

Curriculum Vitae - 31.03.2022

Sebastian A. Los

University of New Mexico
Department of Earth & Planetary Sciences
Albuquerque, NM

Email: slos@unm.edu
Phone: +1 (417) 576-4399
+49 1602029645

Education	University of New Mexico Ph.D. Earth & Planetary Sciences, <i>Expected</i> 2022 Utah State University M.Sc. Climate Science, 2018 University of Missouri B.Sc. Atmospheric Science, 2012	Advisor: Dr. Joseph Galewsky Advisor: Dr. Lawrence Hipps Advisor: Dr. Neil Fox
Research Interests	The role of water in Earth's climate system, (sub)tropical moist processes, water vapor in global climate models, tropical low-clouds and climate change, evapotranspiration, mixing and phase change in planetary atmospheres, dust, water, and energy in the Mars surface environment	
Professional Experience	Department of Earth & Planetary Sciences, University of New Mexico Graduate Research Assistant 2018-Present Institut für Meteorologie, Universität Leipzig, Leipzig, Germany Visiting Scientist 2020 - Present Mars Science Laboratory Mission, Curiosity Rover, ChemCam Instrument Student Collaborator 2020 - Present EUREC⁴A (EUcidating the RoLE of Clouds-Circulation Coupling in ClimAte) Field Campaign <i>Research Vessel Meteor, Subtropical Atlantic Ocean</i> Atmospheric Scientist Jan-Mar 2020 (47 days at sea) Department of Plants, Soils, and Climate, Utah State University Graduate Research Assistant 2015-2018 Thesis: <i>Intermittent Turbulent Exchanges and Their Role in Vineyard Evapotranspiration</i> GRAPEX (Grape Remote sensing Atmospheric Profile & Evapotranspiration eXperiment) <i>USDA-ARS Hydrology and Remote Sensing Laboratory, 5 California Vineyard Sites</i> Graduate Technical Assistant 2016-2018 The Utah Climate Center Graduate Researcher 2015-2018 Utah Public Radio Meteorologist 2016-2018 Department of Soil, Environmental, and Atmospheric Science, University of Missouri Undergraduate Research Assistant 2009-2011 Project: <i>Cloud-top temperatures and lightning in wintertime convection</i> University of Missouri Extension Agricultural Weather Forecaster 2009-2011 PLoWS (ProfiLing of Winter Storms) Field Campaign <i>University Corporation for Atmospheric Research, C-130 Flights, Upper Midwest, USA</i> Undergraduate Technical Assistant 2008-2010 National Weather Service, Springfield, MO Weather Forecast Office Student Intern 2009	
Teaching Experience	ENVS 323L - Water in the Earth System, University of New Mexico Graduate Teaching Assistant, Curriculum Development Fall 2020 8 undergraduates ENVS 320L - Environmental Systems, University of New Mexico Graduate Teaching Assistant, Curriculum Development Fall 2019 33 undergraduates	

EPS 400L - Hydrology Laboratory, University of New Mexico

Graduate Teaching Assistant, Curriculum Development | Spring 2019 | 10 undergraduates

PSC 2000 - The Atmosphere and Weather, Utah State University

Graduate Teaching Assistant | Fall 2016, Fall 2017 | ~120 undergraduates per semester

Campus Weather Service, University of Missouri

Forecast Supervisor | 2008-2011 | Mentored 5 students per forecast shift

- Publications Bailey, A., F. Aemisegger, L. Villiger, **S.A. Los**, et al. (2022). Isotopic measurements in water vapor, precipitation, and seawater during EUREC⁴A, *Earth Syst Sci Data*, 13, [Preprint] doi.org/10.5194/essd-2022-3
- Stevens, B., S. Bony, D. Farrell, [et al. including **S.A. Los**] (2021). EUREC⁴A, *Earth Syst Sci Data*, 13, 8, 4067–4119, doi.org/10.5194/essd-13-4067-2021
- Stephan, C.C., S. Schnitt, H. Schulz, [et al. including **S.A. Los**] (2021). Ship- and island-based atmospheric soundings from the 2020 EUREC⁴A field campaign, *Earth Syst Sci Data*, 13, 491–514, doi.org/10.5194/essd-13-491-2021
- Zhao, L., S.-Y. S. Wang, C.-H. Wu, **S.A. Los**, S. Lyu, X. Meng, L. Wen, S. Luo, Y. Ao, & Z. Li (2020). Association of Diurnal Rainfall in Northeastern Tibetan Plateau with the Retreat of the South Asian High. *Atmosphere* 11(1), 105, doi.org/10.3390/atmos11010105
- Los, S.A.**, L.E. Hipps, J.G. Alfieri, W.P. Kustas, & J.H. Prueger (2019). Intermittency of water vapor fluxes from vineyards during light wind and convective conditions. *Irrigation Sci.* 37, 281–295, doi.org/10.1007/s00271-018-0617-5
- Wu, Y.-C., S.-Y. Wang, Y.-C. Yu, C.-Y. Kung, A.-H. Wang, **S.A. Los**, & W.-R. Huang (2019). Climatology and trends of extreme precipitation events in Taiwan based on weather types. *Int J Climatol*, 39(14), 5351–5366, doi.org/10.1002/joc.6159
- Alfieri, J.G., W.P. Kustas, H. Nieto, J.H. Prueger, L.E. Hipps, L. McKee, F. Gao, & **S.A. Los** (2018). Influence of wind direction on the surface roughness of vineyards. *Irrigation Sci.* 37, 359–373, doi.org/10.1007/s00271-018-0610-z
- Nieto, H., W.P. Kustas, J.G. Alfieri, F. Gao, L.E. Hipps, **S.A. Los**, J.H. Prueger, L.G. McKee, & M.C. Anderson (2018) Impact of different within-canopy wind attenuation formulations on modeling evapotranspiration using TSEB. *Irrigation Sci*, 37, 315–331, doi.org/10.1007/s00271-018-0611-y
- Prueger, J.H., C.K. Parry, W.P. Kustas, J.G. Alfieri, M.M. Alsina, H. Nieto, T.G. Wilson, L.E. Hipps, M.C. Anderson, J.L. Hatfield, F. Gao, L.G. McKee, A. McElrone, N. Agam, & **S.A. Los** (2018). Crop Water Stress Index of an irrigated vineyard in the Central Valley of California. *Irrigation Sci*, 37, 297–313, doi.org/10.1007/s00271-018-0598-4
- Kustas, W.P., M.C. Anderson, J.G. Alfieri, [et al. including **S. Los**] (2018). The Grape Remote sensing Atmospheric Profile and Evapotranspiration eXperiment (GRAPEX). *Bull Amer Meteor Soc*, 99(9), 1791–1812, doi.org/10.1175/BAMS-D-16-0244.1
- Presentations AGU Fall Meeting | Remote Talk | December 2021
Water Isotopes: Weather to Climate Workshop, Zürich, Switzerland Hub | Poster | November 2021
AGU Fall Meeting | Virtual Poster | December 2020
Center for Stable Isotopes Seminar, University of New Mexico | Talk | November 2020
Department Seminar, Institut für Meteorologie, Universität Leipzig | Talk | October 2020
AGU Fall Meeting, San Francisco, CA, USA | Poster | December 2019
CLIVAR Water Stable Isotopes & Climate Workshop, Boulder, CO, USA | Poster | October 2019
Agricultural & Forest Meteorology Conference, Boise, ID, USA | Talk | May 2018
AGU Fall Meeting, New Orleans, LA, USA | Poster | December 2017

	Department Seminar, Plants, Soils & Climate, Utah State University Talk September 2017 Restoring the West Conference, Logan, UT, USA Talk June 2017 AMS Annual Meeting, Seattle, WA, USA 2 Talks December 2017 Agricultural & Forest Meteorology Conference, Salt Lake City, UT, USA Talk June 2016
Skills and Languages	Technical: Stable water isotopologue sampling and analysis, Time-series analysis (Fourier/Cross-spectral/Wavelet), Atmospheric modeling, Eddy covariance method, Meteorological field instrumentation, Environmental data quality control and analysis Computing: Matlab, Fortran, R, IGOR, GrADS, Unix, ArcGIS, L ^A T _E X Languages: English (Native), Dutch (Independent), German (Basic)
Awards	New Mexico Space Grant Consortium Fellow 2021-2022 UNM GPSA Student Research Grant 2019, 2020, 2021 UNM Earth & Planetary Sciences Trauger Scholarship 2019, 2021 UNM Doctoral Conference Award 2020 UNM GPSA New Mexico Research Grant 2019 Graduate Student Teacher of the Year, USU Department of Plants, Soils, and Climate 2018 2nd Place Overall Student Paper, 31st AMS Conference on Hydrology, Seattle, WA 2017 Bert Tanner Graduate Fellowship 2016, 2017, 2018 Apogee Instruments - Campbell Scientific Graduate Fellowship 2016, 2017, 2018 USU Graduate Travel Award 2016, 2017 Grant Darkow Undergraduate Scholarship 2009 Missouri Bright Flight Scholarship 2007-2011
Professional Service	Reviewer, Agricultural & Forest Meteorology 2019–Present AGU Hydrology Technical Committee on Large-Scale Field Experimentation 2017–Present AGU Fall Meeting Press Room Volunteer 2017 AMS Annual Meeting Information Harvester 2017 MU College of Agriculture, Food, and Natural Resources Student Council Representative 2008-2011 Mizzou Storm Chase Team Chair 2009-2011 University of Missouri AMS/NWA Chapter Vice President 2009-2010 Missouri FFA Association State Vice President 2007-2008
Professional Development	Climate Science Summer School NASA JPL Center for Climate Sciences, Virtual 2021 LMDz Climate Model Training Le Laboratoire de Météorologie Dynamique, Paris, France 2018
Outreach	The International School at Mesa del Sol, Albuquerque, NM Virtual Talk <i>Planets and their Weather and Climate</i> February 2022 ~50 4th grade students Junior Docent Summer Program, New Mexico Natural History Museum Talk <i>Living on a Water World</i> June 2019 ~30 middle school students Earth & Planetary Science Learning Booth, New Mexico State Fair Hands-on Well/Aquifer Demonstration September 2019 Conway R-1 High School, Conway, MO Virtual Talk <i>Weather and Climate Change in Missouri</i> March 2018 ~45 high school students The Utah Climate Center in the Classroom, Utah State University Presenter 2016, 2017, 2018 Local K-8 Classes of ~25 students Public Severe Weather Workshop Series, University of Missouri AMS Chapter Developer, Presenter 2008-2011 ~300 members of the public per biennial lecture
Current Affiliations	American Association for the Advancement of Science American Geophysical Union American Meteorological Society European Geophysical Union National Association of Geoscience Teachers