

Earle A. Wilson

CONTACT INFORMATION	Division of Geological and Planetary Sciences, California Institute of Technology, Pasadena, CA 91125	earlew@caltech.edu (626) 395-8675
RESEARCH INTERESTS	General ocean circulation, Southern Ocean dynamics, ice-ocean interactions, polar climate.	
EDUCATION	University of Washington , Seattle, WA Ph.D., Oceanography, June 2019 M.S., Oceanography, February 2014 Columbia University , New York, NY B.S., Applied Physics, May 2011 Morehouse College , Atlanta, GA B.S. candidate in Physics, August 2006–May 2009	
PROFESSIONAL RESEARCH EXPERIENCE	Postdoctoral Scholar California Institute of Technology Supervisor: Andrew Thompson	September 2019 to present
	Graduate Research Assistant University of Washington Advisor: Stephen Riser	June 2012 to June 2019
	Geophysical Fluid Dynamics Fellow Woods Hole Oceanography Institute Advisors: Ian Hewitt, Andrew Wells, and Claudia Cenedese	Summer 2017
	Research Assistant Lamont Doherty Earth Observatory Advisor: Arnold Gordon	September 2011 to June 2012
REFEREED PUBLICATIONS	Wilson, E. A. , A. Wells, I. Hewitt, and C. Cenedese, The dynamics of a subglacial salt wedge, <i>Journal of Fluid Mechanics</i> , 895 , A20. doi: 10.1017/jfm.2020.308 . E. Campbell, Wilson, E. A. , G. W. K. Moore, S. C. Riser, C. Brayton, M. R. Mazloff, and L. Talley (2019), Southern Hemisphere climate anomalies drive Antarctic sea ice openings, <i>Nature</i> , 570 , 319–325, doi: 10.1038/s41586-019-1294-0 . Wilson, E. A. , S. C. Riser, A. Wong, and E. C. Campbell (2019), Winter upper ocean stability and ice-ocean feedbacks in the sea-ice-covered Southern Ocean, <i>Journal of Physical Oceanography</i> , 49 , 1099–1117, doi: 10.1175/JPO-D-18-0184.1 . Wilson, E. A. , S. C. Riser (2015), An assessment of the seasonal salinity budget for the upper Bay of Bengal, <i>Journal of Physical Oceanography</i> , 46 , 1361–1376, doi: 10.1175/JPO-D-15-0147.1 . Wilson, E. A. , A. L. Gordon, and D. Kim (2013), Observations of the Madden Julian Oscillation during Indian Ocean Dipole events, <i>Journal of Geophysical Research: Atmospheres</i> , 118 , 2588–2599, doi: 10.1002/jgrd.50241 .	

MANUSCRIPTS
SUBMITTED OR IN
PREPARATION

Wilson, E. A. and S. Riser, Drivers of the 2016–2017 record surface warming in the Southern Ocean, in prep.

SELECTED
PRESENTATIONS

Gateways to the Ocean: A Symposium Celebrating Arnold Gordon’s Contributions to Physical Oceanography, talk: *Drivers of recent sea ice and upper ocean variability in the Southern Ocean*, San Diego, CA, February 2020. (invited)

Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM) Annual Meeting, talk: *Drivers of recent surface temperature variability in the Southern Ocean*, Princeton, NJ, May 2019.

American Geophysical Union Fall Meeting: *Winter ice-ocean feedbacks in the Southern Ocean: the impact of strong storms on upper ocean stability and winter sea ice growth*, Washington, DC, December 2018.

Lamont Doherty Earth Observatory, OCP seminar: *Winter upper ocean stability and ice-ocean feedbacks in the Southern Ocean*, Palisades, NY, June 2018. (invited)

Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM) Annual Meeting, talk: *Ice-ocean feedbacks in the Southern Ocean: the impact of winter storms on upper ocean stability*, Princeton, NJ, June 2018.

Ocean Sciences Meeting: *Deep ocean ventilation and ice-ocean feedbacks in the Southern Ocean*, Portland, OR, February 2018.

Southern Ocean Carbon and Climate Observations and Modeling (SOCCOM) Annual Meeting: *Observations of upper ocean stability from under-ice Argo floats*, Princeton, NJ, May 2017.

American Geophysical Union Fall Meeting: *Observations of upper ocean stability and vertical heat fluxes in the Antarctic from under-ice Argo floats*, San Francisco, CA, December 2016.

IO50-NIO Symposium: *An assessment of the seasonal salinity budget for the upper Bay of Bengal*, Goa, India, December 2015.

American Geophysical Union Fall Meeting: *Comparisons of HYCOM output and Argo data in the Bay of Bengal*, San Francisco, CA, December 2014.

Ocean Sciences Meeting: *Seasonal freshwater circulation in the Bay of Bengal*, Honolulu, HI, February 2014. Poster. *Received award for Outstanding Student Presentation.*

American Geophysical Union Fall Meeting: *Seasonal upper ocean freshwater circulation in the Bay of Bengal*, San Francisco, CA, December 2012.

TEACHING
EXPERIENCE

University of Washington, Seattle, WA

Teaching Assistant Spring 2015
OCEAN 215 - Methods of data analysis (first time offered)
Instructor: Stephen Riser
Note: Assisted with course development and provided some lecture material

Teaching Assistant Winter 2014
OCEAN 420 - Physical processes in the ocean
Instructor: Mitsuhiro Kawase
Note: Upper-level undergraduate course on physical oceanography

AWARDS

Program on Climate Change fellowship September 2012 - May 2013

FIELD WORK

I08S Repeat Hydrography cruise: R/V Revelle, February 4 - March 19, 2016.
Cha' Ba mooring recovery cruise: R/V Thomas G. Thompson, Sep 22-25, 2013.

SERVICE
ACTIVITIES

Peer reviewer for the Journal of Geophysical Research: Oceans, Ocean Dynamics, Journal of Climate, and Continental Shelf Research.

Proposal reviewer for the US National Science Foundation (NSF).

Science communication fellow at Pacific Science Center, Seattle, WA (2018-2020)

Member of American Geophysical Union, American Meteorological Society.

Student representative on graduate curriculum review committee, School of Oceanography, University of Washington (2017).

Student representative on faculty search committee, School of Oceanography, University of Washington (2016).

Instructor and helper for Software Carpentry workshop, University of Washington, January 2015.