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Ana Beatriz Villas Bôas

Education

2014—Present | PhD in physical oceanography, Scripps Institution of Oceanography.

2012–2014 | MSc. in physical oceanography, University of São Paulo.

2007–2011 | **BSc. in physics**, Federal University of Rio Grande do Norte.

Research Experience

2014-Present

Graduate Student Researcher - SIO

I look at how surface currents modulate the wave field at meso and submesoscales, and how non-breaking waves contribute to vertical mixing in the upper ocean. Advisors: **Sarah Gille**, Matthew Mazloff, and Bruce Cornuelle.

2012 - 2014

Graduate Student Researcher - IOUSP

Master student at the Oceanographic Institute of the University of São Paulo (IOUSP) working on air—sea interactions at mesoscales. Title of the project: "The contribution of mesoscale eddies to the surface heat budget in the South Atlantic", funded by the São Paulo Research Foundation - FAPESP

2013 | Visiting Research Student - LEGOS

Visiting research student at the Laboratoire d'Etudes en Géophysique et Océanographie Spatiales (LEGOS), Toulouse, France. Working on the identification of mesoscale eddies and eddy dynamics under the supervision of Dr. Alexis Chaigneau. This work was funded by the Research Internships Abroad (BEPE) program from the the São Paulo Research Foundation (FAPESP). Title of the project: "The methods of identifying mesoscale eddies from satellite altimetry data".

2011 | Undergraduate Research - UFRN

Undergraduate research project at the Federal University of Rio Grande do Norte (UFRN), working on the dynamics of well-mixed estuaries.

Publications

Ana B Villas Bôas, Sarah T Gille, Matthew R Mazloff, and Bruce D Cornuelle. Characterization of the surface wave variability in the California Current System. in prep for the Journal of Geophysical Research, 2017

Ana B Villas Bôas, Olga T Sato, Alexis Chaigneau, and Guilherme P Castelão. The signature of mesoscale eddies on the air-sea turbulent heat fluxes in the south atlantic ocean. *Geophysical Research Letters*, 42(6):1856–1862, 2015

Guilherme P Castelão, Luiz C Irber, and Ana B Villas Bôas. An objective reference system for studying rings in the ocean. Computers & Geosciences, 61:43-49, 2013

Workshops and Summer Schools

2016 Software Carpentry Workshop - Scripps Institution of Oceanography, San Diego, CA. 2016 WaveWatch III Summer School – The Institut Français de Recherche pour l'exploitation de la Mer (IFREMER), Brest, France. Instructors: Dr. Fabrice Ardhuin and Dr. Aron Roland. 2015 NASA's Earth Observations Summer School – Using Satellite Observations to Advance Climate Models, Keck Institute for Space Studies, Pasadena, CA.

Teaching Experience

Linear Algebra - Teaching assistant for linear algebra - Federal University of Rio Grande do Norte, Natal, Brazil.

Calculus II - Teaching assistant for calculus II - Federal University of Rio Grande do Norte, Natal, Brazil.

Computational skills

| OPERATING SYSTEMS | Unix-based operating systems, command—line, Bash, and Shell-Script. |
|--------------------------|--|
| Programming Languages | Python, C, Fortran, and MatLab. |
| Tools and Software | LaTeX, VIM, version control systems (Git, Mercurial), iPython notebooks, and Markdown. |

Languages

Portuguese: Native language English: Full proficiency

Spanish: Professional working proficiency French: Limited working proficiency

References

Dr. Sarah Gille:

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Dr. Bruce Cornuelle:

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