
CONTACT INFORMATION	Climate, Atmospheric Sciences, and Physical Oceanography Scripps Institution of Oceanography University of California, San Diego 9500 Gilman Drive # 0206 La Jolla, CA 92093-0206	phone: (509) 264-0436 email: nsiler@ucsd.edu scrippsolars.ucsd.edu/nsiler
EDUCATION	<i>Ph.D.</i> , Atmospheric Science, University of Washington, Seattle, WA <i>A.B.</i> , Physics, Harvard University, Cambridge, MA	2015 2005
EMPLOYMENT	Assistant Professor, Oregon State University Postdoctoral Scholar, Scripps Institution of Oceanography Graduate Research Assistant, University of Washington Commissioned Officer, US Air Force	Beginning Jan. 2018 2015 - 2017 2009 - 2015 2005 - 2009
HONORS AND AWARDS	1st place oral presentation, 16th Conference on Mountain Meteorology 1st place oral presentation, 15th Conference on Mountain Meteorology National Defense Science and Engineering Graduate Fellowship University of Washington Program on Climate Change Fellowship Air Force ROTC Scholarship, Type 1	2015 2013 2010 - 2013 2009 - 2010 2001 - 2005
PUBLICATIONS	<p>Siler, N., Y. Kosaka, S.P. Xie, and X. Li, 2017: Tropical ocean contributions to California's surprisingly dry El Niño of 2015-16. <i>J. Climate</i>, <i>in press</i>.</p> <p>Amaya, D., N. Siler, A. Miller, and S.P. Xie, 2017: The interplay of internal and forced modes of Hadley cell width variability. <i>Climate Dynamics</i>, <i>in press</i>.</p> <p>Siler, N., S. Po-Chedley, and C. Bretherton, 2017: Variability in modeled cloud feedback tied to differences in the climatological spatial pattern of clouds. <i>Climate Dynamics</i>, <i>in press</i>.</p> <p>Siler, N. and D. Durran, 2016: What causes weak orographic rain shadows? Insights from case studies in the Cascades and idealized simulations. <i>J. Atmos. Sci.</i>, 73 (10), 4077-4099.</p> <p>Christian, J., N. Siler, G. Roe, and M. Koutnik, 2016: Identifying dynamically induced variability in glacier mass balance records <i>J. Climate</i>, 29 (24), 8915-8929.</p> <p>Siler, N. and D. Durran, 2015: Assessing the influence of the tropopause on mountain waves and orographic precipitation using linear theory and numerical simulations. <i>J. Atm. Sci.</i>, 72 (2), 803-820.</p> <p>Siler, N. and G. Roe, 2014: How will orographic precipitation respond to surface warming? An idealized thermodynamic perspective. <i>Geophys. Res. Lett.</i>, 41, 2606-2613.</p> <p>Siler, N., G. Roe, and D. Durran, 2013: On the dynamical causes of variability in</p>	

the rain-shadow effect: a case study of the Washington Cascades. *J. Hydrometeor.*, 14 (1), 122-139.

MANUSCRIPTS SUBMITTED AND IN PREPARATION **Siler, N.**, G. Roe, K. Armour, and N. Feldl, 2017: Surface energy budget constraints on the increase in global precipitation with warming. *Climate Dynamics*, *submitted*.

Siler, N. and S.P. Xie: Decomposing the dynamic and thermodynamic contributions to changes in atmospheric heat transport and their implications for the hydrologic cycle. *In preparation*.

Siler, N., K. Armour, and G. Roe, 2017: Energetic constraints on the magnitude and pattern of changes in the hydrologic cycle under global warming. *In preparation*.

ACADEMIC TEACHING EXPERIENCE **Co-Instructor, University of Washington** 2013
Earth and Space Sciences 310: Mathematical methods in earth science
Developed and taught (with Gerard Roe) a new 5-credit math class for advanced undergraduates in earth science. Topics included linear algebra, vector calculus, waves, diffusion, linearization, and dimensional analysis.

Teaching Assistant, University of Washington 2011
Atmospheric Sciences 101: Weather
Taught four hour-long sections per week, led a weekly review session, and developed weekly homework and quizzes.

SELECTED PRESENTATIONS *Invited Lecture*, ASP Summer Colloquium, National Center for Atmospheric Research, Boulder, CO, June 2017. The interaction of precipitation with orography.

Invited Seminar, College of Earth, Ocean, and Atmospheric Sciences, Oregon State University, Corvallis, OR, April 2017.

Invited Seminar, Department of Earth and Environmental Sciences, Columbia University, New York, NY, February 2017.

Poster, AMS Annual Meeting, Seattle, WA, January 2017: The dynamical causes of weak orographic rain shadows.

Poster, AGU Fall Meeting, San Francisco, CA, December 2016: The influence of model convection on the global cloud feedback: An observational constraint derived from the climatological distribution of clouds.

Invited Seminar, Society, Water, and Climate Cluster, University of Utah, Salt Lake City, UT, December 2016.

Oral Presentation, 17th Conference on Mountain Meteorology, Burlington, VT, June 2016: What causes weak orographic rain shadows? Insights from case studies in the Cascades and idealized simulations.

Invited Seminar, Department of Atmospheric Sciences, University of Washington, May 2016.

Seminar, Department of Atmospheric Sciences, University of Washington, November 2014: How does the tropopause affect orographic precipitation? Insights from linear theory and numerical simulations.

Oral Presentation, 16th Conference on Mountain Meteorology, San Diego, CA, August 2014: Assessing the influence of the tropopause on mountain waves and orographic precipitation using linear theory and numerical simulations. **1st place award.**

Poster, 16th Conference on Mountain Meteorology, San Diego, CA, August 2014: How will orographic precipitation respond to surface warming? An idealized thermodynamic perspective.

Seminar, NCAR Mesoscale and Microscale Meteorology, Boulder, CO, February 2014: Assessing the influence of tropopause height on orographic precipitation using linear theory and numerical simulations.

Seminar, Program on Climate Change, University of Washington, February 2013: Extreme precipitation and climate change: the basics.

Seminar, Yale University, October 2012: Dynamic and thermodynamic controls on the spatial distribution of orographic precipitation.

Oral Presentation, 15th Conference on Mountain Meteorology, Steamboat Springs, CO, August 2012: On the dynamical causes of variability in the rain-shadow effect: a case study of the Washington Cascades. **1st place award.**

Oral Presentation, 5th Graduate Climate Conference, Woods Hole, MA, October 2011: The influence of the large-scale circulation on the Cascade rain shadow.