Earle A. Wilson

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Information California Institute of Technology, Pasadena, CA 91125 (626) 395-8675

Research 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

PROFESSIONAL RESEARCH EXPERIENCE Postdoctoral Scholar

September 2019 to present

California Institute of Technology Supervisor: Andrew Thompson

Graduate Research Assistant

June 2012 to June 2019

University of Washington Advisor: Stephen Riser

Geophysical Fluid Dynamics Fellow

Summer 2017

Woods Hole Oceanography Institute

Advisors: Ian Hewitt, Andrew Wells and Claudia Cenedese

Research Assistant

September 2011 to June 2012

Lamont Doherty Earth Observatory

Advisor: Arnold Gordon

Refereed Publications 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, *Nature*, **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, *Journal of Physical Oceanography*, **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, *Journal of Physical Oceanography*, **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, *Journal of Geophysical Research:* Atmospheres, 118, 2588–2599, doi: 10.1002/jgrd.50241.

MANUSCRIPTS
SUBMITTED OR IN
PREPARATION

Wilson, E. A., I. Hewitt, A. Wells and C. Cenedese, The dynamics of a subglacial salt wedge, *J. Fluid Mech.*, in review.

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.

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 American, 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 Reviewer for Journal of Geophysical Research: Oceans, Ocean Dynamics, and Continental Shelf Research.

Member of American Geophysical Union, American Meteorological Society.

Science communication fellow at Pacific Science Center, Seattle, WA (2018-2019)

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.