

## BIOGRAPHICAL SKETCH – SULAGNA RAY

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Postdoctoral Research Associate  
Department of Marine Sciences  
University of Connecticut

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### PROPOSAL ROLE

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Sulagna Ray is a postdoctoral research associate at the University of Connecticut (UConn), and co-PI for this project. Her research focuses on using idealized and realistic physical simulations of the global ocean to understand processes that drives coastal variability and its effect on continental landmass. She is part of the Coastal Biogeochemical Dynamics Laboratory at the University of Connecticut. Processes of interest include understanding mechanisms driving the coastal variability and its connections to the equatorial waters.

### PROFESSIONAL PREPARATION:

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University of Calcutta	M.S., Applied Mathematics	2003
Texas A&M University	Ph.D., Oceanography	2011
LOCEAN/IPSL	Postdoctoral Research Associate	2013
GFDL/NOAA	Associate Research Scholar	2017

### APPOINTMENTS:

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2018-present	Postdoctoral Res. Associate, Dept. of Marine Sciences, University of Connecticut
2015-2017	Associate Research Scholar, GFDL, Princeton University
2012-2013	Postdoctoral Res. Associate, LOCEAN/IPSL
2007-2011	Graduate Assistant Research, Texas A&M University

### PUBLICATIONS MOST RELEVANT TO PROPOSAL

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1. **Ray, S.**, A.T. Wittenberg, S. M. Griffies, and F. Zeng: Understanding equatorial Pacific cold tongue heat budget, Part I: Diagnostic framework. *J. Climate*. 31 (24), 9965-9985
2. **Ray, S.**, A.T. Wittenberg, S. M. Griffies, and F. Zeng: Understanding equatorial Pacific cold tongue heat budget, Part II: Evaluation of the GFDL-FLOR coupled GCM. *J. Climate*. 31 (24), 9987-10011
3. Wittenberg, A. T., G. A. Vecchi, T. L. Delworth, A. Rosati, W. G. Anderson, W. F. Cooke, S. Underwood, F. Zeng, S. M. Griffies, and **S. Ray**: Improved simulations of tropical Pacific annual-mean climate in the GFDL FLOR and HiFLOR coupled GCMs. *J. Advances in Modeling Earth Systems*. <https://doi.org/10.1029/2018MS001372>
4. Douglas, D. H., R.S. Knox, S. Curtis, B. S. Giese, and **S. Ray**, 2017: Historical Phase locked El Niño episodes. *Atmospheric and Climate Sciences*, 7, 48-64
5. **Ray, S.**, D. Swingedouw, J. Mignot, E. Guilyardi, 2015: Effect of surface restoring on subsurface variability in a climate model during 1949-2005. *Climate Dynamics*. 44: 2333-2349. DOI 10.1007/s00382-014-2358-3
6. **Ray, S.**, and B. Giese, 2012: Historical changes in El Niño and La Niña characteristics in an ocean reanalysis. *J. Geophys. Res.*, 117, C11007, doi:10.1029/2012JC008031.
7. Giese, B., and **S. Ray**, 2011: El Niño variability in simple ocean data assimilation (SODA), 1871-2008. *J. Geophys. Res.*, 116, C02024, doi:10.1029/2010JC006695