

Kyla Drushka
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Research Interests

Observational oceanography, including: upper ocean salinity variations, their relation to atmospheric forcing, and their impacts on the upper ocean; tropical air-sea interaction; submesoscale to basin-scale physics of the upper ocean; satellite oceanography.

Education

2005 to 2011 Ph.D. in Physical Oceanography, Scripps Institution of Oceanography.
2004 B.Sc. in Physics, McGill University.

Professional Experience

July 2014 to present Oceanographer, Applied Physics Laboratory, University of Washington.
October 2012 to June 2014 Postdoctoral researcher, Scripps Institution of Oceanography (SIO). With Sarah Gille and Janet Sprintall.
2011 to 2012 Postdoctoral researcher, Laboratoire d'Océanographie – Expérimentation et Approches Numériques (LOCEAN). With Eric Guilyardi, Jérôme Vialard, and Matthieu Lengaigne.
2005 to 2011 Graduate Research Assistant, Scripps Institution of Oceanography. Dissertation: *Ocean dynamics and thermodynamics in the tropical Indo-Pacific region*. Advisors: Janet Sprintall and Sarah Gille.
2009 to 2010 Fulbright scholar in Oceanography, Australian Commonwealth Scientific and Research Organisation (CSIRO). With Susan Wijffels.
2004 Natural Sciences and Engineering Research Council of Canada Undergraduate Research Fellow: Ocean Dynamics Laboratory, University of British Columbia. With Rich Pawlowicz.
2004 Undergraduate Research: Department of Atmospheric and Oceanic Sciences, McGill University. With Nikolaj Nawri and Ronald Stewart.

Honors and Awards

2013 Editors' Citation for Excellence in Refereeing for *Geophysical Research Letters*.
2013 University National Oceanographic Laboratory System (UNOLS) Chief Scientist Early-Career Training Cruise, fellowship for a 7-day cruise and pre-cruise training.
2008 to 2011 NASA Earth and Space Science Graduate Research Fellowship.
2010 AGU Outstanding Student Paper award, Fall meeting.
2009 to 2010 Fulbright scholarship for graduate research at CSIRO in Hobart, Australia.
2005 to 2006 Fulsom Fellowship for graduate study at SIO.
2004 Natural Sciences and Engineering Research Council of Canada: Undergraduate Student Research Award.

Publications

- Drushka, K.**, S. T. Gille, and J. Sprintall (2014). The diurnal salinity cycle in the tropics. *J. Geophys. Res.* 119(9), 5875–5890. doi:10.1002/2014JC009924.
- Drushka, K.**, H. Bellenger, E. Guilyardi, M. Lengaigne, J. Vialard, and G. Madec (2014). Processes driving intraseasonal displacements of the eastern edge of the warm pool: the contribution of westerly wind events. *Clim. Dyn.* doi:10.1007/s00382-014-2297-z.
- Drushka, K.**, J. Sprintall, and S. T. Gille (2014). Subseasonal variations in salinity and barrier-layer thickness in the eastern equatorial Indian Ocean. *J. Geophys. Res.* 119, 805–823, doi:10.1002/2013JC009422.
- Nieblas, A-E, **K. Drushka**, G. Reygondeau, V. Rossi, H. Demarcq, L. Dubroca, and S. Bonhommeau (2014). Defining Mediterranean and Black Sea biogeochemical subprovinces and synthetic ocean indicators using mesoscale oceanographic features. *PLoS ONE* 9(10): e111251. doi:10.1371/journal.pone.0111251.
- Ghani, M.H., L. R. Hole, I. Fer, V. H. Kourafalou, N. Wienders, H. Kang, **K. Drushka**, D. Peddie (2014). The SailBuoy remotely-controlled unmanned vessel: Measurements of near surface temperature, salinity and oxygen concentration in the Northern Gulf of Mexico. *Meth. in Oceanogr.* doi:10.1016/j.mio.2014.08.001.
- Nieblas, A.E., H. Demarcq, **K. Drushka**, B. Sloyan, and S. Bonhommeau (2013). Front variability and surface ocean features of the presumed southern bluefin tuna spawning grounds in the tropical southeast Indian Ocean. *Deep-Sea Res. II.* 107, 64–76, doi:10.1016/j.dsr2.2013.11.007.
- Vialard, J., **K. Drushka**, H. Bellenger, M. Lengaigne, S. Pous, and J.-P. Duvel (2012). Processes of Madden-Julian sea surface temperature signature in the North Western Australian Basin. *Clim. Dyn.* doi: 10.1007/s00382-012-1541-7.
- Drushka, K.**, S. Wijffels, J. Sprintall, and S. T. Gille (2012). In situ observations of Madden-Julian Oscillation mixed layer dynamics in the Indian and western Pacific Oceans. *J. Clim.* 25, 2306–2328.
- Drushka, K.**, J. Sprintall, S. T. Gille, and I. Brodjonegoro (2010). Vertical structure of Kelvin waves in the Indonesian Throughflow exit passages, *J. Phys. Oceanogr.*, 40(9), 1965–1987.
- Drushka, K.**, J. Sprintall, S. T. Gille, and W. S. Pranowo (2008). Observations of the 2004 and 2006 Indian Ocean tsunamis from a pressure gauge array in Indonesia, *J. Geophys. Res.*, 113, C07038.

Sea-going Experience

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| October 2013 | UNOLS Chief Scientist Training Cruise: Mid-Atlantic Bight, 6 days (<i>R/V Endeavor</i>). Chief Scientist: Dr. Clare Reimers (Oregon State University). |
| May 2013 | Internal wave-breaking in the Luzon Strait: Luzon Strait, 10 days (<i>R/V Revelle</i>). Chief Scientist: Dr. Robert Pinkel (SIO). |
| March 2008 | PhilEx CTD and mooring recovery cruise: Philippines Straits, 23 days (<i>R/V Melville</i>). Chief Scientist: Dr. Arnold Gordon (LDEO, Columbia). |
| March 2007 | CLIVAR 19N repeat hydrography cruise: Eastern equatorial Indian Ocean, 42 days (<i>R/V Revelle</i>). Chief Scientist: Dr. Janet Sprintall (SIO). |
| August 2004 | Coupled biology and physics of the Strait of Georgia: Georgia Strait, BC, 1 day (<i>Canadian Coast Guard Hovercraft Siyay</i>). Chief Scientist: Dr. Randall Lee (University of British Columbia). |

Teaching and Mentoring

- 2013 to present Mentor to a student in the UCSD McNair Program for undergraduates considering research careers.
- 2014 Completed "The College Classroom" (UCSD), a course to prepare future faculty in using evidence-based teaching practices that support student learning.
- 2013 Course developer and instructor (SIO): "Matlab bootcamp", a week-long introductory class for incoming oceanography graduate students.
- 2009 Teaching assistant (SIO): "Satellite Remote Sensing". Professors: David Sandwell and Helen Fricker.

Professional Activities

Reviewer for *Journal of Climate*, *Journal of Physical Oceanography*, *Journal of Geophysical Research*, *Geophysical Research Letters*, *Journal of Oceanography*, and *Dynamics of Atmospheres and Oceans*, as well as for NSF.

Panel reviewer for NASA.

Member of organizing committee for the International Meeting of Students in Physical Oceanography, 2008.

Conference and Workshop Participation

Earth Observation for Ocean-Atmosphere Interactions Science 2014 meeting. Frascati, Italy. Oral presentation.

2014 Ocean Sciences Meeting. Honolulu, HI. Poster presentation.

Eastern Indian Ocean Upwelling Initiative workshop 2013. Yokohama, Japan.

EGU General Assembly 2012. Toulouse, France. Oral presentation.

Workshop Ateliers de Modélisation de l'Atmosphère 2012. Toulouse, France. Oral presentation.

2011 World Climate Research Programme Open Science Conference. Denver, CO. Poster presentation.

2010 American Geophysical Union Fall Meeting. San Francisco, CA. Oral presentation.

International Meeting of Students in Physical Oceanography 2010. Seattle, WA. Oral presentation.

2010 Ocean Sciences Meeting. Portland, OR. Oral presentation.

2010 Australian Meteorological and Oceanographic Society Conference. Canberra, Australia. Oral presentation.

2009 Alpine Summer School on Monsoon Systems, Valsavarenche, Italy.

2008 American Geophysical Union Fall Meeting. San Francisco, CA. Poster presentation.

International Meeting of Students in Physical Oceanography 2008. La Jolla, CA. Oral presentation.

2008 Ocean Sciences Meeting. Orlando, FL. Oral presentation.