Marcelo Barreiro

List of Publications by Year
in descending order

73 papers	2,033 citations	257450 24 h-index	254184 43 g-index
84 all docs	84 docs citations	84 times ranked	2463 citing authors

#	Article	IF	Citations
1	The Pliocene Paradox (Mechanisms for a Permanent El Nino). Science, 2006, 312, 1485-1489.	12.6	350
2	GFDL's CM2 Global Coupled Climate Models. Part II: The Baseline Ocean Simulation. Journal of Climate, 2006, 19, 675-697.	3.2	269
3	Variability of the South Atlantic Convergence Zone Simulated by an Atmospheric General Circulation Model. Journal of Climate, 2002, 15, 745-763.	3.2	90
4	Inferring long memory processes in the climate network via ordinal pattern analysis. Chaos, 2011, 21, 013101.	2.5	86
5	Influence of ENSO and the South Atlantic Ocean on climate predictability over Southeastern South America. Climate Dynamics, 2010, 35, 1493-1508.	3.8	80
6	Simulations of warm tropical conditions with application to middle Pliocene atmospheres. Climate Dynamics, 2006, 26, 349-365.	3.8	61
7	Climate change impacts on the atmospheric circulation, ocean, and fisheries in the southwest South Atlantic Ocean: a review. Climatic Change, 2020, 162, 2359-2377.	3.6	59
8	Challenges and opportunities for improved understanding of regional climate dynamics. Nature Climate Change, 2018, 8, 101-108.	18.8	56
9	Quantifying Progress Across Different CMIP Phases With the ESMValTool. Journal of Geophysical Research D: Atmospheres, 2020, 125, e2019JD032321.	3.3	50
10	Inferring interdependencies in climate networks constructed at inter-annual, intra-season and longer time scales. European Physical Journal: Special Topics, 2013, 222, 511-523.	2.6	45
11	The 2017 Record Marine Heatwave in the Southwestern Atlantic Shelf. Geophysical Research Letters, 2018, 45, 12,449.	4.0	45
12	Abrupt Climate Changes: How Freshening of the Northern Atlantic Affects the Thermohaline and Wind-Driven Oceanic Circulations. Annual Review of Earth and Planetary Sciences, 2008, 36, 33-58.	11.0	43
13	Assessing the direction of climate interactions by means of complex networks and information theoretic tools. Chaos, 2015, 25, 033105.	2.5	43
14	Simulated precipitation response to SST forcing and potential predictability in the region of the South Atlantic convergence zone. Climate Dynamics, 2005, 24, 105-114.	3.8	38
15	A study of the air-sea interaction in the South Atlantic Convergence Zone through Granger causality. International Journal of Climatology, 2015, 35, 3440-3453.	3.5	38
16	Description and evaluation of the <scp>E</scp>arth <scp>S</scp>ystem <scp>R</scp>egional <scp>C</scp>limate <scp>M</scp>odel (<scp>R</scp>eg <scp>CM‑ES</scp>). Journal of Advances in Modeling Earth Systems, 2017, 9, 1863-1886.	3.8	36
17	The Freshening of Surface Waters in High Latitudes: Effects on the Thermohaline and Wind-Driven Circulations. Journal of Physical Oceanography, 2007, 37, 896-907.	1.7	35
18	Dynamical elements of predicting boreal spring tropical Atlantic sea-surface temperatures. Dynamics of Atmospheres and Oceans, 2005, 39, 61-85.	1.8	31

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19	Land-atmosphere coupling in El NiÃ±o influence over South America. Atmospheric Science Letters, 2011, 12, 351-355.	1.9	31
20	Variability of chlorophyll-a in the Southwestern Atlantic from satellite images: Seasonal cycle and ENSO influences. Continental Shelf Research, 2013, 53, 102-109.	1.8	31
21	The CORDEX Flagship Pilot Study in southeastern South America: a comparative study of statistical and dynamical downscaling models in simulating daily extreme precipitation events. Climate Dynamics, 2021, 56, 1589-1608.	3.8	31
22	Atlantic modulation of El NiÃ±o influence on summertime rainfall over southeastern South America. Geophysical Research Letters, 2008, 35, .	4.0	30
23	Role of the global oceans and landâ€"atmosphere interaction on summertime interdecadal variability over northern Argentina. Climate Dynamics, 2014, 42, 1733-1753.	3.8	28
24	Interdecadal Variability of Southeastern South America Rainfall and Moisture Sources during the Austral Summertime. Journal of Climate, 2016, 29, 6751-6763.	3.2	26
25	Multidecadal changes in the relationship between extreme temperature events in Uruguay and the general atmospheric circulation. Climate Dynamics, 2011, 37, 2471-2480.	3.8	24
26	Evolution of atmospheric connectivity in the 20th century. Nonlinear Processes in Geophysics, 2014, 21, 825-839.	1.3	23
27	Distinguishing the effects of internal and forced atmospheric variability in climate networks. Nonlinear Processes in Geophysics, 2014, 21, 617-631.	1.3	23
28	Analysis of oceans' influence on spring time rainfall variability over Southeastern South America during the 20th century. International Journal of Climatology, 2016, 36, 1344-1358.	3.5	23
29	ENSO teleconnections in the southern hemisphere: A climate network view. Chaos, 2017, 27, 093109.	2.5	20
30	Global Atmospheric Dynamics Investigated by Using Hilbert Frequency Analysis. Entropy, 2016, 18, 408.	2.2	19
31	Quantifying changes in spatial patterns of surface air temperature dynamics over several decades. Earth System Dynamics, 2018, 9, 383-391.	7.1	18
32	Interannual variability of extratropical transient wave activity and its influence on rainfall over Uruguay. International Journal of Climatology, 2017, 37, 4261-4274.	3.5	17
33	Identifying large-scale patterns of unpredictability and response to insolation in atmospheric data. Scientific Reports, 2017, 7, 45676.	3.3	17
34	Effect of future climate change on the coupling between the tropical oceans and precipitation over Southeastern South America. Climatic Change, 2017, 141, 315-329.	3.6	16
35	The Effect of Climate Variability on the Abundance of the Sandy Beach Clam (Mesodesma mactroides) in the Southwestern Atlantic. Journal of Coastal Research, 2017, 33, 531.	0.3	15
36	On the Role of the South Atlantic Atmospheric Circulation in Tropical Atlantic Variability. Geophysical Monograph Series, 0, , 143-156.	0.1	14

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37	Response of the tropical Pacific to changes in extratropical clouds. Climate Dynamics, 2008, 31, 713-729.	3.8	12
38	Centennial hydroclimatic and anthropogenic processes of South East South America modulate interannual and decadal river discharge. Science of the Total Environment, 2021, 781, 146733.	8.0	12
39	Modelling the role of Atlantic airâ€"sea interaction in the impact of Maddenâ€"Julian Oscillation on South American climate. International Journal of Climatology, 2019, 39, 1104-1116.	3.5	10
40	Influence of <scp>Maddenâ€"Julian</scp> Oscillation on extreme rainfall events in Spring in southern Uruguay. International Journal of Climatology, 2021, 41, 3339-3351.	3.5	10
41	Climate Sensitivity to Changes in Ocean Heat Transport. Journal of Climate, 2011, 24, 5015-5030.	3.2	9
42	Spatiotemporal characterization of summer coastal upwelling events in Uruguay, South America. Regional Studies in Marine Science, 2019, 31, 100787.	0.7	9
43	Control of the South Atlantic Convergence Zone by extratropical thermal forcing. Climate Dynamics, 2018, 50, 885-900.	3.8	8
44	Simulated sensitivity of the tropical climate to extratropical thermal forcing: tropical SSTs and African land surface. Climate Dynamics, 2016, 47, 1091-1110.	3.8	7
45	Machine learning prediction of the Madden-Julian oscillation. Npj Climate and Atmospheric Science, 2021, 4, .	6.8	7
46	Shelf Water Export at the Brazil-Malvinas Confluence Evidenced From Combined in situ and Satellite Observations. Frontiers in Marine Science, 2022, 9, .	2.5	7
47	Ondas de calor nas capitais do Sul do Brasil e MontevidÃ©u - Uruguai (Heat waves in the capitals of) Tj ETQq1 1 0.784314 rgBT /Overl...	0.1	5
48	Estimation of Natural Variability and Detection of Anthropogenic Signal in Summertime Precipitation over South America. Advances in Meteorology, 2012, 2012, 1-10.	1.6	4
49	Dynamics of extreme rainfall events in summer in southern Uruguay. International Journal of Climatology, 2019, 39, 3655-3667.	3.5	4
50	Intraseasonal Predictions for the South American Rainfall Dipole. Geophysical Research Letters, 2020, 47, e2020GL089985.	4.0	4
51	Southern Hemisphere Sensitivity to ENSO Patterns and Intensities: Impacts over Subtropical South America. Atmosphere, 2020, 11, 77.	2.3	4
52	Sensitivity of the tropical climate to an interhemispheric thermal gradient: the role of tropical ocean dynamics. Earth System Dynamics, 2018, 9, 285-297.	7.1	3
53	South and North American Monsoons: Characteristics, Life Cycle, Variability, Modeling, and Prediction. World Scientific Series on Asia-Pacific Weather and Climate, 2021, , 49-66.	0.2	3
54	ENSO and SAM Influence on the Generation of Long Episodes of Rossby Wave Packets During Southern Hemisphere Summer. Journal of Geophysical Research D: Atmospheres, 2021, 126, .	3.3	3

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55	Predicción Climática Estacional de Precipitación Acumulada en Primavera y Verano en el Sur de Uruguay. Revista Brasileira De Meteorologia, 2017, 32, 365-373.	0.5	2
56	Uncovering temporal regularity in atmospheric dynamics through Hilbert phase analysis. Chaos, 2019, 29, 051101.	2.5	2
57	Southern hemisphere circulation anomalies and impacts over subtropical South America due to different El Niño flavours. International Journal of Climatology, 2020, 40, 6201-6218.	3.5	2
58	Mapping atmospheric waves and unveiling phase coherent structures in a global surface air temperature reanalysis dataset. Chaos, 2020, 30, 011103.	2.5	2
59	Climate Data Analysis. , 2019, , 27-47.		1
60	The influence of nonlinearities and different SST spatial patterns on the summertime anomalies in subtropical South America during strong ENSO events. Climate Dynamics, 2020, 54, 3765-3779.	3.8	1
61	Challenges and opportunities for improved understanding of regional climate dynamics. , 0, .		1
62	Coastal upwelling along the Uruguayan coast: Structure, variability and drivers. Journal of Marine Systems, 2022, 230, 103735.	2.1	1
63	The Climate System. , 2019, , 1-13.		0
64	Climate Variability. , 2019, , 14-26.		0
65	Climate Networks: Construction Methods and Analysis. , 2019, , 48-78.		0
66	Computational Tools for Network Analysis. , 2019, , 79-93.		0
67	Applications to Atmospheric Variability. , 2019, , 94-129.		0
68	Applications to Oceanic Variability. , 2019, , 130-160.		0
69	Climate Tipping Behavior. , 2019, , 161-197.		0
70	Network-Based Prediction. , 2019, , 198-215.		0
71	A coupled model study on the Atlantic Meridional Overturning Circulation under extreme atmospheric CO_2 conditions. Annals of Geophysics, 2016, 59, .	1.0	0
72	Large-Scale Atmospheric Phenomena Under the Lens of Ordinal Time-Series Analysis and Information Theory Measures. , 2018, , 87-99.		0

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73	A late 1980s shift in El Niño influence on rainfall over Uruguay during austral spring. International Journal of Climatology, 0, , .	3.5	0