Detlef Stammer

List of Publications by Year in Descending Order

95 papers	5,597 citations	36 h-index	74 g-index
101 ext. papers	6,229 ext. citations	5.2 avg, IF	5.73 L-index

#	Paper	IF	Citations
95	Interannual Variability of the Congo River Plume-Induced Sea Surface Salinity. *Remote Sensing*, **2022**, 14, 1013	5	0
94	Century-scale variability of Arctic SSH and freshwater content in a past1000-yr model experiment. *Journal of Climate*, **2022**, 1-40	4.4	
93	Four Types of Baroclinic Instability Waves in the Global Oceans and the Implications for the Vertical Structure of Mesoscale Eddies. *Journal of Geophysical Research: Oceans*, **2021**, 126, e2020JC016966	3.3	1
92	Arctic ocean sea ice reanalysis for the period 2007–2016 using the adjoint method. *Quarterly Journal of the Royal Meteorological Society*, **2021**, 147, 1908-1929	6.4	1
91	Assessing the current and future Arctic Ocean observing system with observing system simulating experiments. *Quarterly Journal of the Royal Meteorological Society*, **2021**, 147, 2670-2690	6.4	1
90	Growth and Decay of Northwestern Tropical Atlantic Barrier Layers. *Journal of Geophysical Research: Oceans*, **2021**, 126, e2020JC016956	3.3	2
89	Ocean Salinity changes in the global ocean under global warming conditions Part 1: Mechanisms in a strong warming scenario. *Journal of Climate*, **2021**, 1-56	4.4	2
88	How well do we know ocean salinity and its changes?. *Progress in Oceanography*, **2021**, 190, 102478	3.8	5
87	What causes the spread of model projections of ocean dynamic sea-level change in response to greenhouse gas forcing?. *Climate Dynamics*, **2021**, 56, 155-187	4.2	7
86	Temporal Variations of the Marine Geoid. *Journal of Geophysical Research: Oceans*, **2020**, 125, e2020JC016433	3.3	1
85	Ocean Climate Observing Requirements in Support of Climate Research and Climate Information. *Frontiers in Marine Science*, **2019**, 6,	4.5	7
84	Satellite Salinity Observing System: Recent Discoveries and the Way Forward. *Frontiers in Marine Science*, **2019**, 6,	4.5	64
83	Concepts and Terminology for Sea Level: Mean, Variability and Change, Both Local and Global. *Surveys in Geophysics*, **2019**, 40, 1251-1289	7.6	135
82	Putting It All Together: Adding Value to the Global Ocean and Climate Observing Systems With Complete Self-Consistent Ocean State and Parameter Estimates. *Frontiers in Marine Science*, **2019**, 6,	4.5	16
81	Initialization and Ensemble Generation for Decadal Climate Predictions: A Comparison of Different Methods. *Journal of Advances in Modeling Earth Systems*, **2019**, 11, 149-172	7.1	15
80	Towards Comprehensive Observing and Modeling Systems for Monitoring and Predicting Regional to Coastal Sea Level. *Frontiers in Marine Science*, **2019**, 6,	4.5	29
79	Measuring Global Ocean Heat Content to Estimate the Earth Energy Imbalance. *Frontiers in Marine Science*, **2019**, 6,	4.5	69

78	Framework for High-End Estimates of Sea Level Rise for Stakeholder Applications. *Earth's Future*, **2019**, 7, 923-938	7.9	30
77	Climate-mode initialization for decadal climate predictions. *Climate Dynamics*, **2019**, 53, 7097-7111	4.2	4
76	Impacts of Basin-Scale Climate Modes on Coastal Sea Level: a Review. *Surveys in Geophysics*, **2019**, 40, 1493-1541	7.6	27
75	Time-Space Sampling-Related Uncertainties of Altimetric Global Mean Sea Level Estimates. *Journal of Geophysical Research: Oceans*, **2019**, 124, 7743-7755	3.3	1
74	Inferring Air-Sea Carbon Dioxide Transfer Velocities From Sea Surface Scatterometer Measurements. *Journal of Geophysical Research: Oceans*, **2019**, 124, 7974-7988	3.3	0
73	Adjoint-Based Climate Model Tuning: Application to the Planet Simulator. *Journal of Advances in Modeling Earth Systems*, **2018**, 10, 207-222	7.1	7
72	A Pilot Climate Sensitivity Study Using the CEN Coupled Adjoint Model (CESAM). *Journal of Climate*, **2018**, 31, 2031-2056	4.4	5
71	Mechanisms of Mixed-Layer Salinity Seasonal Variability in the Indian Ocean. *Journal of Geophysical Research: Oceans*, **2018**, 123, 466-496	3.3	15
70	Full-field initialized decadal predictions with the MPI earth system model: an initial shock in the North Atlantic. *Climate Dynamics*, **2018**, 51, 2593-2608	4.2	19
69	Science Directions in a Post COP21 World of Transient Climate Change: Enabling Regional to Local Predictions in Support of Reliable Climate Information. *Earth's Future*, **2018**, 6, 1498-1507	7.9	4
68	Comparison of the Atlantic meridional overturning circulation between 1960 and 2007 in six ocean reanalysis products. *Climate Dynamics*, **2017**, 49, 957-982	4.2	74
67	Regional Sea Level Variability and Trends, 1960–2007: A Comparison of Sea Level Reconstructions and Ocean Syntheses. *Journal of Geophysical Research: Oceans*, **2017**, 122, 9068-9091	3.3	10
66	Dynamical ocean response to projected changes of the global water cycle. *Journal of Geophysical Research: Oceans*, **2017**, 122, 6512-6532	3.3	3
65	Impact of in-consistency between the climate model and its initial conditions on climate prediction. *Climate Dynamics*, **2017**, 49, 1061-1075	4.2	6
64	Testing the Quality of Sea-Level Data Using the GECCO Adjoint Assimilation Approach. *Surveys in Geophysics*, **2017**, 38, 349-383	7.6	1
63	Sea ice assimilation into a coupled ocean–sea ice model using its adjoint. *Cryosphere*, **2017**, 11, 2265-2281	5.5	9
62	Ocean Data Assimilation in Support of Climate Applications: Status and Perspectives. *Annual Review of Marine Science*, **2016**, 8, 491-518	15.4	65
61	Coastal sea level changes, observed and projected during the 20th and 21st century. *Climatic Change*, **2016**, 134, 269-281	4.5	114

60	The Flux-Anomaly-Forced Model Intercomparison Project (FAFMIP) contribution to CMIP6: investigation of sea-level and ocean climate change in response to CO₂ forcing. *Geoscientific Model Development*, **2016**, 9, 3993-4017	6.3	76
59	A Comparison of Two Ensemble Generation Methods Using Oceanic Singular Vectors and Atmospheric Lagged Initialization for Decadal Climate Prediction. *Monthly Weather Review*, **2016**, 144, 2719-2738	2.4	6
58	Deep-reaching thermocline mixing in the equatorial pacific cold tongue. *Nature Communications*, **2016**, 7, 11576	17.4	23
57	MiKlip: A National Research Project on Decadal Climate Prediction. *Bulletin of the American Meteorological Society*, **2016**, 97, 2379-2394	6.1	60
56	Atlantic sea surface height and velocity spectra inferred from satellite altimetry and a hierarchy of numerical simulations. *Journal of Geophysical Research: Oceans*, **2016**, 121, 4157-4177	3.3	9
55	The Impact of Regional Multidecadal and Century-Scale Internal Climate Variability on Sea Level Trends in CMIP5 Models. *Journal of Climate*, **2015**, 28, 853-861	4.4	26
54	Predictive Skill for Regional Interannual Steric Sea Level and Mechanisms for Predictability*. *Journal of Climate*, **2015**, 28, 7407-7419	4.4	9
53	Spatial and temporal scales of sea surface salinity variability in the Atlantic Ocean. *Journal of Geophysical Research: Oceans*, **2015**, 120, 4306-4323	3.3	21
52	Improved sea level record over the satellite altimetry era (1993–2010) from the Climate Change Initiative project. *Ocean Science*, **2015**, 11, 67-82	4	162
51	Quality assessment of spaceborne sea surface salinity observations over the northern North Atlantic. *Journal of Geophysical Research: Oceans*, **2015**, 120, 94-112	3.3	25
50	Projecting twenty-first century regional sea-level changes. *Climatic Change*, **2014**, 124, 317-332	4.5	246
49	Impact of initialization procedures on the predictive skill of a coupled ocean–atmosphere model. *Climate Dynamics*, **2014**, 42, 3151-3169	4.2	21
48	Multimodel simulations of Arctic Ocean sea surface height variability in the period 1970–2009. *Journal of Geophysical Research: Oceans*, **2014**, 119, 8936-8954	3.3	20
47	Testing variational estimation of process parameters and initial conditions of an earth system model. *Tellus, Series A: Dynamic Meteorology and Oceanography*, **2014**, 66, 22606	2	10
46	Causes for contemporary regional sea level changes. *Annual Review of Marine Science*, **2013**, 5, 21-46	15.4	238
45	Wind-speed inversion from HF radar first-order backscatter signal. *Ocean Dynamics*, **2012**, 62, 105-121	2.3	34
44	Adjoint-Based Estimation of Eddy-Induced Tracer Mixing Parameters in the Global Ocean. *Journal of Physical Oceanography*, **2012**, 42, 1186-1206	2.4	40
43	Impact of assimilating bottom pressure anomalies from GRACE on ocean circulation estimates. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		22

42	Rapid barotropic sea level rise from ice sheet melting. *Journal of Geophysical Research*, **2012**, 117, n/a-n/a		47
41	An Estimate of the Lorenz Energy Cycle for the World Ocean Based on the STORM/NCEP Simulation. *Journal of Physical Oceanography*, **2012**, 42, 2185-2205	2.4	157
40	Statistical parameters of the geostrophic ocean flow field estimated from the Jason-1/TOPEX/Poseidon tandem mission. *Journal of Geophysical Research*, **2011**, 116,		5
39	. *Tellus, Series A: Dynamic Meteorology and Oceanography*, **2010**, 62, 530-550	2	55
38	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*, **2010**, 115,		49
37	Decadal Prediction. *Bulletin of the American Meteorological Society*, **2009**, 90, 1467-1486	6.1	552
36	Initializing Decadal Climate Predictions with the GECCO Oceanic Synthesis: Effects on the North Atlantic. *Journal of Climate*, **2009**, 22, 3926-3938	4.4	227
35	Multi^{3}Scat: A Helicopter-Based Scatterometer for Snow-Cover and Sea-Ice Investigations. *IEEE Geoscience and Remote Sensing Letters*, **2009**, 6, 703-707	4.1	4
34	Fram Strait sea ice volume export estimated between 2003 and 2008 from satellite data. *Geophysical Research Letters*, **2009**, 36,	4.9	75
33	Ocean State Estimation for Climate Research. *Oceanography*, **2009**, 22, 160-167	2.3	203
32	Response of the global ocean to Greenland and Antarctic ice melting. *Journal of Geophysical Research*, **2008**, 113,		98
31	Variability of the Meridional Overturning in the North Atlantic from the 50-Year GECCO State Estimation. *Journal of Physical Oceanography*, **2008**, 38, 1913-1930	2.4	127
30	Decadal Sea Level Changes in the 50-Year GECCO Ocean Synthesis. *Journal of Climate*, **2008**, 21, 1876-1890	4.4	98
29	Causes for Large-Scale Hydrographic Changes at the Hawaii Ocean Time Series Station. *Journal of Physical Oceanography*, **2008**, 38, 1931-1948	2.4	15
28	Impact of Accurate Geoid Fields on Estimates of the Ocean Circulation. *Journal of Atmospheric and Oceanic Technology*, **2007**, 24, 1464-1478	2	20
27	Satellite-based estimates of sea-ice volume flux through Fram Strait. *Annals of Glaciology*, **2006**, 44, 321-328	2.5	31
26	Interannual variability in northeast Pacific circulation. *Journal of Geophysical Research*, **2006**, 111,		25
25	NASA supercomputer improves prospects for ocean climate research. *Eos*, **2005**, 86, 89	1.5	97

24	Adjusting Internal Model Errors through Ocean State Estimation. *Journal of Physical Oceanography*, **2005**, 35, 1143-1153	2.4	28
23	Treating strong adjoint sensitivities in tropical eddy-permitting variational data assimilation. *Quarterly Journal of the Royal Meteorological Society*, **2005**, 131, 3659-3682	6.4	52
22	Estimating air-sea fluxes of heat, freshwater, and momentum through global ocean data assimilation. *Journal of Geophysical Research*, **2004**, 109,		135
21	Vorticity Balance in Coarse-Resolution Global Ocean Simulations. *Journal of Physical Oceanography*, **2004**, 34, 605-622	2.4	12
20	Assessing ENSO Simulations and Predictions Using Adjoint Ocean State Estimation. *Journal of Climate*, **2004**, 17, 4301-4315	4.4	12
19	Optimal Observations for Variational Data Assimilation. *Journal of Physical Oceanography*, **2004**, 34, 529-542	2.4	43
18	Improved spatial resolution of ocean surface topography from the T/P-Jason-1 altimeter mission. *Eos*, **2003**, 84, 241	1.5	12
17	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*, **2003**, 108, 7-1		120
16	Electromagnetic bias estimates based on TOPEX, buoy, and wave model data. *Journal of Geophysical Research*, **2003**, 108,		10
15	Uncertainties in altimetry-based velocity estimates. *Journal of Geophysical Research*, **2002**, 107, 39-1		26
14	State estimation improves prospects for ocean research. *Eos*, **2002**, 83, 289	1.5	72
13	Global ocean circulation during 1992–1997, estimated from ocean observations and a general circulation model. *Journal of Geophysical Research*, **2002**, 107, 1-1		261
12	Improving ocean angular momentum estimates using a model constrained by data. *Geophysical Research Letters*, **2001**, 28, 1775-1778	4.9	37
11	De-aliasing of global high frequency barotropic motions in altimeter observations. *Geophysical Research Letters*, **2000**, 27, 1175-1178	4.9	95
10	Global Characteristics of Ocean Variability Estimated from Regional TOPEX/POSEIDON Altimeter Measurements. *Journal of Physical Oceanography*, **1997**, 27, 1743-1769	2.4	468
9	Atmospheric loading and the oceanic "inverted barometer" effect. *Reviews of Geophysics*, **1997**, 35, 79-107	23.1	266
8	The determination of the large-scale circulation of the Pacific Ocean from satellite altimetry using model Green's functions. *Journal of Geophysical Research*, **1996**, 101, 18409-18432		18
7	How well does a 1/4° global circulation model simulate large-scale oceanic observations?. *Journal of Geophysical Research*, **1996**, 101, 25779-25811		160

6	Mesoscale Variability in the Atlantic Ocean from Geosat Altimetry and WOCE High-Resolution Numerical Modeling. *Journal of Physical Oceanography*, **1992**, 22, 732-752	2.4	66
5	Global current measurements in rivers by spaceborne along-track InSAR		3
4	Satellite-based Sea Surface Salinity designed for Ocean and Climate Studies. *Journal of Geophysical Research: Oceans*,e2021JC017676	3.3	5
3	Improved sea level record over the satellite altimetry era (1993–2010) from the Climate Change Initiative Project		6
2	Satellite-based Time-Series of Sea Surface Salinity designed for Ocean and Climate Studies		1
1	Sea level changes mechanisms in the MPI-ESM under FAFMIP forcing conditions. *Climate Dynamics*,1	4.2	1