Edward Dumas

List of publications

Wilkerson, J., Dobosy, R., Sayres, D. S., Healy, C., Dumas, E., Baker, B., and Anderson, J. G.: **Permafrost Nitrous Oxide Emissions Observed On A Landscape Scale Using The Airborne Eddy-Covariance Method**, *Atmos. Chem. Phys*., *19, 4257-4268*, https://doi.org/10.5194/acp-19-4257-2019, 2019.

Buban, M. S., T. R. Lee, E. J. Dumas, C. B. Baker, and M. Heuer, 2019: **Observations Of The Effects Of A Total Solar Eclipse On Surface And Atmospheric Boundary Layer Evolution**. *Boundary-Layer Meteorology, 2019, 1-14*, doi:10.1007/s10546-018-00421-4.

Lee, T.R., Buban, M., Dumas, E., Baker, C.B. **On the Use of Rotary-Wing Aircraft to Sample Near-Surface Thermodynamic Fields: Results from Recent Field Campaigns**. *Sensors* 2019, 19, 10.

Lee, T. R., M. Buban, M. A. Palecki, R. D. Leeper, H. J. Diamond, E. Dumas, T. P. Meyers, and C. B. Baker (2018), **Great American Eclipse data may fine-tune weather forecasts**, *Eos, 99*, https://doi.org/10.1029/2018EO103931. Published on 16 August 2018 https://eos.org/project-updates/great-american-eclipse-data-may-fine-tune-weather-forecasts

Wulfmeyer, V., D.D. Turner, B. Baker, R. Banta, A. Behrendt, T. Bonin, W. Brewer, M. Buban, A. Choukulkar, E. Dumas, R. Hardesty, T. Heus, J. Ingwersen, D. Lange, T. Lee, S. Metzendorf, S. Muppa, T. Meyers, R. Newsom, M. Osman, S. Raasch, J. Santanello, C. Senff, F. Späth, T. Wagner, and T. Weckwerth, 2018: **A New Research Approach for Observing and Characterizing Land-Atmosphere Feedback.** *Bull. Amer. Meteor. Soc*., 0, https://doi.org/10.1175/BAMS-D-17-0009.1

Buban, M.S., Lee, T.R., Dumas, E.J. Baker, C.B. **Observations and Numerical Simulation of the Effects of the 21 August 2017 North American Total Solar Eclipse on Surface Conditions and Atmospheric Boundary-Layer Evolution** *Boundary-Layer Meteorology* 2019. https://doi.org/10.1007/s10546-018-00421-4

Dumas, E. J., T. R. Lee, M. Buban, B. Baker, 2017: **Small Unmanned Aircraft System (sUAS) measurements during the 2017 Verifications of the Origins of Rotation in Tornadoes Experiment Southeast (VORTEX-SE)**. *NOAA Technical Memorandum OAR-ARL-274* June, 2017. https://doi.org/10.7289/V5/TM-OAR-ARL-274

Dumas, E. J., T. R. Lee, M. Buban, B. Baker, 2017: **Small Unmanned Aircraft System (sUAS) measurements during the 2017 Land-Atmosphere Feedback Experiment (LAFE)**. *NOAA Technical Memorandum OAR-ARL-277* November, 2017. https://doi.org/10.7289/V5/TM-OAR-ARL-277

Lee, T.R., M. Buban, E. Dumas, C.B. Baker, 2017: **A New Technique to Estimate Sensible Heat Fluxes around Micrometeorological Towers Using Small Unmanned Aircraft Systems**. *J. Atmos. Oceanic Technol.*, 34, 2103–2112, https://doi.org/10.1175/JTECH-D-17-0065.1

Dobosy, Sayres, Healy, Dumas, Heuer, Kochendorfer, Baker, Anderson, 2017:, **Estimating Random Uncertainty In Airborne Flux Measurements Over Alaskan Tundra: Update On The Flux Fragment Method. ,** *Journal of Atmospheric and Oceanic Technology,* 34, 1807-1822, American Meteorological Society

Dumas, E. J., and C.B. Baker, 2016: **Push the Boundaries: The use of small unmanned aerial systems to provide boundary layer measurements is now within reach**. *Meteorological Technology International,* April 2016.

Dumas, E. J., T. R. Lee, M. Buban, B. Baker, 2016: **Small Unmanned Aircraft System (sUAS) measurements during the 2016 Verifications of the Origins of Rotation in Tornadoes Experiment Southeast (VORTEX-SE)**. *NOAA Technical Memorandum OAR-ARL-273* July, 2016. https://doi.org/10.7289/V5/TM-OAR-ARL-273

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.

Dumas, E. J., Dobosy, R. J., Senn, D. L., Baker, C. B., Sayres, D., Tuozzolo, C., Rivero, M., Air Resources Laboratory (U.S.). (2014). **Airborne measurements of CO_2 and CH_4 fluxes over the Alaskan North Slope using the Flux Observations of Carbon from an Airborne Laboratory (FOCAL) system**. https://repository.library.noaa.gov/view/noaa/12208