

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

## Publications and Presentations

- 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).

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**

- 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

### **Professional and Volunteer Service**

- 2019-2020 Coordinator, Ocean & Climate Physics Divisional Seminar Committee
- 2018-2020 Coordinator, Lamont-Doherty Earth Observatory Colloquium Committee
- 2018-2019 New Student Chair, Graduate Student 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**

- 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