Magdalena A Balmaseda

List of Publications by Year
in descending order

125 papers	35,654 citations	28274 55 h-index	16650 123 g-index
147 all docs	147 docs citations	147 times ranked	26382 citing authors

#	Article	IF	Citations
1	Seasonal forecast skill of upper-ocean heat content in coupled high-resolution systems. Climate Dynamics, 2022, 58, 3335-3350.	3.8	5
2	Variability of ENSO Forecast Skill in 2â€Year Global Reforecasts Over the 20th Century. Geophysical Research Letters, 2022, 49, .	4.0	11
3	Evaluating Twentyâ€Year Trends in Earth's Energy Flows From Observations and Reanalyses. Journal of Geophysical Research D: Atmospheres, 2022, 127, .	3.3	13
4	The representation of winter Northern Hemisphere atmospheric blocking in ECMWF seasonal prediction systems. Quarterly Journal of the Royal Meteorological Society, 2021, 147, 1344-1363.	2.7	16
5	Year-round impact of winter sea ice thickness observations on seasonal forecasts. Cryosphere, 2021, 15, 325-344.	3.9	10
6	Indian Ocean impact on ENSO evolution 2014â€“2016 in a set of seasonal forecasting experiments. Climate Dynamics, 2021, 56, 2631-2649.	3.8	9
7	Hemispheric Impact of North Atlantic SSTs in Subseasonal Forecasts. Geophysical Research Letters, 2021, 48, e2020GL0911446.	4.0	5
8	The 20th century global warming signature on the ocean at global and basin scales as depicted from historical reanalyses. International Journal of Climatology, 2021, 41, 5977-5997.	3.5	4
9	Tropical Pacific Airâ€Sea Interaction Processes and Biases in CESM2 and Their Relation to El NiÃ±o Development. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC016967.	2.6	4
10	Seasonal Forecasting Skill of Seaâ€Level Anomalies in a Multiâ€Model Prediction Framework. Journal of Geophysical Research: Oceans, 2021, 126, e2020JC017060.	2.6	17
11	Decadal climate variability in the tropical Pacific: Characteristics, causes, predictability, and prospects. Science, 2021, 374, eaay9165.	12.6	92
12	The relative roles of decadal climate variations and changes in the ocean observing system on seasonal prediction skill of tropical Pacific SST. Climate Dynamics, 2021, 56, 3045-3063.	3.8	6
13	The importance of North Atlantic Ocean transports for seasonal forecasts. Climate Dynamics, 2020, 55, 1995-2011.	3.8	15
14	Current and Emerging Developments in Subseasonal to Decadal Prediction. Bulletin of the American Meteorological Society, 2020, 101, E869-E896.	3.3	116
15	The Time-Scale-Dependent Response of the Wintertime North Atlantic to Increased Ocean Model Resolution in a Coupled Forecast Model. Journal of Climate, 2020, 33, 3663-3689.	3.2	15
16	Ocean Reanalyses: Recent Advances and Unsolved Challenges. Frontiers in Marine Science, 2019, 6, .	2.5	63
17	Global Perspectives on Observing Ocean Boundary Current Systems. Frontiers in Marine Science, 2019, 6, .	2.5	39
18	The ECMWF operational ensemble reanalysisâ€“analysis system for ocean and sea ice: a description of the system and assessment. Ocean Science, 2019, 15, 779-808.	3.4	330

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19	A Drift-Free Decadal Climate Prediction System for the Community Earth System Model. Journal of Climate, 2019, 32, 5967-5995.	3.2	11
20	Ocean Observations to Improve Our Understanding, Modeling, and Forecasting of Subseasonal-to-Seasonal Variability. Frontiers in Marine Science, 2019, 6, .	2.5	16
21	Evolution of Ocean Heat Content Related to ENSO. Journal of Climate, 2019, 32, 3529-3556.	3.2	53
22	Synthesis of Ocean Observations Using Data Assimilation for Operational, Real-Time and Reanalysis Systems: A More Complete Picture of the State of the Ocean. Frontiers in Marine Science, 2019, 6, .	2.5	60
23	SEAS5: the new ECMWF seasonal forecast system. Geoscientific Model Development, 2019, 12, 1087-1117.	3.6	331
24	Observing System Evaluation Based on Ocean Data Assimilation and Prediction Systems: On-Going Challenges and a Future Vision for Designing and Supporting Ocean Observational Networks. Frontiers in Marine Science, 2019, 6, .	2.5	61
25	Observational Needs for Improving Ocean and Coupled Reanalysis, S2S Prediction, and Decadal Prediction. Frontiers in Marine Science, 2019, 6, 391.	2.5	24
26	The added value of the multi-system spread information for ocean heat content and steric sea level investigations in the CMEMS GREP ensemble reanalysis product. Climate Dynamics, 2019, 53, 287-312.	3.8	43
27	Influence of Westerly Wind Events stochasticity on El NiÃ±o amplitude: the case of 2014 vs. 2015. Climate Dynamics, 2019, 52, 7435-7454.	3.8	35
28	Unprecedented 2015/2016 Indoâ€Pacific Heat Transfer Speeds Up Tropical Pacific Heat Recharge. Geophysical Research Letters, 2018, 45, 3274-3284.	4.0	43
29	Thin Arctic sea ice in L-band observations and an ocean reanalysis. Cryosphere, 2018, 12, 2051-2072.	3.9	17
30	Ocean heat content variability in an ensemble of twentieth century ocean reanalyses. Climate Dynamics, 2018, 50, 3783-3798.	3.8	24
31	Predicting Sudden Stratospheric Warming 2018 and Its Climate Impacts With a Multimodel Ensemble. Geophysical Research Letters, 2018, 45, 13,538.	4.0	95
32	CERAâ€20C: A Coupled Reanalysis of the Twentieth Century. Journal of Advances in Modeling Earth Systems, 2018, 10, 1172-1195.	3.8	212
33	Predicting El NiÃ±o in 2014 and 2015. Scientific Reports, 2018, 8, 10733.	3.3	17
34	Steric sea level variability (1993â€“2010) in an ensemble of ocean reanalyses and objective analyses. Climate Dynamics, 2017, 49, 709-729.	3.8	48
35	Intercomparison and validation of the mixed layer depth fields of global ocean syntheses. Climate Dynamics, 2017, 49, 753-773.	3.8	52
36	Interannual-decadal variability of wintertime mixed layer depths in the North Pacific detected by an ensemble of ocean syntheses. Climate Dynamics, 2017, 49, 891-907.	3.8	16

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37	Arctic sea ice in the global eddy-permitting ocean reanalysis ORAP5. Climate Dynamics, 2017, 49, 775-789.	3.8	24
38	Comparison of the Atlantic meridional overturning circulation between 1960 and 2007 in six ocean reanalysis products. Climate Dynamics, 2017, 49, 957-982.	3.8	89
39	Ocean heat content variability and change in an ensemble of ocean reanalyses. Climate Dynamics, 2017, 49, 909-930.	3.8	88
40	An assessment of airâ€“sea heat fluxes from ocean and coupled reanalyses. Climate Dynamics, 2017, 49, 983-1008.	3.8	81
41	An ensemble of eddy-permitting global ocean reanalyses from the MyOcean project. Climate Dynamics, 2017, 49, 813-841.	3.8	67
42	Intercomparison of the Arctic sea ice cover in global oceanâ€“sea ice reanalyses from the ORA-IP project. Climate Dynamics, 2017, 49, 1107-1136.	3.8	92
43	An assessment of upper ocean salinity content from the Ocean Reanalyses Inter-comparison Project (ORA-IP). Climate Dynamics, 2017, 49, 1009-1029.	3.8	21
44	The new eddy-permitting ORAP5 ocean reanalysis: description, evaluation and uncertainties in climate signals. Climate Dynamics, 2017, 49, 791-811.	3.8	112
45	Importance of convective parameterization in ENSO predictions. Geophysical Research Letters, 2017, 44, 6334-6342.	4.0	27
46	Multi-year predictability of climate, drought, and wildfire in southwestern North America. Scientific Reports, 2017, 7, 6568.	3.3	49
47	Reforecasting the ENSO Events in the Past 57 Years (1958â€“2014). Journal of Climate, 2017, 30, 7669-7693.	3.2	34
48	Editorial for Ocean Reanalysis Intercomparison Special Issue. Climate Dynamics, 2017, 49, 707-708.	3.8	2
49	Data assimilation for initialization of seasonal forecasts. Journal of Marine Research, 2017, 75, 331-359.	0.3	6
50	The Copernicus Marine Environment Monitoring Service Ocean State Report. Journal of Operational Oceanography, 2016, 9, s235-s320.	1.2	86
51	Improving seasonal forecasting through tropical ocean bias corrections. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 2797-2807.	2.7	6
52	The role of off-equatorial surface temperature anomalies in the 2014 El NiÃ±o prediction. Scientific Reports, 2016, 6, 19677.	3.3	68
53	Observation and integrated Earth-system science: A roadmap for 2016â€“2025. Advances in Space Research, 2016, 57, 2037-2103.	2.6	35
54	A coupled data assimilation system for climate reanalysis. Quarterly Journal of the Royal Meteorological Society, 2016, 142, 65-78.	2.7	145

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55	Influence of Oceanic Intraseasonal Kelvin Waves on Eastern Pacific Hurricane Activity. Journal of Climate, 2016, 29, 7941-7955.	3.2	11
56	Fourth CLIVAR Workshop on the Evaluation of ENSO Processes in Climate Models: ENSO in a Changing Climate. Bulletin of the American Meteorological Society, 2016, 97, 817-820.	3.3	20
57	Evaluation of the Tropical Pacific Observing System from the ocean data assimilation perspective. Quarterly Journal of the Royal Meteorological Society, 2015, 141, 2481-2496.	2.7	28
58	A surface layer variance heat budget for ENSO. Geophysical Research Letters, 2015, 42, 3529-3537.	4.0	19
59	Origin and Impact of Initialization Shocks in Coupled Atmosphereâ€“Ocean Forecasts*. Monthly Weather Review, 2015, 143, 4631-4644.	1.4	70
60	Improved sea level record over the satellite altimetry era (1993â€“2010) from the Climate Change Initiative project. Ocean Science, 2015, 11, 67-82.	3.4	205
61	Surface wave effects in the NEMO ocean model: Forced and coupled experiments. Journal of Geophysical Research: Oceans, 2015, 120, 2973-2992.	2.6	109
62	Climate drift of AMOC, North Atlantic salinity and arctic sea ice in CFSv2 decadal predictions. Climate Dynamics, 2015, 44, 559-583.	3.8	34
63	The Curious Case of the EL NiÃ±o That Never Happened: A Perspective from 40 Years of Progress in Climate Research and Forecasting. Bulletin of the American Meteorological Society, 2015, 96, 1647-1665.	3.3	47
64	Impact of Initial Conditions versus External Forcing in Decadal Climate Predictions: A Sensitivity Experiment*. Journal of Climate, 2015, 28, 4454-4470.	3.2	27
65	Status and future of global and regional ocean prediction systems. Journal of Operational Oceanography, 2015, 8, s201-s220.	1.2	51
66	Surface warming hiatus caused by increased heat uptake across multiple ocean basins. Geophysical Research Letters, 2014, 41, 7868-7874.	4.0	99
67	On the Energy Exchange between Tropical Ocean Basins Related to ENSO*. Journal of Climate, 2014, 27, 6393-6403.	3.2	48
68	The Importance of Wind and Buoyancy Forcing for the Boundary Density Variations and the Geostrophic Component of the AMOC at 26Â°N. Journal of Physical Oceanography, 2014, 44, 2387-2408.	1.7	56
69	Earthâ€™s Energy Imbalance. Journal of Climate, 2014, 27, 3129-3144.	3.2	275
70	Toward a Consistent Reanalysis of the Climate System. Bulletin of the American Meteorological Society, 2014, 95, 1235-1248.	3.3	184
71	How robust is the recent strengthening of the Tropical Pacific trade winds?. Geophysical Research Letters, 2014, 41, 4398-4405.	4.0	45
72	Salinity anomaly as a trigger for ENSO events. Scientific Reports, 2014, 4, 6821.	3.3	92

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73	Evaluation of forecast strategies for seasonal and decadal forecasts in presence of systematic model errors. Climate Dynamics, 2013, 41, 2393-2409.	3.8	81
74	Predictability of the mid-latitude Atlantic meridional overturning circulation in a multi-model system. Climate Dynamics, 2013, 41, 775-785.	3.8	69
75	Improved reliability of ENSO hindcasts with multi-ocean analyses ensemble initialization. Climate Dynamics, 2013, 41, 2785-2795.	3.8	26
76	The Indian Ocean: The Region of Highest Skill Worldwide in Decadal Climate Prediction*. Journal of Climate, 2013, 26, 726-739.	3.2	62
77	Distinctive climate signals in reanalysis of global ocean heat content. Geophysical Research Letters, 2013, 40, 1754-1759.	4.0	490
78	Evaluation of the ECMWF ocean reanalysis system ORAS4. Quarterly Journal of the Royal Meteorological Society, 2013, 139, 1132-1161.	2.7	837
79	How Predictable is the Indian Ocean Dipole?. Monthly Weather Review, 2012, 140, 3867-3884.	1.4	96
80	A Comparative Analysis of Upper-Ocean Heat Content Variability from an Ensemble of Operational Ocean Reanalyses. Journal of Climate, 2012, 25, 6905-6929.	3.2	82
81	An ensemble estimation of the variability of upper-ocean heat content over the tropical Atlantic Ocean with multi-ocean reanalysis products. Climate Dynamics, 2012, 39, 1001-1020.	3.8	46
82	Ensemble ENSO hindcasts initialized from multiple ocean analyses. Geophysical Research Letters, 2012, 39, .	4.0	73
83	Impact of the sea surface temperature forcing on hindcasts of Madden-Julian Oscillation events using the ECMWF model. Ocean Science, 2012, 8, 1071-1084.	3.4	21
84	Decadal climate prediction with the European Centre for Medium-Range Weather Forecasts coupled forecast system: Impact of ocean observations. Journal of Geophysical Research, 2011, 116, .	3.3	62
85	ECMWF seasonal forecast system 3 and its prediction of sea surface temperature. Climate Dynamics, 2011, 37, 455-471.	3.8	127
86	The ERAâ€Interim reanalysis: configuration and performance of the data assimilation system. Quarterly Journal of the Royal Meteorological Society, 2011, 137, 553-597.	2.7	20,227
87	Seasonal and Decadal Prediction. , 2011, , 513-542.		4
88	The PreVOCA experiment: modeling the lower troposphere in the Southeast Pacific. Atmospheric Chemistry and Physics, 2010, 10, 4757-4774.	4.9	109
89	Impact of 2007 and 2008 Arctic ice anomalies on the atmospheric circulation: Implications for long-range predictions. Quarterly Journal of the Royal Meteorological Society, 2010, 136, 1655-1664.	2.7	77
90	Consistency and fidelity of Indonesian-throughflow total volume transport estimated by 14 ocean data assimilation products. Dynamics of Atmospheres and Oceans, 2010, 50, 201-223.	1.8	35

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91	Initialization for Seasonal and Decadal Forecasts. , 2010, , .		5
92	Intergovernmental Panel for Climate Change (IPCC) and Attribution and Prediction of Climate: Progress since the Fourth Assessment. , 2010, , .		1
93	Ocean Initialization for Seasonal Forecasts. Oceanography, 2009, 22, 154-159.	1.0	57
94	Assimilation of Altimeter Data in the ECMWF Ocean Analysis System 3. Monthly Weather Review, 2009, 137, 1393-1408.	1.4	26
95	Ensemble estimation of backgroundâ€error variances in a threeâ€dimensional variational data assimilation system for the global ocean. Quarterly Journal of the Royal Meteorological Society, 2009, 135, 1071-1094.	2.7	67
96	Observing System Evaluations Using GODAE Systems. Oceanography, 2009, 22, 144-153.	1.0	49
97	Ocean State Estimation for Climate Research. Oceanography, 2009, 22, 160-167.	1.0	228
98	The new VarEPSâ€monthly forecasting system: A first step towards seamless prediction. Quarterly Journal of the Royal Meteorological Society, 2008, 134, 1789-1799.	2.7	129
99	The ECMWF Ocean Analysis System: ORA-S3. Monthly Weather Review, 2008, 136, 3018-3034.	1.4	288
100	Impact of Ocean Observation Systems on Ocean Analysis and Seasonal Forecasts. Monthly Weather Review, 2007, 135, 409-429.	1.4	40
101	Monthly Forecast of the Maddenâ€“Julian Oscillation Using a Coupled GCM. Monthly Weather Review, 2007, 135, 2700-2715.	1.4	107
102	Historical reconstruction of the Atlantic Meridional Overturning Circulation from the ECMWF operational ocean reanalysis. Geophysical Research Letters, 2007, 34, .	4.0	51
103	A multivariate treatment of bias for sequential data assimilation: Application to the tropical oceans. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 167-179.	2.7	75
104	The role of the ocean in the Maddenâ€“Julian Oscillation: Implications for MJO prediction. Quarterly Journal of the Royal Meteorological Society, 2007, 133, 117-128.	2.7	175
105	The ECMWF Ocean Analysis System: ORA-S3. Monthly Weather Review, 2007, preprint, 1.	1.4	7
106	Toward an Integrated Seasonal Forecasting System for South America. Journal of Climate, 2006, 19, 3704-3721.	3.2	77
107	Tropical Atlantic SST Prediction with Coupled Oceanâ€“Atmosphere GCMs. Journal of Climate, 2006, 19, 6047-6061.	3.2	106
108	A Bayesian approach for multi-model downscaling: Seasonal forecasting of regional rainfall and river flows in South America. Meteorological Applications, 2006, 13, 73.	2.1	18

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109	The ECMWF Perspective. , 2006, , 361-379.		0
110	Did the ECMWF Seasonal Forecast Model Outperform Statistical ENSO Forecast Models over the Last 15 Years?. Journal of Climate, 2005, 18, 3240-3249.	3.2	90
111	Evaluation of Atmospheric Fields from the ECMWF Seasonal Forecasts over a 15-Year Period. Journal of Climate, 2005, 18, 3250-3269.	3.2	58
112	The ERAâ€40 reâ€analysis. Quarterly Journal of the Royal Meteorological Society, 2005, 131, 2961-3012.	2.7	6,198
113	An Ensemble Generation Method for Seasonal Forecasting with an Oceanâ€“Atmosphere Coupled Model. Monthly Weather Review, 2005, 133, 441-453.	1.4	69
114	Sensitivity of dynamical seasonal forecasts to ocean initial conditions. Quarterly Journal of the Royal Meteorological Society, 2004, 130, 647-667.	2.7	76
115	Westerly Wind Events and the 1997/98 El NiÃ±o Event in the ECMWF Seasonal Forecasting System: A Case Study. Journal of Climate, 2003, 16, 3153-3170.	3.2	28
116	Sensitivity of Pacific Ocean Tropical Instability Waves to Initial Conditions. Journal of Physical Oceanography, 2003, 33, 105-121.	1.7	20
117	Salinity Adjustments in the Presence of Temperature Data Assimilation. Monthly Weather Review, 2002, 130, 89-102.	1.4	67
118	Balanced Ocean-Data Assimilation near the Equator. Journal of Physical Oceanography, 2002, 32, 2509-2519.	1.7	69
119	How Predictability Depends on the Nature of Uncertainty in Initial Conditions in a Coupled Model of ENSO. Journal of Climate, 2000, 13, 3298-3313.	3.2	44
120	Global seasonal rainfall forecasts using a coupled oceanâ€“atmosphere model. Nature, 1998, 392, 370-373.	27.8	253
121	Decadal and Seasonal Dependence of ENSO Prediction Skill. Journal of Climate, 1995, 8, 2705-2715.	3.2	166
122	ENSO prediction using a dynamical ocean model coupled to statistical atmospheres. Tellus, Series A: Dynamic Meteorology and Oceanography, 1994, 46, 497-511.	1.7	41
123	ENSO prediction using a dynamical ocean model coupled to statistical atmospheres. Tellus, Series A: Dynamic Meteorology and Oceanography, 1994, 46, 497-511.	1.7	21
124	Simulation and hindcasts of tropical Pacific Ocean interannual variability. Tellus, Series A: Dynamic Meteorology and Oceanography, 1994, 46, 433-447.	1.7	7
125	Simulation and hindcasts of tropical Pacific Ocean interannual variability. Tellus, Series A: Dynamic Meteorology and Oceanography, 1994, 46, 433-447.	1.7	13