# Fernando S. PAOLO

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#### **EDUCATION**

Ph.D. Geophysics, **Scripps Institution of Oceanography**, Univ. of California, SD (*this 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 Tech. Graphic Arts, Muni. School of Tech. Education, Argentina 1996

#### **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, image processing, statistical modeling and time-series analysis.

## RESEARCH

	DOCTORAL DISSERTATION at UCSD Interannual and decadal variations of Antarctic ice shelves using multi-mission satellite radar altimetry, and links with oceanic and atmospheric forcings.
2007–2009	MASTER'S THESIS at USP Satellite altimetry and marine gravity on the integrated representation of the gravity field in the Brazilian coast.
2004-2006	BACHELOR'S THESIS at USP Characterization of bottom morphodynamics of Cananéia estuary by shallow seismic profiling and side-scan sonar.
2003-2004	UNDERGRADUATE RESEARCH at USP Study on hydrocarbon concentrations in water and sediment from King George Island, Antarctica (including fieldwork).

#### **FIELDWORK**

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

# **TEACHING**

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

## **AWARDS AND HONORS**

2014	AGU Outstanding Student Paper Award, Cryosphere
2012, 2013, 2014	NASA Earth and Space Science Fellowship (NESSF)
2011	AAASPD 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	TA Fellowship (M.S.), Brazilian Ministry of Education
2007, 2008	Graduate Fellowship (M.S.), Brazilian Ministry of Science and Technology
2007	Honor Mention (2 <sup>nd</sup> best B.S. Thesis), University of São Paulo
2005, 2006	Undergrad. Fellowship, São Paulo Research Foundation
2004	Undergrad. Fellowship, Brazilian Ministry of Science and Technology

#### **SKILLS**

PROGRAMMING: Python, C/C++, Fortran 90/95, Shell-Script, HTML/CSS/JavaScript
SOFTWARE: UNIX/Mac/LINUX, VTK/ParaView, GMT, MATLAB, GIS, ETFX, git, VIM, etc.

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

COMMUNICATION: Received training in Public Speaking & Leadership | Presented 6 talks and 5

posters at (inter)national meetings | Edited lab grants and proposals | Reviewer for *Journal of Glaciology* and *The Cryosphere Discussion* | Organized 2 institutional seminar series | Developed and maintain 3 websites: lab, confer-

ence and personal

#### **PUBLICATIONS**

# Journal Articles

- 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*, in press (2015).
- F. S. Paolo, H.A. Fricker, L. Padman, Volume loss from Antarctic ice shelves is accelerating, Science, in press (2015). doi:10.1126/science.aaa0940
- 3. **F. S. Paolo**, E. C. Molina, Integrated marine gravity field in the Brazilian coast from altimeter-derived sea surface gradient and shipborne gravity, *J. Geodyn.*, 50, 347-354 (2010). doi:10.1016/j.jog.2010.04.003
- 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.*, 21, 209-220 (2009). doi:10.1017/S0954102009001734
- 1. **F. S. Paolo**, M. M. Mahiques, Utilization of acoustic methods in coastal dynamics studies: example in the Cananéia lagoonal mouth, *Braz. J. Geophys.*, 26(2), 211-225 (2008). doi:10.1590/S0102-261X2008000200008

#### **Datasets**

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

# **INVITED TALKS**

14 Jun 2011 Elevation changes on Antarctic ice shelves, AAAS Pacific Division, 92<sup>nd</sup> Annual Meeting, San Diego.

# 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

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