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Head Remote Sensing & Assimilation,

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### **Key aspects of activity**

Remote Sensing & Assimilation

### **Scientific path**

since April 2011 Director, Center for Earth System Research and Sustainability, KlimaCampus Hamburg, Universität Hamburg

since 2008 Fellow of Max-Planck-Society

since July 2003 Professor (C4), Institute of Oceanography, Universität Hamburg

2010 - 2011 Director, Center for Marine and Climate Research, KlimaCampus Hamburg, Universität Hamburg

2005 - 2011 Adjunct professor, Scripps Institution of Oceanography

2005 - 2011 Managing director, Institute of Oceanography, Universität Hamburg

2003 - 2005 Professor, Scripps Institution of Oceanography

April 2003 CIMAS Visiting Scientist, 'Rosenstiel School of Marine and Atmospheric Science'

July 2002 Visiting Scientist at MIT

July 2001 Visiting Scientist at Institute of Oceanography, Kiel

July 2000 Visiting Scientist at Oregon State University

1999 - 2003 Associate Professor, Scripps Institution of Oceanography

July 1998 Visiting Scientist at Woods Hole Oceanographic Institution

1997 - 2001 Principal research scientist, MIT

1995 - 1997 Research scientist, MIT

1993 - 1995 Research scientist, MIT (advisor: Prof. C. Wunsch)

1992 - 1993 Research scientist, Institute of Oceanography, Kiel

June 1992 PhD in Oceanography at the University of Kiel, Title: "On the mesoscale variability in the Atlantic Ocean" (advisor: Prof. J. Willebrand)

February 1987 Diploma in Oceanography at the University of Kiel, Title: "Seasonal Variation of the isopycnic potential vorticity in the warm water sphere of the North Atlantic" (advisor: Prof. J. D. Woods)

1983 - 1984 Graduate study at University of Hawaii, Honolulu, USA

1979 - 1992 Studies of physical Oceanography, Meteorology, Geophysics and Physics in Kiel (F.R.G.)

## **Publications**

2018

Stammer, D.; Cazenave, A. (Hg.). Satellite altimetry over oceans and land surfaces. Boca Raton, FL: Taylor & Francis, 2018.

Stammer, D.; Griffies, S. M. . "Ocean Modeling and Data Assimilation in the Context of Satellite Altimetry" . Satellite Altimetry Over Oceans and Land Surfaces. Hg. Stammer, D.; Cazenave, A. . Boca Raton, FL: Taylor & Francis, 2018, S. 547-580.

Sadikni, R.; Schade, N.H.; Andersson, A.; Jahnke-Bornemann, A.; Hinrichs, I.; Gates, L.; Tinz, B.; Stammer, D. "The KLIWAS North Sea Climatology. Part I: Processing of the Atmospheric Data" . *Journal of Atmospheric and Oceanic Technology* 35 (1). (2018): S. 111-126.doi: 10.1175/JTECH-D-17-0044.1

Sadikni, R.; Schade, N.H.; Jahnke-Bornemann, A.; Hinrichs, I.; Gates, L.; Tinz, B.; Stammer, D.. "The KLIWAS North Sea Climatology. Part II: Assessment against Global Reanalyses" . *Journal of Atmospheric and Oceanic Technology* 35 (1). (2018): S. 127-145.doi: 10.1175/JTECH-D-17-0045.1

Stammer, D.; Köhl, A.; Vlasenko, A.; Matei, I.; Lunkeit, F.; Schubert, S.. "A Pilot Climate Sensitivity Study using the CEN Coupled Adjoint Model (CESAM)" . *Journal of Climate* 31 (5). (2018): S. 2031-2056.doi: 10.1175/JCLI-D-17-0183.1

Köhler, J.; Serra, N.; Bryan, F.O.; Johnson, B.K.; Stammer, D.. "Mechanisms of Mixed-Layer Salinity Seasonal Variability in the Indian Ocean" . *Journal of Geophysical Research: Oceans* 123 (1). (2018): S. 466-496.doi: 10.1002/2017JC013640

Lyu, G.; Köhl, A.; Matei, I.; Stammer, D.. "Adjoint-Based Climate Model Tuning: Application to the Planet Simulator" . *Journal of Advances in Modeling Earth Systems* (2018): S. 1-45. Accepted manuscript online doi: 10.1002/2017MS001194

2017

Han, W.; Meehl, G.A.; Stammer, D.; Hu, A.; Hamlington, B.; Kenigson, J.; Palanisamy, H.; Thompson, P.. "Spatial Patterns of Sea Level Variability Associated with Natural Internal Climate Modes" . *Surveys in Geophysics* 38 (1). (2017): S. 217-250.doi: 10.1007/s10712-016-9386-y

Scharffenberg, M.G.; Köhl, A.; Stammer, D.. "Testing the Quality of Sea-Level Data Using the GECCO Adjoint Assimilation Approach" . *Surveys in Geophysics* 38 (1). (2017): S. 349-383.doi: 10.1007/s10712-016-9401-3

Stammer, D.; Bracco, A.; Detemmerman, V.. "Climate and ocean science builds for the future" . *Earth & Space Science News* 98. (2017) doi: 10.1029/2017EO073225

Hinrichs, I.; Gouretski, V.; Pätsch, J.; Emeis, K.; Stammer, D., "North Sea Biogeochemical Climatology" . 2017. doi: 10.1594/WDCC/NSBClim\_v1.1 Technical Report: North Sea Biogeochemical Climatology (Volltext)

Koldunov, N.V.; Köhl, A.; Serra, N.; Stammer, D.. "Sea ice assimilation into a coupled ocean-sea ice model using its adjoint" . *The Cryosphere* 11 (5). (2017): S. 2265-2281.doi: 10.5194/tc-11-2265-2017

Liu, X.; Koehl, A.; Stammer, D.. “Dynamical ocean response to projected changes of the global water cycle” . *Journal of Geophysical Research: Oceans* 122 (8). (2017): S. 6512–6532.doi: 10.1002/2017JC013061

Kröger, J.; Pohlmann, H.; Sienz, F.; Marotzke, J.; Baehr, J.; Köhl, A.; Modali, K.; Polkova, I.; Stammer, D.; Vamborg, F.S.E.; Müller, W.A.. “Full-field initialized decadal predictions with the MPI earth system model: an initial shock in the North Atlantic” . *Climate Dynamics* (2017): S. 1-16.doi: 10.1007/s00382-017-4030-1

Carson, M.; Köhl, A.; Stammer, D.; Meyssignac, B.; Church, J.; Schröter, J.; Wenzel, M.; Hamlington, B.. “Regional Sea Level Variability and Trends, 1960–2007: A Comparison of Sea Level Reconstructions and Ocean Syntheses” . *Journal of Geophysical Research: Oceans* 122 (1). (2017): S. 9068–9091.doi: 10.1002/2017JC012992

Hu, A.; Meehl, G.A.; Stammer, D.; Han, W.; Strand, W.G.. “Role of perturbing ocean initial condition in simulated regional sea level change” . *Water (Switzerland)* 9 (6), 401. (2017): S. 1-16.doi: 10.3390/w9060401

2016

Stammer, D.; Balmaseda, M.; Heimbach, P.; Köhl, A.; Weaver, A.. “Ocean Data Assimilation in Support of Climate Applications: Status and Perspectives” . *Annual Review of Marine Science* 8. (2016): S. 491-518.doi: 10.1146/annurev-marine-122414-034113

Carson, M.; Köhl, A.; Stammer, D.; Slangen, A.B.A.; Katsman, C.A.; van de Wal, R.S.W.; Church, J.; White, N.. “Coastal sea level changes, observed and projected during the 20th and 21st century” . *Climatic Change* 134 (1). (2016): S. 269-281.doi: 10.1007/s10584-015-1520-1

Vlasenko, A.V.; Köhl, A.; Stammer, D.. “The efficiency of geophysical adjoint codes generated by automatic differentiation tools” . *Computer Physics Communications* 199. (2016): S. 22-28.doi: 10.1016/j.cpc.2015.10.008

Durack, P.J.; Lee, T.; Vinogradova, N.T.; Stammer, D.. “Keeping the lights on for global ocean salinity observation” . *Nature Climate Change* 6. (2016): S. 228–231.doi: 10.1038/nclimate2946

Marini, C.; Polkova, I.; Köhl, A.; Stammer, D.. “A comparison of two ensemble generation methods using oceanic singular vectors and atmospheric lagged initialization for decadal climate prediction ” . *Monthly Weather Review* 144 (7). (2016): S. 2719-2738.doi: 10.1175/MWR-D-15-0350.1

Biri, S.; Serra, N.; Scharffenberg, M.G.; Stammer, D.. “Atlantic sea surface height and velocity spectra inferred from satellite altimetry and a hierarchy of numerical simulations” . *Journal of Geophysical Research: Oceans* 121 (6). (2016): S. 4157–4177.doi: 10.1002/2015JC011503

Marotzke, J.; Müller, W.A.; Vamborg, F.S.E.; Becker, P.; Cubasch, U.; Feldmann, H.; Kaspar, F.; Kottmeier, C.; Marini, C.; Polkova, I.; Prömmel, K.; Rust, H.W.; Stammer, D.; Ulbrich, U.; Kadow, C.; Köhl, A.; Kröger, J.; Kruschke, T.; Pinto, J.G.; Pohlmann, H.; Reyers, M.; Schröder, M.; Sienz, F.; Timmreck, C.; Ziese, M.. “MiKlip - a National Research Project on Decadal Climate Prediction” . *Bulletin of the American Meteorological Society* (2016) (in press)doi: 10.1175/BAMS-D-15-00184.1

Liu, X.; Köhl, A.; Stammer, D.; Masuda, S.; Ishikawa, Y.; Mochizuki, T.. “Impact of inconsistency between the climate model and its initial conditions on climate prediction” . *Climate Dynamics* (2016) doi: 10.1007/s00382-016-3194-4

Liu, C.; Köhl, A.; Liu, Z.; Wang, F.; Stammer, D.. “Deep-reaching thermocline mixing in the equatorial pacific cold tongue” . *Nature Communications* 7 (11576). (2016) doi: 10.1038/ncomms11576

2015

Polkova, I.; Köhl, A.; Stammer, D.. “Predictive Skill for Regional Interannual Steric Sea Level and Mechanisms for Predictability” . *Journal of Climate* 28. (2015): S. 7407–7419.doi: 10.1175/JCLI-D-14-00811.1

Martins, M. S.; Serra, N.; Stammer, D.. “Spatial and temporal scales of sea surface salinity variability in the Atlantic Ocean” . *Journal of Geophysical Research* 120 (6). (2015): S. 4306-4323.doi: 10.1002/2014JC010649

Martins, M. S.; Stammer, D.. “Pacific Ocean surface freshwater variability underneath the double ITCZ as seen by satellite sea surface salinity retrievals” . *Journal of Geophysical Research* 120 (8). (2015): S. 5870-5885.doi: 10.1002/2015JC010895

Carson, M.; Köhl, A.; Stammer, D.. “The Impact of Regional Multidecadal and Century-Scale Internal Climate Variability on Sea Level Trends in CMIP5 Models” . *Journal of Climate* 28 (2). (2015): S. 853-861.doi: 10.1175/JCLI-D-14-00359.1

Ablain, M.; Cazenave, A.; Larnicol, G.; Balmaseda, M.; Cipollini, P.; Faugre, Y.; Fernandes, M.J.; Henry, O.; Johannessen, J.A.; Knudsen, P.; Andersen, O.; Legeais, J.; Meyssignac, B.; Picot, N.; Roca, M.; Rudenko, S.; Scharffenberg, M.G.; Stammer, D.; Timms, G.; Benveniste, J. . “Improved sea level record over the satellite altimetry era (1993–2010) from the Climate Change Initiative project” . *Ocean Science* 11 (1). (2015): S. 67-82.doi: 10.5194/os-11-67-2015

Köhler, J.; Sena-Martins, M.; Serra, N.; Stammer, D.. “Quality assessment of spaceborne sea surface salinity observations over the northern North Atlantic” . *Journal of Geophysical Research: Oceans* 120 (1). (2015): S. 94–112.doi:10.1002/2014JC010067

Furue, R.; Jia, Y.; McCreary, J.P.; Schneider, N.; Richards, K.J.; Müller, P.; Cornuelle, B.D.; Martinez Avellaneda, N.; Stammer, D.; Liu, C.; Köhl, A. . "Impacts of regional mixing on the temperature structure of the equatorial Pacific Ocean. Part 1: Vertically uniform vertical diffusion" . *Ocean Modelling* 91. (2015): S. 91-111.doi: 10.1016/j.ocemod.2014.10.002

Karspeck, A.R.; Stammer, D.; Köhl, A.; Danabasoglu, G.; Balmaseda, M.; Smith, D.M.; Fujii, Y.; Zhang, S.; Giese, B.; Tsujino, H.; Rosati, A.. "Comparison of the Atlantic meridional overturning circulation between 1960 and 2007 in six ocean reanalysis products" . *Climate Dynamics* (2015): S. 1-26.doi: 10.1007/s00382-015-2787-7

Agarwal, N.; Jungclaus, J.H.; Köhl, A.; Mechoso, C.R.; Stammer, D.. "Additional contributions to CMIP5 regional sea level projections resulting from Greenland and Antarctic ice mass loss" . *Environmental Research Letters* 10 (7), 074008. (2015) doi: 10.1088/1748-9326/10/7/074008

Biri, S.; Scharffenberg, M. G.; Stammer, D.. "A probabilistic description of the mesoscale eddy field in the ocean" . *Journal of Geophysical Research: Oceans* 120 (7). (2015): S. 4778-4802.doi: 10.1002/2014JC010681

2014

Siegismund, F.; Köhl, A.; Stammer, D.. "Consistency of GOCE geoid information with in-situ ocean and atmospheric data, tested by ocean state estimation" . *Observation of the System Earth from Space - CHAMP, GRACE, GOCE and future missions*. Hg. Flechtner, F.; Sneeuw, N.; Schuh, W.-D.. Berlin, Heidelberg: Springer, 2014, S. 131-137.

Polkova, I.; Köhl, A.; Stammer, D.. "Impact of initialization procedures on the predictive skill of a coupled ocean-atmosphere model" . *Climate Dynamics* 42. (2014): S. 3151-3169.doi: 10.1007/s00382-013-1969-4

Slangen, A. B. A.; Carson, M.; Katsman, C. A.; van de Wal, R. S. W.; Köhl, A.; Stammer, D.. "Projecting twenty-first century regional sea-level changes" . *Climatic Change* 124. (2014): S. 317-332.doi: 10.1007/s10584-014-1080-9

Serra, N.; Martinez, N.; Stammer, D.. "Large-scale impact of Saharan dust on the North Atlantic Ocean circulation" . *Journal of Geophysical Research* 119. (2014): S. 704-730.doi: 10.1002/2013JC009274

Johannessen, J.A.; Raj, R. P.; Nilsen, J. E. O.; Pripp, T.; Knudsen, P.; Counillon, F.; Stammer, D.; Bertino, L.; Andersen, O. B.; Serra, N.; Koldunov, N.. "Toward improved estimation of the dynamic topography and ocean circulation in the high latitude and Arctic Ocean : the importance of GOCE" . *Surveys in Geophysics* 35. (2014): S. 661-679.doi: 10.1007/s10712-013-9270-y

Stammer, D.. "Ocean Modeling and Data Assimilation" . Encyclopedia of Remote Sensing. Hg. Njoku, E. G.. New York: Springer, 2014, S. 446-454. doi: 10.1007/978-0-387-36699-9\_119

Blessing, S.; Kaminski, T.; Lunkeit, F.; Matei, I.; Giering, R.; Köhl, A.; Scholze, M.; Herrmann, P.; Fraedrich, K.; Stammer, D.. "Testing variational estimation of process parameters and initial conditions of an earth system model" . Tellus A 66, 22606. (2014) doi: 10.3402/tellusa.v66.22606

Reverdin, G.; Morisset, S.; Boutin, J.; Martin, N.; Sena-Martins, M.; Gaillard, F.; Blouch, P.; Rolland, J.; Font, J.; Salvador, J.; Fernandez, P.; Stammer, D.. "Validation of salinity data obtained from surface drifters" . Journal of Atmospheric and Oceanic Technology 31. (2014): S. 967-983.doi: 10.1175/JTECH-D-13-00158.1

Gregory, J. M.; Church, J. A.; Clark, P. U.; Payne, A. J.; Merrifield, M. A.; Nerem, R. S.; Nunn, P. D., Pfeffer, W. T.; Stammer, D.. "Comment on " Expert assessment of sea-level rise by AD 2100 and AD 2300" , by Horton et al. (2014)" . Quaternary Science Reviews 97. (2014): S. 193-194.

Taguchi, E.; Zahel, W.; Stammer, D.. "Inferring deep ocean tidal energy dissipation from the global high-resolution data-assimilative HAMTIDE model" . Journal of Geophysical Research 119. (2014): S. 4573-4592.doi: 10.1002/2013JC009766

Köhl, A.; Stammer, D.; Sena-Martins, M.. "Impact of Assimilating Surface Salinity from SMOS on Ocean Circulation Estimates" . Journal of Geophysical Research 119. (2014): S. 5449-5465.doi: 10.1002/2014JC010040

Liu, C.; Köhl, A.; Stammer, D.. "Interpreting layer thickness advection in terms of eddy-topography interaction" . Ocean Modelling 81. (2014): S. 65-77.doi: 10.1016/j.ocemod.2014.07.001

Agarwal, N.; Köhl, A.; Mechoso, R.; Stammer, D.. "On the Early Response of the Climate System to a Meltwater Input from Greenland" . Journal of Climate 27. (2014): S. 8276-8296.doi: 10.1175/JCLI-D-13-00762.1

Stammer, D.; Ray, R. D.; Andersen, O. B.; Arbic, B. K.; Bosch, W.; Carrère, L.; Cheng, Y.; Chinn, D. S.; Dushaw, B. D.; Egbert, G. D.; Erofeeva, S. Y.; Fok, H. S.; Green, J. A. M.; Griffiths, S.; King, M. A.; Lapin, V.; Lemoine, F. G.; Luthcke, S. B.; Lyard, F.; Morison, J.; Müller, M.; Padman, L.; Richman, J. G.; Shriver, J. F.; Shum, C. K.; Taguchi, E.; Yi, Y.. "Accuracy assessment of global ocean tide models" . Reviews of Geophysics 52 (3). (2014): S. 243-282.doi: 10.1002/2014RG000450

Koldunov, N.; Serra, N.; Köhl, A.; Stammer, D.; Henry, O.; Cazenave, A.; Prandi, P.; Knudsen, P.; Andersen, O. B.; Gao, Y.; Johannessen, J.. "Multimodel Simulations of Arctic Ocean Sea

Surface Height Variability in the Period 1970-2009” . Journal of Geophysical Research: Oceans 119 (12). (2014): S. 8936-8954.doi:10.1002/2014JC010170

Gade, M.; Grobelny, T.A.; Stammer, D.. “Multi-polarization scatterometer measurements of long surface gravity wave breaking” . Geoscience and Remote Sensing Symposium (IGARSS), 2014 IEEE International (2014): S. 2665-2668. IGARRS 2014, 13-18 July 2014, Quebec City, Canada doi: 10.1109/IGARSS.2014.6947022

2013

Brath, M., Kern, S.; Stammer, D.. “Sea ice classification during freeze-up conditions with multifrequency scatterometer data” . Geoscience and Remote Sensing 51 (6). (2013): S. 3336-3353.doi: 10.1109/TGRS.2012.2222031

Church, J. A.; Clark, P. U.; Cazenave, A.; Gregory, J. M.; Jevrejeva, S.; Levermann, A.; Merrifield, M. A.; Milne, G. A.; Nerem, R. S.; Nunn, P. D.; Payne, A. J.; Pfeffer, W. T.; Stammer, D. Unnikrishnan, A. S.. “Sea-Level Rise by 2100” . Science 342. (2013): S. 1445.doi: 10.1126/science.342.6165.1445-a

Stammer, D.; Cazenave, A.; Ponte, R. M.; Tamisiea, M. E.. “Causes for Contemporary Regional Sea Level Changes” . Annual Review of Marine Science 5. (2013): S. 21-46.doi: 10.1146/annurev-marine-121211-172406

Koldunov, N. V.; Köhl, A.; Stammer, D.. “Properties of Adjoint Sea Ice Sensitivities to Atmospheric Forcing and Implications for the Causes of the Long Term Trend of Arctic Sea Ice” . Climate Dynamics 41 (2). (2013): S. 227-241.doi:10.1007/s00382-013-1816-7

Church, J.A.; Clark, P.U.; Cazenave, A.; Gregory, J.M.; Jevrejeva, S.; Levermann, A.; Merrifield, M.A.; Milne, G.A.; Nerem, R.S.; Nunn, P.D.; Payne, A.J.; Pfeffer, W.T.; Stammer, D.; Unnikrishnan, A.S.. “Sea level change” . Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Hg. Stocker, T.F.; Qin, D.; Plattner, G.-K.; Tignor, M.; Allen, S.K.; Boschung, J.; Nauels, A., Xia, Y.; Bex, V.; Midgley, P.M. (eds.). Cambridge, UK; New York, US: Cambridge University Press, 2013, S. 1137-1216. www.climatechange2013.org

2012

Lorbacher, K.; Marsland, S.J.; Church, J.A.; Griffies, S.M.; Stammer, D.. “Rapid barotropic sea level rise from ice sheet melting” . Journal of Geophysical Research 117. (2012): S. C06003.doi: 10.1029/2011JC007733

Köhl A., Siegmund, F.; Stammer, D. . “Impact of Assimilating Bottom Pressure Anomalies from GRACE on Ocean Circulation Estimates” . Journal of Geophysical Research 117 (C4). (2012) doi: 10.1029/2011JC007623



Liu C.; Köhl, A.; Stammer, D. . “Adjoint Based Estimation of Eddy Induced Tracer Mixing Parameters in the Global Ocean” . *Journal of Physical Oceanography* 42 (7). (2012): S. 1186-1206.doi: 10.1175/JPO-D-11-0162.1

Shen, W.; Gurgel, K.-W.; Voulgaris, G.; Schlick, T.; Stammer, D.. “Wind Speed Inversion from HF Radar first-order Backscatter Signal” . *Ocean Dynamics* 62 (1). (2012): S. 105-121.doi: 10.1007/s10236-011-0465-9

Wang. W.; Köhl, A., Stammer, D.. “The deep meridional overturning circulation in the Indian Ocean inferred from the GECCO synthesis” . *Dynamics of Atmospheres and Oceans* 58. (2012): S. 44-61.doi: 10.1016/j.dynatmoce.2012.08.001

von Storch, J.-S.; Eden, C.; Fast, I.; Haak, H., Hernandez-Deckers, D.; Maier-Reimer, E.; Marotzke, J.; Stammer, D. . “An estimate of Lorenz energy cycle for the world ocean based on the 1/10 STORM/NCEP simulation” . *Journal of Physical Oceanography* 2185-2205. (2012): S. 42 (12).doi: 10.1175/JPO-D-12-079.1

2011

Scharffenberg, M.; Stammer, D.. “Statistical parameters of the geostrophic ocean flow field estimated from the Jason-1–TOPEX/Poseidon tandem mission” . *Journal of Geophysical Research* 116 (C12). (2011): S. C12011.doi: 10.1029/2011JC007376

Siegismund, F.; Romanova, V.; Köhl, A.; Stammer, D.. “Ocean bottom pressure variations estimated from gravity, nonsteric sea surface height and hydrodynamic model simulations” . *Journal of Geophysical Research* 116 (C7). (2011): S. C07021.doi: 10.1029/2010JC006727

Mehta, V.; Meehl, G.; Goddard, L.; Knight, J.; Kumar, A.; Latif, M.; Lee, T.; Rosati, A.; Stammer, D.. “Decadal Climate Predictability and Prediction: Where Are We?” . *Bulletin of the American Meteorological Society* 92 (5). (2011): S. 637-640.doi: 10.1175/2010BAMS3025.1

Romanova, V.; Köhl, A.; Stammer, D.. “Seasonal Cycle of Near Surface Freshwater Budget in the Western Tropical Atlantic” . *Journal of Geophysical Research: Oceans* 116 (C7). (2011): S. C07009.doi:10.1029/2010JC006650

Stammer, D.; Agarwal, N.; Herrmann, P.; Köhl, A.; Mechoso, C. R.. “Response of a Coupled Ocean-Atmosphere Model to Greenland Ice Melting” . *Surveys in Geophysics* 32 (4-5). (2011): S. 621-642.doi:10.1007/s10712-011-9142-2

Zlotnicki, V.; Stammer, D.. “Applying Spaceborne Gravity Measurements to Ocean Studies” . *EOS, Transactions, American Geophysical Union* 92 (17). (2011): S. 145.doi: 10.1029/2011EO170007

Stammer, D.; Gregory, J.. "Understanding processes contributing to regional sea level change" . EOS, Transactions, American Geophysical Union 92 (39). (2011): S. 328.doi: 10.1029/2011EO390004

Scharffenberg, M. G.; Stammer, D.. "Statistical parameters of the geostrophic ocean flow field estimated from the Jason-1–TOPEX/Poseidon tandem mission" . Journal of Geophysical Research: Oceans 116 (C12). (2011): S. 1-14.doi: 10.1029/2011JC007376

2010

Balmaseda, M.; Alves, O.; Awaji, T.; Behringer, D.; Ferry, N.; Fujii, Y.; Lee, T.; Rienecker, M.; Rosati, T.; Stammer, D.; Smith, D.; Molteni, F. . "Initialization for Seasonal and Decadal Forecasts" . Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society. Hg. Hall, J.; Harrison D.E.; Stammer, D.. Vol. 2. Venice, Italy: ESA Publication, 2010, S. 21-25. doi: 10.5270/OceanObs09.cwp.02

Church, J. A.; Roemmich, D.; Domingues, C. M.; Willis, J. K.; White, N. J.; Gilson, J.; Stammer, D.; Köhl, A.; Chambers, D. P.; Landerer F.; Marotzke, J.; Gregory, J.; Suzuki, T.; Cazenave, A.; Le Traon, P.-Y.. "Ocean temperature and salinity contributions to global and regional sea-level change" . Understanding Sea-Level Rise and Variability. Hg. Church, J. A.; Woodworth, P. L.; Aarup, T.; Wilson, W. S.. Oxford, UK: Wiley-Blackwell, 2010, S. 143-176. doi: 10.1002/9781444323276.ch6

Stammer, D.; Köhl, A.; Awaji, T.; Balmaseda, M.; Behringer, D.; Carton, J.; Ferry, N.; Fischer, A.; Fukumori, I.; Giese, B.; Haines, K.; Harrison, E.; Heimbach, P.; Kamachi, M.; Keppenne, C.; Lee, T.; Masina, S.; Menemenlis, D.; Ponte, R.; Remy, E.; Rienecker, M.; Rosati, A.; Schroeter, J.; Smith, D.; Weaver, A.; Wunsch, C.; Xue, Y.. "Multi-Model Ensemble Ocean Synthesis in Support of Climate Diagnostics" . Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. WPP-306. Venice, Italy: ESA Publication, 2010

Stammer, D.. "Reply to comment by J.F.R. Gower on "Response of the global ocean to Greenland and Antarctic ice melting"" . Journal of Geophysical Research 115. (2010): S. C10010.doi: 10.1029/2010JC006457

Wilson, W.S.; Abdalati, W.; Alsdorf, D.; Benveniste, J.; Bonekamp, H.; Cogley, J.G.; Drinkwater, M.R.; Fu, L.-L.; Gross, R.; Haines, B.J.; Harrison, D.E.; Johnson, G.C.; Johnson, M.; LaBrecque, J.L.; Lindstrom, E.J.; Merrifield, M.A.; Miller, L.; Pavlis, E.C.; Piotrowicz, S.; Roemmich, D.; Stammer, D.; Thomas, R.H.; Thouvenot, E.; Woodworth, P.L.. "Observing Systems Needed to Address Sea-Level Rise and Variability" . Understanding Sea-Level Rise and Variability. Hg. Church, J. A.; Woodworth, P. L.; Aarup, T.; Wilson, W. S.. Oxford, UK: Wiley-Blackwell, 2010, S. 376-401. doi: 10.1002/9781444323276.ch12

Hall, J.; Harrison, D.E.; Stammer, D. (Hg.). Proceedings of the OceanObs'09": Sustained Ocean Observations and Information for Society. 2010. Conference, Venice, Italy, 2009.09.21-25doi: 10.5270/OceanObs09

Reinicker, M.; Awaji, T.; Balmaseda, M.; Behringer, D.; Bell, M.; Carton, J.; Breivik, L.; Dombrowsky, E.; Fairall, C.; Freeland, C.; Griffies, S.M.; Haines, K.; Harrison, D.E.; Heimbach, P.; Kamachi, M.; Kent, E.; Lee, T.; Le Traon, P.-Y.; McPhaden, M.; Martin, M.J.; Oke, P.; Palmer, M.D.; Remy, E.; Rosati, T.; Schiller, A.; Smith, D.M.; Snowden, D.; Stammer, D.; Trenberth, K.E.; Xue, Y. . "Synthesis and assimilation systems: essential adjuncts to the Global Ocean Observing System" . Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 1. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.pp.31

Balmaseda, M.; Alves, O.; Fujii, Y.; Lee, T.; Rienecker, M.; Rosati, T.; Stammer, D.; Xue, Y.; Freeland, H.; McPhaden, M.. "Role of the ocean observing system in an end-to-end seasonal forecasting system" . Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 1. Venice, Italy: ESA Publication, 2010

Trenberth, K.; Balmaseda, M.; Bindo, N.; Church, J.; Freeland, H.; Lagerloef, G.; Nerem, R.S.; Palmer, M.; Rintoul, S.; Roemmich, D.; Sabine, C.; Stammer, D.; Stott, P. .

"Intergovernmental Panel for Climate Change (IPCC) and attribution and prediction of climate" . Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 1. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.pp.39

Rintoul, S.R.; Balmaseda, M.; Cunningham, S.; Dushaw; Garzoli, S.; Gordon, A.; Heimbach, P.; Hood, M.; Johnson, G.; Latif, M.; Send, U.; Shum, C.; Speich, C.; Stammer, D. . "Deep circulation and meridional overturning: Recent progress and strategy for sustained observations" . Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 1. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.pp.32

Lee, T.; Stammer, D.; Awaji, T.; Balmaseda, M.; Behringer, D.; Carton, J.; Ferry, N.; Fischer, A.; Fukumori, I.; Giese, B.; Haines, K.; Harrison, E.; Heimbach, P.; Kamachi, M.; Keppenne, C.; Khl, A.; Masina, S.; Menemenlis, D.; Ponte, R.; Remy, E.; Rienecker, M.; Rosati; Schroeter, J.; Smith, D.; Weaver, A.; Wunsch, C.; Xue, Y. . "Ocean State Estimation for Climate Research " . Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 2. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.cwp.55

Lee, T.; Awaji, T.; Balmaseda, M.; Ferry, N.; Fujii, Y.; Fukumori, I.; Giese, B.; Heimbach, P.; Koehl, A.; Masina, S.; Remy, E.; Rosati, A.; Schodlok, M.P.; Stammer, D.; Weaver, A.T. .

"Consistency and fidelity of Indonesian-throughflow total volume transport estimated by

- 14 ocean data assimilation products” . *Dynamics of Atmospheres and Oceans* 50 (2). (2010): S. 201-223.doi: 10.1016/j.dynatmoce.2009.12.004
- Scharffenberg, M.G.; Stammer, D.. “Seasonal variations of the large-scale geostrophic flow field and eddy kinetic energy inferred from the TOPEX/Poseidon and Jason-1 tandem mission data” . *Journal of Geophysical Research* 115 (C2), C02008. (2010) doi: 10.1029/2008JC005242
- Stammer, D.; Köhl, A.; Romanova, V.; Siegismund, F.. “Comparison of GRACE and Model-Based Estimates of Bottom Pressure Variations Against In Situ Bottom Pressure Measurements” . *System Earth via Geodetic-Geophysical Space Techniques*. Hg. Flechtner, F.M.; Gruber, T.; Güntner, A.; Mandea, M.; Rothacher, M.; Schöne, T.; Wickert, J.. Berlin, Heidelberg: Springer, 2010, S. 297-309. doi: 10.1007/978-3-642-10228-8\_23
- Koldunov, N.V.; Stammer, D.; Marotzke, J.. “Present-Day Arctic Sea Ice Variability in the Coupled ECHAM5/MPI-OM Model” . *Journal of Climate* 23 (10). (2010): S. 2520–2543.doi: 10.1175/2009JCLI3065.1
- Douglass, E.; Roemmich, D.; Stammer, D.. “Interannual variability in North Pacific heat and freshwater budgets” . *Deep Sea Research Part II: Topical Studies in Oceanography* 57 (13-14). (2010): S. 1127–1140.doi: 10.1016/j.dsr2.2010.01.001
- Romanova, V.; Köhl, A.; Stammer, D.; Klepp, C.; Andersson, A.; Bakan, S.. “Sea surface freshwater flux estimates from GECCO, HOAPS and NCEP” . *Tellus A* 62 (4). (2010): S. 435-452.doi: 10.3402/tellusa.v62i4.15700
- Serra, N.; Käse, R. H.; Köhl, A.; Stammer, D.; Quadfasel, D.. “On the low-frequency phase relation between the Denmark Strait and the Faroe-Shetland Channel dense overflow” . *Tellus A* 62 (4). (2010): S. 530-550.doi:10.1111/j.1600-0870.2010.00445.x
- Wang, W.; Köhl, A.; Stammer, D.. “Global Ocean Volume Transport Estimation in the 50-year GECCO Assimilation” . *Geophysical Research Letters* 37 (15). (2010): S. L15601.doi:10.1029/2010GL043949
- Martinez, N.; Serra, N.; Stammer, D.; Minnett, P.. “Response of the eastern sub-tropical Atlantic SST to Saharan Dust: a modeling and observational study” . *Journal of Geophysical Research: Oceans* 115. (2010): S. C08015.doi:10.1029/2009JC005692
- Brath, M.; Scharffenberg, M.; Serra, N.; Stammer, D.. “Altimeter-based estimates of eddy variability and eddy transports in the Subpolar North Atlantic” . *Marine Geodesy* 33 (1). (2010): S. 472-503.doi:10.1080/01490419.2010.488921
- McGillicuddy, D.J.; deYoung, B.; Doney, S.C.; Glibert, P.M.; Stammer, D.; Werner, F.E.. “Models: Tools for Synthesis in International Oceanographic Research Programs” . *Oceanography* 23 (3). (2010): S. 126-139.doi: 10.5670/oceanog.2010.28

Bindoff, N.L.; Stammer, D.; Le Traon, P.Y.; Trenberth, K.; Mauritzen, C.; Church, J.A.; Smith, N.; Malone, T.; Suga, T.; Tintore, J.; Wilson, S.. "Capabilities of Global Ocean Programmes to Inform Climate Services" . *Procedia Environmental Sciences* 1. (2010): S. 342-353. World Climate Conference - 3doi: 10.1016/j.proenv.2010.09.022

Heimbach, P.; Forget, G.; Ponte, R.M.; Wunsch, C.; Balmaseda, M.; Awaji, T.; Baehr, J.; Behringer, D.; Carton, J.; Ferry, N.; Fischer, A.; Fukumori, I.; Giese, B.; Haines, K.; Harrison, E.; Hernandez, F.; Kamachi, M.; Keppenne, C.; Koehl, A.; Lee, T.; Menemenlis, D.; Oke, P.; Remy, E.; Rienecker, M.; Rosati, A.; Smith, D.; Speer, K.; Stammer, D.; Weaver, A.. "Observational Requirements for Global-Scale Ocean Climate Analysis: Lessons from Ocean State Estimation" . *Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society*. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 2. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.cwp.42

Scott, R.B.; Bourassa, M.; Chelton, D.; Cipollini, P.; Ferrari, R.; Fu, L.-L.; Galperin, B.; Gille, S.; Huang, H.-P.; Klein, P.; Maximenko, N.; Morrow, R.; Qiu, B.; Rodriguez, E.; Stammer, D.; Tailleux, R.; Wunsch, C.. "Satellite Altimetry and Key Observations: What We've Learned, and What's Possible with New Technologies" . *Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society*. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 2. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.cwp.76

Lagerloef, G.; Boutin, J.; Chao, Y.; Delcroix, T.; Font, J.; Niiler, P.; Reul, N.; Riser, S.J.; Schmitt, R.; Stammer, D.; Wentz, F.. "Resolving the Global Surface Salinity Field and Variations by Blending Satellite and In Situ Observations" . *Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society*. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 2. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.cwp.51

Shum, C.K.; Plag, H.-P.; Schroeter, J.; Zlotnicki, V.; Bender, P.; Braun, A.; Cazenave, A.; Chamber, D.; Duan, J.; Emery, W.; Fotopoulos, G.; Gouretski, V.; Gross, R.; Gruber, T.; Guo, J.; Han, G.; Hughes, C.; Ishii, M.; Jayne, S.; Johannessen, J.; Knudsen, P.; Kuo, C.; Leuliette, E.; Levitus, S.; Maximenko, N.; Miller, L.; Morison, J.; Rashid, H.; Ries, J.; Rothacher, M.; Rummel, R.; Shibuya, K.; Sideris, M.; Song, Y.T.; Stammer, D.; Thomas, M.; Willis, J.; Woodworth, P.. "Geodetic Observations of the Ocean Surface Topography, Geoid, Currents, and Changes in Ocean Mass and Volume" . *Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society*. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 2. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.cwp.80

Smith, S.R.; Bourassa, M.A.; Bradley, E.F.; Cosca, C.; Fairall, C.W.; Goni, G.J.; Gunn, J.T.; Hood, M.; Jackson, D.L.; Kent, E.C.; Lagerloef, G.; McGillivray, P.; Petit de la Villeon, L.; Pinker, R.T.; Schulz, E.; Sprintall, J.; Stammer, D.; Weill, A.; Wick, G.A.; Yelland, M.J.. "Automated Underway Oceanic and Atmospheric Measurements from Ships" . *Proceedings of the OceanObs'09: Sustained Ocean Observations and Information for Society*. Hg. Hall, J.; Harrison, D. E.; Stammer, D.. Vol. 2. Venice, Italy: ESA Publication, 2010 doi: 10.5270/OceanObs09.cwp.82

Wang, W.; Köhl, A.; Stammer, D.. “Estimates of global ocean volume transports during 1960 through 2001” . *Geophysical Research Letters* 37 (15). (2010) doi: 10.1029/2010GL043949

2009

Käse, R.; Serra, N.; Köhl, A.; Stammer, D.. “Mechanisms for the variability of dense water pathways in the Nordic Seas” . *Journal of Geophysical Research* 114. (2009): S. C01013.doi: 10.1029/2008JC004916

Pohlmann, H.; Jungclaus, J.H.; Köhl, A.; Stammer, D.; Marotzke, J.. “Initializing Decadal Climate Predictions with the GECCO Oceanic Synthesis: Effects on the North Atlantic” . *Journal of Climate* 22 (14). (2009): S. 3926–3938.doi: 10.1175/2009JCLI2535.1

Zedler, S.E.; Niiler, P.P.; Stammer, D.; Terrill, E.; Morzel, J.. “Ocean's response to Hurricane Frances and its implications for drag coefficient parameterization at high wind speeds” . *Journal of Geophysical Research* 114 (C4), C04016. (2009) doi: 10.1029/2008JC005205

Bosch, W.; Savcenko, R.; Flechtner, F.; Dahle, C.; Mayer-Gürr, T.; Stammer, D.; Taguchi, E.; Illk, K.-H.. “Residual ocean tide signals from satellite altimetry, GRACE gravity fields, and hydrodynamic modelling” . *Geophysical Journal International* 178 (3). (2009): S. 1185-1192.doi: 10.1111/j.1365-246X.2009.04281.x

Lee, T.; Awaji, T.; Balmaseda, M.A.; Greiner, E.; Stammer, D.. “Ocean State Estimation for Climate Research” . *Oceanography* 22 (3). (2009): S. 160-167.doi: 10.5670/oceanog.2009.74

Balmaseda, M.A.; Alves, O.J.; Arribas, A.; Awaji, T.; Behringer, D.W.; Ferry, N.; Fujii, Y.; Lee, T.; Rienecker, M.; Rosati, T.; Stammer, D.. “Ocean Initialization for Seasonal Forecasts” . *Oceanography* 22 (3). (2009): S. 154-159.doi: 10.5670/oceanog.2009.73

Spreen, G.; Kern, S.; Stammer, S.; Hansen, E.. “Fram Strait sea ice volume export estimated between 2003 and 2008 from satellite data” . *Geophysical Research Letters* 36 (19), L19502. (2009) doi: 10.1029/2009GL039591

Douglass, E.; Roemmich, D.; Stammer, D.. “Data Sensitivity of the ECCO State Estimate in a Regional Setting” . *Journal of Atmospheric and Oceanic Technology* 26 (11). (2009): S. 2420–2443.doi: 10.1175/2009JTECHO641.1

Kern, S.; Brath, M.; Fontes, R.; Gade, M.; Gurgel, K.-W.; Kaleschke, L.; Spreen, G.; Schulz, S.; Winderlich, A.; Stammer, D.. “Multi<sup>3</sup>Scat : a Helicopter-Based Scatterometer for Snow-Cover and Sea-Ice Investigations ” . *Geoscience and Remote Sensing Letters, IEEE* 6 (4). (2009): S. 703-707.doi: 10.1109/LGRS.2009.2023823

Meehk, G.A.; Goddard, L.; Murphy, J.; Stouffer, R.J.; Boer, G.; Danabasoglu, G.; Dixon, K.; Giorgetta, M.A.; Greene, A.M.; Hawkins, E.; Hegerl, G.; Karoly, D.; Keenlyside, N.; Kimoto, M.; Kirtman, B.; Navarra, A.; Pulwarty, R.; Smith, D.; Stammer, D.; Stockdale, T.. “Decadal Prediction: Can It Be Skillful?” . *Bulletin of the American Meteorological Society* 90 (10). (2009): S. 1467-1485.doi: 10.1175/2009BAMS2778.1

2008

Hoteit, I.; Cornuelle, B.; Thierry, V.; Stammer, D.. “Impact of Resolution and Optimized ECCO Forcing on Simulations of the Tropical Pacific” . *Journal of Atmospheric and Oceanic Technology* 25 (1). (2008): S. 131-147.doi: 10.1175/2007JTECHO528.1

Köhl, A.; Stammer, D.. “Decadal Sea Level Changes in the 50-Year GECCO Ocean Synthesis” . *Journal of Climate* 21. (2008): S. 1876-1890.doi: 10.1175/2007JCLI2081.1

Stammer, D.; Hüttemann, S.. “Response of Regional Sea Level to Atmospheric Pressure Loading in Climate Change Scenario” . *Journal of Climate* 21. (2008): S. 2093-2101.doi: 10.1175/2007JCLI1803.1

Stammer, D.. “Response of the global ocean to Greenland and Antarctic ice melting” . *Journal of Geophysical Research* 113 (C6). (2008): S. C06022.doi: 10.1029/2006JC004079

Stammer, D.; Park, S.; Köhl, A.; Lukas, R.; Santiago-Mandujano, F.. “Causes for Large-Scale Hydrographic Changes at the Hawaii Ocean Time Series Station” . *Journal of Physical Oceanography* 38. (2008): S. 1931-1948.doi: 10.1175/2008JPO3751.1

Köhl, A.; Stammer, D.. “Variability of the meridional overturning in the North Atlantic from the 50-year GECCO state estimation” . *Journal of Physical Oceanography* 38 (9). (2008): S. 1913-1930.doi: 10.1175/2008JPO3775.1

2007

Köhl, A.; Stammer, D.; Cornuelle, B.. “Interannual to Decadal Changes in the ECCO Global Synthesis” . *Journal of Physical Oceanography* 37. (2007): S. 313-337.doi: 10.1175/JPO3014.1

Vinogradova, N. T.; Ponte, R. M.; Stammer, D.. “Relation between sea level and bottom pressure and the vertical dependence of oceanic variability” . *Geophysical Research Letters* 34. (2007): S. L03608.doi: 10.1029/2006GL028588

Schott, F. A.; Wang, W.; Stammer, D.. “Variability of Pacific subtropical cells in the 50-year ECCO assimilation” . *Geophysical Research Letters* 34 (5). (2007): S. L05604.doi: 10.1029/2006GL028478

Bengtson, L.; Arkin, P.; Berrisford, P.; Bougeault, P.; Folland, C. K.; Gordon, C.; Haines, K.; Hodges, K. I.; Jones, P.; Kallberg, P.; Rayner, N.; Simmons, A. J.; Stammer, D.; Thorne, P. W.; Uppala, S.; Vose, R. S.. "The Need for a Dynamical Climate Reanalysis" . *Bulletin of the American Meteorological Society* 88. (2007): S. 495-501.doi: 10.1175/BAMS-88-4-495

Köhl, A.; Käse, R.; Stammer, D.; Serra, N.. "Causes of changes in the Denmark Strait Overflow" . *Journal of Physical Oceanography* 37. (2007): S. 1678-1696.doi: 10.1175/JPO3080.1

Ponte, R. M.; Wunsch, C.; Stammer, D.. "Spatial mapping of time-variable errors in Jason-1 and TOPEX/POSEIDON sea surface height measurements" . *Journal of Atmospheric and Oceanic Technology* 24. (2007): S. 1078-1085.doi: 10.1175/JTECH2029.1

Stammer, D.; Köhl, A.; Wunsch, C.. "Impact of accurate geoid fields on estimates of the ocean circulation" . *Journal of Atmospheric and Oceanic Technology* 24 (8). (2007): S. 1464-1478.doi: 10.1175/JTECH2044.1

Romeiser, R.; Runge, H.; Suchandt, S.; Sprenger, J.; Weilbeer, H.; Sohrmann, A.; Stammer, D.. "Current measurements in rivers by space-borne along-track InSAR" . *Geoscience and Remote Sensing, IEEE Transactions on* 45 (12). (2007): S. 4019-4031.doi: 10.1109/TGRS.2007.904837

2006

Stammer, D.; Wunsch, C.; Ueyoshi, K.. "Temporal Changes in Ocean Eddy Transports" . *Journal of Physical Oceanography* 36 (3). (2006): S. 543-550.doi: 10.1175/JPO2858.1

Douglass, E.; Roemmich, D.; Stammer, D.. "Interannual variability in northeast Pacific circulation" . *Journal of Geophysical Research* 111. (2006): S. C04001.doi: 10.1029/2005JC003015

Lermusiaux, P. F. J.; Malanotte-Rizzoli, P.; Stammer, D.; Carton, J.; Cummins, J.; Moore, A.. "Progress and Prospects of U.S. Data Assimilation in Ocean Research" . *Oceanography* 19. (2006): S. 172-183.doi: 10.5670/oceanog.2006.102

Spreen, G.; Kern, S.; Stammer, D.; Forsberg, R.; Haarpaintner, J.. "Satellite-based estimates of sea ice volume flux through Fram Strait" . *Annals of Glaciology* 44 (1). (2006): S. 321-328.doi: 10.3189/172756406781811385

Kern, S.; Chen, Y.; Stammer, D.; Spreen, G.. "The Sea-Ice Compactness in the Greenland and Barent Sea during 1979-2003: Changes and Links to the Surface Air Flow" . *Annals of Glaciology* 44 (1). (2006): S. 30-36.doi: 10.3189/172756406781811808

2005



Stammer, D.. "Adjusting internal model errors through ocean state estimation" . Journal of Physical Oceanography 35. (2005): S. 1143-1153.doi: 10.1175/JPO2733.1

Menemenlis, D.; Hill, C.; Adcroft, A.; Campin, J.; Cheng, B.; Ciotti, B.; Fukumori, I.; Heimbach, P.; Henze, C.; Köhl, A.; Lee, T.; Stammer, D.; Taft, J.; Zhang, J.. "NASA Supercomputer Improves Prospects for Ocean Climate Research" . EOS Transactions AGU 86. (2005): S. 95-96.doi: 10.1029/2005EO090002

Drinkwater, M.; Rebhan, H.; Le Troon, P. Y.; Phalippou, L.; Cotton, D.; Johannessen, J.; Ruffini, G.; Baharel, P.; Bell, M.; Chapron, B.; Pinardi, N.; Robinson, I.; Santoleri, L.; Stammer, D.. "The road map for a GMES operational oceanography mission" . ESA Bulletin 124. (2005): S. 42-48.pdf

Hoteit, I.; Cornuelle, B.; Köhl, A.; Stammer, D.. "Treating strong adjoint sensitivities in tropical eddy-permitting variational data assimilation" . Quarterly Journal Royal Meteorological Society 131 (613). (2005): S. 3659-3682.doi: 10.1256/qj.05.97

2004

Köhl, A.; Stammer, D.. "Optimal Observations for Variational Data Assimilation" . Journal of Physical Oceanography 34 (3). (2004): S. 529-542.doi: 10.1175/2513.1

Lu, Y.; Stammer, D.. "Vorticity Balance in Coarse-Resolution Global Ocean Simulations" . Journal of Physical Oceanography 34. (2004): S. 605-622.doi: 10.1175/2504.1

Stammer, D.; Ueyoshi, K.; Köhl, A.; Large, W. B.; Josey, S.; Wunsch, C.. "Estimating Air-Sea Fluxes of Heat, Freshwater and Momentum Through Global Ocean Data Assimilation" . Journal of Geophysical Research 109 (C5), C05023. (2004) doi: 10.1029/2003JC002082

Barnett, T.; Malone, R.; Pennell, W.; Stammer, D.; Semtner, B.; Washington, W.. "The effects of climate change on water resources in the west: Introduction and overview" . Climate Change 62. (2004): S. 1-11.doi: 10.1023/B:CLIM.0000013695.21726.b8

Dommenget, D.; Stammer, D.. "Assessing ENSO Simulations and Predictions Using Adjoint Ocean State Estimation" . Journal of Climate 17 (22). (2004): S. 4301-4315.doi: 10.1175/3211.1

Stammer, D.; Theiss, J.. "Velocity statistics inferred from the TOPEX/POSEIDON-JASON Tandem Mission Data" . Marine Geodesy 27 (3-4). (2004): S. 551-575.doi: 10.1080/01490410490902052

2003

Stammer, D.; Wunsch, C.; Giering, R.; Eckert, C.; Heimbach, P.; Marotzke, J.; Adcroft, A.; Hill, C. N.; Marshall, J.. "Volume, heat, and freshwater transports of the global ocean circulation

1993–2000, estimated from a general circulation model constrained by World Ocean Circulation Experiment (WOCE) data” . *Journal of Geophysical Research* 108 (C1), 3007. (2003) doi: 10.1029/2001JC001115

Stammer, D.; Wentz, F.; Gentemann, C.. “Validation of Microwave Sea Surface Temperature Measurements for Climate Purposes” . *Journal of Climate* 16 (1). (2003): S. 73-87.

Fu, L.-L.; Stammer, D.; Leben, R. R.; Chelton, D. B.. “Improving spatial resolution of ocean surface topography from the tandem TOPEX/Poseidon-Jason-1 Altimeter Mission.” . *EOS, Transactions, American Geophysical Union* 84 (26). (2003): S. 241-248.doi: 10.1029/2003EO260002

Biastoch, A.; Käse, R.; Stammer, D.. “The Sensitivity of the Greenland–Scotland Ridge Overflow to Forcing Changes” . *Journal of Physical Oceanography* 33 (11). (2003): S. 2307-2319.

Wunsch, C.; Stammer, D.. “Ocean circulation : Global Ocean Data Assimilation and Geoid Measurements” . *Space Science Reviews* 108 (1). (2003): S. 147-162.doi: 10.1023/A:1026298519493

Kumar, R.; Stammer, D.; Melville, W. K.; Janssen, P.. “Electromagnetic bias estimates based on TOPEX, buoy, and wave model data” . *Journal of Geophysical Research* 108 (C11), 3351. (2003) doi: 10.1029/2002JC001525