



Alexandra Gronholz

Research fellow

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Education and training

2016

PhD

Investigating ocean processes by the use of a regional coupled ocean-atmosphere and a trajectory model - Magna cum laude

MARUM/University of Bremen and University of Waikato - Bremen - DE and Wellington - NZ

2011

M.Sc. Physical Oceanography

High Salinity Shelf Water (HSSW) formation due to ice production in the Terra Nova Bay Polynya Antarctica from 2000 to 2008 by the use of remote sensing measurements - 1.45

University of Hamburg - Hamburg - DE

2009

B.Sc. Environmental Science

Transport and variability of Southeast Pacific Deep Slope Water (SPDSW) with tracer observations - 1.56

Carl von Ossietzky University Oldenburg - Oldenburg - DE

Academic experience

2017 - 2018

Postdoctoral Research Associate

CIMAS/NOAA/AOML/University of Miami - Miami - US

climate modeling - mathematical modeling - multivariate statistics - time series analysis

2019 - 2020

Postdoctoral Researcher

Max-Planck-Institute for Meteorology - Hamburg - DE

Big data analysis - computational statistics - pattern recognition - time series analysis - data filtering and preprocessing

Language skills

English

Proficient

IELTS score 7.5 / C1

Research interests

Ocean and climate science, big data analysis and statistics, machine learning techniques, mathematical modelling, high-resolution model simulation, model setup and development

Editorial activity

Reviewer for Ocean Dynamics

Assignments abroad

03/2015 – 10/2015

Research stay at the National Institute of Water and Atmospheric Research (NIWA, Wellington, New Zealand)

08/2014

Research stay at the U.S. Geological Survey (USGS, Massachusetts, USA)

02/2008 – 04/2008

Polar expedition Antarctica ANT-XXIV/3, research vessel Polarstern, Cape Town (South Africa) - Punta Arenas (Chile)

Other professional activities

07/2019 – 12/2020

Received funding covering postdoctoral position. Funding enabled by the Cooperative Institute for Marine and Atmospheric Studies (CIMAS), Atlantic Oceanographic and Meteorological Laboratory (AOML), National Oceanic and Atmospheric Administration (NOAA) and University of Miami (UM), Miami, FL, USA.

01/2020 - 12/2020

Organization of ocean department group meetings at the Max-Planck-Institute for Meteorology, Hamburg, Germany

10/2019

CodingWaves Machine Learning Workshop, Fuerteventura, Spain

2017

Reintroduction and organization of the biweekly 'Science Discussion' meeting at PHOD/AOML/NOAA, Miami, USA

Since 2017

Member of the American Geophysical Union

01/2014

Workshop Parallel Programming with MPI and OpenMP (Bremen, Germany)

03/2009

Successful application for external funding covering the attendance at the International Climate Conference regarding the conclusion of the International Polar Year 2007/08 (Cité des Sciences et de l'Industrie, Paris, France)

Since 2007

Member of the German Society for Marine Research (DGM)