# Fernando S. PAOLO

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# **EDUCATION**

Ph.D. Geophysics, **Scripps Oceanography**, University of California, San Diego (*Sep 2, 2015*) M.S. Geophysics (w/honors), University of São Paulo, Brazil 2009 B.S. Oceanography (w/honors), University of São Paulo, Brazil 2007

### INTERESTS

Satellite remote sensing, ice-ocean-atmosphere interaction, ice-shelf/ice-sheet mass balance, climate change | Radar and laser altimetry, radar interferometry and imagery | Processing and analysis of large-scale data sets, image processing, statistical modeling and time-series analysis

#### RESEARCH

	DOCTORAL DISSERTATION
2009-15	Interannual and decadal variations of Antarctic ice shelves using multi-mission
	satellite radar altimetry, and links with oceanic and atmospheric forcings.
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2007-08	MASTER'S THESIS
	Satellite altimetry and marine gravity on the integrated representation of the
	gravity field along the Brazilian coast.
2004-06	BACHELOR'S THESIS
	Characterization of bottom morphodynamics of Cananéia estuary by shallow
	seismic profiling and side-scan sonar.

# **SKILLS**

PROGRAMMING: Python, C/C++, Fortran 90/95, Shell-Script, HTML/CSS/JavaScript

SOFTWARE: UNIX/Mac/Linux, VTK/ParaView, GMT, Matlab, MPI, GIS, ET;X, git, VIM, etc.

LANGUAGES: English (fluent), Portuguese (native), Spanish (native)

# COMMUNICATION

Received training in Public Speaking & Leadership (at Toastmasters and UC San Diego) | Gave interviews (about my research) to Los Angeles Times, The Washington Post, Reuters, BBC News, The Wall Street Journal, among others | Wrote 6 papers, 3 articles and presented at 12 (inter)national conferences (3 awarded prizes) | Co-wrote lab grants and proposals | Reviewed papers for J. Glaciol. and The Cryosphere | Assisted in reviewing NASA and NSF proposals | Organized 2 institutional seminar series | Developed and maintain 3 websites: lab, conference and personal

# **TEACHING**

AUG-DEC 2008 Computing for Geophysicists, T.A. at University of São Paulo MAR-JUL 2008 Introduction to Geophysics, T.A. at University of São Paulo

# **AWARDS AND HONORS**

- 2014 AGU Outstanding Student Paper Award, Cryosphere
- 2012–14 NASA Earth and Space Science Fellowship (NESSF)
  - 2011 AAAS Student Award (1st place), Atmospheric and Oceanographic Sciences
  - 2010 AGU Outstanding Student Paper Award, Cryosphere
  - 2010 Honor Mention (best M.S. Thesis in geophysics), University of São Paulo
  - 2008 T.A. Fellowship (M.S.), Brazilian Ministry of Education
- 2007-08 Graduate Fellowship (M.S.), Brazilian Ministry of Science and Technology
  - 2007 Honor Mention (2nd best B.S. Thesis), University of São Paulo
- 2005-06 Undergrad. Fellowship, São Paulo Research Foundation
  - 2004 Undergrad. Fellowship, Brazilian Ministry of Science and Technology

# **PUBLICATIONS**

# Journal Articles

- 6. **F.S. Paolo**, H.A. Fricker, L. Padman, Developing optimal decadal records of Antarctic ice-shelf height change from multiple satellite radar altimeters, *Remote. Sens. Environ.* (in review).
- 5. P.R. Holland, A.Brisbourne, H.F.J. Corr, D. McGrath, K. Purdon, J. Paden, H.A. Fricker, **F.S. Paolo**, A. Fleming, Oceanic and atmospheric forcing of Larsen C Ice-Shelf thinning, *The Cryosphere* (2015).
- 4. **F.S. Paolo**, H.A. Fricker, L. Padman, Volume loss from Antarctic ice shelves is accelerating, *Science* (2015).
- 3. **F.S. Paolo**, E.C. Molina, Integrated marine gravity field along the Brazilian coast from altimeter-derived sea surface gradient and shipborne gravity, *J. Geodyn.* (2010).
- 2. M.C. Bícego, E. Zanardi-Lamardo, S. Taniguchi, C.C. Martins, D.A.M. da Silva, S.T. Sasaki, A.C.R. Albergaria-Barbosa, **F.S. Paolo**, R.R. Weber, R.C. Montone, Results from a 15-year study on hydrocarbon concentrations in water and sediment from Admiralty Bay, King George Island, Antarctica,

Antarct. Sci. (2009).

1. **F.S. Paolo**, M.M. Mahiques, Utilization of acoustic methods in coastal dynamics studies: example in the Cananéia lagoonal mouth,

Braz. J. Geophys. (2008).

#### Data Sets

1. Moholdt, G., H.A. Fricker, L. Padman and **F.S. Paolo** (2013), Synthesized grounding line and ice shelf mask for Antarctica. *Scripps Institution of Oceanography, UCSD*, 25 pp. doi.pangaea.de/10.1594/PANGAEA.819150

# **FIELDWORK**

- DEC 2004 RV *P.W. Besnard*, Geophysical and Geological Survey, Brazil coast (12 days at sea)

  IAN 2004 Brazilian Antarctic Research Station *Comandante Ferraz* (30 days in Antarctica)
- DEC 2003 RB Escuna, Environmental Monitoring Program, Bahia, Brazil (14 days at sea)
- JAN 2003 RV P.W. Besnard, Oceanographic Moorings II, Brazil coast (8 days at sea)
- JUL 2002 RV P.W. Besnard, Oceanographic Moorings I, Brazil coast (9 days at sea)

### REFERENCES

- Dr. Helen A. Fricker, Remote Sensisng and Glaciology, UC San Diego, hafricker@ucsd.edu
- Dr. Laurie Padman, Physical Oceanography, Earth & Space Research, padman@esr.org
- Dr. David T. Sandwell, Remote Sensing and Geodesy, UC San Diego, dsandwell@ucsd.edu