

Julius Busecke

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Education

Columbia University | NY | USA – PhD, expected 2017

Major: Physical Oceanography

Advisor: Prof. Dr. Arnold L. Gordon

Christians-Albrechts University/GEOMAR | Kiel | GER – BSc, 2010

Major: Physics of the earth system: Oceanography-Meteorology-Geophysics

Advisor: Prof. Dr. Arne Biastoch

Publications

In Press / Published

Busecke, J., R. P. Abernathey, A. L. Gordon (2017), Lateral Eddy Mixing in the subtropical salinity maxima of the global Ocean, **JPO**, doi: 10.1175/JPO-D-16-0215.1

Gordon, A. L., C. F. Giulivi, **J. Busecke**, and F. M. Bingham (2015), Differences among subtropical surface salinity patterns, **Oceanography**, doi:10.5670/oceanog.2015.02.

Gordon, A. L., B. A. Huber, and **J. Busecke** (2015), Bottom water export from the western Ross Sea, 2007 through 2010, **GRL**, doi:10.1002/2015GL064457.

Bingham, F. M., **J. Busecke**, A. L. Gordon, C. F. Giulivi, and Z. Li (2014), The North Atlantic subtropical surface salinity maximum as observed by Aquarius, **JGR: Oceans**, doi: 10.1002/2014JC009825.

Busecke, J., A. L. Gordon, Z. Li, F. M. Bingham, and J. Font (2014), Subtropical surface layer salinity budget and the role of mesoscale turbulence, **JGR: Oceans**, doi: 10.1002/2013JC009715.

Under Review

Li, Z., P. Klein, A. L. Gordon, F. M. Bingham, **J. Busecke**, P. Li, Meso/submesoscale Processes in the Subtropical North Atlantic Surface Salinity Maximum Region, **GRL**

In Preparation

Busecke, J., Temporal variability of mesoscale surface diffusivities in the global ocean, **Dissertation Chapter**

Public Appearances

AGU Fall Meeting | San Francisco | 2012 | *Bottom Water Export from the western Ross Sea*

NASA SPURS Webinar Series | 2013 | *Ocean Thinking: Changes in Latitude*

Ocean Science Meeting | Honolulu | 2014 | *Evidence for the origin of the subsurface salinity maximum in the subtropical North Atlantic (received OSPA award)*

EGU General Assembly | Vienna, Austria | 2014 | *The North Atlantic surface layer and the shallow overturning circulation*

ESA workshop - Ocean Salinity Science | Exeter, UK | 2014 | *Differences Between the Subtropical Surface Salinity Patterns*

AGU Fall Meeting | San Francisco | 2014 | *Export of salty surface water to depth in the North Atlantic*

Open Science Conference: Salinity and Freshwater Changes in the Ocean | Hamburg, Germany | 2015 | *Time variable eddy mixing in the North Atlantic*

Ocean Science Meeting | New Orleans | 2016 | *Eddy mixing in the subtropical surface salinity maximum regions*

AGU Fall Meeting | San Francisco | 2016 | *Time variable eddy mixing in the global Sea Surface Salinity maxima (received OSPA award)*

Teaching

Columbia University, Dept. of Earth & Environmental Sciences | New York | NY
Teaching Assistant: Earth Systems - Climate EESCV2100 - Fall 2013
Teaching Assistant: Intro to Physical Oceanography EESCW4925 - Fall 2012
Teaching Assistant: Earth Oceans and Atmospheres EESCW4930 - Spring 2012

Experience

GEOMAR, Department of theory and modeling | Kiel | GER - 2009-2010
Research assistant: Climate model data visualization

Fieldwork

Research cruise aboard B/O SARMIENTO DE GAMBOA - Mar/Apr 2013
Subtropical North Atlantic

Research cruise aboard R/V KNORR - Sep/Oct 2012
Subtropical North Atlantic

Research cruise aboard R/V NATHANIEL B. PALMER - Jan/Feb 2011
Ross Sea, Antarctica

Research cruise aboard R/V METEOR - Jan/Feb 2009
Eastern subtropical North Atlantic

Skills	Oceanographic boat work and sampling - advanced IT on Mac/UNIX systems - proficient programming in MATLAB - advanced programming in python - basic experience in model setup (MITgcm) - advanced skills in picture/video editing with Adobe IL/PS/PR/ID
Languages	German - native English - fluent Spanish - basic
Awards	Outstanding Student Paper Award - 2016 AGU Fall Meeting, San Francisco NASA Earth and Space Science Fellowship - 2014 Outstanding Student Paper Award - 2014 ASLO/AGU Ocean Science Meeting, Honolulu United States Antarctic Service Medal - 2012
Affiliations	Member of the American Geophysical Union - 2012-date Member of the European Geophysical Union - 2014-date
Service and Outreach	Organizer: LDEO Division of Ocean and Climate Physics Seminar - 2010-2011 Reviewer: Journal of Physical Oceanography - 2014- date Reviewer: NASA peer review panel