# Katherine D. Zaba

EDUCATION Scripps Institution of Oceanography -

University of California, San Diego

Ph.D. Candidate, Physical Oceanography

M.S., Oceanography

Thesis Topic: "Seasonal and Interannual Variability of the

California Current System: Glider Observations

and a Numerical State Estimate"

Advisor: Daniel Rudnick, Ph.D.

University of California, Los Angeles Los Angeles, CA

San Diego, CA

Aug 2018

June 2015

June 2010

B.S., Applied Mathematics

B.S., Atmospheric, Oceanic, and Environmental Sciences June 2010

EMPLOYMENT University of San Diego San Diego, CA

Lecturer Sep - Dec 2015

Applied Operations Research Inc. (acquired by Metron Inc.) Solana Beach, CA

Mar 2011 - Jun 2012Physical Sciences Analyst Physical Sciences Intern Nov 2010 - Mar 2011

Jun - Jul 2009

Research UCSD: Scripps Institution of Oceanography -EXPERIENCE

Spray Underwater Glider Lab - California Network project San Diego, CA Sept 2012 - present

Graduate Student Researcher

Theiss Research -

The Zanzibar Project (NSF-funded) Zanzibar, Tanzania

Undergraduate Student Researcher (Tidal Analyst) Jun - Aug 2010

**Publications** K. D. Zaba, D. L. Rudnick, B. D. Cornuelle, G. Gopalakrishnan, and M. R. Mazloff (2018), Annual and interannual variability in the California Current System: Comparison of an ocean state estimate with a network of underwater gliders. Journal of Physical Oceanography, in press, doi: 10.1175/JPO-D-18-0037.1

> Rudnick, D. L., K. D. Zaba, R. E. Todd, and R. E. Davis (2017): A climatology of the California Current System from a network of underwater gliders. Progress in Oceanography, **154**, 64-106, doi: 10.1016/j.pocean.2017.03.002.

> Jacox, M. G., E. L. Hazen, K. D. Zaba, D. L. Rudnick, C. A. Edwards, A. M. Moore, and S. J. Bograd (2016), Impacts of the 2015-2016 El Nino on the California Current System: Early assessment and comparison to past events. Geophysical Research Letters, 43, 7072-7080, doi: 10.1002/2016GL069716.

> Zaba, K. D., and D. L. Rudnick (2016), The 2014-2015 warming anomaly in the Southern California Current System observed by underwater gliders. Geophysical Research Letters, 43, doi:10.1002/2015GL067550.

Conference Presentations

"Seasonal and interannual variability in the southern California Current System: glider observations and a numerical state estimate" (talk) in February 2018. Ocean Sciences Meeting. Portland, OR.

"Glider observations and a numerical simulation of the 2014-2015 warm anomalies in the southern California Current System" (talk) in September 2017. Eastern Pacific Ocean Conference. South Lake Tahoe, CA.

"Glider observations and their application" (talk) in November 2016. Conference of the Parties 22, Youth for Ocean side event. Marrakech, Morocco.

"The 2014-2015 warming anomaly in the Southern California Current System observed by underwater gliders" (talk) in February 2016. Ocean Sciences Meeting. New Orleans, LA.

"Glider observations of the 2014-2015 warming anomaly in the southern California Current System" (poster) in January 2016. Pacific Anomalies Science and Technology Workshop. Seattle, WA.

"Glider observations of the 2014-2015 warming anomaly in the southern California Current System" (talk) in September 2015. Scripps Student Symposium. La Jolla, CA.

"Glider observations of the 2014-2015 temperature anomalies in the southern California Current System" (talk) in May 2015. Pacific Anomalies Science and Technology Workshop. La Jolla, CA.

"A climatology of underwater glider data in the California Current System" (talk) in November 2014. International Meeting of Students in Physical Oceanography. Ensenada, Mexico.

"A seven-year climatology of Spray glider data along CalCOFI Lines 66.7, 80, 90" (poster) in September 2014. Scripps Student Symposium. La Jolla, CA.

### FIELDWORK EXPERIENCE

Spray autonomous underwater glider recoveries and deployments

Principal Investigator: Daniel Rudnick, Ph.D.

San Diego (Nov 2013)

Palau (Sep 2013, Feb 2014, Sep 2014, Feb 2016)

Galapagos Islands, Ecuador (Mar 2014, Jul 2014, Dec 2015)

Research Cruise aboard R/V Revelle

Principal Investigator: Shaun Johnston, Ph.D.

Palau (Jun - Jul 2013)

Repeat Research Cruises aboard Local Vessels

Principal Investigator: Jurgen Theiss, Ph.D.

Zanzibar, Tanzania (Jun - Aug 2010)

### TEACHING EXPERIENCE

## University of California, San Diego

 $Guest\ Lecturer$ 

SIO 171 - Introduction to Physical Oceanography
Nov 21, 2017
SIO 30 - The Oceans
UCSD Academic Connections - Physics of the Ocean World
Jul 13, 2016

#### University of San Diego

Lecturer Sep - Dec 2015

MARS 220L - Introduction of Physical Oceanography Laboratory

Department of Environmental and Ocean Sciences

Instructor: Jennifer Prairie, Ph.D.

#### University of California, San Diego

Teaching Assistant (Math Tutorial section) Sep - Dec 2014

SIO 210 - Introduction of Physical Oceanography

Scripps Institution of Oceanography

Instructor: Lynne Talley, Ph.D.

#### University of California, Los Angeles

Grader Sep - Dec 2007

MATH 32A - Calculus of Several Variables

Department of Mathematics

Instructor: Lincoln Chayes, Ph.D.

SKILLS

Scripting Languages and Software:

• Matlab, Python, ArcGIS, LATEX, C++, Java

Languages:

• English (native), Polish (native), Spanish (intermediate), Italian (basic)

Other:

• Certified PADI Open Water Diver

CERTIFICATES

Specialized Certificate in Geographic Information Systems, University of California, San Diego Extension, May 2017.

Micro MBA Certificate, Rady School of Management - University of California at San Diego, July 2015.

Leadership

Professional Development Coordinator, UCSD Graduate Student Association (August 2016 - June 2017)

Chair, Graduate Student Search Committee for Observational Physical Oceanography faculty position (January - February 2016)

ACADEMIC SERVICES Reviewer for Progress in Oceanography

Committee Member, Graduate Student Search Committee for CalCOFI Director at Scripps Institution of Oceanography (May-June 2015)

OUTREACH

Participating Scientist and Panel Member, "Exploring Ocean STEM Careers Night" at Birch Aquarium (April 14, 2015; April 28, 2016; April 26, 2017)

Team Member, Consulting Project (client: Count Loyalty) with Advanced Professional Degree Consulting Club at UC San Diego (December 2016 - March 2017)

Member of Scripps Student Delegation, "Conference of the Parties 22" in Marrakech, Morocco (November 14-18, 2016)

AWARDS

Graduate Student Awards

• Best student talk at the Eastern Pacific Ocean Conference (Sep 2017)

Undergraduate Student Awards — University of California, Los Angeles

- Alpha Lambda Delta and Phi Eta Sigma Society (national honor societies)
- Deans Honors List: Dec 2006, Mar 2007, June 2007