<div align="center">CURRICULUM VITAE</div>

Ricardo Marques Domingues

Currently works for the National Oceanic and Atmospheric Administration (NOAA) through the Cooperative Institute for Marine and Atmospheric Studies (CIMAS). Has a Bachelors degree in Oceanography from the Federal University of Bahia, Brazil, and a Master of Science degree in Meteorology and Physical Oceanography from the University of Miami, United States.
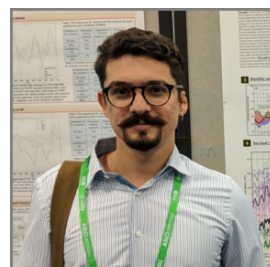
PERSONAL DETAILS

Address: 4301 Rickenbacker Causeway, Miami, FL 33149

Phone: +1 (305) 361-4505

Professional E-mail: ricardo.domingues@noaa.gov

Website: `http://www.aoml.noaa.gov/phod/people/domingues`

PROFESSIONAL EXPERIENCE

NOAA Atlantic Oceanographic Meteorological Laboratory *(2011 - Present)*
  CIMAS, University of Miami, Miami FL, USA

▷ **Title:** Senior Research Associate II

  Job Description: Provide science and technical support to studies and projects within the NOAA Atlantic Oceanographic Meteorological Laboratory with the focus of monitoring climate variability, improving extreme weather forecasts, and on understanding on the role that the oceans play on extreme weather events, climate, and ecosystems.

  Website: `http://www.aoml.noaa.gov/phod`

  Specific job duties:

  * Provide science and technical support to the observational efforts within NOAA to maintaining key components of the Global Ocean Observing System;

  * Maintain real-time data quality control and distribution;

  * Maintain real-time computation and distribution of ocean indices and indicators in support of extreme weather and ecosystems research;

  * Pilot Autonomous Underwater Vehicles (AUVs) under hurricane wind conditions to collect ocean data in support of hurricane studies and forecasts;

* Lead or collaborate with science publications aiming to help improve the skill of hurricane intensity forecasts;

* Lead or collaborate with the analysis and publication of science results on the role that the ocean plays on extreme weather events, climate and ecosystems;

* Maintain the Mandatory Ship Reporting System (MSR) in collaboration with National Marine Fisheries Service and the United States Coast Guard;

* Participate in oceanographic cruises in support of the Global Ocean Observing System;

Admiral Paulo Moreira Marine Research Institute - IEAPM   *(2010 - 2011)*
  Brazilian Navy, Arraial do Cabo RJ, Brazil

▷ **Title:** Oceanographer

 Job Description: Provide science and technical support to the Brazilian Ocean Modeling and Observation Network (REMO) towards the development of an oceanic forecast system for Brazil.

 Website: `https://www.marinha.mil.br/ieapm/`

 Specific job duties:

* Maintain real-time datasets and databases in support of operational applications;

* Lead or collaborate with implementation of operational numerical ocean models for the coast of Brazil;

* Analyze oceanographic data derived from satellites and from in situ instruments;

* Assisting scientists on the publication of peer-reviewed scientific papers;

* Participate in oceanographic cruises;

Federal University of Bahia - UFBA   *(2006 - 2010)*

▷ Intern *(December 2009 - May 2010)*
 Advisors: Dr. Mauro Cirano, Dr. Carlos Lentini, & Dr. Leandro Calado
 Research Group: The Brazilian Ocean Modeling and Observation Network - REMO

▷ Intern *(October 2008 - November 2009)*
 Advisor: Dr. Carlos Lentini

Research Group: Tropical Oceanography Research Group - GOAT

▷ Intern *(June 2006 - September 2008)*
  Advisor: Dr. Ruy Kikuchi
  Research Group: Coral Reefs and Global Changes Research Laboratory - RECOR/UFBA

PROFESSIONAL INTERESTS

◇ Carry out research and provide technical support to efforts aimed at monitoring climate variability, improving weather forecasts, and understanding on the role that the ocean plays on extreme weather events, ecosystems, and regional sea level changes.

FORMAL EDUCATION

2016:   MSc in Meteorology and Physical Oceanography,
       Rosenstiel School of Marine and Atmospheric Science
       University of Miami, United States of America

       Advisor: Dr. William Johns

2010:   BSc in Oceanography,
       Federal University of Bahia - UFBA, Brazil

COMPLEMENTARY EDUCATION AND TRAINING

2015:   Seagliders Underwater Gliders piloting training,
       NOAA-AOML (60 hours)

2011:   GEOSOFT Oasis Montaj (30 hours)

2009:   Amazônia Azul: A experiência embarcada,
       Federal University of Rio Grande (120 hours)

2007:   Continuing Education on Coastal Management,
       Federal University of Bahia, Brazil (34 hours)

2004:   Foreign Language: English
       Brazil-United States Cultural Association - ACBEU
       Salvador, BA, Brazil

AWARDS

- ✠ Special Recognition, NOAA-AOML, December 2018

- ✠ NOAA-AOML Andrew Award, March 2018

- ✠ Special Recognition, NOAA-AOML, December 2016

- ✠ Award of Academic Merit, University of Miami, December 2016

- ✠ NOAA Team Member of the Month, February 2015

- ✠ Special Recognition, NOAA-AOML, 2014

- ✠ Admiral Franco Award, Brazilian Navy, 2009

- ✠ Outstanding student research project - Earth Sciences, Federal University of Bahia, 2007

KNOWLEDGE

Languages: Portuguese (native language), English (fluent), and Spanish (understands)

Programming Languages: SHELL (advanced), Python (advanced), Matlab® (advanced), Fortran (advanced), and IDL (basic).

OS: LINUX/UNIX environment (advanced), Mac OS (advanced), Windows (advanced)

Oceanographic Equipment: Underwater Gliders (advanced), CTD (advanced), XBT (advanced), ADCP (advanced), and Argo (intermediate)

Numerical Ocean Models: Regional Ocean Modeling System (advanced), MERCATOR products (intermediate)

Software: SeaDAS (advanced), GMT (advanced), ArcGIS 9.x (intermediate), GEOSoft (intermediate), ENVI (intermediate)

Data Management: MySQL (advanced), PostgreSQL (advanced)

Web-Design: PHP (advanced), HTML (advanced)

Under review / In preparation

Domingues, R., Goni, G.J., Knaff, J.A., Lin, I.-I., and Bringas, F., The tropics-Tropical cyclone heat potential. In State of the Climate in 2019, *Under review at Bulletin of the American Meteorological Society*

Domingues, R., Le Henaff, M., Halliwell, G., Zhang, J., Bringas, F., Chardon, P., Kim, H-S, Morell, J., Goni, G., The Impact of the Ocean Conditions on the Intensification and Forecasts of three Major Atlantic Hurricanes from 2017, *Manuscript in preparation*.

Le Henaff et al., ... **Domingues, R.**, Hurricane Michael (2018): The role of the Gulf of Mexico ocean conditions on its intensification, *Manuscript in preparation*.

Germineaud, C., Goes, M., Lee, S-K, Volkov, D. L., **Domingues, R.**, Schmid, C., Baringer, M., Impacts of the East Atlantic pattern on the interannual sea level variability along the U.S. eastern seaboard, *Manuscript in preparation*.

Published / In Press

Goni, G., Sprintall, J., Bringas, F., Cheng, L., Cirano, M., Dong, S., **Domingues, R.**, Goes, M., ..., Volkov, D. (2019), More than 50 years of successful continuous temperature section measurements by the Global Expendable Bathythermograph Network, its integrability, societal benefits, and future , *Frontiers in Marine Science, 6, 452*

Domingues, R., Kuwano-Yoshida, A., Chardon-Maldonado, P., Todd, R. E., Halliwell, G., ..., Gustavo Goni (2019), Ocean Observations in Support of Studies and Forecasts of Tropical and Extratropical Cyclones, *Frontiers in Marine Science 6 (2019): 446*

Goni, G.J., **Domingues, R.** (2019), Upper-ocean conditions in the Gulf of Mexico during Hurricane Michael, In State of the Climate in 2018, J. Blunden, D.S. Arndt, and G. Hartfield (eds.). *Bulletin of the American Meteorological Society, 100(9), Si-S306*

Domingues, R., Goni, G.J., Knaff, J.A., Lin, I.-I., and Bringas, F. (2019), The tropics-Tropical cyclone heat potential. In State of the Climate in 2018, J. Blunden, D.S. Arndt, and G. Hartfield (eds.). *Bulletin of the American Meteorological Society, 100(9), Si-S306*

Volkov, D., Lee, S-K, **Domingues, R.**, Zhang, H., Goes, M. (2019), The North Atlantic sea surface height tripole: the ocean gyre-scale heat divergence and its impacts on sea level along the United States southeastern board, *Geophysical Research Letters 46 (13), 7481-7490*

Domingues, R., Johns, W. E., Meinen, C. (2019), Mechanisms of Eddy-Driven Variability of the Florida Current, *Journal of Physical Oceanography, 49(5), 1319-1338*

Smith, E. A., Sweet, W., Mitchell, M., **Domingues, R.**, Weaver, C. P., Baringer, M., Goni, G., Haines, J., Loftis, D., Boon, J., and Malmquist, D. (2019), Treading water: Tools to help US coastal communities plan for sea level rise impacts, *Frontiers in Marine Science, 6, 300*

Domingues, R., Goni, G., Baringer, M., and Volkov, D. (2018), What caused the accelerated sea level changes along the United States East Coast during 2010-2015?. *Geophysical Research Letters. 45(24):13,367-13,376 (doi:10.1029/2018GL081183).*

Goni, G.J., Knaff, J.A., Lin, I.-I., and **Domingues, R.**, (2018), The tropics-Tropical cyclone heat potential. In State of the Climate in 2017, J. Blunden, D.S. Arndt, and G. Hartfield (eds.). *Bulletin of the American Meteorological Society, 99(8):S129-S132 (doi:10.1175/2018BAMSStateoftheClimate.1)*

Goni, G.J., R.E. Todd, S.R. Jayne, G. Halliwell, S. Glenn, J. Dong, R. Curry, **R. Domingues**, F. Bringas, L. Centurioni, S.F. DiMarco, T. Miles, J. Morell, L. Pomales, H.-S. Kim, P.E. Robbins, G.G. Gawarkiewicz, J. Wilkin, J. Heiderich, B. Baltes, J.J. Cione, G. Seroka, K. Knee, and E.R. Sanabia, (2017). Autonomous and Lagrangian ocean observations for Atlantic tropical cyclone studies and forecasts. *Oceanography 30(2):92103, https://doi.org/10.5670/oceanog.2017.227..*

Dong, J., **R. Domingues**, G. Goni, G. Halliwell, S-K Lee, Y-H Sook, J. Morell, L. Pomales, F. Bringas (2017), Impact of underwater glider on Hurricane Gonzalo (2014) forecast. *Weather Forecast, 32(3), 1143-1159..*

Domingues, R., M. Baringer, G. Goni (2016), Remote sources for year-to-year changes in the seasonality of the Florida Current transport. *Journal of Geophysical Research - Oceans, doi:10.1002/2016JC012070.*

Domingues, R., G. Goni, F. Bringas, B. Muhling, D. Lindo, J. Walter (2016), Variability of preferred environmental conditions for Atlantic bluefin tuna (*Thunnus thynnus*) larvae in the Gulf of Mexico during 1993-2011. *Fisheries Oceanography, 25(3), 320-336.*

Domingues, R., G. Goni, F. Bringas, S.-K. Lee, H.-S. Kim, G. Halliwell, J. Dong, J. Morell, and L. Pomales (2015), Upper ocean response to Hurricane Gonzalo (2014): Salinity effects revealed by targeted and sustained underwater glider observations, *Geophys. Res. Lett., 42, doi:10.1002/2015GL065378.*

Domingues, R., G. Goni, S. Swart, and S. Dong (2014), Wind forced variability of the Antarctic Circumpolar Current south of Africa between 1993-2010, *J. Geophys. Res. Oceans, 119, doi:10.1002/2013JC008908.*

Codato, G., L. Calado, N. Martins, W. Watanabe, **R. Domingues** , and S. Jesus (2012), Acoustic prediction using a feature-oriented regional modeling system and acoustic inversion, *Proceedings of Meetings on Acoustics, Vol. 17, p. 070052.*

Oliveira, E., L. Calado, W. Watanabe, **R. Domingues** (2011), Detecção de Feições Oceanográficas a partir de Dados Orbitais: Validação de Modelos Numéricos, *A Ressurgência (ISSN:1982-2790), v. 5, p. 18-20.*

Calado, L., **R. Domingues** , W. Watanabe, G. Serrato, E. Oliveira, L. Nascimento (2012), Desenvolvimento da Técnica de previsão da Corrente do Brasil na região sudeste. *A Ressurgência (ISSN:1982-2790), v. 6, p. 40-45.*

OUTREACH PUBLICATIONS & CONTRIBUTIONS

(December 3, 2018) *The Christian Science Monitor*, Dissecting a hurricane: What makes a superstorm?

URL: https://www.csmonitor.com/Environment/2018/1203/Dissecting-a-hurricane-What-makes-a-superstorm

(August 27, 2012) *The New York Times*, Isaac Follows a Familiar Path, but With Less Intensity.

URL: http://www.nytimes.com/interactive/2012/08/28/us/isaac-follows-a-familiar-path-but-with-less-intensity.html

RESEARCH PROJECTS

2016 - Present: Fish Stock Assessment From Satellite Observations - Bluefin tuna Monitoring (NOAA-AOML, NOAA/SEFSC)

Goal: an ocean indicator, the BFT_Index, was implemented and is currently computed on a daily basis for the Gulf of Mexico during the spring months, which is the spawning season for Atlantic bluefin tuna in the Gulf of Mexico. Daily maps

of BFT_Index are distributed through the PhOD webpage in support of bluefin tuna stock assessment operations and management activities carried out by the NOAA Southeast Fisheries Science Center.

Website: `http://www.aoml.noaa.gov/phod/research/ecosystems/fisheries/bft_maps.php`

2014 - Present: The NOAA-AOML - CARICOOS Hurricane Underwater Gliders

Goal: help improve seasonal and intensity forecasts of Hurricanes though the collection of targeted ocean observations using underwater gliders under hurricane conditions in the Caribbean Sea and Tropical North Atlantic.

Website: `http://www.aoml.noaa.gov/phod/gliders`

2013 - Present: Mandatory Ship Reporting System 2.0 (NOAA-AOML)

Goal: implement and maintain the MSR 2.0, which is jointly operated by the United States Coast Guard and the National Marine Fisheries Service and is designed to aid in the reduction of ship collisions with North Atlantic right whales.

Websites: - `http://www.nmfs.noaa.gov/pr/shipstrike/msr.htm`

- `https://www.rightwhalesmsr.aoml.noaa.gov`

2011 - Present: The NOAA-AOML XBT Network

Goal: improve the current understanding on the dynamics of major ocean currents, on the upper-ocean heat content, and on the meridional overturning circulation by carrying out consistent observations along fixed transects across all ocean basins, where eXpendable BathyThermographs (XBTs) are used to collect temperature observations of the upper 1km of the ocean.

Website: `http://www.aoml.noaa.gov/phod/goos/xbt_network/`

2011 - Present: NOAA-AOML Long Term Time Series of Surface Currents and Ocean Indicators

Goal: satellite-based monitoring of the spatial and temporal variability of key surface currents.

Website: `http://www.aoml.noaa.gov/phod/altimetry/cvar/index.php`

2010 - 2011: Project DetecFeicoes (IEAPM)

Goal: implementation of a operational methodology for detecting and tracking mesoscale ocean features at the southeast coast of Brazil using satellite data.

2010 - 2011: Ocean Acustic Exploration (IEAPM)

Goal: enhance the international colaboration between Brasil, the European Union, and Canada in the field of ocean monitoring through acustic methods and marine technologies.

2009 - 2011: The Brazilian Ocean Modeling and Observation Network (UFBA/IEAPM)

Goal: implement an operational oceanic forecast system based on numerical models and satellite data.

Website: `http://www.rederemo.org/html/index.php/welcome`

2019 (oral presentation) - title: Identifying Favorable Ocean Conditions for Atlantic Hurricane Intensification: A New NOAA Synthesis Product; AGU Fall Meeting, December 7-11, 2019, San Francisco, CA.

2019 (Co-chair of Scientific Organizing Committee); The US CLIVAR Workshop Sea Level Hotspots from Florida to Maine: Drivers, Impacts and Adaptation, April 23-25, 2019, Norfolk, VA.

2018 (oral presentation) - title: Accelerated sea level changes along the United States East Coast during 2010-2015; AGU Fall Meeting, December 10-14, 2018, Washington D.C.

2018 (oral presentation on behalf of Gustavo Goni) - title: The distinctive upper ocean conditions as observed by satellite observations during the 2018 tropical Atlantic hurricane season; AGU Fall Meeting, December 10-14, 2018, Washington D.C.

2018 (poster presentation) - title: Sea level changes along the east coast of United States: links to the Florida Current transport and temperature; 2018 Ocean Sciences Meeting, February 11-16, 2018, Portland, United States.

2017 (oral presentation) - title: Evidence of coastal sea level changes along the east coast of United States associated with the Florida Current transport and heat content using satellite altimetry and hydrographic observations; 2017 Ocean Surface Topography Science Team Meeting, October 23-27, 2017, Miami, United States.

2017 (poster presentation) - title: Remote sources of Florida Current variability on seasonal time-scales: links with coastal sea-level variability along the east coast of United States; WCRP/IOC Sea Level Conference 2017, July 10-14, 2017, New York City, United States.

2017 (oral presentation) - title: Recent efforts from NOAA-AOML towards monitoring and improving the understanding of changes in the Florida Current: relationships with sea-level along the east U.S. coast; Workshop on Effects of Gulf Stream Variations on Sea Levels along the Eastern Coast, May 9, 2017, South Florida Water Managment Distric, West Palm Beach, United States.

2016 (oral presentation on behalf of Gustavo Goni) - title: NOAA-AOML - CARICOOS Hurricane Underwater Glider Operations; 32nd Session of the Data Buoy Cooperation Panel, 17-21 October 2016, La Jolla, United States.

2016 (oral presentations) - title: 1) NOAA-AOML - CARICOOS Hurricane Underwater Glider Operations; 2) Hurricane Gonzalo (2014): upper-ocean processes and hurricane intensity forecast using hurricane underwater gliders data; 7th EGO Conference on Autonomous Ocean Gliders and their Applications, September 26-29, 2016, Southampton, UK.

2016 (poster) - **R. Domingues**, G. Goni, et al. Upper ocean response to Hurricane Gonzalo (2014): Salinity effects revealed by targeted and sustained underwater glider observations. Ocean Sciences Meeting, February 20-26, 2016, New Orleans, USA.

2015 (oral presentation) - **R. Domingues**, G. Goni, Sustained and Targeted Ocean Observations for Improving Atlantic Tropical Cyclone Intensity and Hurricane Seasonal Forecasts. US CLIVAR Observing & Modeling Climate Variability in the Intra-Americas Seas & Impacts on the Continental Americas & the Caribbean, Virtual Workshop, September 9-11, 2015.

`https://usclivar.org/meetings/2015-iasclip-virtual-workshop`

2014 (oral presentation) - **R. Domingues**, G. Goni, F. Bringas, B. Muhling, D. Lindo, The variability of preferred spawning grounds for Bluefin tuna in the Gulf of Mexico during 1993-2011. NOAA AOML-SEFSC Workshop, May 29, 2014, Miami, USA.

2010 (oral presentation) - Watanabe, W., **R. Domingues**, L. Calado, L. Barreira, On the influence of the upwelling front on the acoustics propagation. Submarine Acoustics Technology Meeting (IX ETAS), Arraial do Cabo, Brazil

2010 (poster) - **Domingues, R.**, C. Lentini, J. Miranda, M. Cirano, and L. Calado, Investigating the Brazil Current meso-scale activity through the application of the Chaotic Theory. AGU, The Meeting of Sciences. Foz do Iguacu, Brazil

2009 (oral presentation) - **Domingues, R.**, C. Lentini, J. Miranda, An investigation about the Lagrangian and chaotic behavior of the Brazil Current near Cabo Frio using MODIS thermal images and complexes systems. Waves, Tides and Satellite Oceanography Symposium, Arraial do Cabo, Brazil

2009 (poster) - Lentini, C., J. Servain, M. Araujo, M. Silva, L. Nascimento, **R. Domingues**, and M. Cintra, How well work the Mercator products in the Southwestern Tropical Atlantic?; Project TRANSAT conference, Toulouse, France

2009 (poster) - Lisboa, D., C. Lentini, and **R. Domingues**, Generation of Hot Spots and Degree Heating Weeks maps to identify regions of coral bleaching in the Southwestern Tropical Atlantic; Brazilian Remote Sensing Symposium, Natal, Brazil

TECHNICAL WORK

February, 2011 - Development of "METEO processing" MATLAB® toolbox, designed to process meteorological data collected by Brazilian stations. **Client:** Federal University of Bahia

June, 2010 - Upgrade in the "ADCP ProcED" MATLAB® toolbox. **Client:** Federal University of Bahia

Reference: Genz, Fernando, Cirano, Mauro, and Lessa, Guilherme Camargo. (2010). ProcED: a MATLAB® package for processing ADCP estuarine data. Revista Brasileira de Geofsica, 28(2), 183-192.

Link to the package: `http://www.mcirano.ufba.br/ftp/pub/matlab/proced/`

January, 2010 - Development of the "ADCP Flowquest processing" MATLAB® toolbox, designed to process ADCP data. **Client:** Belov Engenharia Ltda

October, 2009 - Monitoring the Paraguacu River tidal cycle using ADCP and CTD measurements. **Client:** Federal University of Bahia

UNDERWATER GLIDER PILOTING EXPERIENCE

(July - November, 2019) Location: North Atlantic Ocean and Caribbean Sea; **Glider Mission:** The 2019 NOAA Hurricane Underwater Glider Operations; **Duration:** 642 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

(July - November, 2018) Location: North Atlantic Ocean and Caribbean Sea; **Glider Mission:** AOML's 8th Underwater Glider Mission; **Duration:** 403 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

(July - November, 2017) Location: North Atlantic Ocean and Caribbean Sea; **Glider Mission:** AOML's 7th Underwater Glider Mission; **Duration:** 306 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

(March, 2017) Location: Caribbean Sea; **Glider Mission:** AOML's 6th Underwater Glider Mission; **Duration:** 10 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

(July - November, 2016) Location: North Atlantic Ocean and Caribbean Sea; **Glider Mission:** AOML's 5th Underwater Glider Mission; **Duration:** 403 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

(March - June, 2016) Location: Caribbean Sea; **Glider Mission:** AOML's 4th Underwater Glider Mission; **Duration:** 94 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

(July - November, 2015) Location: North Atlantic Ocean and Caribbean Sea; **Glider Mission:** AOML's 3rd Underwater Glider Mission; **Duration:** 223 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

(February - April, 2015) Location: Caribbean Sea; **Glider Mission:** AOML's 2nd Underwater Glider Mission; **Duration:** 160 glider-days; **Institution:** National Oceanic and Atmospheric Administration; **Glider-type:** Seaglider

AT-SEA EXPERIENCE

June, 2017 - Location: North Atlantic Ocean from New York, USA, to San Juan, Puerto Rico; **Cruise Name:** June 2017 AX10 XBT transect; **Duration:** 5 days; **Institution:** National Oceanic and Atmospheric Administration

February, 2017 - Location: North Atlantic Ocean from Miami, USA, to Algeciras, Spain; **Cruise Name:** February 2017 AX07 XBT transect; **Duration:** 10 days; **Institution:** National Oceanic and Atmospheric Administration

January, 2016 - Location: North Atlantic Ocean from Miami, USA, to Valencia, Spain; **Cruise Name:** January 2016 AX07 XBT transect; **Duration:** 16 days; **Institution:** National Oceanic and Atmospheric Administration

November, 2015 - Location: Florida Straits; **Cruise Name:** Florida Current $27°$N Cruise **Duration:** 2 days; **Institution:** National Oceanic and Atmospheric Administration, **Vessel:** R/V Walton Smith

February, 2015 - Location: North Atlantic Ocean from Miami, USA, to Valencia, Spain; **Cruise Name:** February 2015 AX07 XBT transect; **Duration:** 13 days; **Institution:** National Oceanic and Atmospheric Administration

March, 2014 - Location: North Atlantic Ocean from Barcelona, Spain, to Fort Lauderdale, USA; **Cruise Name:** March 2014 AX07 XBT transect; **Duration:** 13 days; **Institution:** National Oceanic and Atmospheric Administration

August, 2013 - Location: North Atlantic Ocean from Barcelona, Spain, to Fort Lauderdale, USA; **Cruise Name:** August 2013 AX07 XBT transect; **Duration:** 13 days; **Institution:** National Oceanic and Atmospheric Administration

June, 2013 - Location: North Atlantic Ocean from Newark, USA, to San Juan, Puerto Rico; **Cruise Name:** June 2013 AX10 XBT transect; **Duration:** 5 days; **Institution:** National Oceanic and Atmospheric Administration

February, 2013 - Location: North Atlantic Ocean from Newark, USA, to San Juan, Puerto Rico; **Cruise Name:** February 2013 AX10 XBT transect; **Duration:** 5 days; **Institution:** National Oceanic and Atmospheric Administration

December, 2012 - Location: North Atlantic Ocean from Fort Lauderdale, USA, to Cagliari, Italy; **Cruise Name:** December 2012 AX07 XBT transect; **Duration:** 13 days; **Institution:** National Oceanic and Atmospheric Administration

July, 2012 - Location: North Atlantic Ocean from Fort Lauderdale, USA, to Cagliari, Italy; **Cruise Name:** July 2012 AX07 XBT transect; **Duration:** 13 days; **Institution:** National Oceanic and Atmospheric Administration

March, 2012 - Location: North Atlantic Ocean from Newark, USA, to San Juan, Puerto Rico; **Cruise Name:** March 2012 AX10 XBT transect; **Duration:** 5 days; **Institution:** National Oceanic and Atmospheric Administration

December, 2011 - Location: North Atlantic Ocean from Newark, USA, to San Juan, Puerto Rico; **Cruise Name:** December 2011 AX10 XBT transect; **Duration:** 5 days; **Institution:** National Oceanic and Atmospheric Administration

October, 2010 - Location: Rio de Janeiro; **Cruise Name:** Ocean Acoustics Exploration experiment; **Duration:** 4 days; **Institution:** Admiral Paulo Moreira Marine Research Institute, Brazilian Navy, **Vessel:** R/V Aspirante Moura

October, 2009 - Location: Paraguaçu estuary; **Description:** Hydrographic survey; **Duration:** 4 days; **Institution:** Federal University of Bahia

June, 2009 - **Location:** South Atlantic; **Cruise Name:** Amazonia Azul, leg 23; **Duration:** 5 days; **Institution:** Federal University of Rio Grande **Vessel:** R/V Atlantico Sul

2006 to 2008 - **Location:** Bahia, Brazil; **Description:** Scientific dives as part of the activies by the Coral Reef and Global Change Research Laboratory - RECOR; **Duration:** 300 hours; **Institution:** Federal University of Bahia.