

Una Kim Miller

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Education

2019-

PhD Candidate, Ocean and Climate Physics
Columbia University, New York, New York
Advisor: Christopher J. Zappa

2016-2018

M.A., Ocean and Climate Physics
Columbia University, New York, New York
Advisor: Christopher J. Zappa

2011-2015

B.S., Oceanography
University of Washington, Seattle, Washington
Advisor: H. Paul Johnson

Research Experience

2016-2019

Master's Thesis Research, Department of Ocean and Climate Physics, Columbia University

- Applicability of Monin-Obukhov similarity scaling of turbulence kinetic energy dissipation in the surface ocean boundary layer

2015-2016

Research Assistant, Department of Oceanography, University of Washington

2014-2015

Undergraduate Thesis Research, Department of Oceanography, University of Washington

- Estuarine surface water alkalinity

2012-2015

Undergraduate Research Assistant, Department of Oceanography, University of Washington

Publications

Wurl, O., Bird, K., Cunliffe, M., Landing, W. M., **Miller, U.**, Mustaffa, N. I. H., et al. (2018). Warming and inhibition of salinization at the ocean's surface by cyanobacteria. *Geophysical Research Letters*, 45, 4230–4237. <https://doi.org/10.1029/2018GL077946>

Johnson, H. P., **U. K. Miller**, M. S. Salmi, and E. A. Solomon (2015), Analysis of bubble plume distributions to evaluate methane hydrate decomposition on the continental slope, *Geochem. Geophys. Geosyst.*, 16, 3825–3839, doi:[10.1002/2015GC005955](https://doi.org/10.1002/2015GC005955).

Hautala, S. L., E. A. Solomon, H. P. Johnson, R. N. Harris, and **U. K. Miller** (2014), Dissociation of Cascadia margin gas hydrates in response to contemporary ocean warming, *Geophys. Res. Lett.*, 41, 8486–8494, doi:[10.1002/2014GL061606](https://doi.org/10.1002/2014GL061606).

Presentations

2015

Analysis of Bubble Plume Distributions to Evaluate Methane Hydrate Decomposition on the Continental Slope. American Geophysical Union Fall Meeting. Poster. San Francisco, CA.

Teaching Experience

2018

Teaching Assistant, “Introduction of Physical Oceanography”, Department of Earth and Environmental Sciences, Columbia University

2017

Teaching Assistant, “Dynamics of Climate Variability and Change”, Department of Earth and Environmental Sciences, Columbia University

2015

Teaching Assistant, “Oceanography of the Pacific Northwest”, Department of Oceanography, University of Washington

Service

2018-2020

New Student Chair, Graduate Student Committee

2018-2020

Graduate Student Member, Lamont-Doherty Colloquium Committee

2016-

Volunteer, Classroom Health Chair, Girls Who Code at Columbia University

Annually

Volunteer, Girls Science Day at Columbia University

Volunteer, Lamont-Doherty Open House

Field Work Experience

2018

R/V Araon, Ross Sea, Antarctica, February-March, 6 weeks

2014

R/V Thompson, Nootka Sound, British Columbia, December, 10 days

R/V Thompson, Washington and Oregon coasts, October, 2 weeks

R/V Thompson, Washington and Oregon coasts, June-July, 2 weeks

2013

R/V Atlantis, Washington and Oregon coasts, August, 1 month

R/V Barnes, Puget Sound, April, 1 day