

Una Kim Miller

Columbia University · Lamont-Doherty Earth Observatory · umiller@ldeo.columbia.edu · <https://unamiller.github.io/>

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
- 2014-2015 Undergraduate Thesis Research, Department of Oceanography, University of Washington
 Characterizing the controls on surface water alkalinity in Nootka Sound, B.C.
- 2012-2016 Research Assistant, Department of Oceanography, University of Washington

Awards

- 2019 Future Investigators in NASA Earth and Space Science and Technology (FINESST)

Publications and Presentations

- Wurl, O., Bird, K., Cunliffe, M., Landing, W. M., **Miller, U. K.**, 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).

Miller, U. K. (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

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| 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

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| 2018-2020 | New Student Chair, Graduate Student Committee |
| 2018-2020 | Graduate Student Member, Lamont-Doherty Earth Observatory Colloquium Committee |
| 2016- | Volunteer, weekly, Classroom Health Chair, Girls Who Code at Columbia University |
| 2016- | Volunteer, annually, Girls’ Science Day at Columbia University |
| 2016- | Volunteer, annually, Lamont-Doherty Earth Observatory Open House |

Research Cruise Experience

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| 2018 | <i>R/V Araon</i> , Ross Sea, Antarctica, February-March, 6 weeks |
| 2014 | <i>R/V Thompson</i> , Nootka Sound, British Columbia, December, 10 days
<i>R/V Thompson</i> , Washington and Oregon coasts, October, 2 weeks
<i>R/V Thompson</i> , Washington and Oregon coasts, June-July, 2 weeks |
| 2013 | <i>R/V Atlantis</i> , Washington and Oregon coasts, August, 1 month
<i>R/V Barnes</i> , Puget Sound, April, 1 day |