

SARAH T. GILLE - BIOGRAPHICAL SKETCH

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A. PROFESSIONAL PREPARATION:

Yale University, New Haven, CT	Physics, (<i>summa cum laude</i>)	B.S., 1988
M.I.T./WHOI Joint Program	Physical Oceanography	Ph.D., 1995
Postdoc at Scripps	Physical Oceanography	1995-1997
Postdoc at Univ. of E. Anglia, UK	Physical Oceanography	1997-1998

B. APPOINTMENTS:

2011-2012	Visting Scientist (Poste Route), Laboratoire d'Etudes en Géophysique et Océanographie Spatiale, Observatoire Midi-Pyrénées, Toulouse
2008-present	Professor and Research Oceanographer, Scripps Institution of Oceanography and Department of Mechanical and Aerospace Engineering, University of California San Diego.
2004-2008	Associate Professor and Associate Research Oceanographer, UCSD/SIO
2004-2005	Visiting Scientist (Poste Rouge), Centre National de la Recherche Scientifique, LODYC, Paris.
2000-2004	Assistant Professor and Assistant Research Oceanographer, UCSD/SIO
1998-2000	Assistant Professor, Earth System Science, University of California, Irvine.

C. PUBLICATIONS:

5 Related Publications

- Jiang, C., S. T. Gille, J. Sprintall, K. Yoshimura, and M. Kanamitsu (2012) Spatial variation in turbulent heat fluxes in Drake Passage, in press *J. Climate*, <http://dx.doi.org/10.1175/2011JCLI4071.1>.
- Griesel, A., S. T. Gille, J. Sprintall, J. L. McClean, J. H. LaCasce, and M. E. Maltrud (2010) Isopycnal diffusivities in the Antarctic Circumpolar Current inferred from Lagrangian floats in an eddying model, *J. Geophys. Res.*, **115**, C06006, <http://dx.doi.org/10.1029/2009JC005821>.
- Dong, S., S. T. Gille, J. Sprintall, and E. J. Fetzer (2010) Assessing the potential of the Atmospheric Infrared Sounder (AIRS) surface temperature and specific humidity in turbulent heat flux estimates in the Southern Ocean, *J. Geophys. Res.*, **115**, C05013, <http://dx.doi.org/10.1029/2009JC005542>.
- Gille, S. T. (2008) Decadal-scale temperature trends in the Southern Hemisphere ocean, *J. Clim.*, **21**(18), 4749-4765, <http://dx.doi.org/10.1175/2008JLCL1231.1>.
- Dong, S., J. Sprintall, S. T. Gille, and L. Talley (2008) Southern Ocean mixed-layer depth from Argo float profiles, *J. Geophys. Res.*, **113**, C06013, <http://dx.doi.org/10.1029/2006JC004051>.

5 Other Significant Publications

- Elipot, S. and S. T. Gille (2009) Estimates of wind energy input to the Ekman layer in the Southern Ocean from surface drifter data, *J. Geophys. Res.*, **114**, C06003, <http://dx.doi.org/10.1029/2008JC005170>.

- Dong, S., S. T. Gille, J. Sprintall (2007) An assessment of the Southern Ocean mixed-layer heat budget, *J. Clim.*, **20**, 4425-4442, <http://dx.doi.org/10.1175/JCLI4259.1>.
- Gille, S. T. (2003) Float Observations of the Southern Ocean: Part 1, Estimating mean fields, bottom velocities, and topographic steering, *J. Phys. Oceanogr.*, **33**, 1167-1181, [http://dx.doi.org/10.1175/1520-0485\(2003\)](http://dx.doi.org/10.1175/1520-0485(2003)).
- Gille, S. T. (2003) Float observations of the Southern Ocean: Part 2, Eddy Fluxes, *J. Phys. Oceanogr.*, **33**, 1182-1196, [http://dx.doi.org/10.1175/1520-0485\(2003\)](http://dx.doi.org/10.1175/1520-0485(2003)).
- Gille, S. T. (2002) Warming of the Southern Ocean since the 1950s, *Science*, **295**, 1275-1277, <http://dx.doi.org/10.1126/science.1065863>.

D. SYNERGISTIC ACTIVITIES:

Joint Scientific Committee of the World Climate Research Program: (2008-present).
US CLIVAR: Southern Ocean Working Group, 2002- 2005, Panel on Phenomenology, Observations and Synthesis, 2005-2010(co-chair: 2008-2010).
US CLIVAR Working Group on High Latitude Surface Fluxes: co-chair, 2008-2010.
NRC Studies. Committee on Earth Studies, Space Studies Board standing committee, 2000-2004, Climate Panel, Decadal Survey on Earth Science and Applications from Space, 2005-2007.
Teaching. Undergraduate: sustainability, environmental science. Graduate: data analysis.

E. COLLABORATORS AND CO-EDITORS:

Collaborators: Mark Bourassa (FSU), Harry Bryden (NOCS), Tim Duda (WHOI), Raffaele Ferrari (MIT), Eric Fetzer (JPL), P. C. Fiedler (NMFS), Chelle Gentemann (Remote Sensing Systems), James Girton (UW/APL), M. Hatta (U. Hawaii), P. Hyder (UK Met Office), Mark Inall (SAMS), D. L. Jackson (CIRES, Boulder), Brian King (NOCS), Joe LaCasce (U. Oslo), Peter Lazarevich (FSU), James Ledwell (WHOI), Mat Maltrud (LANL), John Marshall (MIT), Doug Martinson (Lamont), C. Measures (U. Hawaii), Mike Meredith (BAS), M. Monzano (CIBN, La Paz), Raghu Murtugudde (UMD), Alberto Naveira Garabato (NOC, Southampton), Breck Owens (WHOI), Luc Rainville (UW/APL), D. L. Roberts (NASA), Emily Shuckburgh (BAS), J. H. Simpson (Bangor), Walter Smith (NOAA), David Smeed (NOCS), Kevin Speer (FSU), Lou St. Laurent (FSU), John Toole (WHOI), Frederic Vivier (LOCEAN, Paris), Andy Watson (UEA), Gary Wick (NOAA), M. Zhou (UMass Boston).

Advisors: Dr. Kathryn A. Kelly (Ph.D. advisor, now at University of Washington, APL), Dr. Russ E. Davis (Postdoctoral advisor, UCSD), Dr. Karen J. Heywood (Postdoctoral advisor, UEA)

Students/recent postdocs: (Total = 11)

Shenfu Dong (postdoc: 2004-2007; now at AOML); Alexa Griesel (postdoc: 2005-2011; now at U. Hamburg); ChuanLi Jiang (postdoc: 2008-2011; now at Earth and Space Research); Kyla Drushka (PhD, 2011, now at LOCEAN, Paris); Shane Elipot (PhD, 2006, now at NOC Liverpool), Erik Tang (MS, 2010, now at Advanced Lab Group)

Gordon Stephenson (PhD student, 2006-present), Uriel Zajaczkovski (2009-present), Magdalena Carranza (2009-present), Marina Frants (PhD, 2011; postdoc, 2011-present), Nathalie Zilberman (2010-present)