

Bruno Ferrero

Laboratory of Oceanography, Climate and Cryosphere - OC², University of São Paulo
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Education

- ongoing* **Ph.D. in Physical Oceanography**
Oceanographic Institute, University of São Paulo
Start date: March-2016
- 2017 **B.S. in Computer Science**
Institute of Mathematics and Statistics, University of São Paulo, Brazil
- 2009 **M.S. in Physical Oceanography**
Oceanographic Institute, University of São Paulo, Brazil
- 2007 **B.S. in Oceanography**
Oceanographic Institute, University of São Paulo, Brazil

Work Experience

- 2016–2017 **Research Assistant @ OC²/PETROBRAS, São Paulo**
Project: *Tracking of Eddies in Climate Change Projection Scenarios*
Activities: Eddy tracking algorithm implementation; Support to ocean dynamical downscaling;
[Data visualization](#);
- 2014–2015 **Project Scientist @ OC²/AGEDI, São Paulo/Abu Dhabi**
Project: *Regional Climate Change Modeling: Arabian Gulf*
Project: *Desalination & Climate Change: Arabian Gulf*
Activities: [Ocean model results validation](#); Statistical data analysis;
Data Visualization; Report, doi: [10.1007/978-3-030-11202-8_6](https://doi.org/10.1007/978-3-030-11202-8_6);
- 2011–2013 **Research Assistant @ OC²/PETROBRAS, São Paulo**
Project: *Climate Change Impacts in Offshore Operations at Campos Basin*
Activities: modeling support; Data analysis and visualization.
- 2010 **Quantitative Analyst @ Dunamis Equity Partners, São Paulo**
High frequency trading, backtest framework for quant strategies

Teaching Experience

- 2008, 2010 Differential and Integral Calculus I, *Teaching Assistant at Univ. of São Paulo Mar–Jul*
- 2009 Ocean System II, *Teaching Assistant at Univ. of São Paulo, Mar–Jul*

Additional Courses

- 2018 **CESM Tutorial**
National Center for Atmospheric Research Boulder/USA, one week duration, 2018
- 2018 **CLIVAR Summer School on Sea Level Changes**
FIO Qingdao/China, one week duration, 2018
- 2018 **UNESCO/IOC Training Course on Ocean Forecast System**
FIO Qingdao/China, one week duration, 2018

Skills

Programming

C/C++, MS-C#, R, Matlab, Shell Script (Bash), Git (see my [GitHub](#))

NetCDF/NCO/CDO, Ferret/NOAA, NCL

Python [Jupyter, NumPy, xarray, pandas, Matplotlib]

Languages

Portuguese (native), *English* (advanced), *German* (basic), *French* (basic)

Soft Skills

Logical thinking • flexibility • collaborative • commitment and responsibility

Publications

Journal articles

1. Tonelli M.; Marcello, F.; **Ferrero B.**; Wainer I., Warm Deep Water variability during the Last Millennium in the CESM–LME: pre-industrial scenario versus late 20th-century changes, *Geosciences* (2019), 9, 346. doi: [10.3390/geosciences9080346](https://doi.org/10.3390/geosciences9080346)

Conference Presentations

1. Ferrero et. al (2012), *Local to regional climate dynamics for the South Atlantic ocean in down-scaled projections PART II: IPCC-AR4 scenario analysis*, Planet Under Pressure 2012, London/UK
2. Ferrero et. al (2017), *Global and Regional Sea Level in CMIP5 Models: piControl and historical Scenario*, WCRP/IOC Sea Level Conference 2017, New York/USA