., Earle, M. E., Wolff, M., Buisán, S., Roulet, Y.-A., and Laine, T.: **Evaluation of the WMO Solid Precipitation Intercomparison Experiment (SPICE) transfer functions for adjusting the wind bias in solid precipitation measurements** (2020). *Hydrol. Earth Syst. Sci.*, 24, 4025–4043, <https://doi.org/10.5194/hess-24-4025-2020>.

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Wilson, T. B., Diamond, H. J., Kochendorfer, J., Meyers, T. P., Hall, M., Casey, N. W., Baker, C. B., Leeper, R., and Palecki, M. A. (2020). **Evaluating time domain reflectometry and coaxial impedance sensors for soil observations by the U.S. Climate Reference Network,** *Vadose Zone Journal*, 19, e20013, 10.1002/vzj2.20013, 2020.

Leeper, R. D., J. Kochendorfer, T. Henderson, and M. A. Palecki (2019). **Impacts of Urban Built Structures on Air Temperature Observations,** *J. Appl. Meteor. Climatol.*, 58, 1369–1380, <https://doi.org/10.1175/JAMC-D-19-0002.1>

Pierre, A., S. Justas, C. Smith, J. Kochendorfer, V. Fortin, and F. Anctil (2019). **Evaluation of catch efficiency transfer functions for unshielded and single-Alter-shielded solid precipitation measurements,** *J. of Atmos. and Oceanic Technol.*, 36, 865–881, <https://doi.org/10.1175/JTECH-D-18-0112.1>

Buisán, S. T., M. E. Earle, J. L. Collado, J. Kochendorfer, J. Alastrué, M. Wolff, C. D. Smith, and J. I. López-Moreno (2017). **Assessment of Snowfall Accumulation Underestimation by Tipping Bucket Gauges in The Spanish Operational Network,** *Atmospheric Measurement Techniques*, 10, 1079-1091, doi:10.5194/amt-10-1079-2017

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[J.E. Bell](#), M.A. Palecki, B. Baker, W.G. Collins, J.H. Lawrimore, R.D. Leeper, M.E. Hall, John Kochendorfer, T.P. Meyers, T. Wilson, H.J. Diamond (2013).. **U.S. Climate Reference Network Soil Moisture and Temperature Observations** [J.E. Bell](#), *Journal of Hydrometeorology*. 14, 977–988. doi: 10.1175/JHM-D-12-0146.1.

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